Letter: EMID-700001
MDA C PMR: EMID-700003

N3B Los Alamos

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Date: MAY 24 2018
Refer To: N3B-18-0114

John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Annual Periodic Monitoring Reports for the Chromium Investigation, Material Disposal Area C, and Technical Area 54 Monitoring Groups

Dear Mr. Kieling:

Enclosed please find two hard copies with electronic files of the annual periodic monitoring reports for the Chromium Investigation, Material Disposal Area C, and Technical Area 54 monitoring groups for sampling campaigns performed during the second, third, and fourth quarters of monitoring year 2017 and the first quarter of monitoring year 2018.

This report is submitted in accordance with Appendix E, Section IV, of the June 2016 Compliance Order on Consent, as modified on February 27, 2017.

If you have any questions, please contact Steve Veenis at (505) 309-1362 (steve.veenis@em-la.doe.gov) or Hai Shen at (505) 665-5046 (hai.shen@em.doe.gov).

Sincerely,

Joseph A. Legare
Program Manager
Environmental Remediation Program

Sincerely,

David S. Rhodes, Director
Office of Quality and Regulatory Compliance
Environmental Management
Los Alamos Field Office

JL/DR/SV

Enclosure(s): Two hard copies with electronic files
1. Annual Periodic Monitoring Report for the Chromium Investigation Monitoring Group (EM2018-0001)
2. Annual Periodic Monitoring Report for the Material Disposal Area C Monitoring Group (EM2018-0002)
3. Annual Periodic Monitoring Report for the Technical Area 54 Monitoring Group (EM2018-0003)

Cy: (letter with enclosure[s])
Steve Veenis, ER Program
Cheryl Rodriguez, DOE-EM-LA

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Scott Fenby, ER Program
Joe English, ER Program

May 2018
EM2018-0002

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

N3B Los Alamos

EM2018-0002

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

May 2018

Responsible program director:

Printed Name	Signature	Title	Organization	Date
Bruce Robinson		Program Director	Water Program	5/22/2018

Responsible N3B representative:

Printed Name	Signature	Title	Organization	Date
Joseph A. Legare		Program Manager	N3B Environmental Remediation Program	5/22/18

Responsible DOE-EM-LA representative:

Printed Name	Signature	Title	Organization	Date
David S. Rhodes		Office Director	Quality and Regulatory Compliance	5-23-2018

EXECUTIVE SUMMARY

This annual periodic monitoring report (PMR) presents results for the Material Disposal Area (MDA) C monitoring group of the Newport News Nuclear BWXT – Los Alamos, LLC (N3B) 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 2017 Monitoring Year, October 2016–September 2017," and the "Interim Facility-Wide Groundwater Monitoring Plan for the 2018 Monitoring Year, October 2017–September 2018," both prepared in accordance with the Compliance Order on Consent.

This PMR presents monitoring results for two periodic monitoring events (PMEs) conducted during the third quarter of Monitoring Year (MY) 2017 and the first quarter of MY2018 and includes the monitoring of groundwater well or well screen locations. There are no surface-water monitoring locations in the MDA C monitoring group. This PMR also includes any results from earlier MDA C 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; polychlorinated biphenyls; radionuclides, including tritium; general inorganic chemicals, including perchlorate; and field parameters (dissolved oxygen, oxidation-reduction potential, pH, specific conductance, temperature, and turbidity).

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

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Acronyms and Abbreviations

ARSL	American Radiation Services, 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.)
EM	Office of Environmental Management (DOE)
EPA	Environmental Protection Agency (U.S.)
ESH	Environment, Safety, and Health (Directorate)
F	filtered
GELC	General Engineering Laboratories, Inc.
gpm	gallons per minute
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)
N3B	Newport News Nuclear BWXT – Los Alamos, LLC
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
NTU	nephelometric turbidity unit(s)
PME	periodic monitoring event
PMR	periodic monitoring report
QC	quality control
SOP	standard operating procedure
SU	standard unit
TA	technical area
UF	unfiltered
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) C 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
Mortandad	2017	3	05/03/17	05/04/17
	2018	1	11/07/17	11/08/17

*MY = Monitoring year.

The annual PMR for the MDA C monitoring group is submitted to the New Mexico Environment Department (NMED) every May and includes MDA C monitoring group PMEs performed through the first quarter of MY2018. During the third quarter of fiscal year 2018, environmental remediation work transitioned from the Laboratory, under the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA), to Newport News Nuclear BWXT – Los Alamos, LLC (N3B), under the DOE Office of Environmental Management (EM).

Monitoring was conducted pursuant to the "Interim Facility-Wide Groundwater Monitoring Plan for the 2017 Monitoring Year, October 2016–September 2017" (2017 IFGMP) (LANL 2016, 601506) and the "Interim Facility-Wide Groundwater Monitoring Plan for the 2018 Monitoring Year, October 2017–September 2018" (2018 IFGMP) (LANL 2017, 602406), 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.

This report also includes any results from previous PMEs from the MDA C monitoring group 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 DOE policy.

1.1 Background

MDA C is located on Mesita del Buey in Technical Area 50 (TA-50), at the head of Ten Site Canyon. The MDA C monitoring group includes nearby regional monitoring wells on the mesa top and in Mortandad Canyon. TA-50 is bounded on the north by Effluent and Mortandad Canyons, on the east by the upper reaches of Ten Site Canyon, on the south by Twomile Canyon, and on the west by TA-55.

MDA C (Solid Waste Management Unit 50-009) is an inactive 11.8-acre landfill consisting of 7 disposal pits and 108 shafts. Solid low-level radioactive wastes and chemical wastes were disposed of in the landfill between 1948 and 1974. The depths of the 7 pits at MDA C range from 12 ft to 25 ft below the original ground surface. The depths of the 108 shafts range from 10 ft to 25 ft below the original ground surface. The original ground surface is defined as beneath the cover that was placed over the site in 1984. The pits and shafts are constructed in the Tshirege Member of the Bandelier Tuff. The regional aquifer is estimated to be approximately 1330 ft deep based on the water level in well R-46 (LANL 2009, 105592). The topography of MDA C is relatively flat, although the slope steepens to the north where the northeast corner of MDA C abuts the south wall of Ten Site Canyon.

Vapor-phase volatile organic compounds (VOCs) and tritium are present in the upper 500 ft of the unsaturated zone beneath MDA C (LANL 2011, 204370). The primary vapor-phase contaminants beneath MDA C are trichloroethene and tritium. There is no evidence of groundwater contamination in the regional aquifer. MDA C is located on a mesa top above thick, unsaturated units of the Bandelier Tuff; therefore, present-day aqueous-phase transport is generally believed to be minimal.

2.0 SCOPE OF ACTIVITIES

The PMEs for the MDA C monitoring group were conducted pursuant to the 2017 IFGMP (LANL 2016, 601506) and the 2018 IFGMP (LANL 2017, 602406).

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 2017 IFGMP (LANL 2016, 601506) and 2018 IFGMP (LANL 2017, 602406).

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 collected 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.

3.4 Deviations from Planned Scope

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.

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 2017 IFGMP (LANL 2016, 601506) and 2018 IFGMP (LANL 2017, 602406). Purge water is managed and characterized in accordance with the waste characterization strategy form associated with the well and the "Land Application of Groundwater" procedure. The "Land Application of Groundwater" procedure implements the NMED-approved decision tree for land application of drilling, development, rehabilitation, and purge water.

All sampling, data reviews, and data package validations are conducted using standard operating procedures (SOPs) that are part of a comprehensive quality assurance program. 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.

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.

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 analytical laboratories, in-house field QC samples are submitted to test the overall sampling and analytical laboratory process and to spot-check for analytical problems. The field QC sample results are used in secondary validation along with information provided by the analytical laboratory.

After the analytical laboratory submits data packages, the packages receive in-house secondary validation. As a result of secondary validation, a second set of qualifiers is assigned to the analytical results. Secondary validation is currently done by an automated process after data are loaded.

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

A detection status is assigned 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 regulatory and in-house 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.
    - ❖ Other than those mentioned above, 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 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 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 with 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 November 2017 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. For the data reported in this PMR, no analytes exceeded one half their screening values, so no data are presented in Appendix D.

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 its screening value in both a primary sample and a field duplicate, only the primary sample result is shown. If aluminum was detected above its screening value in two primary samples, both results are shown. As noted in Table 4.2-2, there were no locations where an analyte was above its screening value for the data reported in this PMR.

For the data reported in this PMR, no analytes exceeded their screening values at more than one sampling location, so no figures 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 C 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 in the expanded data set described above, 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 C monitoring group.

4.2.2 Groundwater

No groundwater analytical 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 C 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 C monitoring group.

5.2.2 Groundwater

No groundwater analytical results reported in this PMR were above screening values.

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.

5.4 Remediation System Monitoring

Remediation system monitoring is not applicable to the MDA C monitoring group because no groundwater remediation systems are required for the MDA C area.

6.0 REFERENCES AND MAP DATA SOURCES

The following reference list includes documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. This information is also included in text citations. ERIDs were assigned by the Laboratory's Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory's Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B (IDs 700000 and above). IDs are used to locate documents in N3B's Records Management System and in the Master Reference Set. The NMED Hazardous Waste Bureau and N3B 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.

LANL (Los Alamos National Laboratory), March 2009. "Completion Report for Regional Aquifer Well R-46," Los Alamos National Laboratory document LA-UR-09-1338, Los Alamos, New Mexico. (LANL 2009, 105592)

LANL (Los Alamos National Laboratory), June 2011. "Phase III Investigation Report for Material Disposal Area C, Solid Waste Management Unit 50-009, at Technical Area 50," Los Alamos National Laboratory document LA-UR-11-3429, Los Alamos, New Mexico. (LANL 2011, 204370)

LANL (Los Alamos National Laboratory), May 2016. "Interim Facility-Wide Groundwater Monitoring Plan for the 2017 Monitoring Year, October 2016–September 2017," Los Alamos National Laboratory document LA-UR-16-23408, Los Alamos, New Mexico. (LANL 2016, 601506)

LANL (Los Alamos National Laboratory), May 2017. “Interim Facility-Wide Groundwater Monitoring Plan for the 2018 Monitoring Year, October 2017–September 2018,” Los Alamos National Laboratory document LA-UR-17-24070, Los Alamos, New Mexico. (LANL 2017, 602406)

NMED (New Mexico Environment Department), March 2017. “Risk Assessment Guidance for Site Investigations and Remediation, Volume I Soil Screening Guidance for Human Health Risk Assessments,” Hazardous Waste Bureau, Santa Fe, New Mexico. (NMED 2017, 602273)

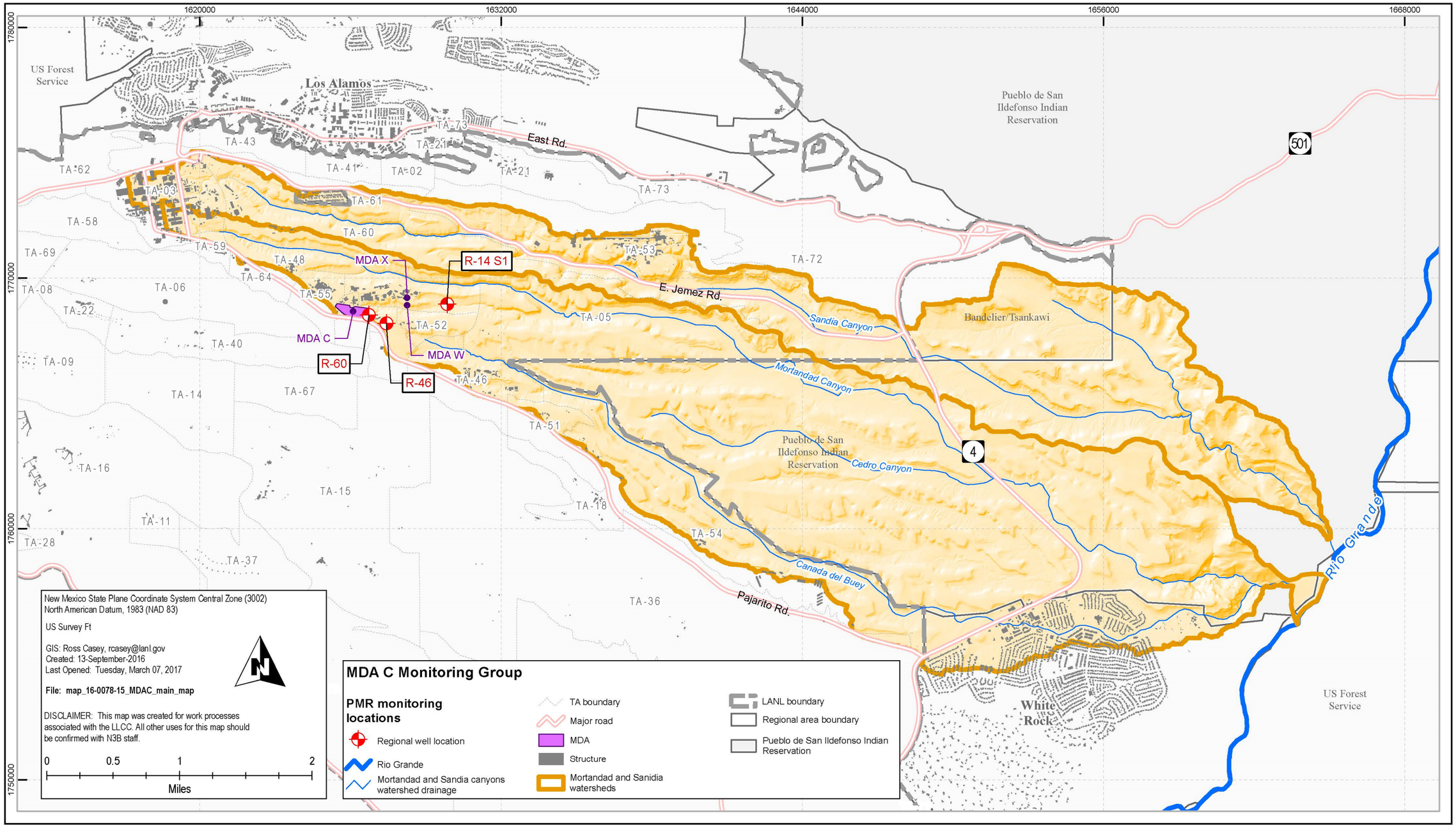

Figure 2.0-1 MDA C monitoring group locations (see also Table 2.0-1)

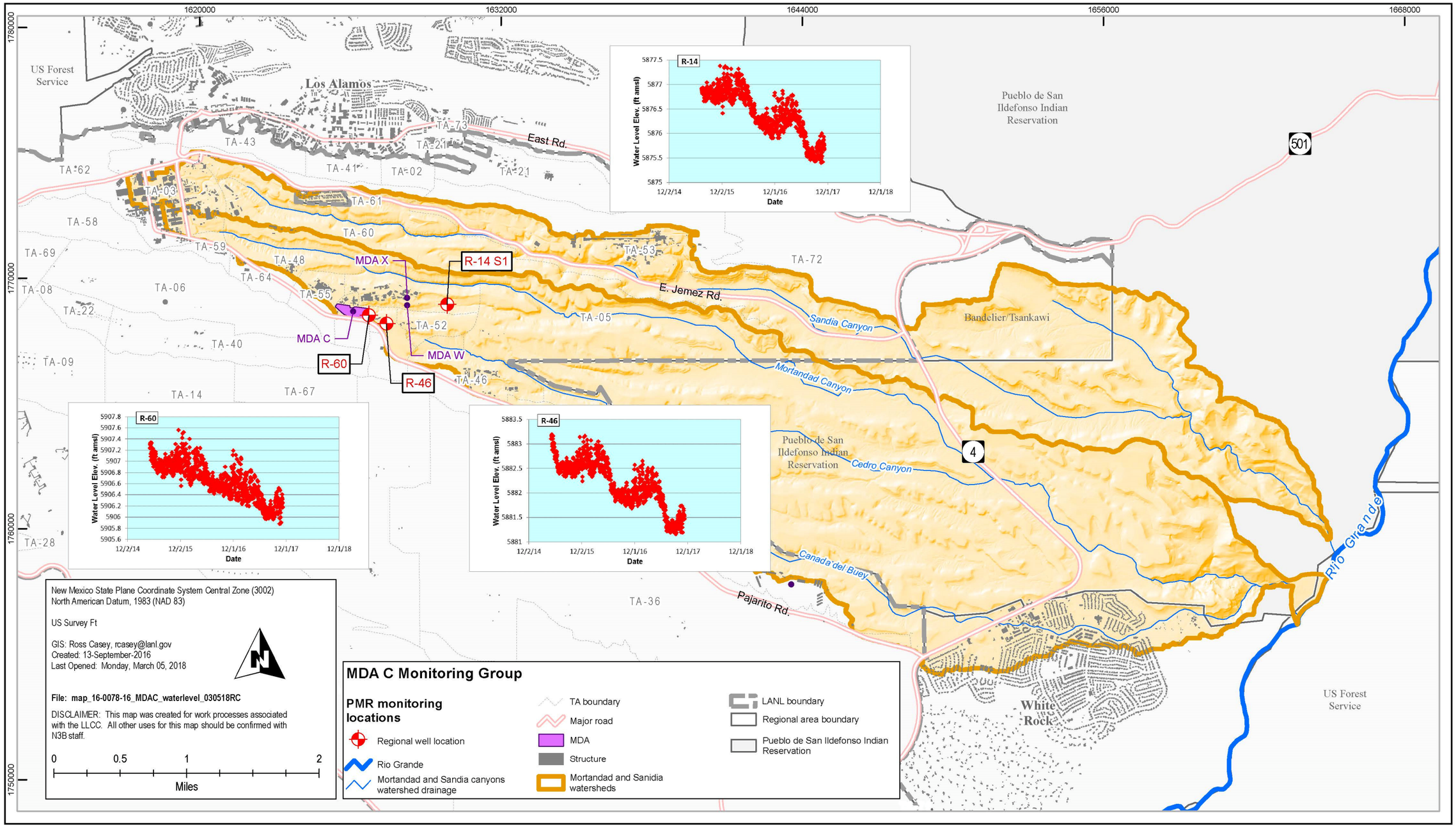

Figure 3.3-1 Groundwater elevations

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

Location	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[a])
		MY	Quarter							
Regional										
R-14 S1	Mortandad	2017	3	05/04/17	32.6	1200.6	1233.2	48.5	154	6.98
R-46	Mortandad			05/04/17	20.7	1340	1360.7	51.7	137	4.92
R-60	Mortandad			05/03/17	20.9	1330	1350.9	39.8	121	2.75
R-14 S1	Mortandad	2018	1	11/08/17	32.6	1200.6	1233.2	48.1	150	7.14
R-46	Mortandad			11/07/17	20.7	1340	1360.7	51.3	155	4.84
R-60	Mortandad			11/07/17	20.9	1330	1350.9	39.6	121	2.48–3.23[b]

[a] gpm = Gallons per minute.

[b] Purge rate was not constant and the range of purge rates is reported.

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

Monitoring Location	Watershed	Sampling Event		Observation/Deviation	Cause	Comments
		MY	Quarter			
R-14 S1	Mortandad	2018	1	Seal on field trip blank for VOC sample collected on 11/08/17 was broken.	Unknown	Sample Management Office was contacted and approved use of field trip blank with broken seal.

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	3.09–3.33	SW-846:8270D	3	µg/L	EPA MCL	GELC[a]
Azobenzene	3–3.33	SW-846:8270D	1.2	µg/L	EPA TAP SCRN LVL[b]	GELC
Benzidine	3.9–4.33	SW-846:8270D	0.00109	µg/L	NMED A1 TAP SCRN LVL[c]	GELC
Benzo(a)anthracene	0.3–0.333	SW-846:8270D	0.12	µg/L	NMED A1 TAP SCRN LVL	GELC
Benzo(a)pyrene	0.3–0.333	SW-846:8270D	0.2	µg/L	EPA MCL	GELC
Bis(2-chloroethyl)ether	3–3.33	SW-846:8270D	0.137	µg/L	NMED A1 TAP SCRN LVL	GELC
Dibenz(a,h)anthracene	0.3–0.333	SW-846:8270D	0.0343	µg/L	NMED A1 TAP SCRN LVL	GELC
Dichlorobenzidine[3,3'-]	3–3.33	SW-846:8270D	1.25	µg/L	NMED A1 TAP SCRN LVL	GELC
Dinitro-2-methylphenol[4,6-]	3–3.33	SW-846:8270D	1.52	µg/L	NMED A1 TAP SCRN LVL	GELC
Hexachlorobenzene	3–3.33	SW-846:8270D	1	µg/L	EPA MCL	GELC
Nitrosodiethylamine[N-]	3–3.33	SW-846:8270D	0.00167	µg/L	NMED A1 TAP SCRN LVL	GELC
Nitrosodimethylamine[N-]	3–3.33	SW-846:8270D	0.00491	µg/L	NMED A1 TAP SCRN LVL	GELC
Nitroso-di-n-butylamine[N-]	3–3.33	SW-846:8270D	0.0273	µg/L	NMED A1 TAP SCRN LVL	GELC
Nitroso-di-n-propylamine[N-]	3–3.33	SW-846:8270D	0.11	µg/L	EPA TAP SCRN LVL	GELC
Nitrosopyrrolidine[N-]	3–3.33	SW-846:8270D	0.37	µg/L	NMED A1 TAP SCRN LVL	GELC
Pentachlorophenol	3–3.33	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

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

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

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

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

Table 3.4-3
Target Analytes with MDLs at or below Screening Values

Analyte Name	MDL	Analytical Method	Screening Value	Unit	Screening-Value Type	Lab ID
Semivolatile Organic Compounds						
Atrazine	3	SW-846:8270D	3	µg/L	EPA MCL	GELC[a]
Benzo(b)fluoranthene	0.3–0.333	SW-846:8270D	0.343	µg/L	NMED A1 TAP SCRN LVL[b]	GELC
Indeno(1,2,3-cd)pyrene	0.3–0.333	SW-846:8270D	0.343	µg/L	NMED A1 TAP SCRN LVL	GELC
Oxybis(1-chloropropane)[2,2'-]	3–3.33	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] GELC = General Engineering Laboratories, Inc., Charleston, SC.

[b] NMED A1 TAP SCRN LVL = New Mexico Environment Department screening level for tap water.

[c] EPA TAP SCRN LVL = U.S. Environmental Protection Agency regional 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 the 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-november-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 C 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

Location	Depth (ft)	Date	Matrix	Analyte	Result	Unit	Sample
R-14 S1	1200.6	11/08/17	WG[a]	Dissolved Oxygen	5.77	mg/L	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	Dissolved Oxygen	5.72	mg/L	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	Dissolved Oxygen	5.72	mg/L	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	Dissolved Oxygen	5.79	mg/L	CAMO-16-115250
R-14 S1	1200.6	11/19/15	WG	Dissolved Oxygen	5.85	mg/L	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	Dissolved Oxygen	5.59	mg/L	CAMO-15-95776
R-14 S1	1200.6	11/08/17	WG	Flow (in gpm[b])	7.14	gpm	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	Flow (in gpm)	6.98	gpm	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	Flow (in gpm)	6.98	gpm	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	Flow (in gpm)	6.98	gpm	CAMO-16-115250
R-14 S1	1200.6	11/19/15	WG	Flow (in gpm)	6.98	gpm	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	Flow (in gpm)	6.98	gpm	CAMO-15-95776
R-14 S1	1200.6	11/08/17	WG	Oxidation-Reduction Potential	181.4	mV	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	Oxidation-Reduction Potential	187.9	mV	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	Oxidation-Reduction Potential	171	mV	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	Oxidation-Reduction Potential	180.5	mV	CAMO-16-115250
R-14 S1	1200.6	11/19/15	WG	Oxidation-Reduction Potential	79	mV	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	Oxidation-Reduction Potential	85.2	mV	CAMO-15-95776
R-14 S1	1200.6	11/08/17	WG	pH	8.19	SU[c]	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	pH	8.11	SU	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	pH	8.25	SU	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	pH	8.24	SU	CAMO-16-115250
R-14 S1	1200.6	11/19/15	WG	pH	7.95	SU	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	pH	8.13	SU	CAMO-15-95776
R-14 S1	1200.6	11/08/17	WG	Specific Conductance	127	µS/cm	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	Specific Conductance	127.4	µS/cm	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	Specific Conductance	128.6	µS/cm	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	Specific Conductance	133	µS/cm	CAMO-16-115250
R-14 S1	1200.6	11/19/15	WG	Specific Conductance	129	µS/cm	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	Specific Conductance	130	µS/cm	CAMO-15-95776
R-14 S1	1200.6	11/08/17	WG	Temperature	23.2	deg C	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	Temperature	23.4	deg C	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	Temperature	22.7	deg C	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	Temperature	22.62	deg C	CAMO-16-115250
R-14 S1	1200.6	11/19/15	WG	Temperature	22.11	deg C	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	Temperature	23.72	deg C	CAMO-15-95776
R-14 S1	1200.6	11/08/17	WG	Turbidity	0.22	NTU[d]	CAMO-18-148116
R-14 S1	1200.6	05/04/17	WG	Turbidity	0.2	NTU	CAMO-17-132223
R-14 S1	1200.6	11/09/16	WG	Turbidity	0.46	NTU	CAMO-17-127226
R-14 S1	1200.6	05/18/16	WG	Turbidity	0.9	NTU	CAMO-16-115250

Location	Depth (ft)	Date	Matrix	Analyte	Result	Unit	Sample
R-14 S1	1200.6	11/19/15	WG	Turbidity	0.5	NTU	CAMO-16-106098
R-14 S1	1200.6	05/07/15	WG	Turbidity	0.6	NTU	CAMO-15-95776
R-46	1340.0	11/07/17	WG	Dissolved Oxygen	6.72	mg/L	CAMO-18-148117
R-46	1340.0	05/04/17	WG	Dissolved Oxygen	6.83	mg/L	CAMO-17-132213
R-46	1340.0	11/08/16	WG	Dissolved Oxygen	6.8	mg/L	CAMO-17-127236
R-46	1340.0	05/05/16	WG	Dissolved Oxygen	6.8	mg/L	CAMO-16-115261
R-46	1340.0	11/18/15	WG	Dissolved Oxygen	6.77	mg/L	CAMO-16-106109
R-46	1340.0	05/07/15	WG	Dissolved Oxygen	6.59	mg/L	CAMO-15-95787
R-46	1340.0	11/07/17	WG	Flow (in gpm)	4.84	gpm	CAMO-18-148117
R-46	1340.0	05/04/17	WG	Flow (in gpm)	4.92	gpm	CAMO-17-132213
R-46	1340.0	11/08/16	WG	Flow (in gpm)	5	gpm	CAMO-17-127236
R-46	1340.0	05/05/16	WG	Flow (in gpm)	4.84	gpm	CAMO-16-115261
R-46	1340.0	11/18/15	WG	Flow (in gpm)	4.68	gpm	CAMO-16-106109
R-46	1340.0	05/07/15	WG	Flow (in gpm)	4.84	gpm	CAMO-15-95787
R-46	1340.0	11/07/17	WG	Oxidation-Reduction Potential	150.1	mV	CAMO-18-148117
R-46	1340.0	05/04/17	WG	Oxidation-Reduction Potential	206.8	mV	CAMO-17-132213
R-46	1340.0	11/08/16	WG	Oxidation-Reduction Potential	171.6	mV	CAMO-17-127236
R-46	1340.0	05/05/16	WG	Oxidation-Reduction Potential	101.9	mV	CAMO-16-115261
R-46	1340.0	11/18/15	WG	Oxidation-Reduction Potential	79.4	mV	CAMO-16-106109
R-46	1340.0	05/07/15	WG	Oxidation-Reduction Potential	145.4	mV	CAMO-15-95787
R-46	1340.0	11/07/17	WG	pH	7.99	SU	CAMO-18-148117
R-46	1340.0	05/04/17	WG	pH	7.86	SU	CAMO-17-132213
R-46	1340.0	11/08/16	WG	pH	8.01	SU	CAMO-17-127236
R-46	1340.0	05/05/16	WG	pH	8.03	SU	CAMO-16-115261
R-46	1340.0	11/18/15	WG	pH	7.63	SU	CAMO-16-106109
R-46	1340.0	05/07/15	WG	pH	7.92	SU	CAMO-15-95787
R-46	1340.0	11/07/17	WG	Specific Conductance	120.1	µS/cm	CAMO-18-148117
R-46	1340.0	05/04/17	WG	Specific Conductance	120.1	µS/cm	CAMO-17-132213
R-46	1340.0	11/08/16	WG	Specific Conductance	120.6	µS/cm	CAMO-17-127236
R-46	1340.0	05/05/16	WG	Specific Conductance	127	µS/cm	CAMO-16-115261
R-46	1340.0	11/18/15	WG	Specific Conductance	124	µS/cm	CAMO-16-106109
R-46	1340.0	05/07/15	WG	Specific Conductance	122	µS/cm	CAMO-15-95787
R-46	1340.0	11/07/17	WG	Temperature	20.8	deg C	CAMO-18-148117
R-46	1340.0	05/04/17	WG	Temperature	20.8	deg C	CAMO-17-132213
R-46	1340.0	11/08/16	WG	Temperature	18.3	deg C	CAMO-17-127236
R-46	1340.0	05/05/16	WG	Temperature	21.9	deg C	CAMO-16-115261
R-46	1340.0	11/18/15	WG	Temperature	21.02	deg C	CAMO-16-106109
R-46	1340.0	05/07/15	WG	Temperature	21.8	deg C	CAMO-15-95787
R-46	1340.0	11/07/17	WG	Turbidity	0.29	NTU	CAMO-18-148117
R-46	1340.0	05/04/17	WG	Turbidity	0.29	NTU	CAMO-17-132213

Location	Depth (ft)	Date	Matrix	Analyte	Result	Unit	Sample
R-46	1340.0	11/08/16	WG	Turbidity	0.95	NTU	CAMO-17-127236
R-46	1340.0	05/05/16	WG	Turbidity	0.4	NTU	CAMO-16-115261
R-46	1340.0	11/18/15	WG	Turbidity	0.3	NTU	CAMO-16-106109
R-46	1340.0	05/07/15	WG	Turbidity	0.8	NTU	CAMO-15-95787
R-60	1330.0	11/07/17	WG	Dissolved Oxygen	5.97	mg/L	CAMO-18-148118
R-60	1330.0	05/03/17	WG	Dissolved Oxygen	5.99	mg/L	CAMO-17-132236
R-60	1330.0	11/10/16	WG	Dissolved Oxygen	6.08	mg/L	CAMO-17-127239
R-60	1330.0	05/17/16	WG	Dissolved Oxygen	5.68	mg/L	CAMO-16-115264
R-60	1330.0	11/17/15	WG	Dissolved Oxygen	5.26	mg/L	CAMO-16-106112
R-60	1330.0	05/12/15	WG	Dissolved Oxygen	5.28	mg/L	CAMO-15-95790
R-60	1330.0	11/07/17	WG	Flow (in gpm)	2.48	gpm	CAMO-18-148118
R-60	1330.0	05/03/17	WG	Flow (in gpm)	2.75	gpm	CAMO-17-132236
R-60	1330.0	11/10/16	WG	Flow (in gpm)	2.91	gpm	CAMO-17-127239
R-60	1330.0	05/17/16	WG	Flow (in gpm)	2.52	gpm	CAMO-16-115264
R-60	1330.0	11/17/15	WG	Flow (in gpm)	2.63	gpm	CAMO-16-106112
R-60	1330.0	05/12/15	WG	Flow (in gpm)	2.7	gpm	CAMO-15-95790
R-60	1330.0	11/07/17	WG	Oxidation-Reduction Potential	96.6	mV	CAMO-18-148118
R-60	1330.0	05/03/17	WG	Oxidation-Reduction Potential	85.5	mV	CAMO-17-132236
R-60	1330.0	11/10/16	WG	Oxidation-Reduction Potential	80.3	mV	CAMO-17-127239
R-60	1330.0	05/17/16	WG	Oxidation-Reduction Potential	63.4	mV	CAMO-16-115264
R-60	1330.0	11/17/15	WG	Oxidation-Reduction Potential	-0.5	mV	CAMO-16-106112
R-60	1330.0	05/12/15	WG	Oxidation-Reduction Potential	24.5	mV	CAMO-15-95790
R-60	1330.0	11/07/17	WG	pH	8.17	SU	CAMO-18-148118
R-60	1330.0	05/03/17	WG	pH	8.25	SU	CAMO-17-132236
R-60	1330.0	11/10/16	WG	pH	7.94	SU	CAMO-17-127239
R-60	1330.0	05/17/16	WG	pH	8.32	SU	CAMO-16-115264
R-60	1330.0	11/17/15	WG	pH	8.11	SU	CAMO-16-106112
R-60	1330.0	05/12/15	WG	pH	8.29	SU	CAMO-15-95790
R-60	1330.0	11/07/17	WG	Specific Conductance	124.4	µS/cm	CAMO-18-148118
R-60	1330.0	05/03/17	WG	Specific Conductance	126.5	µS/cm	CAMO-17-132236
R-60	1330.0	11/10/16	WG	Specific Conductance	126.3	µS/cm	CAMO-17-127239
R-60	1330.0	05/17/16	WG	Specific Conductance	161	µS/cm	CAMO-16-115264
R-60	1330.0	11/17/15	WG	Specific Conductance	131	µS/cm	CAMO-16-106112
R-60	1330.0	05/12/15	WG	Specific Conductance	130	µS/cm	CAMO-15-95790
R-60	1330.0	11/07/17	WG	Temperature	23.1	deg C	CAMO-18-148118
R-60	1330.0	05/03/17	WG	Temperature	24	deg C	CAMO-17-132236
R-60	1330.0	11/10/16	WG	Temperature	20.9	deg C	CAMO-17-127239
R-60	1330.0	05/17/16	WG	Temperature	23.61	deg C	CAMO-16-115264
R-60	1330.0	11/17/15	WG	Temperature	22.46	deg C	CAMO-16-106112
R-60	1330.0	05/12/15	WG	Temperature	22.47	deg C	CAMO-15-95790

Location	Depth (ft)	Date	Matrix	Analyte	Result	Unit	Sample
R-60	1330.0	11/07/17	WG	Turbidity	0.99	NTU	CAMO-18-148118
R-60	1330.0	05/03/17	WG	Turbidity	2.79	NTU	CAMO-17-132236
R-60	1330.0	11/10/16	WG	Turbidity	4	NTU	CAMO-17-127239
R-60	1330.0	05/17/16	WG	Turbidity	2.1	NTU	CAMO-16-115264
R-60	1330.0	11/17/15	WG	Turbidity	1.5	NTU	CAMO-16-106112
R-60	1330.0	05/12/15	WG	Turbidity	3.29	NTU	CAMO-15-95790

[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
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
LLEE	low-level electrolytic extraction
LOC	level of chlorination
LSC	liquid scintillation counting
Lvl	level
MCL	maximum contaminant level (EPA)
MDA	minimum detectable activity
MDC	minimum detectable concentration
MDL	method detection limit
MNX	mononitroso-RDX (or hexahydro-1-nitroso-3,5-dinitro-1,3,5-triazine)
MS	matrix spike
MSD	matrix spike duplicate
NM	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.

Table C-1 MDA C 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-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.29	—	—	0.01	SU	Y	H	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.18	—	—	0.01	SU	Y	H	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.03	—	—	0.01	SU	Y	H	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.07	—	—	0.01	SU	Y	H	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	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	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.33	—	—	0.01	SU	Y	H	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	61.9	—	—	1.45	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	62.8	—	—	1.45	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	59.4	—	—	0.725	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	60.9	—	—	0.725	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	62.4	—	—	0.725	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	60	—	—	0.725	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00447	0.00774	0.0398	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00908	0.00908	0.0754	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0167	0.00725	0.0282	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00396	0.00485	0.0267	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.011	0.0813	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0213	0.0106	0.0313	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0393	—	—	0.017	mg/L	Y	J	J	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0322	—	—	0.017	mg/L	Y	J	U	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.113	—	—	0.017	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0705	—	—	0.017	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0549	—	—	0.017	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.05	—	—	0.017	mg/L	Y	U	U	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	26.1	—	—	1	µg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	24.9	—	—	1	µg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	26.6	—	—	1	µg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	25.7	—	—	1	µg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	26.7	—	—	1	µg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	28.5	—	—	1	µg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	14.2	—	—	0.05	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.2	—	—	0.05	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.2	—	—	0.05	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.99	—	—	0.05	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.2	—	—	0.05	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.6	—	—	0.05	mg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.671	1.22	4.78	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.699	2.39	4.81	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	5.51	2.75	3.9	—	pCi/L	Y	UI	R	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.409	1.25	4.45	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-2.17	1.46	4.26	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	1.17	1.39	5.16	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.56	—	—	0.067	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.63	—	—	0.067	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.68	—	—	0.067	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.67	—	—	0.067	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC

Table C-1 MDA C 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-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.76	—	—	0.067	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.66	—	—	0.067	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	6.58	—	—	3	µg/L	Y	J	J	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.95	—	—	3	µg/L	Y	J	J	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.34	—	—	2	µg/L	Y	J	J	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.59	—	—	2	µg/L	Y	J	J	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.73	—	—	2	µg/L	Y	J	J	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.68	—	—	2	µg/L	Y	J	J	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.76	1.41	4.78	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.448	0.998	4.25	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.03	1.41	6.04	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.17	1.34	5.69	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.05	1.08	4.9	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.605	1.23	4.39	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	INORGANIC	EPA:335.4	Cyanide (Total)	CN(TOTAL)	Y	0.0025	—	—	0.00167	mg/L	Y	J	J	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	INORGANIC	EPA:335.4	Cyanide (Total)	CN(TOTAL)	N	0.005	—	—	0.00167	mg/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	INORGANIC	EPA:335.4	Cyanide (Total)	CN(TOTAL)	N	0.005	—	—	0.00167	mg/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	INORGANIC	EPA:335.4	Cyanide (Total)	CN(TOTAL)	N	0.005	—	—	0.00167	mg/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	INORGANIC	EPA:335.4	Cyanide (Total)	CN(TOTAL)	N	0.005	—	—	0.00167	mg/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	INORGANIC	EPA:335.4	Cyanide (Total)	CN(TOTAL)	N	0.005	—	—	0.00167	mg/L	Y	U	UJ	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.101	—	—	0.033	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.13	—	—	0.033	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.145	—	—	0.033	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.128	—	—	0.033	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.162	—	—	0.033	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.131	—	—	0.033	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.01	0.84	2.92	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.17	0.644	2.09	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.105	0.755	2.95	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.28	0.598	2.32	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.382	0.37	1.25	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.874	0.817	2.94	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	2.36	0.926	2.88	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.43	0.572	1.84	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	2.91	0.897	2.76	—	pCi/L	Y	—	NQ	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	3.87	0.954	2.84	—	pCi/L	Y	—	NQ	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	3.92	0.645	2.02	—	pCi/L	Y	—	NQ	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.71	0.786	2.42	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	49.8	—	—	0.453	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.1	—	—	0.453	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.7	—	—	0.453	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.5	—	—	0.453	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.1	—	—	0.453	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.9	—	—	0.453	mg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.46	—	—	0.11	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.29	—	—	0.11	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC

Table C-1 MDA C 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-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.42	—	—	0.11	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.3	—	—	0.11	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.33	—	—	0.11	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.53	—	—	0.11	mg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.26	2.46	9.44	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.46	2.26	7.14	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.12	2.71	9.86	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.159	2.55	8.85	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.343	3.1	9.83	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.11	2.79	9.42	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.379	—	—	0.017	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.451	—	—	0.017	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.354	—	—	0.017	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.345	—	—	0.017	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.335	—	—	0.017	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.318	—	—	0.017	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.307	—	—	0.05	µg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.324	—	—	0.05	µg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.333	—	—	0.05	µg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.296	—	—	0.05	µg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.323	—	—	0.05	µg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.323	—	—	0.05	µg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.00778	0.0405	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.0284	0.0205	0.0659	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.0113	0.00598	0.0221	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00768	0.0047	0.0224	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00288	0.00499	0.0387	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00536	0.01	0.0295	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00275	0.00824	0.0579	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00284	0.00752	0.0498	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00000000126	0.00597	0.0425	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00384	0.00607	0.0431	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00864	0.00956	0.057	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00803	0.00888	0.0469	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.36	—	—	0.05	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	2.09	—	—	0.05	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.97	—	—	0.05	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.92	—	—	0.05	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.94	—	—	0.05	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	2.2	—	—	0.05	mg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-33.9	21	70.7	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-8.42	16.3	59.1	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	2.29	18.4	47.6	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	35	17.2	71	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	16.9	17.8	41.2	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-0.477	15.4	61.1	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC

Table C-1 MDA C 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-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	69.2	—	—	0.053	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	78.9	—	—	0.053	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	80.2	—	—	0.053	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	78.4	—	—	0.053	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	79.6	—	—	0.053	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	79.4	—	—	0.053	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.71	—	—	0.1	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	10.2	—	—	0.1	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Sodium	Na	Y	10.5	—	—	0.1	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	10.3	—	—	0.1	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	10.5	—	—	0.1	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	11.3	—	—	0.1	mg/L	Y	N	J+	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.698	1.55	6.29	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.683	1.08	4.03	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.14	1.18	4.61	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.11	1.09	4.4	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.215	1.33	4.91	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.927	1.66	5.49	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	132	—	—	1	µS/cm	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	128	—	—	1	µS/cm	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	119	—	—	3.63	µS/cm	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	119	—	—	3.63	µS/cm	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	122	—	—	3.63	µS/cm	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	129	—	—	1	µS/cm	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	51.9	—	—	1	µg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	43.3	—	—	1	µg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	44.1	—	—	1	µg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	43.4	—	—	1	µg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	47.9	—	—	1	µg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	49.9	—	—	1	µg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0426	0.0845	0.348	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.219	0.129	0.426	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.2	0.145	0.487	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0896	0.119	0.482	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.303	0.127	0.491	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.218	0.142	0.472	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.75	—	—	0.133	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.82	—	—	0.133	mg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.78	—	—	0.133	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.79	—	—	0.133	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.93	—	—	0.133	mg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.8	—	—	0.133	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	05/04/17	WG	UF	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	4	—	—	—	deg C	Y	—	NQ	2017-1486	CAMO-17-132223	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	131	—	—	3.4	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC

Table C-1 MDA C 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-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	107	—	—	3.4	mg/L	Y	—	J	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	187	—	—	3.4	mg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	196	—	—	3.4	mg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	WG	F	RE	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	106	—	—	3.4	mg/L	Y	H	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	379	—	—	3.4	mg/L	N	—	R	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	137	—	—	3.4	mg/L	Y	—	NQ	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0815	—	—	0.02	mg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0409	—	—	0.02	mg/L	Y	J	J	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0417	—	—	0.017	mg/L	Y	J	J	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0409	—	—	0.017	mg/L	Y	J	J	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/12/14	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	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/13	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0619	—	—	0.017	mg/L	Y	—	U	2014-2393	CAMO-14-45693	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	2.714	0.999	2.931	—	pCi/L	Y	QU	U	2018-833	CAMO-18-148116	ARSL
R-14 S1	1200.6	05/04/17	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.203	0.659	2.074	—	pCi/L	Y	U	U	2017-1519	CAMO-17-132223	ARSL
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.303	0.693	2.336	—	pCi/L	Y	U	U	2017-493	CAMO-17-127226	ARSL
R-14 S1	1200.6	05/18/16	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.404	0.636	2.126	—	pCi/L	Y	U	U	2016-1238	CAMO-16-115250	ARSL
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.224	0.71	2.247	—	pCi/L	Y	U	U	2016-399	CAMO-16-106098	ARSL
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.294	0.671	2.302	—	pCi/L	Y	U	U	2016-399	CAMO-16-106070	ARSL
R-14 S1	1200.6	05/07/15	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.361	0.687	2.136	—	pCi/L	Y	U	U	2015-1205	CAMO-15-95776	ARSL
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.668	—	—	0.067	µg/L	Y	—	NQ	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.715	—	—	0.067	µg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.736	—	—	0.067	µg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.734	—	—	0.067	µg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.728	—	—	0.067	µg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.93	—	—	0.067	µg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.461	0.0333	0.112	—	pCi/L	Y	—	NQ	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.519	0.038	0.116	—	pCi/L	Y	—	NQ	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.459	0.04	0.108	—	pCi/L	Y	—	NQ	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.428	0.0297	0.0632	—	pCi/L	Y	—	NQ	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.474	0.0336	0.0473	—	pCi/L	Y	—	NQ	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.378	0.0283	0.0432	—	pCi/L	Y	—	NQ	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0391	0.0125	0.0486	—	pCi/L	Y	U	U	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0198	0.00935	0.0783	—	pCi/L	Y	U	U	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0122	0.00912	0.094	—	pCi/L	Y	U	U	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00957	0.00677	0.0552	—	pCi/L	Y	U	U	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00572	0.007	0.0412	—	pCi/L	Y	U	U	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00000000124	0.00703	0.0249	—	pCi/L	Y	U	U	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.212	0.0241	0.0658	—	pCi/L	Y	—	NQ	2018-828	CAMO-18-148116	GELC
R-14 S1	1200.6	11/09/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.267	0.0275	0.089	—	pCi/L	Y	—	NQ	2017-433	CAMO-17-127226	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.195	0.027	0.106	—	pCi/L	Y	—	NQ	2016-381	CAMO-16-106070	GELC
R-14 S1	1200.6	11/19/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.25	0.023	0.0624	—	pCi/L	Y	—	NQ	2016-381	CAMO-16-106098	GELC
R-14 S1	1200.6	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.238	0.0239	0.0454	—	pCi/L	Y	—	NQ	2015-297	CAMO-15-90281	GELC
R-14 S1	1200.6	11/05/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.239	0.0225	0.0223	—	pCi/L	Y	—	NQ	2014-2393	CAMO-14-45689	GELC
R-14 S1	1200.6	11/08/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	4.99	—	—	1	µg/L	Y	J	J	2018-828	CAMO-18-148113	GELC
R-14 S1	1200.6	11/09/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.24	—	—	1	µg/L	Y	—	NQ	2017-433	CAMO-17-127246	GELC
R-14 S1	1200.6	11/19/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.89	—	—	1	µg/L	Y	—	NQ	2016-381	CAMO-16-106072	GELC

Table C-1 MDA C 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-14 S1	1200.6	11/19/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.71	—	—	1	µg/L	Y	—	NQ	2016-381	CAMO-16-106119	GELC
R-14 S1	1200.6	11/12/14	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	6.95	—	—	1	µg/L	Y	—	NQ	2015-297	CAMO-15-90288	GELC
R-14 S1	1200.6	11/05/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	7.66	—	—	1	µg/L	Y	—	NQ	2013-271	CAMO-13-24280	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.87	—	—	0.01	SU	Y	H	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.94	—	—	0.01	SU	Y	H	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.96	—	—	0.01	SU	Y	H	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.74	—	—	0.01	SU	Y	H	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	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	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.92	—	—	0.01	SU	Y	H	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.41	—	—	0.01	SU	Y	H	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	7.81	—	—	0.01	SU	Y	H	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	59.3	—	—	1.45	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	58.5	—	—	1.45	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	58.2	—	—	1.45	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	59.8	—	—	1.45	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.5	—	—	0.725	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55	—	—	0.725	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.6	—	—	0.725	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	53.9	—	—	0.725	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.004	0.0291	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.011	0.00582	0.0327	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00287	0.0144	0.0716	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0115	0.0115	0.0518	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00374	0.00648	0.0781	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.0052	0.00736	0.0339	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0617	—	—	0.017	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.017	—	—	0.017	mg/L	Y	U	U	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0381	—	—	0.017	mg/L	Y	J	J	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0432	—	—	0.017	mg/L	Y	J	U	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.215	—	—	0.017	mg/L	Y	—	U	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0238	—	—	0.017	mg/L	Y	J	U	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.044	—	—	0.017	mg/L	Y	J	U	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0343	—	—	0.017	mg/L	Y	J	U	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Antimony	Sb	Y	2.57	—	—	1	µg/L	Y	J	J	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6020	Antimony	Sb	Y	2.04	—	—	1	µg/L	Y	J	J	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Antimony	Sb	Y	1.38	—	—	1	µg/L	Y	J	J	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Antimony	Sb	Y	5.06	—	—	1	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6020	Antimony	Sb	Y	2.32	—	—	1	µg/L	Y	J	J	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Antimony	Sb	Y	2.05	—	—	1	µg/L	Y	J	J	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Antimony	Sb	Y	3.42	—	—	1	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Antimony	Sb	Y	2.69	—	—	1	µg/L	Y	J	J	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	23.3	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	22.4	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	22	—	—	1	µg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	23.1	—	—	1	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	21.9	—	—	1	µg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC

Table C-1 MDA C 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-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	21.6	—	—	1	µg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	22	—	—	1	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	21.4	—	—	1	µg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.5	—	—	0.05	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.1	—	—	0.05	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.88	—	—	0.05	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	11.1	—	—	0.05	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.1	—	—	0.05	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.91	—	—	0.05	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.9	—	—	0.05	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	9.77	—	—	0.05	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-2.23	1.6	5.1	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.55	1.44	4.97	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	1.96	1.55	6.25	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.381	1.44	5.47	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-2.01	1.2	3.92	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.25	1.43	4.9	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.65	—	—	0.067	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.66	—	—	0.067	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.85	—	—	0.067	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.76	—	—	0.067	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.7	—	—	0.067	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.69	—	—	0.067	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.72	—	—	0.067	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.71	—	—	0.067	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.05	—	—	3	µg/L	Y	J	J	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	6.61	—	—	3	µg/L	Y	J	J	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.52	—	—	2	µg/L	Y	J	J	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.03	—	—	2	µg/L	Y	J	J	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.5	—	—	2	µg/L	Y	J	J	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.02	—	—	2	µg/L	Y	J	J	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.21	1.68	6.01	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.87	1.67	6.83	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.94	1.51	4.46	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.962	1.38	5.08	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.03	1.2	4.9	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.73	1.61	5.43	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.0962	—	—	0.033	mg/L	Y	J	J	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.0824	—	—	0.033	mg/L	Y	J	J	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.129	—	—	0.033	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.0953	—	—	0.033	mg/L	Y	J	J	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.0894	—	—	0.033	mg/L	Y	J	J	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.0898	—	—	0.033	mg/L	Y	J	J	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.122	—	—	0.033	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.118	—	—	0.033	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.372	0.611	2.39	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC

Table C-1 MDA C 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-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	-0.0384	0.658	2.81	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.411	0.404	1.43	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.374	0.774	2.9	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.323	0.377	1.28	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.118	0.676	2.88	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	1.86	0.62	1.73	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	2.23	0.733	2.04	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	2.26	0.545	1.68	—	pCi/L	Y	—	NQ	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	2.48	0.938	2.99	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.21	0.483	1.57	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.39	0.881	2.92	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.2	—	—	0.453	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.2	—	—	0.453	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.7	—	—	0.453	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	42.1	—	—	0.453	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.2	—	—	0.453	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.8	—	—	0.453	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.9	—	—	0.453	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.5	—	—	0.453	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.41	—	—	0.11	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.38	—	—	0.11	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.17	—	—	0.11	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.53	—	—	0.11	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.27	—	—	0.11	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.31	—	—	0.11	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.21	—	—	0.11	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.19	—	—	0.11	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.18	—	—	0.2	µg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.06	—	—	0.2	µg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.948	—	—	0.2	µg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.28	—	—	0.3	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.04	—	—	0.165	µg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.04	—	—	0.165	µg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.07	—	—	0.165	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.983	—	—	0.165	µg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-3.65	2.92	8.79	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	7.32	4.12	12.2	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.95	3.09	10.7	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.34	2.66	9.37	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.68	2.4	9.06	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.727	2.61	9.21	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	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	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.315	—	—	0.017	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.352	—	—	0.017	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.368	—	—	0.017	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.404	—	—	0.085	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC

Table C-1 MDA C 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-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.405	—	—	0.085	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.353	—	—	0.017	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.38	—	—	0.017	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.315	—	—	0.05	µg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.333	—	—	0.05	µg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.354	—	—	0.05	µg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.31	—	—	0.05	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.298	—	—	0.05	µg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.291	—	—	0.05	µg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.339	—	—	0.05	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.327	—	—	0.05	µg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.0123	0.0123	0.0606	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00745	0.00589	0.0274	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.0101	0.00713	0.0584	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00229	0.00686	0.0267	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00547	0.00547	0.0366	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.0145	0.0145	0.0493	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0205	0.0148	0.0866	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00744	0.00645	0.0392	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00755	0.00755	0.0441	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00000000152	0.00722	0.0513	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0082	0.00723	0.054	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.029	0.0194	0.0757	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.81	—	—	0.05	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.83	—	—	0.05	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.84	—	—	0.05	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.91	—	—	0.05	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.82	—	—	0.05	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.85	—	—	0.05	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.92	—	—	0.05	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.78	—	—	0.05	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-32.2	21.2	70.8	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	-22.1	21.1	77.4	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	37.9	20.7	45.7	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	3.56	19	50.4	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-14.1	16.3	55.6	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	26.2	14.2	59.5	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	72.5	—	—	0.053	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	69.9	—	—	0.053	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	68.3	—	—	0.053	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	74.3	—	—	0.053	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	73.6	—	—	0.053	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	72.5	—	—	0.053	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	73	—	—	0.053	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	70.6	—	—	0.053	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.14	—	—	0.1	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC

Table C-1 MDA C 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-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Sodium	Na	Y	8.98	—	—	0.1	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.72	—	—	0.1	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.95	—	—	0.1	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	8.86	—	—	0.1	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Sodium	Na	Y	8.66	—	—	0.1	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	8.83	—	—	0.1	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.24	—	—	0.1	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-2.11	1.1	2.9	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	1.04	1.81	6.86	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.404	1.42	5.57	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.94	1.13	5.25	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.173	1.66	5.22	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.0448	1.52	4.91	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	131	—	—	1	µS/cm	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	125	—	—	1	µS/cm	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	126	—	—	1	µS/cm	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	120	—	—	1	µS/cm	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	124	—	—	3.63	µS/cm	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	125	—	—	3.63	µS/cm	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	123	—	—	3.63	µS/cm	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	117	—	—	3.63	µS/cm	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	40.8	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	39.5	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	43.1	—	—	1	µg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	43.6	—	—	1	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	42.3	—	—	1	µg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	39.1	—	—	1	µg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	37.9	—	—	1	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	41.2	—	—	1	µg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.211	0.131	0.435	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.203	0.135	0.45	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.307	0.106	0.475	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0151	0.128	0.453	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.027	0.128	0.474	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0739	0.122	0.486	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.76	—	—	0.133	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.78	—	—	0.133	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.06	—	—	0.133	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.82	—	—	0.133	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.84	—	—	0.133	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.85	—	—	0.133	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.84	—	—	0.133	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.74	—	—	0.133	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-790	CAMO-18-148117	GELC

Table C-1 MDA C 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-46	1340.0	11/07/17	WG	UF	INIT	FD	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-790	CAMO-18-148580	GELC
R-46	1340.0	05/04/17	WG	UF	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	4	—	—	—	deg C	Y	—	NQ	2017-1486	CAMO-17-132233	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	4	—	—	—	deg C	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	104	—	—	3.4	mg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	120	—	—	3.4	mg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	114	—	—	3.4	mg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	129	—	—	3.4	mg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	114	—	—	3.4	mg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	61.4	—	—	3.4	mg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	177	—	—	3.4	mg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	97.1	—	—	3.4	mg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.621	—	—	0.33	mg/L	Y	J	J	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.598	—	—	0.33	mg/L	Y	J	J	2018-790	CAMO-18-148580	GELC
R-46	1340.0	05/04/17	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.701	—	—	0.33	mg/L	Y	J	J	2017-1486	CAMO-17-132233	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.781	—	—	0.33	mg/L	Y	J	J	2017-389	CAMO-17-127236	GELC
R-46	1340.0	05/05/16	WG	UF	INIT	FD	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.762	—	—	0.33	mg/L	Y	J	J	2016-1157	CAMO-16-115235	GELC
R-46	1340.0	05/05/16	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.705	—	—	0.33	mg/L	Y	J	J	2016-1157	CAMO-16-115261	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.776	—	—	0.33	mg/L	Y	J	J	2016-365	CAMO-16-106109	GELC
R-46	1340.0	05/07/15	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	1.01	—	—	0.33	mg/L	Y	—	NQ	2015-1176	CAMO-15-95787	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.031	—	—	0.02	mg/L	Y	J	J	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0367	—	—	0.02	mg/L	Y	J	J	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.02	mg/L	Y	U	U	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0431	—	—	0.02	mg/L	Y	J	J	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0391	—	—	0.017	mg/L	Y	J	J	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0586	—	—	0.017	mg/L	Y	—	U	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.587	0.782	2.678	—	pCi/L	Y	U	U	2018-835	CAMO-18-148117	ARSL
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.415	0.683	2.337	—	pCi/L	Y	U	U	2018-835	CAMO-18-148580	ARSL
R-46	1340.0	05/04/17	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.684	0.76	2.322	—	pCi/L	Y	U	U	2017-1519	CAMO-17-132233	ARSL
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.629	0.596	1.972	—	pCi/L	Y	U	U	2017-400	CAMO-17-127236	ARSL
R-46	1340.0	05/05/16	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.158	0.636	2.156	—	pCi/L	Y	U	U	2016-1200	CAMO-16-115261	ARSL
R-46	1340.0	05/05/16	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.006	0.597	1.895	—	pCi/L	Y	U	U	2016-1200	CAMO-16-115235	ARSL
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.301	0.72	2.466	—	pCi/L	Y	U	U	2016-379	CAMO-16-106109	ARSL
R-46	1340.0	05/07/15	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.33	0.605	2.082	—	pCi/L	Y	U	U	2015-1205	CAMO-15-95787	ARSL
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.466	—	—	0.067	µg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.456	—	—	0.067	µg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.543	—	—	0.067	µg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.513	—	—	0.067	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.489	—	—	0.067	µg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.5	—	—	0.067	µg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.431	—	—	0.067	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.478	—	—	0.067	µg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.462	0.037	0.132	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.407	0.0325	0.122	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.344	0.0322	0.121	—	pCi/L	Y	—	J	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.343	0.0314	0.08	—	pCi/L	Y	—	NQ	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.34	0.0359	0.0717	—	pCi/L	Y	—	NQ	2015-297	CAMO-15-90283	GELC

Table C-1 MDA C 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-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.461	0.0363	0.0565	—	pCi/L	Y	—	J	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0525	0.018	0.0571	—	pCi/L	Y	U	U	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0516	0.0132	0.0528	—	pCi/L	Y	U	U	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0138	0.0109	0.0819	—	pCi/L	Y	U	U	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0212	0.00909	0.0698	—	pCi/L	Y	U	U	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00865	0.0106	0.0624	—	pCi/L	Y	U	U	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0138	0.00845	0.0356	—	pCi/L	Y	U	U	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.265	0.0281	0.0773	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148117	GELC
R-46	1340.0	11/07/17	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.199	0.0231	0.0715	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148580	GELC
R-46	1340.0	11/08/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.17	0.0225	0.0929	—	pCi/L	Y	—	NQ	2017-389	CAMO-17-127236	GELC
R-46	1340.0	11/18/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.14	0.0201	0.079	—	pCi/L	Y	—	NQ	2016-365	CAMO-16-106109	GELC
R-46	1340.0	11/12/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.13	0.024	0.0687	—	pCi/L	Y	—	NQ	2015-297	CAMO-15-90283	GELC
R-46	1340.0	11/18/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.207	0.025	0.03	—	pCi/L	Y	—	J	2014-2507	CAMO-14-45691	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.55	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.87	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.55	—	—	1	µg/L	Y	—	NQ	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	8.1	—	—	1	µg/L	Y	—	NQ	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.77	—	—	1	µg/L	Y	—	NQ	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.67	—	—	1	µg/L	Y	—	NQ	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.71	—	—	1	µg/L	Y	—	NQ	2016-365	CAMO-16-106130	GELC
R-46	1340.0	05/07/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.57	—	—	1	µg/L	Y	—	NQ	2015-1176	CAMO-15-95809	GELC
R-46	1340.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Zinc	Zn	Y	4.66	—	—	3.3	µg/L	Y	J	J	2018-790	CAMO-18-148114	GELC
R-46	1340.0	11/07/17	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Zinc	Zn	N	3.3	—	—	3.3	µg/L	Y	U	U	2018-790	CAMO-18-148581	GELC
R-46	1340.0	05/04/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Zinc	Zn	N	10	—	—	3.3	µg/L	Y	U	U	2017-1486	CAMO-17-132213	GELC
R-46	1340.0	11/08/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Zinc	Zn	Y	4.37	—	—	3.3	µg/L	Y	J	J	2017-389	CAMO-17-127256	GELC
R-46	1340.0	05/05/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Zinc	Zn	N	10	—	—	3.3	µg/L	Y	U	U	2016-1157	CAMO-16-115284	GELC
R-46	1340.0	05/05/16	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Zinc	Zn	N	10	—	—	3.3	µg/L	Y	U	U	2016-1157	CAMO-16-115238	GELC
R-46	1340.0	11/18/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Zinc	Zn	Y	7.19	—	—	3.3	µg/L	Y	J	J	2016-365	CAMO-16-106130	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.27	—	—	0.01	SU	Y	H	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.26	—	—	0.01	SU	Y	H	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8	—	—	0.01	SU	Y	H	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.26	—	—	0.01	SU	Y	H	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.11	—	—	0.01	SU	Y	H	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.08	—	—	0.01	SU	Y	H	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alkalinity of a solution	pH	Y	8.17	—	—	0.01	SU	Y	H	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	59.7	—	—	1.45	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	60	—	—	1.45	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	61.8	—	—	1.45	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	58.4	—	—	0.725	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	60.2	—	—	0.725	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	57.6	—	—	0.725	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	58.1	—	—	0.725	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.011	0.00519	0.0327	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00231	0.00517	0.0576	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00894	0.00774	0.0302	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0186	0.0107	0.0646	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC

Table C-1 MDA C 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-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.00968	0.0639	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0105	0.00742	0.0309	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0296	—	—	0.017	mg/L	Y	J	J	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.044	—	—	0.017	mg/L	Y	J	U	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0261	—	—	0.017	mg/L	Y	J	U	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0203	—	—	0.017	mg/L	Y	J	U	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.758	—	—	0.017	mg/L	Y	—	J	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.311	—	—	0.017	mg/L	Y	—	J	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	2.02	—	—	2	µg/L	Y	J	J	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	Y	U	U	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	24.4	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	24.9	—	—	1	µg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	24.3	—	—	1	µg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	25.4	—	—	1	µg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	25	—	—	1	µg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Barium	Ba	Y	25.5	—	—	1	µg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Barium	Ba	Y	25.1	—	—	1	µg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.2	—	—	0.05	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.4	—	—	0.05	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.2	—	—	0.05	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.8	—	—	0.05	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.3	—	—	0.05	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Calcium	Ca	Y	11.1	—	—	0.05	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Calcium	Ca	Y	10.9	—	—	0.05	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.439	1.2	4.42	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.237	1.02	3.88	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.108	1.73	5.59	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.638	1.17	4.39	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.2	1.7	5.08	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.73	1.95	4.11	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.75	—	—	0.067	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.88	—	—	0.067	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.81	—	—	0.067	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.8	—	—	0.067	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.84	—	—	0.067	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.86	—	—	0.067	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.99	—	—	0.067	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.14	—	—	3	µg/L	Y	J	J	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.14	—	—	3	µg/L	Y	J	J	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.32	—	—	2	µg/L	Y	J	J	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.32	—	—	2	µg/L	Y	J	J	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	5.06	—	—	2	µg/L	Y	J	J	2015-1191	CAMO-15-95763	GELC

Table C-1 MDA C 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-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	4.9	—	—	2	µg/L	Y	J	J	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-3.52	1.55	4.26	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.535	1.07	3.98	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.321	1.48	6.06	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.11	1.27	4.13	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.718	1.04	3.71	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.316	1.33	4.17	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.104	—	—	0.033	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.163	—	—	0.033	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.112	—	—	0.033	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.0912	—	—	0.033	mg/L	Y	J	J	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.142	—	—	0.033	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.134	—	—	0.033	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.129	—	—	0.033	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.216	0.649	2.58	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	2.22	0.949	2.94	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.0819	0.695	2.81	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.0882	0.311	1.09	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.781	0.299	0.936	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-1.24	0.629	2.94	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	2.57	0.817	2.26	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	RE	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.68	0.869	2.75	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	203	4.07	2.88	—	pCi/L	Y	—	NQ	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	3.01	0.937	2.92	—	pCi/L	Y	—	NQ	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	1.77	0.327	0.973	—	pCi/L	Y	—	NQ	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	2.4	0.4	1.21	—	pCi/L	Y	—	NQ	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	2.57	0.957	2.95	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.9	—	—	0.453	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.3	—	—	0.453	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.6	—	—	0.453	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	41.9	—	—	0.453	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.6	—	—	0.453	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	43.6	—	—	0.453	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	42.9	—	—	0.453	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.53	—	—	0.11	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.5	—	—	0.11	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.46	—	—	0.11	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.64	—	—	0.11	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.6	—	—	0.11	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.89	—	—	0.11	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Magnesium	Mg	Y	3.85	—	—	0.11	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.978	—	—	0.2	µg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.08	—	—	0.2	µg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.01	—	—	0.3	µg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.03	—	—	0.165	µg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.02	—	—	0.165	µg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC

Table C-1 MDA C 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-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.977	—	—	0.165	µg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.975	—	—	0.165	µg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-3.82	2.75	9.37	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.174	2.01	7.15	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.29	2.78	9.56	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.77	2.53	8.84	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.07	2.2	8.49	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	2.24	2.15	7.67	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.75	—	—	0.6	µg/L	Y	J	J	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.702	—	—	0.6	µg/L	Y	J	J	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.976	—	—	0.5	µg/L	Y	J	J	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.35	—	—	0.5	µg/L	Y	J	J	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	N	2.08	—	—	0.5	µg/L	Y	—	U	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.591	—	—	0.5	µg/L	Y	J	J	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	N	2	—	—	0.5	µg/L	Y	U	U	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.344	—	—	0.017	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.366	—	—	0.017	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.394	—	—	0.017	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.408	—	—	0.017	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.388	—	—	0.017	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.474	—	—	0.017	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.436	—	—	0.017	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.374	—	—	0.05	µg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.345	—	—	0.05	µg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.341	—	—	0.05	µg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.338	—	—	0.05	µg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.35	—	—	0.05	µg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.333	—	—	0.05	µg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.328	—	—	0.05	µg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00219	0.00579	0.0322	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00526	0.00744	0.0609	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.0177	0.00984	0.023	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00305	0.00807	0.0409	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00475	0.00889	0.0319	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00284	0.00852	0.0313	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.0197	0.00901	0.0461	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00263	0.00872	0.0461	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00197	0.00857	0.0442	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.0061	0.00862	0.0603	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00237	0.0123	0.047	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.00984	0.0498	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.77	—	—	0.05	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.86	—	—	0.05	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.84	—	—	0.05	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.87	—	—	0.05	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.8	—	—	0.05	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC

Table C-1 MDA C 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-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Potassium	K	Y	1.79	—	—	0.05	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Potassium	K	Y	1.81	—	—	0.05	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-0.55	22.7	85.7	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	6.54	15.2	31	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-21.5	17.5	70.7	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-19.7	15	56.9	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	45.2	15.9	29.1	—	pCi/L	Y	UI	R	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	26.6	14.3	27.8	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	69.6	—	—	0.053	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	69.3	—	—	0.053	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	70.6	—	—	0.053	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	75.4	—	—	0.053	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	72.9	—	—	0.053	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	74.1	—	—	0.053	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Silicon Dioxide	SiO2	Y	73	—	—	0.053	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.25	—	—	0.1	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.91	—	—	0.1	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.86	—	—	0.1	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.87	—	—	0.1	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.51	—	—	0.1	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.99	—	—	0.1	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Sodium	Na	Y	9.97	—	—	0.1	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.411	1.35	5.36	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.88	1.19	5.24	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.909	1.41	6.05	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.0268	1.25	4.74	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	0.309	1.3	4.99	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.28	1.27	4.03	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	130	—	—	1	µS/cm	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	254	—	—	1	µS/cm	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	132	—	—	1	µS/cm	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	120	—	—	3.63	µS/cm	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	117	—	—	3.63	µS/cm	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	119	—	—	3.63	µS/cm	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance	SPEC_CONDC	Y	118	—	—	3.63	µS/cm	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	41.6	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	45	—	—	1	µg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	41.9	—	—	1	µg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	47.4	—	—	1	µg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	44.3	—	—	1	µg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Strontium	Sr	Y	50.4	—	—	1	µg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Strontium	Sr	Y	51.9	—	—	1	µg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.15	0.121	0.446	—	pCi/L	Y	U	U	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.295	0.141	0.463	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.19	0.0993	0.481	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.101	0.117	0.47	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC

Table C-1 MDA C 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-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.325	0.122	0.484	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0328	0.129	0.474	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.98	—	—	0.133	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.1	—	—	0.133	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.08	—	—	0.133	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.15	—	—	0.133	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.98	—	—	0.133	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.04	—	—	0.133	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.05	—	—	0.133	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	2	—	—	—	deg C	Y	—	NQ	2018-790	CAMO-18-148118	GELC
R-60	1330.0	05/03/17	WG	UF	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	4	—	—	—	deg C	Y	—	NQ	2017-1476	CAMO-17-132236	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	VOC	EPA:170.0	Temperature	TEMP	Y	4	—	—	—	deg C	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	119	—	—	3.4	mg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	130	—	—	3.4	mg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	130	—	—	3.4	mg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	28.6	—	—	3.4	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	161	—	—	3.4	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	104	—	—	3.4	mg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	94.3	—	—	3.4	mg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	Y	0.0387	—	—	0.033	mg/L	Y	J	J	2018-790	CAMO-18-148118	GELC
R-60	1330.0	05/03/17	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.17	—	—	0.033	mg/L	Y	—	U	2017-1476	CAMO-17-132236	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	05/17/16	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2016-1223	CAMO-16-115264	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	GENERAL CHEMISTRY	EPA:351.2	Total Kjeldahl Nitrogen	TKN	N	0.1	—	—	0.033	mg/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0368	—	—	0.02	mg/L	Y	J	J	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0388	—	—	0.02	mg/L	Y	J	J	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0528	—	—	0.02	mg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0715	—	—	0.017	mg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0474	—	—	0.017	mg/L	Y	J	U	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0456	—	—	0.017	mg/L	Y	J	U	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.069	0.698	2.379	—	pCi/L	Y	U	U	2018-835	CAMO-18-148118	ARSL
R-60	1330.0	05/03/17	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.851	0.835	2.553	—	pCi/L	Y	U	U	2017-1483	CAMO-17-132236	ARSL
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.625	0.599	2.064	—	pCi/L	Y	U	U	2017-493	CAMO-17-127239	ARSL
R-60	1330.0	05/17/16	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.253	0.711	2.245	—	pCi/L	Y	U	U	2016-1238	CAMO-16-115264	ARSL
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.503	0.699	2.4	—	pCi/L	Y	U	U	2016-379	CAMO-16-106112	ARSL
R-60	1330.0	05/12/15	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.843	0.633	2.053	—	pCi/L	Y	U	U	2015-1205	CAMO-15-95760	ARSL
R-60	1330.0	05/12/15	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.954	0.707	2.291	—	pCi/L	Y	U	U	2015-1205	CAMO-15-95790	ARSL
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.5	—	—	0.067	µg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.618	—	—	0.067	µg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.527	—	—	0.067	µg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.555	—	—	0.067	µg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.517	—	—	0.067	µg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.547	—	—	0.067	µg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.537	—	—	0.067	µg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.407	0.0344	0.132	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148118	GELC

Table C-1 MDA C 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-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.386	0.0305	0.0998	—	pCi/L	Y	—	NQ	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.44	0.0365	0.0927	—	pCi/L	Y	—	NQ	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.584	0.0588	0.113	—	pCi/L	Y	—	NQ	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.347	0.0502	0.111	—	pCi/L	Y	—	NQ	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.351	0.0311	0.0567	—	pCi/L	Y	—	NQ	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	Y	0.0625	0.0151	0.0573	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0568	0.0139	0.0673	—	pCi/L	Y	U	U	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0211	0.0111	0.0809	—	pCi/L	Y	U	U	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0272	0.0192	0.0982	—	pCi/L	Y	U	U	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0134	0.0189	0.0966	—	pCi/L	Y	U	U	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00652	0.00922	0.0327	—	pCi/L	Y	U	U	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.239	0.0271	0.0775	—	pCi/L	Y	—	NQ	2018-790	CAMO-18-148118	GELC
R-60	1330.0	11/10/16	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.202	0.0218	0.0764	—	pCi/L	Y	—	NQ	2017-442	CAMO-17-127239	GELC
R-60	1330.0	11/17/15	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.185	0.0243	0.0915	—	pCi/L	Y	—	NQ	2016-362	CAMO-16-106112	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.242	0.0381	0.108	—	pCi/L	Y	—	NQ	2015-353	CAMO-15-90284	GELC
R-60	1330.0	11/17/14	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.173	0.0351	0.106	—	pCi/L	Y	—	NQ	2015-353	CAMO-15-90267	GELC
R-60	1330.0	11/14/13	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.185	0.023	0.0293	—	pCi/L	Y	—	NQ	2014-2471	CAMO-14-45692	GELC
R-60	1330.0	11/07/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	8	—	—	1	µg/L	Y	—	NQ	2018-790	CAMO-18-148115	GELC
R-60	1330.0	05/03/17	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	8.44	—	—	1	µg/L	Y	—	NQ	2017-1476	CAMO-17-132216	GELC
R-60	1330.0	11/10/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	8.47	—	—	1	µg/L	Y	—	NQ	2017-442	CAMO-17-127259	GELC
R-60	1330.0	05/17/16	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	7.97	—	—	1	µg/L	Y	—	NQ	2016-1223	CAMO-16-115287	GELC
R-60	1330.0	11/17/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	8.05	—	—	1	µg/L	Y	—	NQ	2016-362	CAMO-16-106133	GELC
R-60	1330.0	05/12/15	WG	F	INIT	FD	INORGANIC	SW-846:6010C	Vanadium	V	Y	8.29	—	—	1	µg/L	Y	—	NQ	2015-1191	CAMO-15-95763	GELC
R-60	1330.0	05/12/15	WG	F	INIT	REG	INORGANIC	SW-846:6010C	Vanadium	V	Y	8.14	—	—	1	µg/L	Y	—	NQ	2015-1191	CAMO-15-95812	GELC

Appendix D

Groundwater Results Greater Than Half of Screening Values

There are no results for this periodic monitoring report.

Appendix E

Analytical Chemistry Graphs of Screening-Value Exceedances

There are no results for this periodic monitoring report.

Appendix F

Analytical Reports
(on CD included with this document)

CD Table of Contents

Chain of Custody	Category	Lab	Sample	Date	Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)
17-1476	Inorganic	GELC[a]	CAMO-17-132216	05/03/17	R-60	1330	1350.9
17-1476	Inorganic	GELC	CAMO-17-132236	05/03/17	R-60	1330	1350.9
17-1476	Organic	GELC	CAMO-17-132236	05/03/17	R-60	1330	1350.9
17-1483	Rad[b]	ARSL	CAMO-17-132236	05/03/17	R-60	1330	1350.9
17-1486	Inorganic	GELC	CAMO-17-132213	05/04/17	R-46	1340	1360.7
17-1486	Inorganic	GELC	CAMO-17-132223	05/04/17	R-14 S1	1200.6	1233.2
17-1486	Inorganic	GELC	CAMO-17-132233	05/04/17	R-46	1340	1360.7
17-1486	Organic	GELC	CAMO-17-132223	05/04/17	R-14 S1	1200.6	1233.2
17-1486	Organic	GELC	CAMO-17-132233	05/04/17	R-46	1340	1360.7
17-1519	Rad	ARSL[c]	CAMO-17-132223	05/04/17	R-14 S1	1200.6	1233.2
17-1519	Rad	ARSL	CAMO-17-132233	05/04/17	R-46	1340	1360.7
2018-790	Inorganic	GELC	CAMO-18-148115	11/07/17	R-60	1330	1350.9
2018-790	Inorganic	GELC	CAMO-18-148114	11/07/17	R-46	1340	1360.7
2018-790	Inorganic	GELC	CAMO-18-148580	11/07/17	R-46	1340	1360.7
2018-790	Inorganic	GELC	CAMO-18-148581	11/07/17	R-46	1340	1360.7
2018-790	Inorganic	GELC	CAMO-18-148117	11/07/17	R-46	1340	1360.7
2018-790	Inorganic	GELC	CAMO-18-148118	11/07/17	R-60	1330	1350.9
2018-790	Organic	GELC	CAMO-18-148580	11/07/17	R-46	1340	1360.7
2018-790	Organic	GELC	CAMO-18-148117	11/07/17	R-46	1340	1360.7
2018-790	Organic	GELC	CAMO-18-148118	11/07/17	R-60	1330	1350.9
2018-790	Rad	GELC	CAMO-18-148580	11/07/17	R-46	1340	1360.7
2018-790	Rad	GELC	CAMO-18-148117	11/07/17	R-46	1340	1360.7
2018-790	Rad	GELC	CAMO-18-148118	11/07/17	R-60	1330	1350.9
2018-828	Inorganic	GELC	CAMO-18-148113	11/08/17	R-14 S1	1200.6	1233.2
2018-828	Inorganic	GELC	CAMO-18-148116	11/08/17	R-14 S1	1200.6	1233.2
2018-828	Organic	GELC	CAMO-18-148116	11/08/17	R-14 S1	1200.6	1233.2
2018-828	Rad	GELC	CAMO-18-148116	11/08/17	R-14 S1	1200.6	1233.2
2018-833	Rad	ARSL	CAMO-18-148116	11/08/17	R-14 S1	1200.6	1233.2
2018-835	Rad	ARSL	CAMO-18-148580	11/07/17	R-46	1340	1360.7
2018-835	Rad	ARSL	CAMO-18-148117	11/07/17	R-46	1340	1360.7
2018-835	Rad	ARSL	CAMO-18-148118	11/07/17	R-60	1330	1350.9

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

[b] Rad = Radiochemistry.

[c] ARSL = American Radiation Services, Inc.