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Annual Periodic Monitoring Report for the Material Disposal Area AB Monitoring Group



Prepared by the Associate Directorate for Environmental Management

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August 2017

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EXECUTIVE SUMMARY

This annual periodic monitoring report (PMR) presents results for the Material Disposal Area (MDA) AB monitoring group of the Los Alamos National Laboratory groundwater monitoring program that have not been previously reported. All monitoring work reported in this PMR was conducted pursuant to the “Interim Facility-Wide Groundwater Monitoring Plan for the 2016 Monitoring Year, October 2015–September 2016,” and the “Interim Facility-Wide Groundwater Monitoring Plan for the 2017 Monitoring Year, October 2016–September 2017,” both prepared in accordance with the Compliance Order on Consent.

This PMR presents monitoring results for two periodic monitoring events (PMEs) conducted during the fourth quarter of Monitoring Year (MY) 2016 and the second quarter of MY2017 and includes the monitoring of groundwater well or well screen locations. This PMR also includes any results from earlier MDA AB monitoring group PMEs that have not yet been reported because validated laboratory data were not available (in some cases because of data release agreements).

Groundwater samples collected during the PMEs were analyzed for metals; volatile organic compounds; semivolatile organic compounds; explosive compounds; radionuclides, including low-level tritium; general inorganic chemicals, including perchlorate; and field parameters (dissolved oxygen, oxidation-reduction potential, pH, specific conductance, temperature, and turbidity).

There are no surface-water monitoring locations in the MDA AB monitoring group. No groundwater analytical results reported in this PMR were above the applicable screening values.

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- 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
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- Appendix E Analytical Chemistry Graphs of Screening-Value Exceedances
- Appendix F Analytical Reports (on CD included with this document)

Acronyms and Abbreviations

ADEM	Associate Directorate of Environmental Management
AOC	area of concern
AQA	Analytical Quality Associates, Inc.
BCG	Biota Concentration Guide (DOE)
CFR	Code of Federal Regulations (U.S.)
Consent Order	Compliance Order on Consent
DCS	Derived Concentration Technical Standard (DOE)
DOE	Department of Energy (U.S.)
EPA	Environmental Protection Agency (U.S.)
ESH	Environment, Safety, and Health (Directorate)
gpm	gallons per minute
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)
MDA	material disposal area
MDL	method detection limit
MY	monitoring year
N	no (best value flag code)
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
NTU	nephelometric turbidity unit
PME	periodic monitoring event
PMR	periodic monitoring report
QC	quality control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
SOP	standard operating procedure
SU	standard unit
SWMU	solid waste management unit
TA	technical area
TNT	2,4,6-trinitrotoluene
VOC	volatile organic compound
Y	yes (best value flag code)

1.0 INTRODUCTION

This annual periodic monitoring report (PMR) for the Material Disposal Area (MDA) AB monitoring group provides documentation of the following groundwater periodic monitoring events (PMEs) conducted by Los Alamos National Laboratory (LANL or the Laboratory):

Watershed	PMEs Reported in this PMR		PME Field Sampling	
	MY*	Quarter	Begin	End
Ancho and Water	2016	4	08/26/16	08/26/16
	2017	2	03/24/17	03/27/17

*MY = Monitoring year.

The annual PMR for the MDA AB monitoring group is submitted to the New Mexico Environment Department (NMED) every August and includes MDA AB monitoring group PMEs performed in the fourth quarter of MY2016 and the second quarter of MY2017.

Monitoring was conducted pursuant to the “Interim Facility-Wide Groundwater Monitoring Plan for the 2016 Monitoring Year, October 2015–September 2016” (2016 IFGMP) (LANL 2015, 600467) and the “Interim Facility-Wide Groundwater Monitoring Plan for the 2017 Monitoring Year, October 2016–September 2017” (2017 IFGMP) (LANL 2016, 601506), both prepared in accordance with the Compliance Order on Consent (the Consent Order). The PMEs noted above included sampling of groundwater well (or well screen) locations. For MY2016 wells R-29 and R-30 were sampled as required in the 2016 IFGMP, while wells R-27, R-27i, R29, and R-30 were sampled in MY2017.

This report also includes any results from previous MDA AB monitoring group 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 a PME are also included in this report.

Section IX of the Consent Order describes the role of data screening in the corrective action process. Screening values are used to identify the *potential* for unacceptable risk resulting from the presence of contaminants in groundwater and surface water. New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), NMED screening levels for tap water, and EPA regional screening levels for tap water are used to establish a set of screening values for evaluating IFGMP monitoring data. If contaminants are present at concentrations above screening values, additional risk evaluation is required to determine the potential need for cleanup (corrective action).

This report presents the following information:

- general background information on the monitoring group
- field-measurement monitoring results
- water-quality monitoring results
- screening analysis results
- a summary based on the monitoring data and the results of screening analysis

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

1.1 Background

At MDA AB, groundwater monitoring is conducted to support the corrective measures process for solid waste management units (SWMUs) and areas of concern (AOCs) under the Consent Order. The MDA AB monitoring group includes both intermediate-perched and regional wells in the near vicinity of MDA AB. Other downgradient wells have general relevance to MDA AB and other upgradient sources but are not considered part of the MDA AB monitoring network and are not included in the monitoring group.

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 (Purtymum 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 involved 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 SWMUs and AOCs at TA-49 can be found in recent Laboratory reports (LANL 2016, 601698; LANL 2016, 601699).

2.0 SCOPE OF ACTIVITIES

The PMEs for the MDA AB monitoring group were conducted pursuant to the 2016 IFGMP (LANL 2015, 600467) and the 2017 IFGMP (LANL 2016, 601506).

Table 2.0-1 provides the name, watershed, sample collection date, screened interval, top and bottom screen depths, casing volume, purge volume, and purge or flow rate for each of the planned monitoring 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 data reported in this PMR are documented in the 2016 IFGMP (LANL 2015, 600467) and 2017 IFGMP (LANL 2016, 601506).

3.2 Field Parameter Results

Appendix A presents the field parameter measurements associated with the sampling and analysis data that are reported in this PMR.

3.3 Groundwater Elevations

The groundwater level is measured at each groundwater monitoring location before purging and sampling that location as required by the Consent Order. Section 3.4 notes any instances where this requirement could not be met.

In addition to collecting groundwater-level data before purging and sampling, the Laboratory collects groundwater-level data “continuously” (e.g., hourly, daily) for most monitoring locations and these data are voluntarily presented in this PMR. Any gaps in the continuous groundwater-level records presented in this PMR are a result of one or more of the following conditions:

- Dry well
- Well not equipped with a pressure (level) transducer
- Water level below transducer
- Transducer not functioning properly (including failure)
- Transducer temporarily removed from well for maintenance and/or calibration

Groundwater-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 in Figure 3.3-1. No surface-water locations are sampled for this monitoring group.

3.4 Deviations from Planned Scope

Table 3.4-1 summarizes the deviations from the planned monitoring scope while the work associated with the monitoring data reported in this PMR was conducted.

Table 3.4-2 presents a list of analytes with method detection limits (MDLs) greater than screening values. Some of the analytes were measured using more than one analytical method, leading to a range of MDLs. For some of these analytes, the MDL is much lower than for earlier analyses. Table 3.4-3 presents a list of analytes with MDLs below screening values. The tables apply to the results with the lowest MDL, so the analytical method and analytical laboratory are included in the tables for reference.

4.0 ANALYTICAL DATA RESULTS

4.1 Methods and Procedures

All methods and procedures used to perform PME analytical activities are documented in the 2016 IFGMP (LANL 2015, 600467) and 2017 IFGMP (LANL 2016, 601506). Purge water is managed and characterized in accordance with the waste characterization strategy form associated with the well and ENV-RCRA-QP-010, “Land Application of Groundwater.” ENV-RCRA-QP-010 implements the NMED-approved decision tree for land application of drilling, development, rehabilitation, and 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 listed at <http://www.lanl.gov/environment/plans-procedures.php> and are available at eprr.lanl.gov.

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 industry practices. The analytical laboratory assigns qualifiers to the data to indicate the quality of the analytical results. The laboratory batch QC is 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 are 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 the data are loaded into the system.

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 blanks, and 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 followed the guidelines set in the DOE model SOP for data validation, which included 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.

Autovalidation (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 autovalidation 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 for the two PMEs reported in this PMR and from the four sampling events at these locations immediately before these PMEs. 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 PMEs (i.e., all data that have been independently reviewed for conformance with Laboratory requirements) with the following constraints:

- All data
 - ❖ Data that are R-qualified (rejected because of noncompliance regarding QC acceptance criteria) during independent validation are considered unusable but are still reported.
 - ❖ Analytical laboratory QC results, including matrix spike and matrix spike duplicates, 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.

Multiple analyses of a sample, including dilutions and reanalyses, create redundant results. These multiple results have the same sample ID, analytical laboratory code, and analytical method. The analytical and validation information is used to designate the preferred result, which is marked with a best value flag of "Y" (yes). The redundant values of lower quality are assigned a best value flag of "N" (no). In cases where a reanalysis gives a significantly different result than an earlier value, the original result may be rejected and assigned a best value flag of N, and the reanalysis result may be marked with a best value flag of Y. The best value flag is included in Appendix C.

Monitoring data are evaluated using the screening process described below. The sources for standards and screening levels from which specific screening values are established 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 values used for data at each monitoring location. Hardness-dependent screening values 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 recoverable aluminum and dissolved cadmium, chromium, copper, lead, manganese, nickel, silver, and zinc in accordance with the requirements of 20 New Mexico Administrative Code (NMAC) 6.4.900.
- Groundwater data are screened in accordance to Section IX of the Consent Order. For an individual substance, the lower of the NMWQCC groundwater standard or EPA MCL is used as the screening value.

If an NMWQCC groundwater standard or an MCL has not been established for a specific substance for which toxicological information is published, the NMED screening level for tap water is used as the groundwater screening value. The NMED screening levels are for either a cancer- or noncancer-risk type. For the cancer-risk type, the screening levels are based on a 10^{-5} excess cancer risk. This report was prepared using the March 2017 NMED screening levels for tap water.

If an NMED screening level for tap water has not been established for a specific substance for which toxicological information is published, the EPA regional screening level for tap water is used as the groundwater screening value. The EPA screening levels are for either a cancer- or noncancer-risk type. For the cancer-risk type, the Consent Order specifies screening at a 10^{-5} excess cancer risk. The EPA screening levels for tap water are for 10^{-6} excess cancer risk, so 10 times the EPA 10^{-6} screening levels are used in the screening process. This report was prepared using the May 2016 EPA regional screening levels for tap water.

- 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 radionuclides and radioactivity are voluntarily compared with the DOE Biota Concentration Guides (BCGs) for surface water and Derived Concentration Technical Standards (DCSs) for groundwater but are not reported in Table 4.2-2 or Appendix D.

Appendix D presents each analytical result that is greater than half of its applicable screening value. Results with a best value flag of N are included in Appendix D but not discussed in the text.

Table 4.2-2 provides groundwater analytical results (by hydrogeologic zone for a specific analytical suite) that are above screening values. Multiple detections are included in the table except for field duplicate exceedances. For example, if aluminum was detected above a screening value in both a primary sample and a field duplicate, only the primary sample result is shown. If aluminum was detected above a screening value in two primary samples, both results are shown. No results were greater than screening values for PMEs reported in the current PMR, so no results are included in Table 4.2-2.

No analytes from the current PME exceeded their screening values at more than one sampling location, so no maps showing analyte concentrations are presented in this PMR.

Graphs in Appendix E display analyte concentration histories for monitoring group locations where the analyte was above its screening value at least once in the following expanded data set: data reported in this PMR plus data for the three previous MDA AB monitoring group PMEs. Appendix E may include instances where the analyte data reported in this PMR are evaluated using a higher screening value than the screening value that was used to evaluate previously reported analyte data. For example, the current screening value for perchlorate, 13.8 µg/L per 2016 Consent Order data screening requirements, is greater than the former perchlorate screening value of 4 µg/L, which was used to evaluate previously reported analyte data. The horizontal solid red line on each graph depicts the current analyte screening value, except in cases where there were no exceedances of the current screening value by the data reported in this PMR but there was at least one exceedance of the former (lower) screening value by the previously reported analytical data. In such cases, the horizontal solid red line depicts the former (lower) screening value. Results with a best value flag of N are not included in Appendix E. There were no locations where an analyte was above its screening value at least once during the PMEs reported in this PMR and the three other most recent PMEs, so no graphs are included in Appendix E.

4.2.1 Surface Water (Base Flow)

There are no surface-water monitoring locations in the MDA AB monitoring group.

4.2.2 Groundwater

No results reported in this PMR were above applicable screening values.

4.3 Sampling Program Modifications

No modifications to the currently planned periodic monitoring of the MDA AB monitoring group are proposed at this time.

5.0 SUMMARY AND INTERPRETATIONS

5.1 Monitoring Results

Appendix A presents the field parameter measurements associated with the sampling and analysis data that are reported in this PMR.

5.2 Analytical Results

5.2.1 Surface Water (Base Flow)

There are no surface-water monitoring locations in the MDA AB monitoring group.

5.2.2 Groundwater

No groundwater analytical results reported in this PMR were above the applicable screening values (Table 4.2-2).

5.3 Data Gaps

Table 3.4-1 summarizes the deviations from the planned monitoring scope that were experienced while conducting the work associated with the monitoring data reported in this PMR.

Although not specifically data gaps, the sample holding-time exceedances summarized in Table 3.4-1 result in qualification of the associated analytical data. The holding-time exceedances listed in Table 3.4-1 are a result of the contract analytical laboratory's misunderstanding of sample holding-time requirements. Specifically, analyzing preserved volatile organic compound (VOC) samples after the 14-d holding time, but before 2 times the holding time (28 d) must be limited to only those rare cases where analysis before the holding time expires is unavoidable. A corrective action was implemented on December 15, 2016, that requires the contract analytical laboratory to analyze the Laboratory samples within method-specified holding times. The corrective action also requires the contract laboratory to notify the responsible Laboratory project manager if any samples cannot be analyzed within the method-specified holding times and fully explain in the analytical narrative why samples were analyzed outside of the method-specified holding times. The corrective action was implemented and no holding time exceedances were noted for the MDA AB monitoring group samples collected during the second quarter of MY2017.

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 reference list includes documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ERID or ESHID. This information is also included in text citations. ERIDs were assigned by the Associate Directorate for Environmental Management's (ADEM's) Records Processing Facility (IDs through 599999), and ESHIDs are assigned by the Environment, Safety, and Health Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and in the Master Reference Set. The NMED Hazardous Waste Bureau and ADEM maintain copies of the Master Reference Set. The set ensures that NMED has the references to review documents. The set is updated when new references are cited in documents.

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- 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)

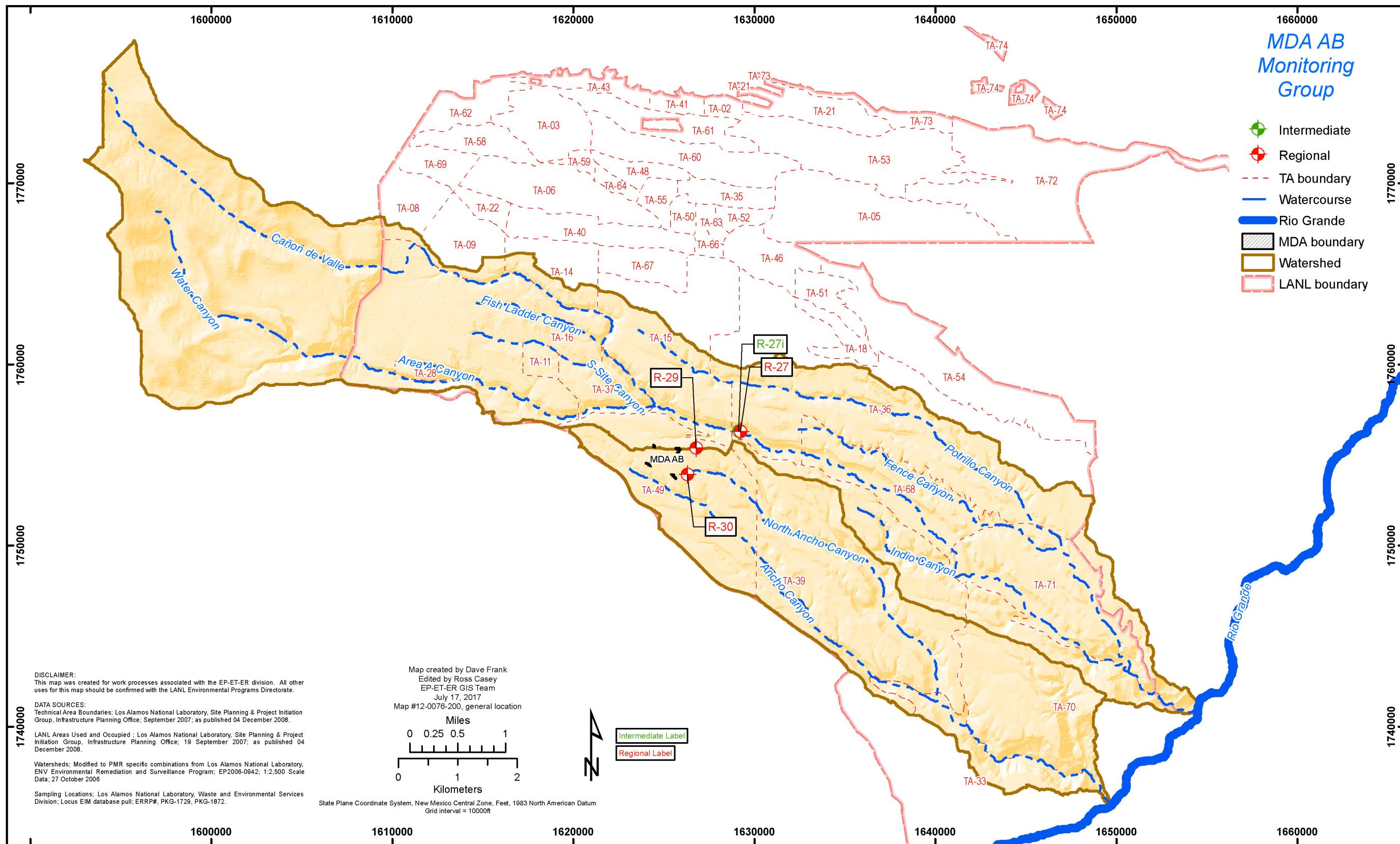


Figure 2.0-1 MDA AB monitoring group locations (see also Table 2.0-1)

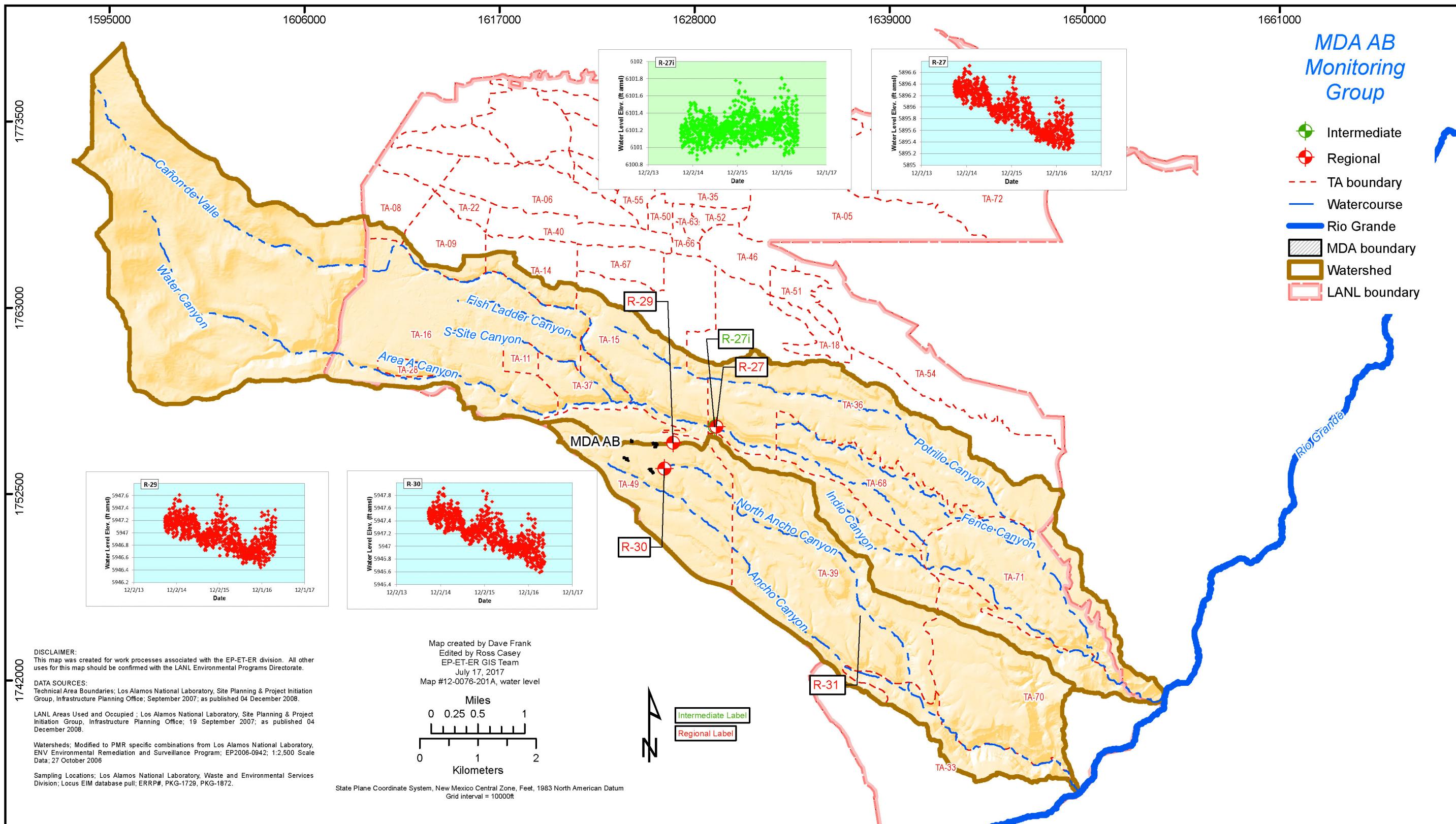


Figure 3.3-1 Groundwater elevations

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

Location Name	Watershed	Sampling Event		Sample Collection Date	Screened Interval (ft)	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Calculated Single Casing Volume (gal.)	Purge Volume (gal.)	Purge or Flow Rate (gpm*)
		MY	Quarter							
Intermediate										
R-27i	Water	2017	2	03/24/17	10	619	629	13.84	41.6	0.52
Regional										
R-29	Ancho	2016	4	08/26/16	10	1170	1180	39.2	231.54	6.81
R-30	Ancho			08/26/16	20.9	1140	1160.9	46.72	218	5.45
R-27	Water	2017	2	03/24/17	23	852	875	50.06	153.6	3.84
R-29	Ancho			03/27/17	10	1170	1180	36.69	248.88	7.32
R-30	Ancho			03/27/17	20.9	1140	1160.9	46.61	139.88	5.38

*gpm = Gallons per minute.

Table 3.4-1

MDA AB Monitoring Group PME Observations and Deviations

Monitoring Location	Watershed	Sampling Event		Observation/Deviation	Cause	Comment
		MY	Quarter			
R-29	Ancho	2016	4	The 14-d holding time for VOC analysis was exceeded for the sample collected on 08/26/16.	Contract analytical laboratory misunderstanding of sample holding-time requirements. See section 5.3 for additional information.	Sample was analyzed within 2 times the method-specific holding time and the result was qualified in accordance with LANL data validation procedures. A corrective action was implemented on December 15, 2016, that requires the contract analytical laboratory to analyze LANL samples within method-specific holding times.
R-30	Ancho			The 14-d holding time for VOC analysis was exceeded for the sample collected on 08/26/16.		
R-30	Ancho			The 14-d holding time for VOC analysis was exceeded for the field duplicate collected on 08/26/16.		

Table 3.4-2
Target Analytes with MDLs above Screening Values

Analyte Name	MDL	Analytical Method	Screening Value	Unit	Screening-Value Type	Lab ID
Semivolatile Organic Compounds						
Atrazine	3.06–3.13	SW-846:8270D	3	µg/L	EPA MCL	GELC ^a
Azobenzene	3.06–3.13	SW-846:8270D	1.2	µg/L	EPA TAP SCRN LVL ^b	GELC
Benzidine	3.98–4.06	SW-846:8270D	0.00109	µg/L	NMED A1 TAP SCRN LVL ^c	GELC
Benzo(a)anthracene	0.306–0.313	SW-846:8270D	0.12	µg/L	NMED A1 TAP SCRN LVL	GELC
Benzo(a)pyrene	0.306–0.313	SW-846:8270D	0.2	µg/L	EPA MCL	GELC
Bis(2-chloroethyl)ether	3.06–3.13	SW-846:8270D	0.137	µg/L	NMED A1 TAP SCRN LVL	GELC
Dibenz(a,h)anthracene	0.306–0.313	SW-846:8270D	0.0343	µg/L	NMED A1 TAP SCRN LVL	GELC
Dichlorobenzidine[3,3'-]	3.06–3.13	SW-846:8270D	1.25	µg/L	NMED A1 TAP SCRN LVL	GELC
Dinitro-2-methylphenol[4,6-]	3.06–3.13	SW-846:8270D	1.52	µg/L	NMED A1 TAP SCRN LVL	GELC
Hexachlorobenzene	3.06–3.13	SW-846:8270D	1	µg/L	EPA MCL TAP SCRN LVL	GELC
Nitrosodiethylamine[N-]	3.06–3.13	SW-846:8270D	0.00167	µg/L	NMED A1 TAP SCRN LVL	GELC
Nitrosodimethylamine[N-]	3.06–3.13	SW-846:8270D	0.00491	µg/L	NMED A1 TAP SCRN LVL	GELC
Nitroso-di-n-butylamine[N-]	3.06–3.13	SW-846:8270D	0.0273	µg/L	NMED A1 TAP SCRN LVL	GELC
Nitroso-di-n-propylamine[N-]	3.06–3.13	SW-846:8270D	0.11	µg/L	EPA TAP SCRN LVL	GELC
Nitrosopyrrolidine[N-]	3.06–3.13	SW-846:8270D	0.37	µg/L	NMED A1 TAP SCRN LVL	GELC
Pentachlorophenol	3.06–3.13	SW-846:8270D	1	µg/L	EPA MCL	GELC

Table 3.4-2 (continued)

Analyte Name	MDL	Analytical Method	Screening Value	Unit	Screening-Value Type	Lab ID
Volatile Organic Compounds						
Acrolein	1.5	SW-846:8260B	0.0415	µg/L	NMED A1 TAP SCRN LVL	GELC
Acrylonitrile	1.5	SW-846:8260B	0.523	µg/L	NMED A1 TAP SCRN LVL	GELC
Chloro-1,3-butadiene[2-]	0.3	SW-846:8260B	0.187	µg/L	NMED A1 TAP SCRN LVL	GELC
Dibromo-3-Chloropropane[1,2-]	0.5	SW-846:8260B	0.2	µg/L	EPA MCL	GELC
Dibromoethane[1,2-]	0.3	SW-846:8260B	0.05	µg/L	EPA MCL	GELC
Trichloropropene[1,2,3-]	0.3	SW-846:8260B	0.00835	µg/L	NMED A1 TAP SCRN LVL	GELC

Note: This table is applicable to samples reported in this PMR.

^a GELC = GELC Laboratories, LLC, Division of the GELC Group, Charleston, SC.

^b EPA TAP SCRN LVL = U.S. Environmental Protection Agency screening level for tap water.

^c NMED A1 TAP SCRN LVL = New Mexico Environment Department screening level for tap water.

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Table 3.4-3
Target Analytes with MDLs below Screening Values

Analyte Name	MDL	Analytical Method	Screening Value	Unit	Screening-Value Type	Lab ID
Semivolatile Organic Compounds						
Benzo(b)fluoranthene	0.306–0.313	SW-846:8270D	0.343	µg/L	NMED A1 TAP SCRN LVL ^a	GELC ^b
Indeno(1,2,3-cd)pyrene	0.306–0.313	SW-846:8270D	0.343	µg/L	NMED A1 TAP SCRN LVL	GELC
Oxybis(1-chloropropane)[2,2'-]	3.06–3.13	SW-846:8270D	710	µg/L	EPA TAP SCRN LVL ^c	GELC
Volatile Organic Compounds						
Methacrylonitrile	1.5	SW-846:8260B	1.91	µg/L	NMED A1 TAP SCRN LVL	GELC

Note: This table is applicable to samples reported in this PMR.

^a NMED A1 TAP SCRN LVL = New Mexico Environment Department screening level for tap water.

^b GELC = GELC Laboratories, LLC, Division of the GELC Group, Charleston, SC.

^c EPA TAP SCRN LVL = U.S. Environmental Protection Agency screening level for tap water.

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

Standard Source	Standard Type	Groundwater	Surface Water
DOE Order 458.1	DOE BCG	n/a ^a	X ^b
DOE Order 458.1	DOE 100-mrem Public Dose DCS	X	n/a
DOE Order 458.1	DOE 4-mrem Drinking Water DCS	X	n/a
40 CFR ^c 141	EPA MCL	X	n/a
NMED Screening Levels ^d	Screening Levels for Tap Water	X	n/a
EPA Regional Screening Levels ^e	Screening Levels for Tap Water	X	n/a
20 NMAC 6.2.3103	NMWQCC Groundwater Standard	X	n/a
20 NMAC 6.4.900.C	NMWQCC Irrigation Standard	n/a	X
20 NMAC 6.4.900.F	NMWQCC Livestock Watering Standard	n/a	X
20 NMAC 6.4.900.G	NMWQCC Wildlife Habitat Standard	n/a	X
20 NMAC 6.4.900.H	NMWQCC Aquatic Life Standards Acute	n/a	X ^{f, g}
20 NMAC 6.4.900.H	NMWQCC Aquatic Life Standards Chronic	n/a	X ^{f, g}
20 NMAC 6.4.900.H	NMWQCC Aquatic Life 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.^d Reference: "Risk Assessment Guidance for Site Investigations and Remediation," New Mexico Environment Department, March 2017 (NMED 2017, 602273).^e Available at <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017>.^f Hardness-based standards for total recoverable aluminum and dissolved chromium(III) conservatively compared with results for total aluminum and dissolved chromium, respectively.^g Standard for dissolved chromium(VI) conservatively compared with results for dissolved chromium.

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

Location	Date	Analyte	Field Prep Code	Result	Unit	Screening Value	Screening-Value Type
n/a*	n/a	There are no results above screening values for data reported in this PMR.	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*

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Location	Depth(ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-27	852.0	03/24/17	WG ^a	Dissolved Oxygen	7.04	mg/L	CAWA-17-130485
R-27	852.0	03/18/16	WG	Dissolved Oxygen	7.19	mg/L	CAWA-16-110752
R-27	852.0	02/06/15	WG	Dissolved Oxygen	7.02	mg/L	CAWA-15-91341
R-27	852.0	03/07/14	WG	Dissolved Oxygen	7.03	mg/L	CAWA-14-54782
R-27	852.0	03/11/13	WG	Dissolved Oxygen	7.23	mg/L	CAWA-13-28880
R-27	852.0	03/24/17	WG	Flow (in gpm ^b)	3.84	gpm	CAWA-17-130485
R-27	852.0	03/18/16	WG	Flow (in gpm)	3.41	gpm	CAWA-16-110752
R-27	852.0	02/06/15	WG	Flow (in gpm)	3.33	gpm	CAWA-15-91341
R-27	852.0	03/07/14	WG	Flow (in gpm)	3.75	gpm	CAWA-14-54782
R-27	852.0	02/03/12	WG	Flow (in gpm)	4	gpm	CAWA-12-2022
R-27	852.0	03/24/17	WG	Oxidation-Reduction Potential	58.2	mV	CAWA-17-130485
R-27	852.0	03/18/16	WG	Oxidation-Reduction Potential	186.3	mV	CAWA-16-110752
R-27	852.0	02/06/15	WG	Oxidation-Reduction Potential	64.6	mV	CAWA-15-91341
R-27	852.0	03/07/14	WG	Oxidation-Reduction Potential	102.1	mV	CAWA-14-54782
R-27	852.0	03/11/13	WG	Oxidation-Reduction Potential	45.4	mV	CAWA-13-28880
R-27	852.0	03/24/17	WG	pH	7.94	SU ^c	CAWA-17-130485
R-27	852.0	03/18/16	WG	pH	7.77	SU	CAWA-16-110752
R-27	852.0	02/06/15	WG	pH	7.88	SU	CAWA-15-91341
R-27	852.0	03/07/14	WG	pH	7.87	SU	CAWA-14-54782
R-27	852.0	03/11/13	WG	pH	7.95	SU	CAWA-13-28880
R-27	852.0	03/24/17	WG	Specific Conductance	119.2	µS/cm	CAWA-17-130485
R-27	852.0	03/18/16	WG	Specific Conductance	124	µS/cm	CAWA-16-110752
R-27	852.0	02/06/15	WG	Specific Conductance	120	µS/cm	CAWA-15-91341
R-27	852.0	03/07/14	WG	Specific Conductance	122	µS/cm	CAWA-14-54782
R-27	852.0	03/11/13	WG	Specific Conductance	119	µS/cm	CAWA-13-28880
R-27	852.0	03/24/17	WG	Temperature	18.3	deg C	CAWA-17-130485
R-27	852.0	03/18/16	WG	Temperature	17.69	deg C	CAWA-16-110752

Location	Depth(ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-27	852.0	02/06/15	WG	Temperature	18.39	deg C	CAWA-15-91341
R-27	852.0	03/07/14	WG	Temperature	18.44	deg C	CAWA-14-54782
R-27	852.0	03/11/13	WG	Temperature	17.88	deg C	CAWA-13-28880
R-27	852.0	03/24/17	WG	Turbidity	0.34	NTU ^d	CAWA-17-130485
R-27	852.0	03/18/16	WG	Turbidity	0.39	NTU	CAWA-16-110752
R-27	852.0	02/06/15	WG	Turbidity	0.7	NTU	CAWA-15-91341
R-27	852.0	03/07/14	WG	Turbidity	0	NTU	CAWA-14-54782
R-27	852.0	03/11/13	WG	Turbidity	0.1	NTU	CAWA-13-28880
R-27i	619.0	03/24/17	WG	Dissolved Oxygen	8.12	mg/L	CAWA-17-130486
R-27i	619.0	03/18/16	WG	Dissolved Oxygen	8.16	mg/L	CAWA-16-110753
R-27i	619.0	02/06/15	WG	Dissolved Oxygen	8.14	mg/L	CAWA-15-91342
R-27i	619.0	03/07/14	WG	Dissolved Oxygen	7.86	mg/L	CAWA-14-54783
R-27i	619.0	03/11/13	WG	Dissolved Oxygen	8.07	mg/L	CAWA-13-28881
R-27i	619.0	03/24/17	WG	Flow (in gpm)	0.52	gpm	CAWA-17-130486
R-27i	619.0	03/18/16	WG	Flow (in gpm)	0.57	gpm	CAWA-16-110753
R-27i	619.0	02/06/15	WG	Flow (in gpm)	0.65	gpm	CAWA-15-91342
R-27i	619.0	03/07/14	WG	Flow (in gpm)	0.6	gpm	CAWA-14-54783
R-27i	619.0	02/03/12	WG	Flow (in gpm)	0.55	gpm	CAWA-12-2018
R-27i	619.0	03/24/17	WG	Oxidation-Reduction Potential	253.8	mV	CAWA-17-130486
R-27i	619.0	03/18/16	WG	Oxidation-Reduction Potential	293.9	mV	CAWA-16-110753
R-27i	619.0	02/06/15	WG	Oxidation-Reduction Potential	118.6	mV	CAWA-15-91342
R-27i	619.0	03/07/14	WG	Oxidation-Reduction Potential	170.6	mV	CAWA-14-54783
R-27i	619.0	03/11/13	WG	Oxidation-Reduction Potential	240.1	mV	CAWA-13-28881
R-27i	619.0	03/24/17	WG	pH	6.96	SU	CAWA-17-130486
R-27i	619.0	03/18/16	WG	pH	6.68	SU	CAWA-16-110753
R-27i	619.0	02/06/15	WG	pH	6.88	SU	CAWA-15-91342
R-27i	619.0	03/07/14	WG	pH	6.99	SU	CAWA-14-54783

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Location	Depth(ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-27i	619.0	03/11/13	WG	pH	6.46	SU	CAWA-13-28881
R-27i	619.0	03/24/17	WG	Specific Conductance	102.4	µS/cm	CAWA-17-130486
R-27i	619.0	03/18/16	WG	Specific Conductance	107	µS/cm	CAWA-16-110753
R-27i	619.0	02/06/15	WG	Specific Conductance	0.6	µS/cm	CAWA-15-91342
R-27i	619.0	03/07/14	WG	Specific Conductance	106	µS/cm	CAWA-14-54783
R-27i	619.0	03/11/13	WG	Specific Conductance	103	µS/cm	CAWA-13-28881
R-27i	619.0	03/24/17	WG	Temperature	13.4	deg C	CAWA-17-130486
R-27i	619.0	03/18/16	WG	Temperature	13.97	deg C	CAWA-16-110753
R-27i	619.0	02/06/15	WG	Temperature	13.48	deg C	CAWA-15-91342
R-27i	619.0	03/07/14	WG	Temperature	13.19	deg C	CAWA-14-54783
R-27i	619.0	03/11/13	WG	Temperature	13.39	deg C	CAWA-13-28881
R-27i	619.0	03/24/17	WG	Turbidity	0.6	NTU	CAWA-17-130486
R-27i	619.0	03/18/16	WG	Turbidity	0.56	NTU	CAWA-16-110753
R-27i	619.0	02/06/15	WG	Turbidity	1.2	NTU	CAWA-15-91342
R-27i	619.0	03/07/14	WG	Turbidity	0.3	NTU	CAWA-14-54783
R-27i	619.0	03/11/13	WG	Turbidity	1.6	NTU	CAWA-13-28881
R-29	1170.0	03/27/17	WG	Dissolved Oxygen	6.31	mg/L	CAAN-17-130479
R-29	1170.0	08/26/16	WG	Dissolved Oxygen	6.07	mg/L	CAAN-16-124887
R-29	1170.0	03/03/16	WG	Dissolved Oxygen	5.87	mg/L	CAAN-16-110571
R-29	1170.0	09/21/15	WG	Dissolved Oxygen	6.46	mg/L	CAAN-15-104031
R-29	1170.0	03/09/15	WG	Dissolved Oxygen	7.09	mg/L	CAAN-15-92883
R-29	1170.0	08/06/14	WG	Dissolved Oxygen	7.14	mg/L	CAAN-14-84628
R-29	1170.0	03/27/17	WG	Flow (in gpm)	7.32	gpm	CAAN-17-130479
R-29	1170.0	08/26/16	WG	Flow (in gpm)	6.81	gpm	CAAN-16-124887
R-29	1170.0	03/03/16	WG	Flow (in gpm)	7.69	gpm	CAAN-16-110571
R-29	1170.0	09/21/15	WG	Flow (in gpm)	7.14	gpm	CAAN-15-104031
R-29	1170.0	03/09/15	WG	Flow (in gpm)	7.5	gpm	CAAN-15-92883

Location	Depth(ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170.0	08/06/14	WG	Flow (in gpm)	7.3	gpm	CAAN-14-84628
R-29	1170.0	03/27/17	WG	Oxidation-Reduction Potential	67.1	mV	CAAN-17-130479
R-29	1170.0	08/26/16	WG	Oxidation-Reduction Potential	78.3	mV	CAAN-16-124887
R-29	1170.0	03/03/16	WG	Oxidation-Reduction Potential	135	mV	CAAN-16-110571
R-29	1170.0	09/21/15	WG	Oxidation-Reduction Potential	116.1	mV	CAAN-15-104031
R-29	1170.0	03/09/15	WG	Oxidation-Reduction Potential	203.5	mV	CAAN-15-92883
R-29	1170.0	08/06/14	WG	Oxidation-Reduction Potential	71	mV	CAAN-14-84628
R-29	1170.0	03/27/17	WG	pH	7.86	SU	CAAN-17-130479
R-29	1170.0	08/26/16	WG	pH	8.12	SU	CAAN-16-124887
R-29	1170.0	03/03/16	WG	pH	8.36	SU	CAAN-16-110571
R-29	1170.0	09/21/15	WG	pH	8	SU	CAAN-15-104031
R-29	1170.0	03/09/15	WG	pH	8.12	SU	CAAN-15-92883
R-29	1170.0	08/06/14	WG	pH	7.66	SU	CAAN-14-84628
R-29	1170.0	03/27/17	WG	Specific Conductance	121.4	µS/cm	CAAN-17-130479
R-29	1170.0	08/26/16	WG	Specific Conductance	122.7	µS/cm	CAAN-16-124887
R-29	1170.0	03/03/16	WG	Specific Conductance	125	µS/cm	CAAN-16-110571
R-29	1170.0	09/21/15	WG	Specific Conductance	126	µS/cm	CAAN-15-104031
R-29	1170.0	03/09/15	WG	Specific Conductance	126	µS/cm	CAAN-15-92883
R-29	1170.0	08/06/14	WG	Specific Conductance	123	µS/cm	CAAN-14-84628
R-29	1170.0	08/06/14	WG	Dissolved Oxygen	7.14	mg/L	CAAN-14-84628
R-29	1170.0	03/27/17	WG	Temperature	18.8	deg C	CAAN-17-130479
R-29	1170.0	08/26/16	WG	Temperature	19.4	deg C	CAAN-16-124887
R-29	1170.0	03/03/16	WG	Temperature	18.42	deg C	CAAN-16-110571
R-29	1170.0	09/21/15	WG	Temperature	20	deg C	CAAN-15-104031
R-29	1170.0	03/09/15	WG	Temperature	18.76	deg C	CAAN-15-92883
R-29	1170.0	08/06/14	WG	Temperature	19.14	deg C	CAAN-14-84628
R-29	1170.0	03/27/17	WG	Turbidity	7.74	NTU	CAAN-17-130479

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Location	Depth(ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170.0	08/26/16	WG	Turbidity	7.74	NTU	CAAN-16-124887
R-29	1170.0	03/03/16	WG	Turbidity	7.31	NTU	CAAN-16-110571
R-29	1170.0	09/21/15	WG	Turbidity	6.9	NTU	CAAN-15-104031
R-29	1170.0	03/09/15	WG	Turbidity	6.4	NTU	CAAN-15-92883
R-29	1170.0	08/06/14	WG	Turbidity	6.3	NTU	CAAN-14-84628
R-30	1140.0	03/27/17	WG	Dissolved Oxygen	6.92	mg/L	CAAN-17-130480
R-30	1140.0	08/26/16	WG	Dissolved Oxygen	6.82	mg/L	CAAN-16-124883
R-30	1140.0	03/04/16	WG	Dissolved Oxygen	6.88	mg/L	CAAN-16-110572
R-30	1140.0	09/22/15	WG	Dissolved Oxygen	7.21	mg/L	CAAN-15-104032
R-30	1140.0	03/10/15	WG	Dissolved Oxygen	6.97	mg/L	CAAN-15-92884
R-30	1140.0	08/11/14	WG	Dissolved Oxygen	7.22	mg/L	CAAN-14-84629
R-30	1140.0	03/27/17	WG	Flow (in gpm)	5.38	gpm	CAAN-17-130480
R-30	1140.0	08/26/16	WG	Flow (in gpm)	5.45	gpm	CAAN-16-124883
R-30	1140.0	03/04/16	WG	Flow (in gpm)	5.77	gpm	CAAN-16-110572
R-30	1140.0	09/22/15	WG	Flow (in gpm)	5.6	gpm	CAAN-15-104032
R-30	1140.0	03/10/15	WG	Flow (in gpm)	5.08	gpm	CAAN-15-92884
R-30	1140.0	08/11/14	WG	Flow (in gpm)	5.26	gpm	CAAN-14-84629
R-30	1140.0	03/27/17	WG	Oxidation-Reduction Potential	205.3	mV	CAAN-17-130480
R-30	1140.0	08/26/16	WG	Oxidation-Reduction Potential	168.37	mV	CAAN-16-124883
R-30	1140.0	03/04/16	WG	Oxidation-Reduction Potential	197.5	mV	CAAN-16-110572
R-30	1140.0	09/22/15	WG	Oxidation-Reduction Potential	162.7	mV	CAAN-15-104032
R-30	1140.0	03/10/15	WG	Oxidation-Reduction Potential	204.2	mV	CAAN-15-92884
R-30	1140.0	08/11/14	WG	Oxidation-Reduction Potential	81.2	mV	CAAN-14-84629
R-30	1140.0	03/27/17	WG	pH	7.89	SU	CAAN-17-130480
R-30	1140.0	08/26/16	WG	pH	8.18	SU	CAAN-16-124883
R-30	1140.0	03/04/16	WG	pH	7.9	SU	CAAN-16-110572
R-30	1140.0	09/22/15	WG	pH	7.93	SU	CAAN-15-104032

Location	Depth(ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-30	1140.0	03/10/15	WG	pH	8.17	SU	CAAN-15-92884
R-30	1140.0	08/11/14	WG	pH	7.75	SU	CAAN-14-84629
R-30	1140.0	03/27/17	WG	Specific Conductance	119.1	µS/cm	CAAN-17-130480
R-30	1140.0	08/26/16	WG	Specific Conductance	119.8	µS/cm	CAAN-16-124883
R-30	1140.0	03/04/16	WG	Specific Conductance	124	µS/cm	CAAN-16-110572
R-30	1140.0	09/22/15	WG	Specific Conductance	122	µS/cm	CAAN-15-104032
R-30	1140.0	03/10/15	WG	Specific Conductance	120	µS/cm	CAAN-15-92884
R-30	1140.0	08/11/14	WG	Specific Conductance	118	µS/cm	CAAN-14-84629
R-30	1140.0	03/27/17	WG	Temperature	19.7	deg C	CAAN-17-130480
R-30	1140.0	08/26/16	WG	Temperature	20	deg C	CAAN-16-124883
R-30	1140.0	03/04/16	WG	Temperature	19.72	deg C	CAAN-16-110572
R-30	1140.0	09/22/15	WG	Temperature	20.19	deg C	CAAN-15-104032
R-30	1140.0	03/10/15	WG	Temperature	19.43	deg C	CAAN-15-92884
R-30	1140.0	08/11/14	WG	Temperature	20.04	deg C	CAAN-14-84629
R-30	1140.0	03/27/17	WG	Turbidity	0.65	NTU	CAAN-17-130480
R-30	1140.0	08/26/16	WG	Turbidity	0.5	NTU	CAAN-16-124883
R-30	1140.0	03/04/16	WG	Turbidity	1	NTU	CAAN-16-110572
R-30	1140.0	09/22/15	WG	Turbidity	3	NTU	CAAN-15-104032
R-30	1140.0	03/10/15	WG	Turbidity	0.78	NTU	CAAN-15-92884
R-30	1140.0	08/11/14	WG	Turbidity	0.45	NTU	CAAN-14-84629

^a WG = Groundwater.^b gpm = Gallons per minute.^c SU = Standard unit.^d 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	Contract 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
GELC	General Engineering Laboratories, Inc. (used in Environmental Information Management database)
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

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Miscellaneous (continued)	
IDL	instrument detection limit
IS	internal standard
LAL	lower acceptance limit
LANL	Los Alamos National Laboratory
LCS	laboratory control sample
LLEEE	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	New Mexico
NMED	New Mexico Environment 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

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Miscellaneous (continued)	
TCDD	tetrachlorodibenzo-p-dioxin
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

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Field QC Type Codes (continued)	
PEB	performance evaluation blank
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 and Best Value 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

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Lab Codes (continued)	
GELC	General Engineering Laboratories, Inc., Charleston, SC (used in Environmental Information Management data base)
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

Note: A combination of analytical laboratory qualifier codes means that several codes apply.

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.
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or data exception report.
U	The material was analyzed for but was not detected above the level of the associated numeric value.
U*	See U code and see * code.
UD	See U code and see D code.
UE	See U code and see E code.
UE*	See U code, see E code, and see * code.
UEN	See U code, see E code, and see N code.
UH	See U code and see H code.

Analytical Laboratory Qualifier Codes (continued)

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

Secondary Validation Flag Codes

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

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.06	—	—	0.01	SU	Y	H	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.97	—	—	0.01	SU	Y	H	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.98	—	—	0.01	SU	Y	H	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.9	—	—	0.01	SU	Y	H	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.12	—	—	0.01	SU	Y	H	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.91	—	—	0.01	SU	Y	H	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO ₃ +HCO ₃	ALK-CO ₃ +HCO ₃	Y	59	—	—	1.45	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO ₃ +HCO ₃	ALK-CO ₃ +HCO ₃	Y	57.9	—	—	0.725	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO ₃ +HCO ₃	ALK-CO ₃ +HCO ₃	Y	58.4	—	—	0.725	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO ₃ +HCO ₃	ALK-CO ₃ +HCO ₃	Y	56.5	—	—	0.725	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO ₃ +HCO ₃	ALK-CO ₃ +HCO ₃	Y	47.6	—	—	0.725	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO ₃ +HCO ₃	ALK-CO ₃ +HCO ₃	Y	55.1	—	—	0.725	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0112	0.00674	0.0521	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0152	0.0056	0.0303	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00679	0.00635	0.0304	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0058	0.00916	0.0412	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.00643	0.0526	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00707	0.00782	0.0309	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	2.22	—	—	2	µg/L	Y	J	J	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	26.1	—	—	1	µg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	26.9	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	27.1	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	26.7	—	—	1	µg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	26.1	—	—	1	µg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	26.2	—	—	1	µg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	11.1	—	—	0.05	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.7	—	—	0.05	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.8	—	—	0.05	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.3	—	—	0.05	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	9.71	—	—	0.05	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-																						

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.55	—	—	2	µg/L	Y	J	J	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.1	—	—	2	µg/L	Y	J	J	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.0823	1.15	4.33	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.0758	1.53	6.04	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.4	1.31	3.33	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.39	1.26	5.64	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.699	1.26	5.04	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.297	1.07	4.2	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.176	—	—	0.033	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.173	—	—	0.033	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.17	—	—	0.033	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.192	—	—	0.033	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.185	—	—	0.033	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.235	—	—	0.033	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.583	0.755	2.86	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.63	0.936	2.97	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.365	0.762	2.96	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.42	0.821	2.68	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.949	0.521	2.51	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.54	0.743	2.07	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	2.14	0.887	2.83	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	1.51	0.443	1.42	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	-1.13	0.474	1.65	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.161	0.753	2.64	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	-1.04	0.553	1.9	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	3.48	0.878	2.35	—	pCi/L	Y	—	NQ	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	41.2	—	—	0.453	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.4	—	—	0.453	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.7	—	—	0.453	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.4	—	—	0.453	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.9	—	—	0.453	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.5	—	—	0.453	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.3	—	—	0.11	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.09	—									

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	2.18	2.21	7.78	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.51	3.4	12.1	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.66	2.84	9.51	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.27	2.33	7.67	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.272	—	—	0.017	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.278	—	—	0.017	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.294	—	—	0.017	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.285	—	—	0.017	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.392	—	—	0.017	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.274	—	—	0.017	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.211	—	—	0.05	µg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.208	—	—	0.05	µg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.203	—	—	0.05	µg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.197	—	—	0.05	µg/L	Y	J	J	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.203	—	—	0.05	µg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	02/03/2012	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.211	—	—	0.05	µg/L	Y	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00971	0.00724	0.0586	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.0153	0.00881	0.0402	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00583	0.00921	0.0461	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00706	0.00623	0.0414	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00601	0.00601	0.0387	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00687	0.00944	0.0295	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00971	0.0107	0.0487	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0127	0.0105	0.037	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0262	0.012	0.0424	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0118	0.00706	0.0465	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00601	0.0085	0.0882	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00687	0.00606	0.0327	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.56	—	—	0.05	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.33	—	—	0.05	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.32	—	—	0.05	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.21	—	—	0.05	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.38	—	—	0.05	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.29	—	—	0.05	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-2										

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.76	—	—	0.1	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.1	—	—	0.1	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	9.67	—	—	0.1	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.511	0.894	3.68	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.629	1.81	6.55	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.796	1.1	3.85	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-1.03	1.47	5.27	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.295	1.41	5.22	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.313	1.28	4.56	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	123	—	—	1	uS/cm	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	126	—	—	3.63	uS/cm	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	127	—	—	3.63	uS/cm	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	111	—	—	3.63	uS/cm	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	117	—	—	1	uS/cm	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	119	—	—	1	uS/cm	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	48.2	—	—	1	µg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	49.3	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	49.3	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	47.7	—	—	1	µg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	48.6	—	—	1	µg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	47.9	—	—	1	µg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0445	0.0842	0.309	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.242	0.128	0.486	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0983	0.105	0.434	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.206	0.089	0.364	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.175	0.126	0.485	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.167	0.0839	0.295	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.44	—	—	0.133	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.32	—	—	0.133	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.32	—	—	0.133	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.29	—	—	0.133	mg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.41	—	—	0.133	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.44	—	—	0.133	mg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	144	—	—	3.4	mg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	134	—	—	3.4	mg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	114	—	—	3.4	mg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG																			

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.197	—	—	0.017	mg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.707	0.69	2.267	—	pCi/L	Y	U	U	2017-1286	CAWA-17-130485	ARSL
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.244	0.648	2.217	—	pCi/L	Y	U	U	2016-946	CAWA-16-110697	ARSL
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.143	0.658	2.247	—	pCi/L	Y	U	U	2016-946	CAWA-16-110752	ARSL
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	2.087	0.746	2.157	—	pCi/L	Y	U	U	2015-789	CAWA-15-91341	ARSL
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.038	0.646	2.061	—	pCi/L	Y	U	U	2014-2979	CAWA-14-54782	ARSL
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.601	0.645	2.214	—	pCi/L	Y	U	U	2013-614	CAWA-13-28880	ARSL
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.553	—	—	0.067	µg/L	Y	—	NQ	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.623	—	—	0.067	µg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.612	—	—	0.067	µg/L	Y	—	NQ	2016-929	CAWA-16-110700	GELC
R-27	852.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.511	—	—	0.067	µg/L	Y	—	NQ	2015-772	CAWA-15-91368	GELC
R-27	852.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.501	—	—	0.067	µg/L	Y	—	NQ	2014-2960	CAWA-14-54784	GELC
R-27	852.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.524	—	—	0.067	µg/L	Y	—	NQ	2013-605	CAWA-13-28882	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.408	0.0316	0.126	—	pCi/L	Y	—	NQ	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.369	0.0414	0.157	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.356	0.0348	0.118	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.331	0.0278	0.102	—	pCi/L	Y	—	NQ	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.301	0.0302	0.0438	—	pCi/L	Y	—	NQ	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.283	0.0284	0.0577	—	pCi/L	Y	—	NQ	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.029	0.0123	0.108	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0	0.00684	0.101	—	pCi/L	Y	U	U	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0125	0.00882	0.0755	—	pCi/L	Y	U	U	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0428	0.0114	0.0454	—	pCi/L	Y	U	U	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	-0.00654	0.0103	0.0418	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0155	0.00928	0.0335	—	pCi/L	Y	U	U	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.192	0.0225	0.127	—	pCi/L	Y	—	NQ	2017-1265	CAWA-17-130485	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.185	0.0298	0.101	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110752	GELC
R-27	852.0	03/18/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.195	0.027	0.0753	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110697	GELC
R-27	852.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.171	0.0204	0.0427	—	pCi/L	Y	—	NQ	2015-772	CAWA-15-91341	GELC
R-27	852.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.182	0.0244	0.0409	—	pCi/L	Y	—	NQ	2014-2960	CAWA-14-54782	GELC
R-27	852.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.163	0.0208	0.0312	—	pCi/L	Y	—	NQ	2013-605	CAWA-13-28880	GELC
R-27	852.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	4.55	—	—	1	µg/L	Y	J	J	2017-1265	CAWA-17-130483	GELC
R-27	852.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	5.88	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110783	GELC
R-27	852.0	03/18/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	5.75	—	—	1	µg/L	Y	—	NQ	201		

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00558	0.00416	0.033	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.00606	0.0352	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00248	0.00656	0.0496	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00954	0.00826	0.0313	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	8.97	—	—	1	µg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	9.43	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	9.35	—	—	1	µg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	9.27	—	—	1	µg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	9.69	—	—	1	µg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.15	—	—	0.05	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	8.79	—	—	0.05	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	8.79	—	—	0.05	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.11	—	—	0.05	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.38	—	—	0.05	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.374	1.16	3.58	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.565	1.53	4.75	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.62	1.34	3.92	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-2.87	1.77	5.42	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.826	2.2	6.52	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.31	—	—	0.067	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.22	—	—	0.067	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.28	—	—	0.067	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.34	—	—	0.067	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.36	—	—	0.067	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.751	1.01	3.58	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.66	1.42	4.93	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.778	1.16	4.98	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.36	1.42	5.08	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.45	2.43	7.75	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.159	—	—	0.033	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.141	—	—	0.033	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.171	—	—	0.033	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.149	—	—	0.033	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.206	—	—	0.033	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.623	0.413	1.58	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.408	0.528	2.75	—	pCi/L						

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	SVOC	SW-846:8270D	Hexachlorobutadiene	87-68-3	N	10.2	—	—	3.06	µg/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	VOC	SW-846:8260B	Hexachlorobutadiene	87-68-3	Y	0.37	—	—	0.3	µg/L	Y	BJ	J	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	VOC	SW-846:8260B	Hexachlorobutadiene	87-68-3	N	1	—	—	0.3	µg/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	SVOC	SW-846:8270D	Hexachlorobutadiene	87-68-3	N	5.1	—	—	1.53	µg/L	Y	U	UJ	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	VOC	SW-846:8260B	Hexachlorobutadiene	87-68-3	N	1	—	—	0.3	µg/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	SVOC	SW-846:8270D	Hexachlorobutadiene	87-68-3	N	10.6	—	—	3.19	µg/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	SVOC	SW-846:8270C	Hexachlorobutadiene	87-68-3	N	10.2	—	—	3.06	µg/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	VOC	SW-846:8260B	Hexachlorobutadiene	87-68-3	N	1	—	—	0.3	µg/L	Y	UH	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	SVOC	SW-846:8270C	Hexachlorobutadiene	87-68-3	N	10	—	—	3	µg/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	VOC	SW-846:8260B	Hexachlorobutadiene	87-68-3	N	1	—	—	0.3	µg/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.54	—	—	0.11	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.5	—	—	0.11	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.5	—	—	0.11	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.29	—	—	0.11	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.42	—	—	0.11	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.63	—	—	0.2	µg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.49	—	—	0.165	µg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.54	—	—	0.165	µg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.59	—	—	0.165	µg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.7	—	—	0.165	µg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	2.08	3.5	8.02	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.41	3.3	11.8	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.967	3.07	10.9	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-6.1	3.04	10.1	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	2.11	4.71	15	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.0903	—	—	0.017	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.112	—	—	0.017	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.107	—	—	0.017	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.11	—	—	0.017	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.0955	—	—	0.017	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.12	—	—	0.05	µg/L	Y	J	J	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.124	—	—	0.05	µg/L	Y	J	J	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.112	—	—	0.05	µg/L	Y	J	J	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.117	—	—	0.05	µg/L	Y	J	J	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	02/03/2012	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.123	—	—	0.05	µg/L	Y	J	J	12-719	CAWA-12-2019	GELC
R-27i	619.0	03/24/																				

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	0.8	—	—	0.05	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-3.82	13.6	49.1	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	45	19.7	64.1	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	34.8	28.6	64.2	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	50	23.2	55.6	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-23.3	24.2	75.9	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	65.1	—	—	0.053	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	68	—	—	0.053	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	66.6	—	—	0.053	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	63.9	—	—	0.053	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	67.3	—	—	0.053	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	10	—	—	0.1	mg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.68	—	—	0.1	mg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.76	—	—	0.1	mg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	9.89	—	—	0.1	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	9.59	—	—	0.1	mg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.645	1.05	3.69	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.99	1.51	5.58	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.18	1.5	5.52	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.297	1.62	6.05	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	6.36	2.18	8.13	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	108	—	—	1	uS/cm	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	111	—	—	3.63	uS/cm	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	97.3	—	—	3.63	uS/cm	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	103	—	—	1	uS/cm	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	103	—	—	1	uS/cm	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	45.5	—	—	1	µg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	46.6	—	—	1	µg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	46.8	—	—	1	µg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	46.7	—	—	1	µg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	45.9	—	—	1	µg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0994	0.127	0.472	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.037	0.132	0.491	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.135	0.139	0.477	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.252	0.0884	0.438	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.373	0.134	0.476	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881</td	

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.631	—	—	0.33	mg/L	Y	J	J	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.78	—	—	0.33	mg/L	Y	J	J	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0393	—	—	0.02	mg/L	Y	J	J	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.15	—	—	0.017	mg/L	Y	—	NQ	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	VOC	SW-846:8260B	Trichlorobenzene[1,2,3-]	87-61-6	Y	0.31	—	—	0.3	µg/L	Y	BJ	J	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	VOC	SW-846:8260B	Trichlorobenzene[1,2,3-]	87-61-6	N	1	—	—	0.3	µg/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	VOC	SW-846:8260B	Trichlorobenzene[1,2,3-]	87-61-6	N	1	—	—	0.3	µg/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	VOC	SW-846:8260B	Trichlorobenzene[1,2,3-]	87-61-6	N	1	—	—	0.3	µg/L	Y	UH	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	VOC	SW-846:8260B	Trichlorobenzene[1,2,3-]	87-61-6	N	1	—	—	0.3	µg/L	Y	U	UJ	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.444	0.796	2.717	—	pCi/L	Y	U	U	2017-1286	CAWA-17-130486	ARSL
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.16	0.646	2.207	—	pCi/L	Y	U	U	2016-946	CAWA-16-110753	ARSL
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.833	0.666	2.17	—	pCi/L	Y	U	U	2015-789	CAWA-15-91342	ARSL
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.594	0.66	2.262	—	pCi/L	Y	U	U	2014-2979	CAWA-14-54783	ARSL
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.128	0.714	2.282	—	pCi/L	Y	U	U	2013-614	CAWA-13-28881	ARSL
R-27i	619.0	03/24/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.259	—	—	0.067	µg/L	Y	—	NQ	2017-1265	CAWA-17-130484	GELC
R-27i	619.0	03/18/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.294	—	—	0.067	µg/L	Y	—	NQ	2016-929	CAWA-16-110784	GELC
R-27i	619.0	02/06/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.249	—	—	0.067	µg/L	Y	—	NQ	2015-772	CAWA-15-91369	GELC
R-27i	619.0	03/07/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	N	0.25	—	—	0.067	µg/L	Y	—	U	2014-2960	CAWA-14-54785	GELC
R-27i	619.0	03/11/2013	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.269	—	—	0.067	µg/L	Y	—	NQ	2013-604	CAWA-13-28883	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.213	0.0249	0.128	—	pCi/L	Y	—	NQ	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.215	0.0273	0.113	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.193	0.0205	0.0916	—	pCi/L	Y	—	NQ	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.214	0.0262	0.048	—	pCi/L	Y	—	NQ	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.152	0.0233	0.0717	—	pCi/L	Y	—	J	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.044	0.0134	0.11	—	pCi/L	Y	U	U	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0131	0.00978	0.0724	—	pCi/L	Y	U	U	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00723	0.00799	0.0409	—	pCi/L	Y	U	U	2015-772	CAWA-15-91342	GELC
R-27i	619.0	03/07/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0179	0.0107	0.0458	—	pCi/L	Y	U	U	2014-2960	CAWA-14-54783	GELC
R-27i	619.0	03/11/2013	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00769	0.0122	0.0416	—	pCi/L	Y	U	U	2013-604	CAWA-13-28881	GELC
R-27i	619.0	03/24/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.138	0.0196	0.129	—	pCi/L	Y	—	NQ	2017-1265	CAWA-17-130486	GELC
R-27i	619.0	03/18/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.133	0.0214	0.0722	—	pCi/L	Y	—	NQ	2016-929	CAWA-16-110753	GELC
R-27i	619.0	02/06/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.0877	0.0139	0.0385</td								

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	60.2	—	—	1.45	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.8	—	—	0.725	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.8	—	—	0.725	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.3	—	—	0.725	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.7	—	—	0.725	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.3	—	—	0.725	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	49.6	—	—	0.725	mg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	50.1	—	—	0.725	mg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00378	0.00535	0.0439	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0161	0.00592	0.0414	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0215	0.0104	0.0393	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0107	0.00932	0.0383	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00765	0.00605	0.0343	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00000000102	0.00575	0.0327	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00934	0.00934	0.0375	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.013	0.00934	0.0435	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00395	0.0153	0.0462	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00804	0.00804	0.0471	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	15.5	—	—	1	µg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	16.1	—	—	1	µg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	16	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	17	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	16.7	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	17.3	—	—	1	µg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	17	—	—	1	µg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	17.2	—	—	1	µg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	15.9	—	—	1	µg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	16	—	—	1	µg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.92	—	—	0.05	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.1	—	—	0.05	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.72	—	—	0.05	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	11.2	—	—	0.05	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	11.1	—	—	0.05	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.6	—	—	0.05	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.5	—	—	0.05	mg/L	Y	—	NQ</			

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	03/27/2017	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.77	—	—	0.067	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.71	—	—	0.067	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.68	—	—	0.067	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.69	—	—	0.067	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.81	—	—	0.067	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.8	—	—	0.067	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.69	—	—	0.067	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.68	—	—	0.067	mg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.71	—	—	0.067	mg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.12	—	—	3	µg/L	Y	J	J	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	3	µg/L	Y	U	U	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	3	µg/L	Y	U	U	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	Y	U	U	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Cobalt	Co	Y	1.47	—	—	1	µg/L	Y	J	J	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Cobalt	Co	Y	1.98	—	—	1	µg/L	Y	J	J	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Cobalt	Co	Y	1.73	—	—	1	µg/L	Y	J	J	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Cobalt	Co	N	5	—	—	1	µg/L	Y	U	U	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Cobalt	Co	N	5	—	—	1	µg/L	Y	U	U	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Cobalt	Co	Y	1.17	—	—	1	µg/L	Y	J	J	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Cobalt	Co	N	5	—	—	1	µg/L	Y	U	U	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Cobalt	Co	N	5	—	—	1	µg/L	Y	U	U	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.78	1.06	4.32	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-3.07	1.11	3.27	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.31	0.913	2.12	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.453	1.45	5.7	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.376	1.12	4.62	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.51	1.27	5.17	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.109	1.38	5.24	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.06	1.21	5.27	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.44	1.32	4.53	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.65	1.25	3.74	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.142	—	—	0.033	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	GENERAL															

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.0535	0.653	2.81	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.911	0.616	2.96	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.574	0.802	2.94	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.272	0.327	1.2	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.71	0.774	2.23	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.211	0.655	2.3	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.67	0.9	2.94	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	1.62	0.835	2.72	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	-0.289	0.693	2.54	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	1.7	0.437	1.39	—	pCi/L	Y	—	NQ	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.132	0.532	1.78	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.671	0.874	2.95	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	-1.1	0.548	2.11	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.853	0.33	1.06	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	2	0.6	1.76	—	pCi/L	Y	—	NQ	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	0.984	0.854	2.88	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	36.1	—	—	0.453	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	36.9	—	—	0.453	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.2	—	—	0.453	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	41	—	—	0.453	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.4	—	—	0.453	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.8	—	—	0.453	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.5	—	—	0.453	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.7	—	—	0.453	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.8	—	—	0.453	mg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	36	—	—	0.453	mg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.76	—	—	0.11	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.81	—	—	0.11	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.65	—	—	0.11	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.16	—	—	0.11	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.09	—	—	0.11	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3	—	—	0.11	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.96	—	—	0.11	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.85	—	—	0.11	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.75	—	—	0.11	mg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.79	—	—	0.11	mg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Manganese</td													

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.46	—	—	0.165	µg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.33	—	—	0.165	µg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.44	—	—	0.165	µg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.49	—	—	0.165	µg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.49	—	—	0.165	µg/L	Y	—	J	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.44	—	—	0.165	µg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.39	—	—	0.165	µg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.64	1.98	6.14	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.901	1.73	5.65	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.5	2.21	8.83	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	-5.59	2.89	9.44	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-4.85	2.59	8.47	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.22	2.55	9.06	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.283	2.81	9.86	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.26	2.22	7.67	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.45	2.49	8.98	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.665	2.66	9.44	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.275	—	—	0.017	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.277	—	—	0.017	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.274	—	—	0.017	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.317	—	—	0.017	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.292	—	—	0.017	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.287	—	—	0.017	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.278	—	—	0.017	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.306	—	—	0.017	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.291	—	—	0.017	mg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.296	—	—	0.017	mg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.243	—	—	0.05	µg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.228	—	—	0.05	µg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.234	—	—	0.05	µg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.23	—	—	0.05	µg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.227	—	—	0.05	µg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.225	—	—	0.05	µg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.227	—	—	0.05	µg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.22	—	—	0.05	µg/L	Y	—	NQ			

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.0079	0.0616	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00741	0.00524	0.0269	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.00572	0.0294	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00675	0.00606	0.024	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.0072	0.0372	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00415	0.00508	0.0506	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00662	0.00662	0.0696	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00329	0.0087	0.0691	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.19	—	—	0.05	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.21	—	—	0.05	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.35	—	—	0.05	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.34	—	—	0.05	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.21	—	—	0.05	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.16	—	—	0.05	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.15	—	—	0.05	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.13	—	—	0.05	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.14	—	—	0.05	mg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.12	—	—	0.05	mg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	43.5	17.8	31.7	—	pCi/L	Y	UI	R	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	-3.49	13.1	45.8	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	2.52	16.3	67.3	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	-8.62	16.2	58.1	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-3.41	17.6	68.8	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	7.48	16.7	56.8	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	-36.4	18.7	57.1	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	16.3	17.6	38.2	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-15.9	15.6	56.3	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	0.8	15	59.6	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	60.8	—	—	0.053	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	62.5	—	—	0.053	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	62.2	—	—	0.053	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	68	—	—	0.053	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	67.1	—	—	0.053	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	64.4	—	—	0.053	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	64.5	—	—	0.053	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.344	0.86	3.26	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.29	1.14	5	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-1.69	1.54	5.07	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.26	1.05	4.72	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.252	1.3	4.82	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.671	1.26	4.68	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-2.11	1.16	3.52	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-2.05	1.16	3.74	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	1.07	1.06	4.42	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	123	—	—	1	uS/cm	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	124	—	—	1	uS/cm	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	108	—	—	3.63	uS/cm	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	129	—	—	3.63	uS/cm	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	130	—	—	3.63	uS/cm	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	104	—	—	1	uS/cm	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	107	—	—	1	uS/cm	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	114	—	—	3.63	uS/cm	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	122	—	—	1	uS/cm	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	124	—	—	1	uS/cm	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	58.7	—	—	1	µg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	59.8	—	—	1	µg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	57.6	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	63.7	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	62.4	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	53.4	—	—	1	µg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	56	—	—	1	µg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	59.1	—	—	1	µg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	57	—	—	1	µg/L	Y	—	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	57	—	—	1	µg/L	Y	—	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.146	0.0767	0.351	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0383	0.123	0.494	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.176	0.1	0.35	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.12	0.116	0.463	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.324	0.149	0.477	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0734	0.097	0.403	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.109	0.107	0.413	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	136	—	—	3.4	mg/L	Y	—	NQ	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	129	—	—	3.4	mg/L	Y	—	NQ	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	127	—	—	3.4	mg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	124	—	—	3.4	mg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	107	—	—	3.4	mg/L	Y	—	NQ	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	129	—	—	3.4	mg/L	Y	—	NQ	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	116	—	—	3.4	mg/L	Y	—	NQ	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	62.9	—	—	3.4	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	08/06/2014	WG	F	RE	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	113	—	—	3.4	mg/L	Y	H	NQ	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/06/2014	WG	F	RE	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	94.3	—	—	3.4	mg/L	Y	H	NQ	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	413	—	—	3.4	mg/L	N	—	R	2014-4255	CAAN-14-84624	GELC
R-29	1170.0	08/06/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	223	—	—	3.4	mg/L	N	—	R	2014-4255	CAAN-14-84630	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	Y	0.828	—	—	0.033	mg/L	Y	—	NQ	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	1	—	—	0.33	mg/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.5	—	—	0.165	mg/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.0547	—	—	0.033	mg/L	Y	J	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0432	—	—	0.02	mg/L	Y	J	J	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0428	—	—	0.02	mg/L	Y	J	J	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.02	mg/L	Y	U	U	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2016-856	CAAN-16-110566	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0448	—	—	0.017	mg/L	Y	J	J	2015-2362	CAAN-15-104033	GELC
R-29	1170.0	09/21/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0362	—	—	0.017	mg/L	Y	J	J	2015-2362	CAAN-15-104028	GELC
R-29	1170.0	03/09/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0765	—	—	0.017	mg/L	Y	—	NQ	2015-866	CAAN-15-92887	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.839	0.982	3.313	—	pCi/L	Y	U	U	2017-1286	CAAN-17-130479	ARSL
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-2.241	0.91	3.012	—	pCi/L	Y	U	U	2017-1286	CAAN-17-130539	ARSL
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.433	0.764	2.602	—	pCi/L	Y	U	U	2016-2325	CAAN-16-124887	ARSL
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.275	0.584	1.964	—	pCi/L	Y	U	U	2016-846	CAAN-16-110571	ARSL
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.997	0.704	2.272	—	pCi/L	Y	U	U	2016-846	CAAN-16-110565	ARSL
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.568	0.743	2.499	—	pCi/L	Y	U	U	2015-2371	CAAN-15-104031	ARSL
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.656	0.69	2.362	—	pCi/L	Y	U	U	2015-2371	CAAN-15-104027	ARSL
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.3	1.01	3.43	—	pCi/L	Y	U	U	2015-885	CAAN-15-92883	ARSL
R-29	1170.0	08/																				

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.286	0.0291	0.145	—	pCi/L	Y	—	NQ	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.226	0.0235	0.0824	—	pCi/L	Y	—	NQ	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.277	0.0265	0.089	—	pCi/L	Y	—	NQ	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.297	0.029	0.0952	—	pCi/L	Y	—	NQ	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.345	0.037	0.135	—	pCi/L	Y	—	NQ	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.305	0.0306	0.122	—	pCi/L	Y	—	NQ	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	N	0.242	0.0443	0.267	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.255	0.027	0.0631	—	pCi/L	Y	—	J	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.339	0.0354	0.0865	—	pCi/L	Y	—	NQ	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0174	0.0105	0.13	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0234	0.01	0.125	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0137	0.00725	0.079	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0322	0.0121	0.0569	—	pCi/L	Y	U	U	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0345	0.0121	0.0608	—	pCi/L	Y	U	U	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.087	0.0202	0.0952	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0645	0.016	0.0863	—	pCi/L	Y	U	U	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0256	0.0283	0.167	—	pCi/L	Y	U	U	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0284	0.0105	0.038	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00863	0.00863	0.052	—	pCi/L	Y	U	U	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.194	0.0237	0.153	—	pCi/L	Y	—	NQ	2017-1277	CAAN-17-130479	GELC
R-29	1170.0	03/27/2017	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.17	0.0231	0.146	—	pCi/L	Y	—	NQ	2017-1277	CAAN-17-130539	GELC
R-29	1170.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.157	0.0202	0.0823	—	pCi/L	Y	—	NQ	2016-2218	CAAN-16-124887	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.185	0.0217	0.0568	—	pCi/L	Y	—	NQ	2016-856	CAAN-16-110565	GELC
R-29	1170.0	03/03/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.145	0.0204	0.0608	—	pCi/L	Y	—	NQ	2016-856	CAAN-16-110571	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.237	0.03	0.125	—	pCi/L	Y	—	NQ	2015-2362	CAAN-15-104031	GELC
R-29	1170.0	09/21/2015	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.197	0.0249	0.114	—	pCi/L	Y	—	NQ	2015-2362	CAAN-15-104027	GELC
R-29	1170.0	03/09/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.159	0.0397	0.136	—	pCi/L	Y	—	NQ	2015-866	CAAN-15-92883	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.112	0.018	0.0563	—	pCi/L	Y	—	J	2014-4255	CAAN-14-84628	GELC
R-29	1170.0	08/06/2014	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.161	0.0247	0.0772	—	pCi/L	Y	—	NQ	2014-4255	CAAN-14-84625	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	4.98	—	—	1	µg/L	Y	J	J	2017-1277	CAAN-17-130477	GELC
R-29	1170.0	03/27/2017	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	4.96	—	—	1	µg/L	Y	J	J	2017-1277	CAAN-17-130540	GELC
R-29	1170.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	5.18	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124889	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	5.71	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110575	GELC
R-29	1170.0	03/03/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.06	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-	

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	59.2	—	—	1.45	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.8	—	—	0.725	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.8	—	—	0.725	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.3	—	—	0.725	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.3	—	—	0.725	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	48.7	—	—	0.725	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00383	0.00542	0.0444	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0203	0.0095	0.0417	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00933	0.0128	0.051	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00382	0.00467	0.0342	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00000000102	0.00578	0.0328	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00723	0.00723	0.0607	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.00821	0.0689	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/26/2014	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00365	0.0121	0.0428	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	1.78	—	—	1.7	µg/L	Y	J	J	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	Y	1.83	—	—	1.7	µg/L	Y	J	J	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	2.11	—	—	1.7	µg/L	Y	J	J	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	1.74	—	—	1.7	µg/L	Y	J	J	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	1.9	—	—	1.7	µg/L	Y	J	J	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	13.5	—	—	1	µg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	13.3	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	13.1	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	13.9	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	13.5	—	—	1	µg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	14.1	—	—	1	µg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	14.4	—	—	1	µg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	13.5	—	—	1	µg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.67	—	—	0.05	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.24	—	—	0.05	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.12	—	—	0.05	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.5	—	—	0.05	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.69	—	—	0.05	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.1	—	—	0.05	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG</td																			

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.7	—	—	0.067	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.52	—	—	0.067	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.53	—	—	0.067	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.59	—	—	0.067	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.15	—	—	3	µg/L	Y	J	J	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	3	µg/L	Y	U	U	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	3	µg/L	Y	U	U	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	2.24	—	—	2	µg/L	Y	J	J	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	2.34	—	—	2	µg/L	Y	J	J	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	2.27	—	—	2	µg/L	Y	J	J	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	2.06	—	—	2	µg/L	Y	J	J	2015-873	CAAN-15-92880	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.75	1.48	7.29	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.843	1.43	5.11	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.271	1.1	3.43	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.504	1.36	5.33	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-3.21	1.23	3.35	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.61	1.97	6.79	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.49	1.66	5.89	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.5	1.33	5.42	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.156	—	—	0.033	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.142	—	—	0.033	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.143	—	—	0.033	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.15	—	—	0.033	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.219	—	—	0.033	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.187	—	—	0.033	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.188	—	—	0.033	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.179	—	—	0.033	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.424	0.299	1.14	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	-0.0401	0.293	1.03	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-1.16	0.423	1.61	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.0275	0.679	2.69	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.133	0.655	2.42	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.53	0.559	2.76	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.901	0.343	1.08	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.1	0.75	2.94	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.42	0.747	2.44	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF																		

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.9	—	—	0.453	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.9	—	—	0.453	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.88	—	—	0.11	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.75	—	—	0.11	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.73	—	—	0.11	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.23	—	—	0.11	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.9	—	—	0.11	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.05	—	—	0.11	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.14	—	—	0.11	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	2.95	—	—	0.11	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.38	—	—	0.3	µg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.2	—	—	0.3	µg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.22	—	—	0.3	µg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.17	—	—	0.165	µg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.35	—	—	0.165	µg/L	Y	—	J	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.16	—	—	0.165	µg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.22	—	—	0.165	µg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.04	—	—	0.165	µg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	4.85	2.8	10.6	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	5.28	4.85	11.1	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.4	2.19	6.86	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-3.2	3.32	11.2	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.189	3.06	11	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.02	3.49	11.1	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.0966	3.2	11.1	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.87	2.83	9.66	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.294	—	—	0.017	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.292	—	—	0.017	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.29	—	—	0.017	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.336	—	—	0.017	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.3	—	—	0.017	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.313	—	—	0.017	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.311	—	—	0.017	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.35	—	—	0.017	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	CIO4	Y	0.259	—	—	0.05	µg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	LCMS/MS PERCHLOR															

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.00598	0.0511	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00714	0.0101	0.0537	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00674	0.00953	0.0744	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00284	0.00942	0.0627	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00907	0.00641	0.033	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00169	0.00795	0.0361	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.0112	0.0611	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00311	0.012	0.0759	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00422	0.014	0.0888	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.19	—	—	0.05	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.24	—	—	0.05	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.27	—	—	0.05	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.31	—	—	0.05	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.16	—	—	0.05	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.17	—	—	0.05	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.16	—	—	0.05	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.17	—	—	0.05	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-37.1	21.1	77.2	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	19.5	21.9	55.1	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	10.7	14.7	60.5	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	17.4	24	95.2	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-29.6	17.2	58.9	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	4.19	20.2	80.1	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	31.1	19.2	39.3	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	9.89	18.8	49.6	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	65.2	—	—	0.053	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	65.6	—	—	0.053	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	65.2	—	—	0.053	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	69.7	—	—	0.053	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	67.1	—	—	0.053	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	69.3	—	—	0.053	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	71.4	—	—	0.053	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	65.4	—	—	0.053	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	12	—	—	0.1	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	10.4	—	—	0.1	mg/L	Y	—	NQ	2016-2218	CAAN	

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	121	—	—	1	uS/cm	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	107	—	—	3.63	uS/cm	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	105	—	—	3.63	uS/cm	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	127	—	—	3.63	uS/cm	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	107	—	—	1	uS/cm	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	110	—	—	3.63	uS/cm	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	110	—	—	3.63	uS/cm	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_COND_C	Y	117	—	—	1	uS/cm	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	50.4	—	—	1	µg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	48.2	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	47.5	—	—	1	µg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	51.2	—	—	1	µg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	45.7	—	—	1	µg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	49.7	—	—	1	µg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	53.1	—	—	1	µg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	46.8	—	—	1	µg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.168	0.102	0.336	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0665	0.128	0.484	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0116	0.0595	0.204	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.148	0.131	0.493	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.115	0.0927	0.404	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.083	0.134	0.481	—	pCi/L	Y	U	U	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.276	0.119	0.495	—	pCi/L	Y	U	U	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.228	0.11	0.455	—	pCi/L	Y	U	U	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.65	—	—	0.133	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.65	—	—	0.133	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.62	—	—	0.133	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.49	—	—	0.133	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.5	—	—	0.133	mg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.47	—	—	0.133	mg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.47	—	—	0.133	mg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.55	—	—	0.133	mg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	137	—	—	3.4	mg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	116	—	—	3.4	mg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	107	—	—	3.4	mg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	131	—	—	3.4	mg/L	Y	—	NQ	2016-856	CAAN-16-110576	

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	08/26/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.02	mg/L	Y	U	U	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.017	mg/L	Y	U	U	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0449	—	—	0.017	mg/L	Y	J	J	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0221	—	—	0.017	mg/L	Y	J	U	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0322	—	—	0.017	mg/L	Y	J	U	2015-873	CAAN-15-92880	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.138	0.864	2.92	—	pCi/L	Y	U	U	2017-1286	CAAN-17-130480	ARSL
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.828	0.576	1.974	—	pCi/L	Y	U	U	2016-2325	CAAN-16-124888	ARSL
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.024	0.581	1.978	—	pCi/L	Y	U	U	2016-2325	CAAN-16-124883	ARSL
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.286	0.58	1.95	—	pCi/L	Y	U	U	2016-871	CAAN-16-110572	ARSL
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-2.063	0.752	2.469	—	pCi/L	Y	U	U	2015-2371	CAAN-15-104032	ARSL
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.61	1.07	3.59	—	pCi/L	Y	U	U	2015-885	CAAN-15-92884	ARSL
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.69	1.11	3.72	—	pCi/L	Y	U	U	2015-885	CAAN-15-92879	ARSL
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.912	0.779	2.328	—	pCi/L	Y	U	U	2014-4343	CAAN-14-84629	ARSL
R-30	1140.0	03/27/2017	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.46	—	—	0.067	µg/L	Y	—	NQ	2017-1277	CAAN-17-130478	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.488	—	—	0.067	µg/L	Y	—	NQ	2016-2218	CAAN-16-124890	GELC
R-30	1140.0	08/26/2016	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.53	—	—	0.067	µg/L	Y	—	NQ	2016-2218	CAAN-16-124884	GELC
R-30	1140.0	03/04/2016	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.475	—	—	0.067	µg/L	Y	—	NQ	2016-856	CAAN-16-110576	GELC
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.491	—	—	0.067	µg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.506	—	—	0.067	µg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.592	—	—	0.067	µg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.41	—	—	0.067	µg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.265	0.0266	0.136	—	pCi/L	Y	—	NQ	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.338	0.0283	0.0801	—	pCi/L	Y	—	NQ	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.295	0.0254	0.0773	—	pCi/L	Y	—	NQ	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.279	0.0256	0.0817	—	pCi/L	Y	—	NQ	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.342	0.0329	0.129	—	pCi/L	Y	—	NQ	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.303	0.0253	0.0755	—	pCi/L	Y	—	NQ	2015-873	CAAN-15-92884	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.257	0.0247	0.0782	—	pCi/L	Y	—	NQ	2015-873	CAAN-15-92879	GELC
R-30	1140.0	08/11/2014	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.264	0.0289	0.0695	—	pCi/L	Y	—	NQ	2014-4316	CAAN-14-84629	GELC
R-30	1140.0	03/27/2017	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0436	0.0125	0.117	—	pCi/L	Y	U	U	2017-1277	CAAN-17-130480	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0106	0.00652	0.0767	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124883	GELC
R-30	1140.0	08/26/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.018	0.00926	0.074	—	pCi/L	Y	U	U	2016-2218	CAAN-16-124888	GELC
R-30	1140.0	03/04/2016	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00807	0.0111	0.0522	—	pCi/L	Y	U	U	2016-856	CAAN-16-110572	GELC
R-30	1140.0	09/22/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0302	0.0131	0.0908	—	pCi/L	Y	U	U	2015-2366	CAAN-15-104032	GELC
R-30	1140.0	03/10/2015	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0121	0.00871	0.0472	—	pCi/L	Y					

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	Best Value Flag	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140.0	09/22/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.76	—	—	1	µg/L	Y	—	NQ	2015-2366	CAAN-15-104034	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.65	—	—	1	µg/L	Y	—	NQ	2015-873	CAAN-15-92888	GELC
R-30	1140.0	03/10/2015	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.87	—	—	1	µg/L	Y	—	NQ	2015-873	CAAN-15-92880	GELC
R-30	1140.0	08/11/2014	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.4	—	—	1	µg/L	Y	—	NQ	2014-4316	CAAN-14-84631	GELC

Appendix D

Groundwater Results Greater Than Half of Screening Values

There are no analytical results greater than one-half of applicable screening values for this periodic monitoring report.

Appendix E

Analytical Chemistry Graphs of Screening-Value Exceedances

There are no results analytical chemistry graphs of screening-value exceedances for this periodic monitoring report.

Appendix F

*Analytical Reports
(on CD included with this document)*

COC	Category	Lab	Sample	Date	Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)
2016-2218	Inorganic	GEL ^a	CAAN-16-124887	08/26/2016	R-29	1170	1180
2016-2218	Inorganic	GEL	CAAN-16-124883	08/26/2016	R-30	1140	1160.9
2016-2218	Inorganic	GEL	CAAN-16-124884	08/26/2016	R-30	1140	1160.9
2016-2218	Inorganic	GEL	CAAN-16-124888	08/26/2016	R-30	1140	1160.9
2016-2218	Inorganic	GEL	CAAN-16-124889	08/26/2016	R-29	1170	1180
2016-2218	Inorganic	GEL	CAAN-16-124890	08/26/2016	R-30	1140	1160.9
2016-2218	Organic	GEL	CAAN-16-124883	08/26/2016	R-30	1140	1160.9
2016-2218	Organic	GEL	CAAN-16-124887	08/26/2016	R-29	1170	1180
2016-2218	Organic	GEL	CAAN-16-124888	08/26/2016	R-30	1140	1160.9
2016-2218	Rad ^b	GEL	CAAN-16-124887	08/26/2016	R-29	1170	1180
2016-2218	Rad	GEL	CAAN-16-124883	08/26/2016	R-30	1140	1160.9
2016-2218	Rad	GEL	CAAN-16-124888	08/26/2016	R-30	1140	1160.9
2016-2325	Rad	ARSL ^c	CAAN-16-124883	08/26/2016	R-30	1140	1160.9
2016-2325	Rad	ARSL	CAAN-16-124888	08/26/2016	R-30	1140	1160.9
2016-2325	Rad	ARSL	CAAN-16-124887	08/26/2016	R-29	1170	1180
2017-1265	Inorganic	GEL	CAWA-17-130484	03/24/2017	R-27i	619	629
2017-1265	Inorganic	GEL	CAWA-17-130485	03/24/2017	R-27	852	875
2017-1265	Inorganic	GEL	CAWA-17-130483	03/24/2017	R-27	852	875
2017-1265	Inorganic	GEL	CAWA-17-130486	03/24/2017	R-27i	619	629
2017-1265	Organic	GEL	CAWA-17-130485	03/24/2017	R-27	852	875
2017-1265	Organic	GEL	CAWA-17-130486	03/24/2017	R-27i	619	629
2017-1265	Rad	GEL	CAWA-17-130485	03/24/2017	R-27	852	875
2017-1265	Rad	GEL	CAWA-17-130486	03/24/2017	R-27i	619	629
2017-1277	Inorganic	GEL	CAAN-17-130477	03/27/2017	R-29	1170	1180
2017-1277	Inorganic	GEL	CAAN-17-130478	03/27/2017	R-30	1140	1160.9
2017-1277	Inorganic	GEL	CAAN-17-130480	03/27/2017	R-30	1140	1160.9
2017-1277	Inorganic	GEL	CAAN-17-130479	03/27/2017	R-29	1170	1180
2017-1277	Inorganic	GEL	CAAN-17-130539	03/27/2017	R-29	1170	1180
2017-1277	Inorganic	GEL	CAAN-17-130540	03/27/2017	R-29	1170	1180
2017-1277	Organic	GEL	CAAN-17-130480	03/27/2017	R-30	1140	1160.9
2017-1277	Organic	GEL	CAAN-17-130479	03/27/2017	R-29	1170	1180
2017-1277	Organic	GEL	CAAN-17-130539	03/27/2017	R-29	1170	1180
2017-1277	Rad	GEL	CAAN-17-130480	03/27/2017	R-30	1140	1160.9
2017-1277	Rad	GEL	CAAN-17-130479	03/27/2017	R-29	1170	1180
2017-1277	Rad	GEL	CAAN-17-130539	03/27/2017	R-29	1170	1180

COC	Category	Lab	Sample	Date	Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)
2017-1286	Rad	ARSL	CAAN-17-130480	03/27/2017	R-30	1140	1160.9
2017-1286	Rad	ARSL	CAAN-17-130479	03/27/2017	R-29	1170	1180
2017-1286	Rad	ARSL	CAAN-17-130539	03/27/2017	R-29	1170	1180
2017-1286	Rad	ARSL	CAWA-17-130485	03/24/2017	R-27	852	875
2017-1286	Rad	ARSL	CAWA-17-130486	03/24/2017	R-27i	619	629

^a GEL = GEL Laboratories, LLC, Division of the GEL Group, Charleston, SC.

^b Rad = Radiochemistry (not gamma).

^c ARSL = American Radiation Services, Inc.