NEXTera® ENERGY SEABROOK

April 26, 2018
Docket No. 50-443
SBK-L-18071

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Seabrook Station
2017 Annual Radiological Environmental Operating Report

Pursuant to the requirements of 10 CFR 50.36a(a)(2) and Seabrook Station Technical Specification 6.8.1.3, NextEra Energy Seabrook, LLC submits the 2017 Annual Radiological Environmental Operating Report. The report summarizes the implementation of the NextEra Energy Seabrook, LLC Radiological Environmental Monitoring Program (REMP). Attachment 1 to the report is the complete data set for the REMP samples.

A copy of this report is also being provided to the Commonwealth of Massachusetts, Department of Public Health; and the State of New Hampshire, Bureau of Radiological Health.

Should you require further information regarding this matter, please contact David Robinson, Chemistry Department Manager, at (603) 773-7496.

Sincerely,

NextEra Energy Seabrook, LLC

Kenneth Browne
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cc: with enclosure

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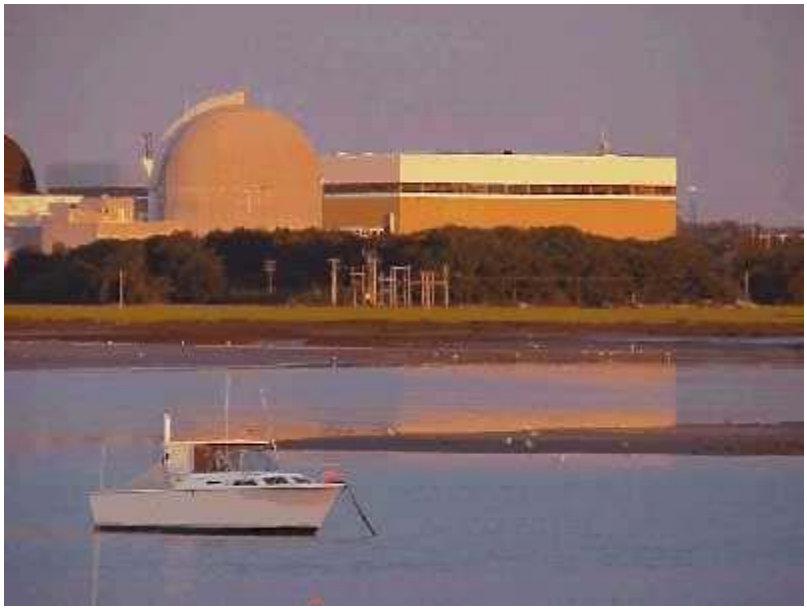
NEXTera ENERGY SEABROOK

2017 Annual Radiological Environmental Operating Report



April 2018

SEABROOK STATION

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

For the Period

January - December 2017

Docket No. 50-443

Prepared By:

NextEra Energy Seabrook, LLC
Chemistry Department
Seabrook Station

And

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for David Robinson, NextEra Energy Seabrook, LLC

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Executive Summary

Both the plant operations and Dry Fuel Storage Radiological Environmental Monitoring Programs (REMP) for Seabrook Station operated successfully for the period of January through December 2017. This report describes the REMP and its implementation as required by Technical Specifications and as defined in the Offsite Dose Calculation Manual (ODCM). It also contains analytical results, data evaluation, dose assessment (as needed), and data trends for each environmental sample medium. Also included are the results of the Land Use Census, historical data, and the environmental laboratory performance in the Quality Assurance Inter-comparison Program required by the ODCM.

Radioactivity levels in the vicinity of Seabrook Station from January 1 through December 31, 2017 in air, water, sediment, milk, fish, food crops, and vegetation, as well as direct radiation measurements have been analyzed, evaluated, and summarized. The results of the REMP are intended to supplement the results of the radiological effluent monitoring by verifying that any measurable concentration of radioactive materials and levels of radiation are not higher than expected on the basis of the effluent measurement and modeling of the environmental exposure pathways.

Radiation and radioactivity in the environment is monitored within a 10-mile radius of the site. Two types of samples are taken. The first type, control samples, is collected from areas that are beyond measurable influence of Seabrook Station. These samples are used as reference data. Normal background radiation levels, or radiation present due to causes other than Seabrook Station, can thus be compared to the environment surrounding the nuclear power station. Indicator samples are the second sample type obtained. These samples show how much measureable radiation or radioactivity (if any) is contributed to the environment by the site. Indicator samples are taken from areas close to the station where any plant contribution will be at the highest potential concentration. The ODCM minimum required plant operations REMP included the collection for 2017 of at least 576 samples, with a total of 2416 individual measurement analyses. In 2017, the total number of sample analysis sets (both required and non-required) equaled 830 taken from 98 locations around Seabrook Station. These were collected from aquatic, atmospheric, and terrestrial environments. An estimated 5012 individual measurement analyses were performed on these samples. The plant operations radiological environmental monitoring program is outlined in Table 2.0-1. Radiation environmental monitoring associated with Dry Fuel Storage (DFS) in 2017 included an additional 20 TLD direct radiation measurements beyond those listed as being part of the REMP. The DFS environmental monitoring program is shown on Table 4.0-1.

Prior to station operation, samples were collected and analyzed to determine the amount of radioactivity present in the area. The resulting values are used as a "pre-operational baseline." Current analysis results from the indicator samples are compared to both current control sample values and the pre-operational baseline to determine if changes in radioactivity levels are attributable to station operations.

A report is required to be submitted to the Nuclear Regulatory Commission when the level of radioactivity as a result of plant operations in an environmental sampling medium at a specified location exceeds the reporting level limits specified in the ODCM when averaged over any calendar quarter. Also, when more than one of the radionuclides is detected in the sampling medium, this report shall be submitted if:

$$\frac{\text{Concentration (1)}}{\text{Limit Level (1)}} + \frac{\text{Concentration (2)}}{\text{Limit Level (2)}} + \ldots \geq 1.0$$

Based on the analytical results of environmental samples during 2017, Seabrook Station reporting levels were not exceeded.

All off-site radioactivity detected was attributable to either naturally-occurring radionuclides, previous nuclear weapons tests, the Fukushima Daiichi nuclear accident in Japan on March 11, 2011, or other man-made sources.

In 2017, the maximum whole body dose to the hypothetically exposed individual due to Seabrook Station effluents and operations was estimated to be 0.0656 mrem. This whole body dose is the sum of all the exposure pathways for liquid and gaseous effluents, plus the direct whole body dose from station sources. This total represents approximately 0.26% of the whole body dose limits for a member of the public as set forth in 40CFR190.

The average effective dose per individual in the U.S. population from ubiquitous or background radiation sources is about 3.11 mSv/yr (311 mrem/yr), with another 3.00 mSv/yr (300 mrem/yr) resulting from medical procedures and imaging (NCRP Report No. 160, "Ionizing Radiation Exposure of the Population of the United States" (2009)). The estimate for natural background includes radon gas which has always been present but has not always been included in previous estimates. In some regions of the country, the amount of natural radiation is significantly higher. Residents of Colorado, for example, receive an additional 60 mrem/yr due to the increase in cosmic and terrestrial radiation levels. In fact, for every 100 feet above sea level, a person will receive an additional 1 mrem/yr from cosmic radiation. In several regions of the world, naturally high concentrations of uranium and radium deposits result in doses of several thousand mrem/yr to their residents (CRC Handbook. "Radioecology: Nuclear Energy and the Environment", F. Ward Whicker and Vincent Schultz, Volume I, 1982).

Analytical results are divided into four categories based on exposure pathways: Airborne, direct radiation, ingestion, and waterborne. Each of these pathways is described below:

- The airborne exposure pathway includes airborne iodine and airborne particulate. The 2017 results were similar to previous years, excluding the Fukushima Daiichi event in 2011. There was no notable increase in natural products and no detectable fission products or other plant-related radionuclides in the airborne particulate media during the year.

- The direct exposure pathway measures environmental radiation exposures by use of thermoluminescent dosimeters (TLDs). TLD results have indicated a trend that compares with previous years which reflect the natural variability of background radiation from one location to another. The exposure rate response at some individual monitoring stations has exhibited step changes at some point in the past that appear to be related to changes in local conditions in the area of the dosimeter measurement. These step observations have been noted at various locations (both control and indicator stations) with no correlation with distance from Seabrook Station, leading to the conclusion that the changes in local TLD responses are not related to Seabrook operations. As a result, no detectable radiation contribution from Seabrook Station sources was identified via TLD environmental measurements off-site during the course of 2017 from either plant operations or from the spent fuel in the Dry Fuel Storage Facility.

- The ingestion exposure pathway includes milk, fish, shellfish, terrestrial food products and leafy vegetation samples. The gamma spectroscopy analyses indicated the most prominent positive results were for potassium-40 (K-40) at average environmental levels. Other naturally-occurring radionuclides were also periodically detected. However, past world-wide nuclear events such as atmospheric testing of nuclear weapons and the Fukushima Daiichi nuclear accident did result in detectable fallout of fission related radioactivity (Cs-137) in milk. Neither fish, shellfish nor terrestrial food products (strawberries, blueberries, green beans and tomatoes) nor leafy vegetation had any detectable fission product related radioactivity. No radionuclides related to plant effluents were detected in any of these sample media during 2017. For the one fission product (Cs-137) detected in milk, the concentration falls within the range of past and pre-operational measurements and can be attributed to past weapons testing fallout.

- The waterborne exposure pathway includes surface (ocean) water, drinking water supply, shallow well water, sea algae (Irish Moss) and sediment. Water samples were analyzed for tritium, gross-beta and gamma-emitting radionuclides. Irish Moss was analyzed for gamma-emitting radionuclides. Tritium was not identified in the water samples analyzed. For groundwater, the gross beta activity detected at all locations is similar to what was detected in the pre-operational program and is consistent with results from previous years of commercial operations. Gamma analysis of samples indicated no plant-related gamma-emitting radionuclides above detection limits.

The results of the 2017 REMP continue to clearly demonstrate that there is no significant short term or chronic long-term radiological impact on the environment in the vicinity of Seabrook Station from plant operations and that there is no detectable impact to members of the public associated with the DFS facility. The REMP monitoring did detect local area fallout related to past global nuclear events, such as atmospheric weapons testing and the Japanese nuclear accident in March 2011, thereby demonstrating the sensitivity and capability of the REMP to detect low level radiological changes in the environment and the likely source. The

REMP confirmed that plant effluents in 2017 did not contribute measurable radiation exposure to the general public. This finding is consistent with previous years' monitoring conclusions. As a result, no increasing or changing trends in plant related radiological impacts on the environment are found.

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1.0 Introduction

NextEra Energy Seabrook, LLC's Radiological Environmental Monitoring Program (REMP) consists of two interconnected sample collection and measurement schedules that look for environmental influences from: (1) plant operations which release to the environment radioactive materials in liquid and gaseous effluents, and direct radiation from plant facilities inside the power block Protected Area, and (2) direct radiation from used fuel placed in the Dry Fuel Storage (DFS) facility located in the West Southwest sector approximately 0.38 miles from the Containment Building. Several monitoring locations provide data that are shared or used in the assessment of both plant and DFS operations.

The plant operations REMP at Seabrook Station has been designed and carried out to achieve the following specific objectives:

- To provide an indication of the appearance or accumulation of any radioactive material in the environment caused by the operation of the nuclear power station.
- To provide assurance to regulatory agencies and the public that the station's environmental impact is known and within anticipated limits.
- To verify the adequacy and proper functioning of station effluent controls and monitoring systems.
- To provide standby monitoring capability for rapid assessment of risk to the general public in the event of unanticipated or accidental releases of radioactive material.

In July 2008, the plant operations REMP was supplemented with the DFS environmental monitoring for direct radiation when used nuclear fuel assemblies were for the first time transferred to the on-site DFS facility located WSW of the power block.

NextEra Energy Seabrook, LLC staff collected the terrestrial samples. Normandeau Associates, Inc. collected the marine and sediment samples. After initial sample preparation for shipment, the samples were sent to GEL Laboratories, Inc. of Charleston, SC for analysis. The Environmental Dosimetry Company located in Sterling, MA processed the environmental TLDs for the entire year.

This report is a summary of the findings of the REMP for 2017. It is being provided in compliance with Part A of Seabrook Station's ODCM and Technical Specification 6.8.1.3.

2.0 Plant Operations Environmental Monitoring Program

Table 2.0-1 outlines the plant operations monitoring program as specified in the Seabrook Station ODCM, Part B, Section 4. Table 2.0-2 lists the operational sampling stations and their specific locations (distances are measured from the center of the Unit 1 Containment Building). The sampling locations are shown on maps in Figures 2.1 through 2.6. The sampling and analysis program as described above fulfills the minimum requirements for environmental sample collection and analysis as contained in ODCM Table A.9.1-1, and includes additional sampling of various pathways and locations beyond the minimum requirements.

Below are listed the two-letter media codes and what they represent:

AP	Air Particulate
CF	Charcoal Filter
TM	Milk
WG	Ground Water
WS	Surface (Sea) Water
SE	Sediment
FH	Fish
HA	Lobsters
MU	Mussels (Shellfish – edible portion only)
MS	Mussels (Shellfish – shell portion only)
TL	Direct Radiation (TLD)
AL	Irish Moss (algae)
TF	Food Crop
TG	Vegetation (broad-leaf)

Table 2.0-1

Plant Operations Radiological Environmental Monitoring Program

Media	Sampling Frequency	Required Analyses
Air Particulate (AP)	-Bi-Weekly -Quarterly Composite	Gross Beta Gamma spectroscopy
Charcoal Filter (CF)	-Bi-Weekly	I-131
Milk (TM)*	-Monthly (Semimonthly when animals are on pasture)	Gamma spectroscopy I-131
Surface (Sea) Water (WS)	-Monthly -Quarterly Composite	Gamma spectroscopy H-3 (composite)
Sediment (SE)	-Semiannually	Gamma spectroscopy
Fish & Invertebrates (FH, HA, MU)	-Quarterly or -Semiannually	Gamma spectroscopy
Direct Radiation (TL)	-Quarterly	Integrated gamma exposure
Irish Moss (AL)	-Semiannually	Gamma spectroscopy
Ground Water (WG)	-Quarterly	Gamma spectroscopy Gross Beta H-3
Food Crops (TF)	-Monthly/Growing Season	Gamma spectroscopy
Vegetation (TG)	-Monthly/Growing Season	Gamma spectroscopy I-131

* Note that broad leaf vegetation is substituted for milk due to insufficient number of required milk sampling locations in the site area.

Table 2.0-2

Plant Operations Radiological Environmental Monitoring Locations [(a) (b)]
2017

Station Code (Media - Sta. No.)	Station Description	Zone	Approx. Distance From Plant (km)	Direction From Plant
AP/CF-01+	PSNH Barge Landing Area	1	2.6	ESE
AP/CF-02+	Hampton Marina (Harbor Rd)	1	2.5	E
AP/CF-03+	Southwest Boundary (Rock Pile)	1	1.0	SW
AP/CF-04+	West Boundary (Plate Yard)	1	1.2	W
AP/CF-05	Winnacunnet High School	1	4.0	NNE
AP/CF-07+	PSNH Substation	1	5.7	NNW
AP/CF-08	E&H Substation	1	3.4	SSE
AP/CF-09+	Georgetown Electric Light Co.	2	21.4	SSW
TM-15	Hampton Falls, NH	1	6.9	NW
WG-01	Seabrook Town Wells	1	5.6	W
WG-13	Seabrook Station Well No.13	1	1.0	N
WG-14	Brimmer's Lane	1	1.3	NNW
WS-01+	Hampton-Discharge Area	1	5.1	E
WS-51+	Ipswich Bay	2	26.2	SSE
WS-10 *	Seabrook Marsh	1	0.18	SSE
SE-02	Hampton-Discharge Area	1	5.2	E
SE-07	Hampton Beach	1	3.3	E
SE-08+	Seabrook Beach	1	3.3	ESE
SE-52	Ipswich Bay	2	26.2	SSE
SE-57	Plum Island Beach	2	22.4	SSE
FH-03+	Hampton-Discharge Area	1	5.0	ESE
FH-53+	Ipswich Bay	2	23.3	SSE
FH-06	Hampton-Discharge Area	1	5.2	E
HA-04+	Hampton-Discharge Area	1	5.1	E
HA-54+	Ipswich Bay	2	27.9	SSE
MU-06+	Hampton-Discharge Area	1	5.2	E
MU-09	Hampton Harbor	1	2.5	E
MU-56+	Ipswich Bay	2	28.6	SSE
MU-59	Plum Island	2	22.0	SSE
MS-06	Hampton-Discharge Area	1	5.2	E
MS-56	Ipswich Bay	2	28.6	SSE
AL-05	Hampton-Discharge Area	1	5.2	E
AL-55	Ipswich Bay	2	28.7	SSE
TF-02	Hampton Falls, NH	1	5.0	WNW
TF-03	Salisbury, MA	1	5.1	SW
TF-06	Ipswich, MA	2	26.0	S

Table 2.0-2 (Cont'd)

Plant Operations Radiological Environmental Monitoring Locations [a] [b]
2017

Station Code (Media - Sta. No.)	Station Description	Zone	Approx. Distance From Plant (km)	Direction From Plant
TG-08+	North Access Rd, Site Boundary	1	1.05	W
TG-09+	General Office Bld. Site Boundary	1	0.97	SW
TG-10+	Georgetown Electric Light Co.	2	21.4	SSW
TL-01+	Brimmer's Lane, Hampton Falls	I	0.97	N
TL-02+	Landing Road, Hampton	I	3.0	NNE
TL-03+	Glade Path, Hampton Beach	I	2.9	NE
TL-04+	Island Path, Hampton Beach	I	2.3	ENE
TL-05+	Harbor Road, Hampton Beach	I	2.5	E
TL-06+	PSNH Barge Landing Area	I	2.7	ESE
TL-07+	Cross Road, Seabrook Beach	I	2.6	SE
TL-08+	Farm Lane, Seabrook	I	1.3	SSE
TL-09+	Farm Lane, Seabrook	I	1.3	S
TL-10+	Site Boundary Fence	I	1.1	SSW
TL-11+	Site Boundary Fence	I	1.0	SW
TL-12+	Site Boundary Fence	I	1.2	WSW
TL-13+	Inside Site Boundary	I	1.2	W
TL-14+	Trailer Park, Seabrook	I	1.3	WNW
TL-15+	Brimmer's Lane, Hampton Falls	I	1.4	NW
TL-16+	Brimmer's Lane Hampton Falls	I	1.2	NNW
TL-17+	South Road, North Hampton	0	7.8	N
TL-18+	Mill Road, North Hampton	0	7.6	NNE
TL-19+	Appledore Avenue, North Hampton	0	7.7	NE
TL-20+	Ashworth Avenue, Hampton Beach	0	3.2	ENE
TL-21+	Route 1A, Seabrook Beach	0	3.7	SE
TL-22+	Cable Avenue, Salisbury Beach	0	7.6	SSE
TL-23+	Ferry Road, Salisbury	0	8.1	S
TL-24+	Ferry Lots Lane, Salisbury	0	7.2	SSW
TL-25+	Elm Street, Amesbury	0	7.6	SW
TL-26+	Route 107A, Amesbury	0	8.1	WSW
TL-27+	Highland St. S. Hampton	0	7.5	W
TL-28+	Rte. 150, Kensington	0	7.5	WNW
TL-29+	Frying Pan Ln., Hampton Falls	0	7.2	NW
TL-30+	Route 27, Hampton	0	7.6	NNW

Table 2.0-2 (Cont'd)

Plant Operations Radiological Environmental Monitoring Locations [(a) (b)]
2017

Station Code (Media - Sta. No.)	Station Description	Zone	Approx. Distance From Plant (km)	Direction From Plant
TL-31+	Alumni Drive, Hampton	S	3.8	NNE
TL-32+	Seabrook Elementary School	S	2.0	S
TL-33+	Dock Area, Newburyport	S	9.8	S
TL-34+	Bow Street, Exeter	S	12.0	NW
TL-35+	Lincoln Ackerman School	S	2.3	NNW
TL-36+	Route 97, Georgetown	2	22.6	SSW
TL-37+	Post Office Plaistow, NH	2	21.5	WSW
TL-38+	Emerson St. Hampstead, NH	2	27.7	W
TL-39+	Fremont, NH	2	27.0	WNW
TL-40+	Newmarket, NH	2	21.6	NNW
TL-41	Portsmouth, NH	2	21.0	NNE
TL-42	Ipswich, MA	2	22.8	SSE
TL-44	Education (Science & Nature) Center	S	0.6	SW
TL-45	Hampton Fire Station	S	4.4	NE
TL-46	Seabrook Beach (near Police Station)	S	2.8	ESE
TL-47	Hampton Falls, NH	S	4.1	WNW

Zone indices are: 1 = Indicator Stations; 2 = Control Stations; 0 = Outer Ring TLD;
I = Inner Ring TLD; S = Special Interest TLD

\+ = Sample Locations required by the Off-Site Dose Calculation Manual (ODCM)
* Note that WS-10 is the same location as WS-02 reported in previous annual reports.

(a) Dry Fuel Storage (DFS) locations are listed on Table 4.0-1.

(b) Table reflects those locations included in the 2017 sample collection program.

Figure 2.1 Radiological Environmental Monitoring Locations Within 4 Km of Seabrook Station

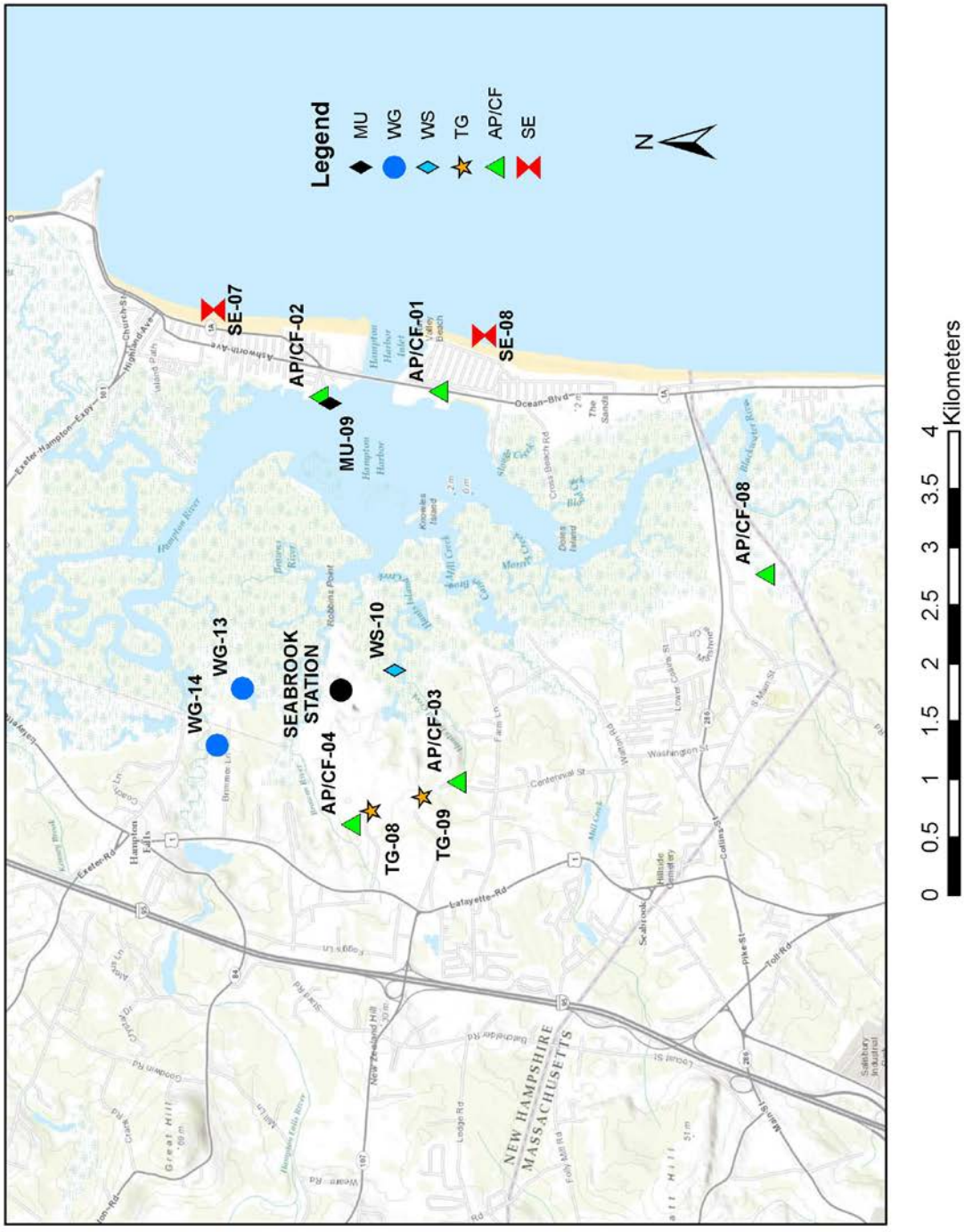


Figure 2.2 Radiological Environmental Monitoring Locations Between 4 & 12 Km of Seabrook Station

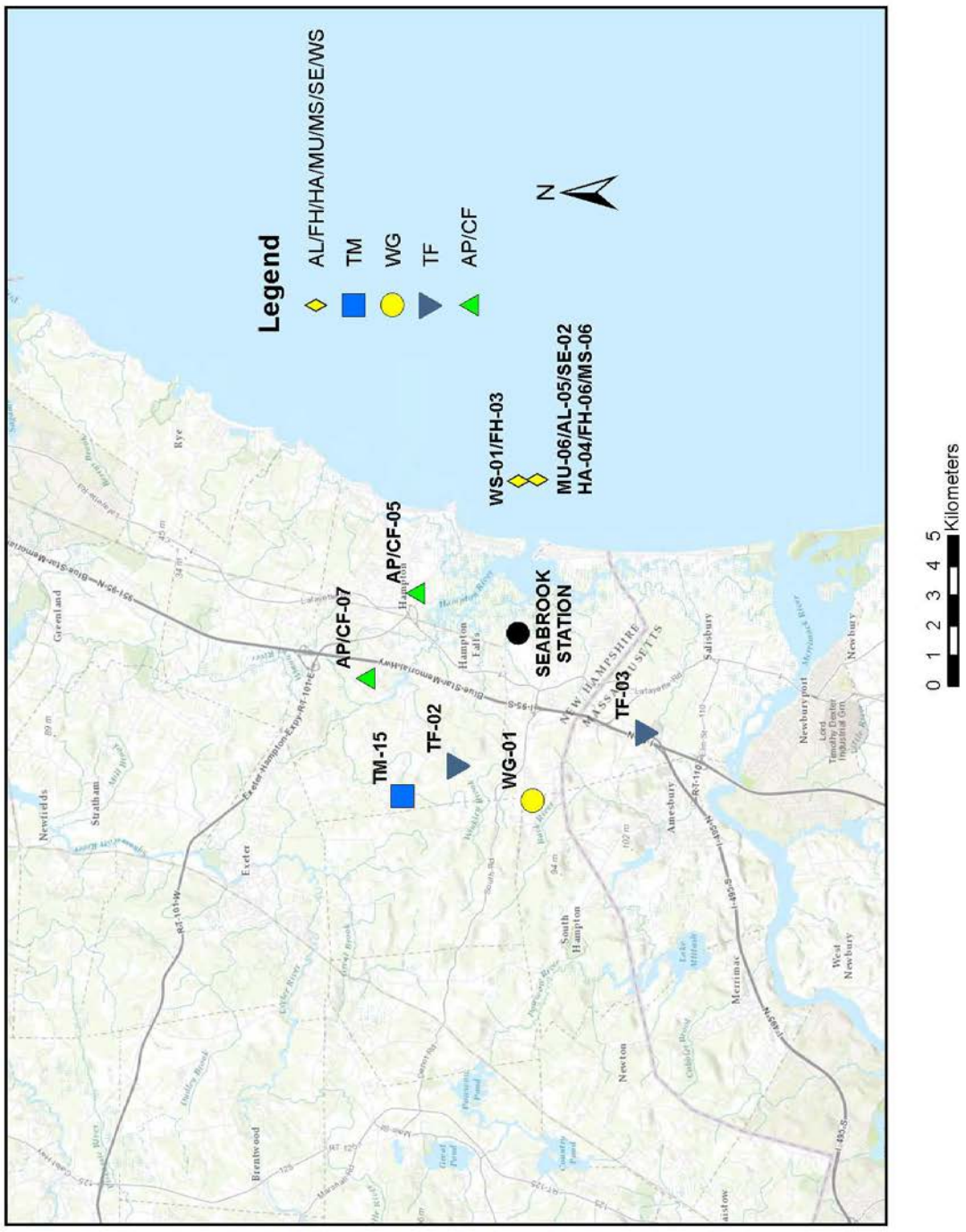


Figure 2.3 Radiological Environmental Monitoring Locations Outside 12 Km of Seabrook Station

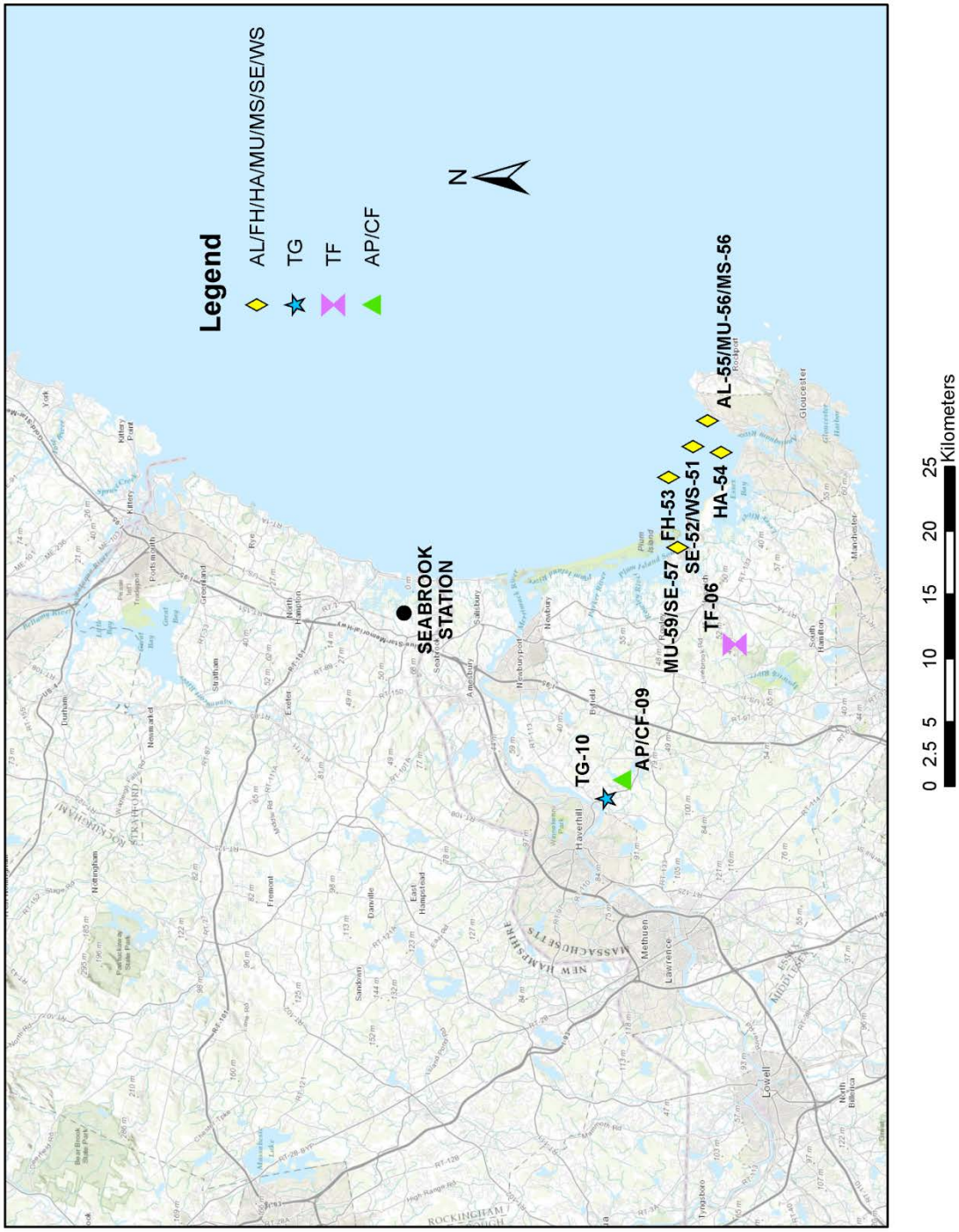


Figure 2.4 Direct Radiation Monitoring Locations Within 4 Km of Seabrook Station

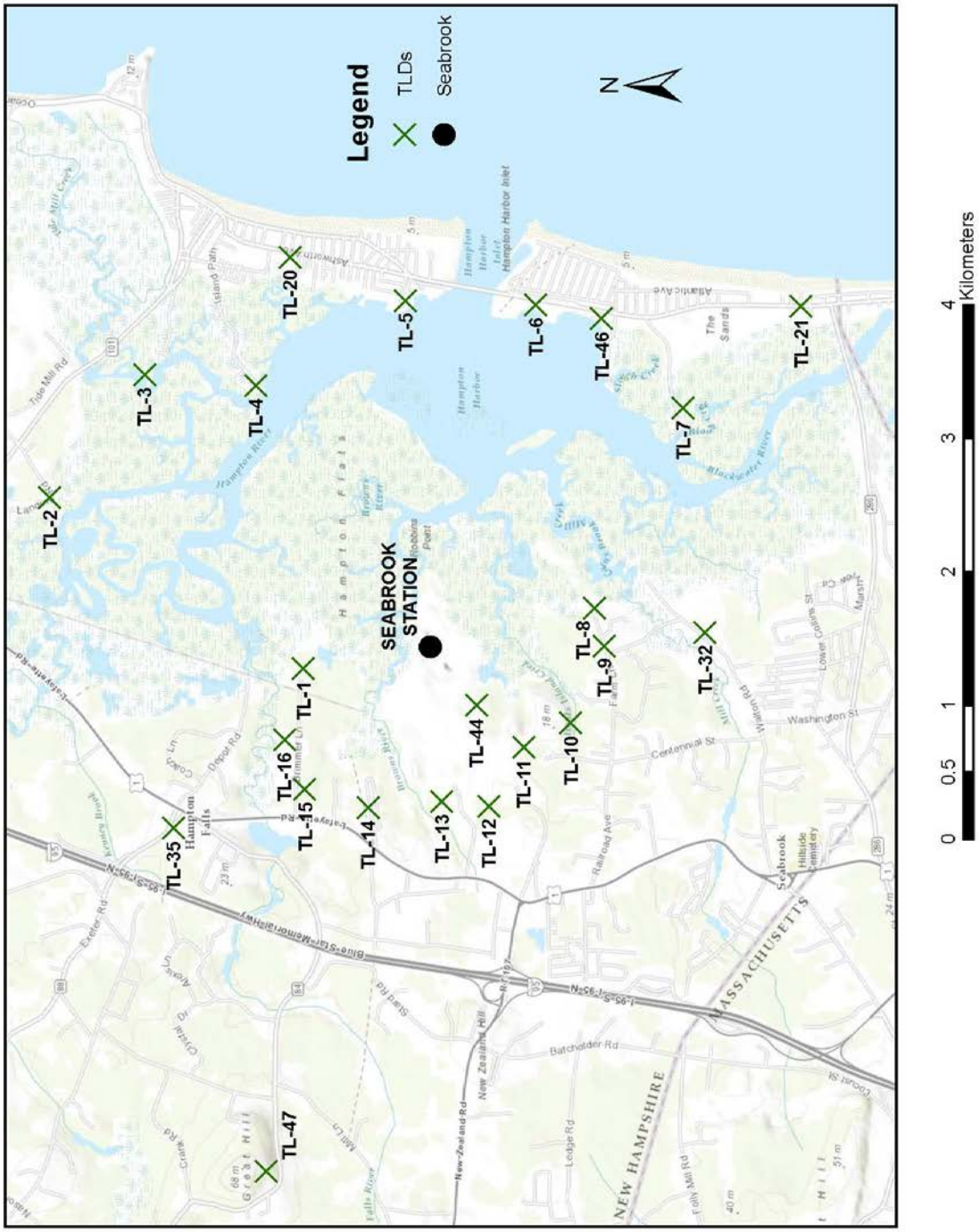


Figure 2.5 Direct Radiation Monitoring Locations Between 4 & 12 Km of Seabrook Station

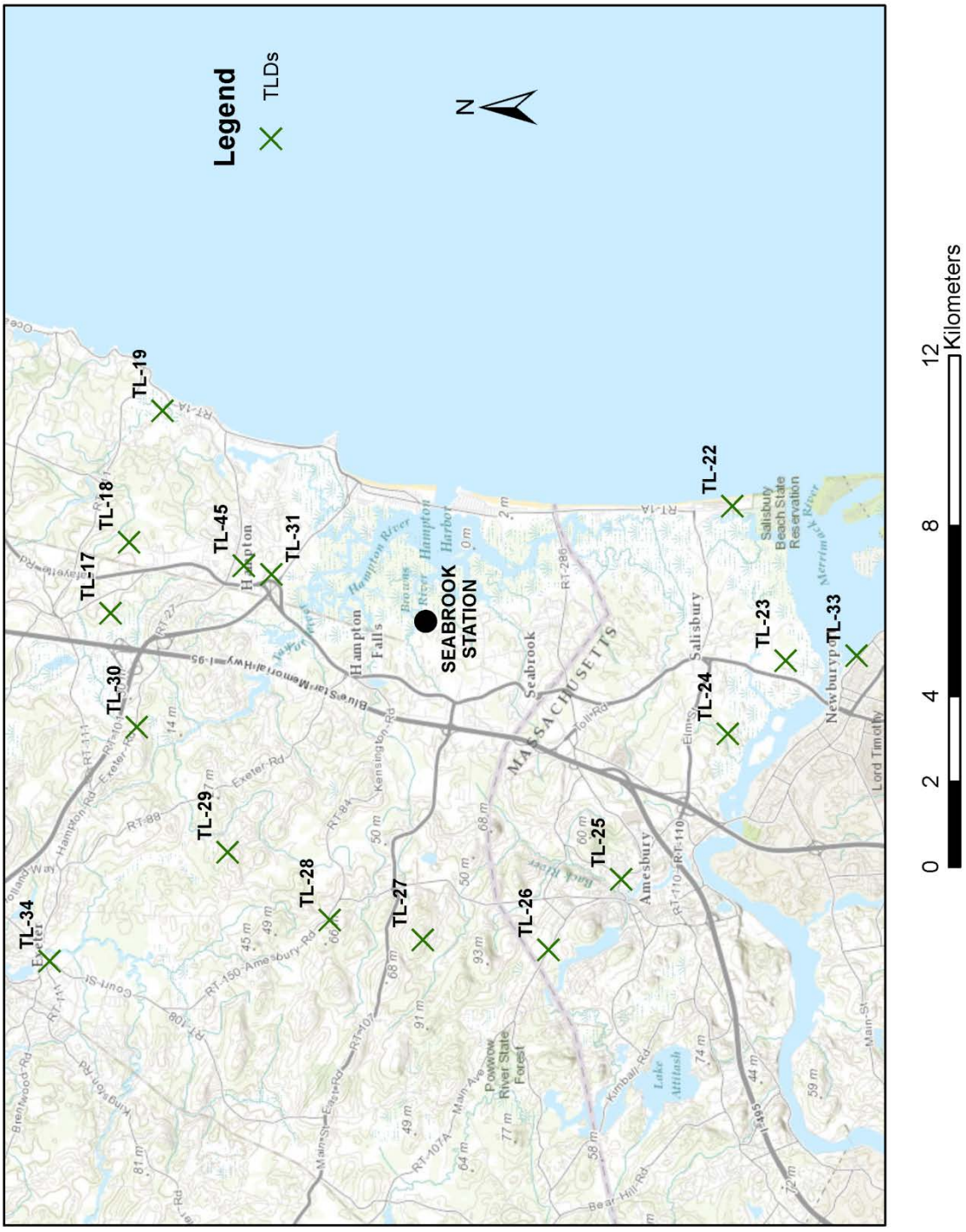
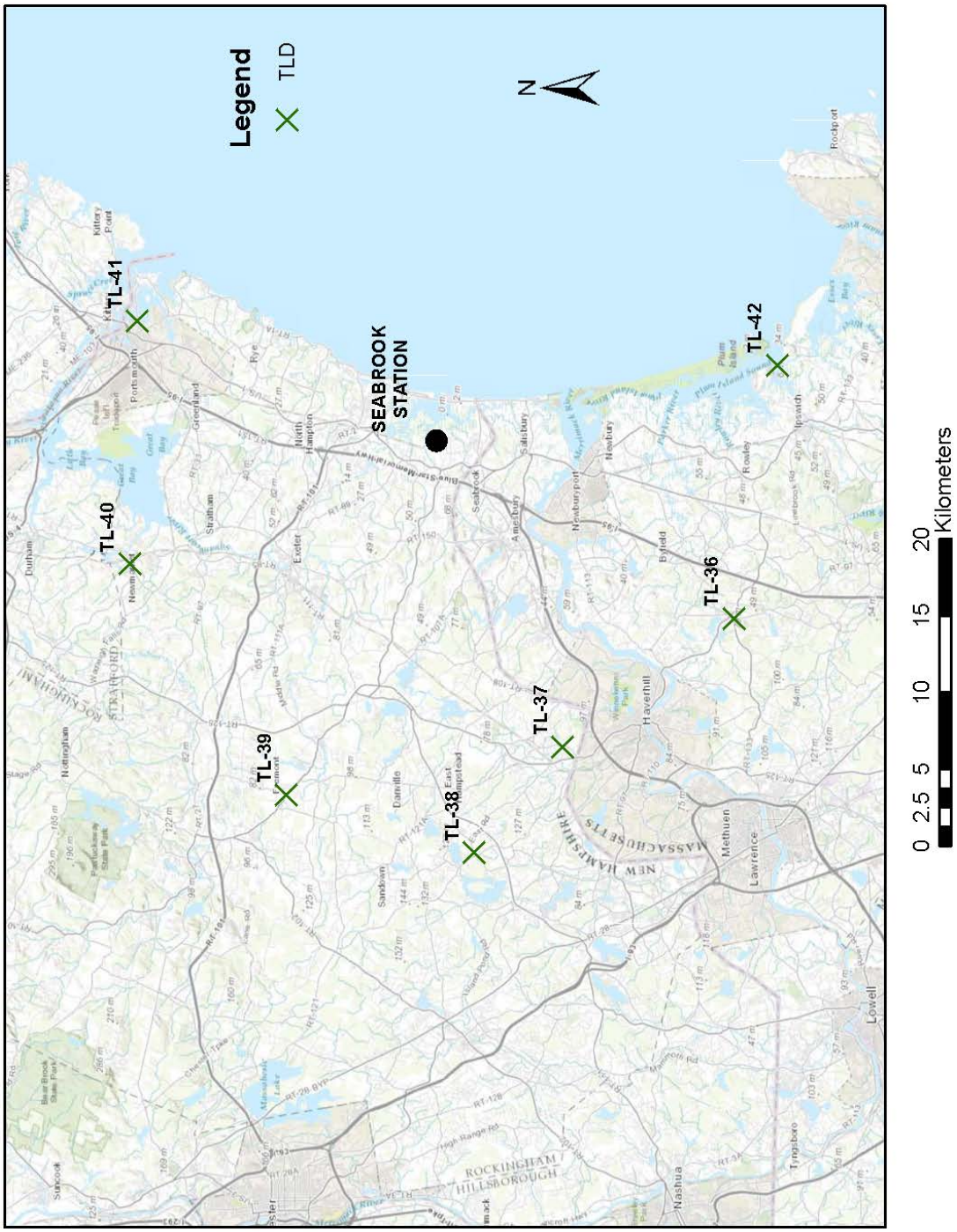


Figure 2.6 Direct Radiation Monitoring Locations Outside 12 Km of Seabrook Station



3.0 Summary of Plant Operations Radiological Environmental Monitoring Data

The following pages summarize the analytical results of the plant operations environmental samples collected in 2017. Each environmental media category is presented as a separate subsection. A table that summarizes the data follows a discussion of the sampling requirements and results for each media type. Listed at the top of each table are the units of measurement for each medium. The left-hand column contains the radionuclide which is being reported, total number of analyses of that radionuclide, and the number of measurements that exceed the required reporting level as documented in Table A.9.1-3 of the ODCM. The latter are classified as "non-routine" measurements. The next column lists the Lower Limit of Detection (LLD) for those radionuclides that have detection capability requirements specified in the ODCM.

Those sampling stations which are adjacent to the plant and which could conceivably be affected by the operation of Seabrook Station are called "Indicator" or "Zone 1" stations. Distant stations, which are beyond potential plant influences, are called "Control" or "Zone 2" stations.

A set of statistical parameters is calculated for each radionuclide. This set of statistical parameters includes separate analyses for (1) the indicator stations, (2) the station having the highest annual mean concentration for that radionuclide, and (3) control stations. For each of the three groups of data, these parameters are as follows:

- The mean value of all concentrations
- The range of values
- The number of positive measurements (a concentration which is greater than the MDC for the measurement) divided by the total number of measurements

Each radioactivity measurement datum in this report is based on a single measurement and is reported as a concentration plus or minus a one standard deviation uncertainty. The quoted uncertainty term represents only the random uncertainty associated with the radioactive decay process (counting statistics), and not the propagation of all possible uncertainties in the analytical procedure.

Attachment 1 contains the data for the samples collected in 2017. The results are organized as follows: (1) by sample type; (2) within each sample type the data are alphabetical by nuclide; and (3) within each radionuclide listing the data are chronologically arranged by end date (date of sample collection).

The radionuclide value concentrations have been corrected for radioactive decay. For composite samples, such as air particulates and airborne iodine, the GEL laboratory uses the mid-point of the collection period as the reference for decay correction until time of analysis.

3.1 Air Particulate

Air monitoring stations were established at a total of eight locations, six locations required by the ODCM, Table A.9.1-1, and two additional sites included to supplement the program. Seven of the locations are indicators, while the remaining one is a control station located more than 21 km away from the plant.

Airborne particulates (AP) are collected by passing the air through a glass-fiber filter. In 2017, these filters were typically collected bi-weekly and held for a period (typically 100 hours or more) before being analyzed for gross-beta activity (indicated as BETA in Table 3.1-1) to allow for the decay of Radon and Thoron daughter products. Continuous automated and real-time remote monitoring of vital air sampling system parameters is performed with telemetry that detects power outages, pump failures, filter degradation, tubing failures and excessive filter loading. The telemetry communicates by cellular transmission to a web server that communicates to a shift technician's pager when set-point thresholds are reached, providing 24/7 alert notification. This capability provides for timely identification of problems and corrective actions that reduce the potential loss of air sampling. If periods of high dust loading during the collection period cause a higher than normal differential pressure drop across the collection filters, the collection period may be reduced to weekly cycles to reduce the dust loading. There were no recorded collection cycle reductions due to dust loading in 2017. For the year, 208 particulate filters were collected and analyzed for gross beta activity.

The 2017 gross beta activity analyses for the indicator locations were found to be statistically equivalent to that seen at the control station (positive activity for all samples). The gross beta results are also similar to what was seen in the pre-operational program and for the last twenty-eight years of commercial operation, with the exception of the Fukushima Daiichi related spike in 2011. All filter samples from all stations showed similar trends lines (see Figure 3.1) over the course of the year and from previous years (see Figures 3.1.1, 3.1.2, and 3.1.3). Figure 3.1.4 compares the quarterly average gross beta response of all indicator air sampling stations to the control location over the last 23 years, and shows no significant difference in the two data sets. It is also noted that no plant-related radionuclides (by gamma spectroscopy) were identified in any of the quarterly filter composite samples for 2017. The overall fluctuations at all stations seen in the gross beta activity throughout the year can be attributed to changes in environmental conditions unrelated to plant operations. Natural environmental processes such as wind direction, precipitation, snow cover, and soil temperature and moisture affect concentrations of naturally-occurring radionuclides in the atmosphere directly above land.

Gamma isotopic analyses of particulate filters are summarized on Table 3.1-1. The only radionuclide detected was naturally-occurring Be-7, which indicated positive in all air particulate samples. Be-7 is of cosmogenic origin, and its presence is consistent with previous years in both the pre-operational and operational periods.

Near the end of 2010, analysis of environmental samples was changed from the AREVA Environmental Laboratory to GEL Laboratory after the AREVA lab discontinued operations. In comparing long term trends in gross beta activity, the results since 2011 appear to reflect a step increase at the time of the transition between labs. The reason for the step increase is related to the change in the gross beta counting equipment configurations and reference calibration standards used by the AREVA lab and GEL. Both labs use(d) gas proportional counting of the filter element. However, AREVA applied a Cs-137 calibration source while the GEL lab uses a Tc-99 calibration source. In the case of the AREVA data record, the Cs-137 detection efficiency (typically 34%) was applied to the "gross" counts to determine the apparent activity. This inherently presumes that the radioactivity in a field sample is all Cs-137. In the case of the GEL data record, the Tc-99 efficiency (20.6%) is applied to the same "gross" counts as if all the radioactivity in this case is Tc-99. The end result is two different gross beta radioactivity determinations for the same level of environmental activity. In application, this is not an adverse condition in that the gross beta counting is used as a qualitative indicator of changes in environmental conditions, not as a quantitative measure of the actual radioactivity. Since the comparison of the response curves for each monitoring station, including the control station, are similar over time, the curves indicate that there is no detectable influence from a single nearby point source such as Seabrook Station.

The air particulate sampling program demonstrated no off-site dose to the public or impact to the environment from this pathway as the result of plant operations. This is consistent with previous years and the pre-operational program. The REMP Summary Table 3.1-1 lists the range of analysis results by

radionuclide for Indicator and Control Stations for the air particulate environmental media. Attachment 1 to this report lists the individual analysis results for each measurement of air particulates under the Sample Type code AP.

Air particulate sample collection and analysis deviations from the ODCM required program (if any) are described in Section 5.

FIGURE 3.1

GROSS-BETA MEASUREMENTS OF AIR PARTICULATE FILTERS
SEABROOK STATION

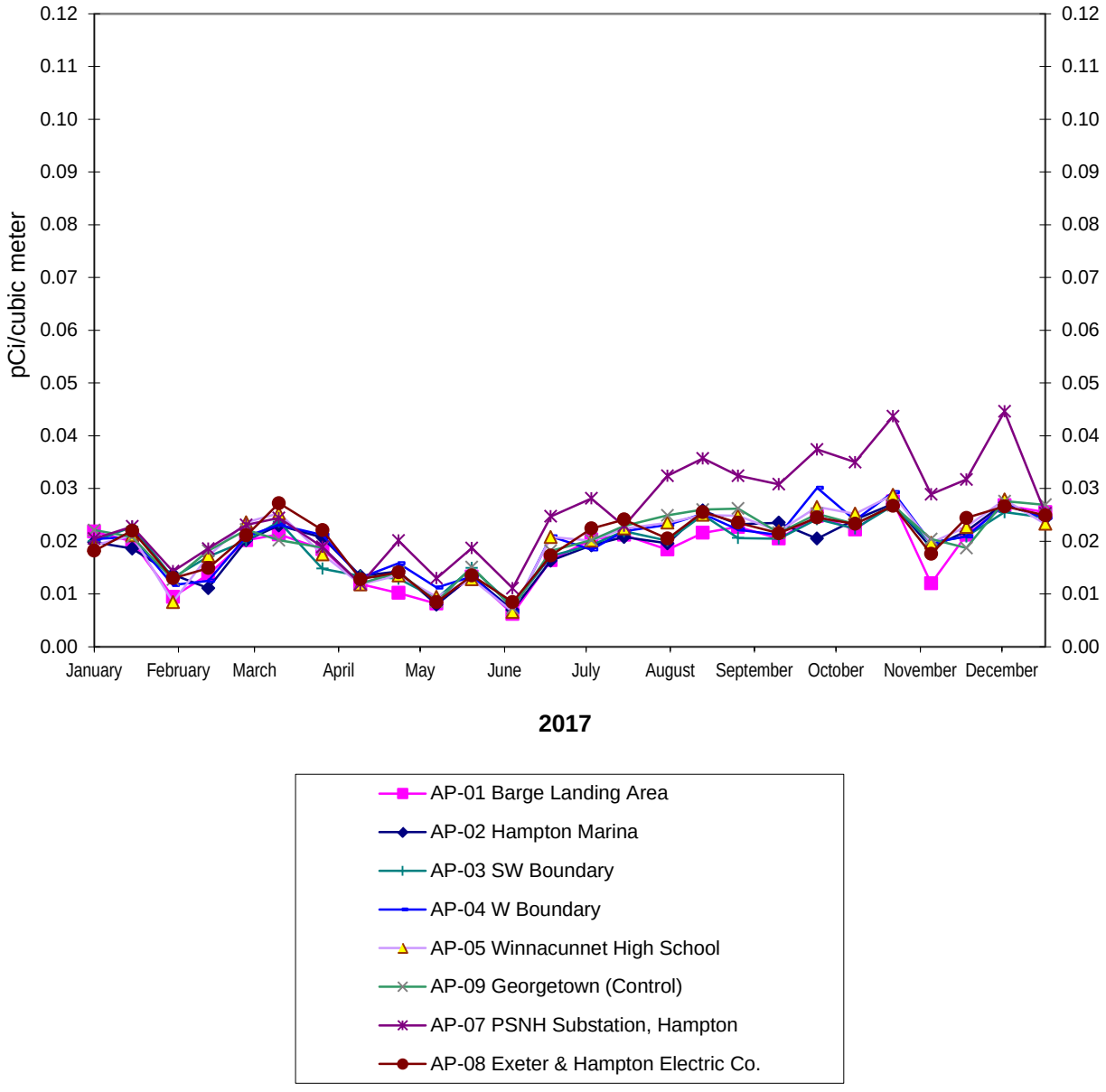


FIGURE 3.1.1

GROSS-BETA MEASUREMENTS OF AIR PARTICULATE FILTERS QUARTERLY AVERAGES
SEABROOK STATION

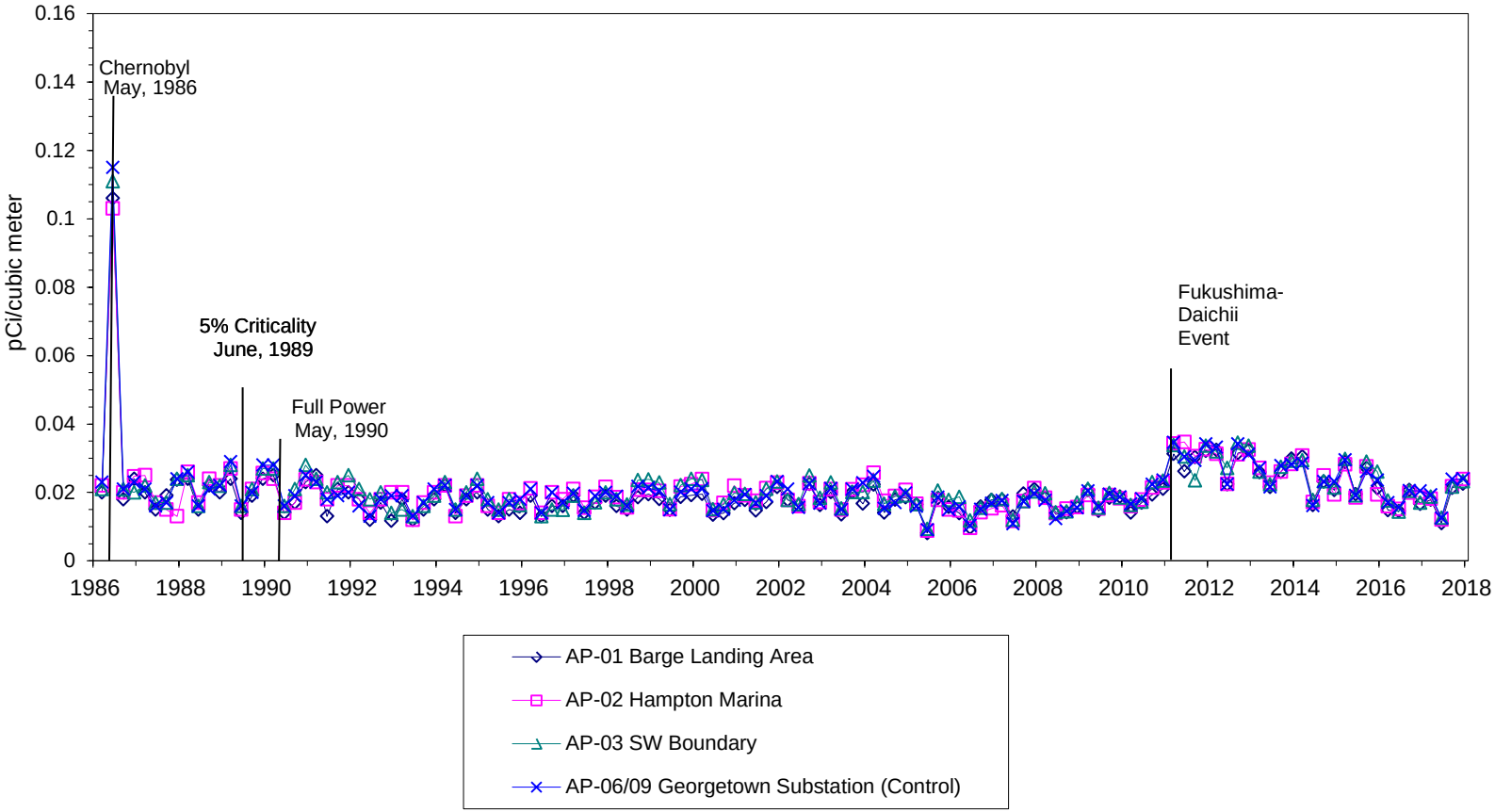


FIGURE 3.1.2

GROSS-BETA MEASUREMENTS OF AIR PARTICULATE FILTERS QUARTERLY AVERAGES
SEABROOK STATION

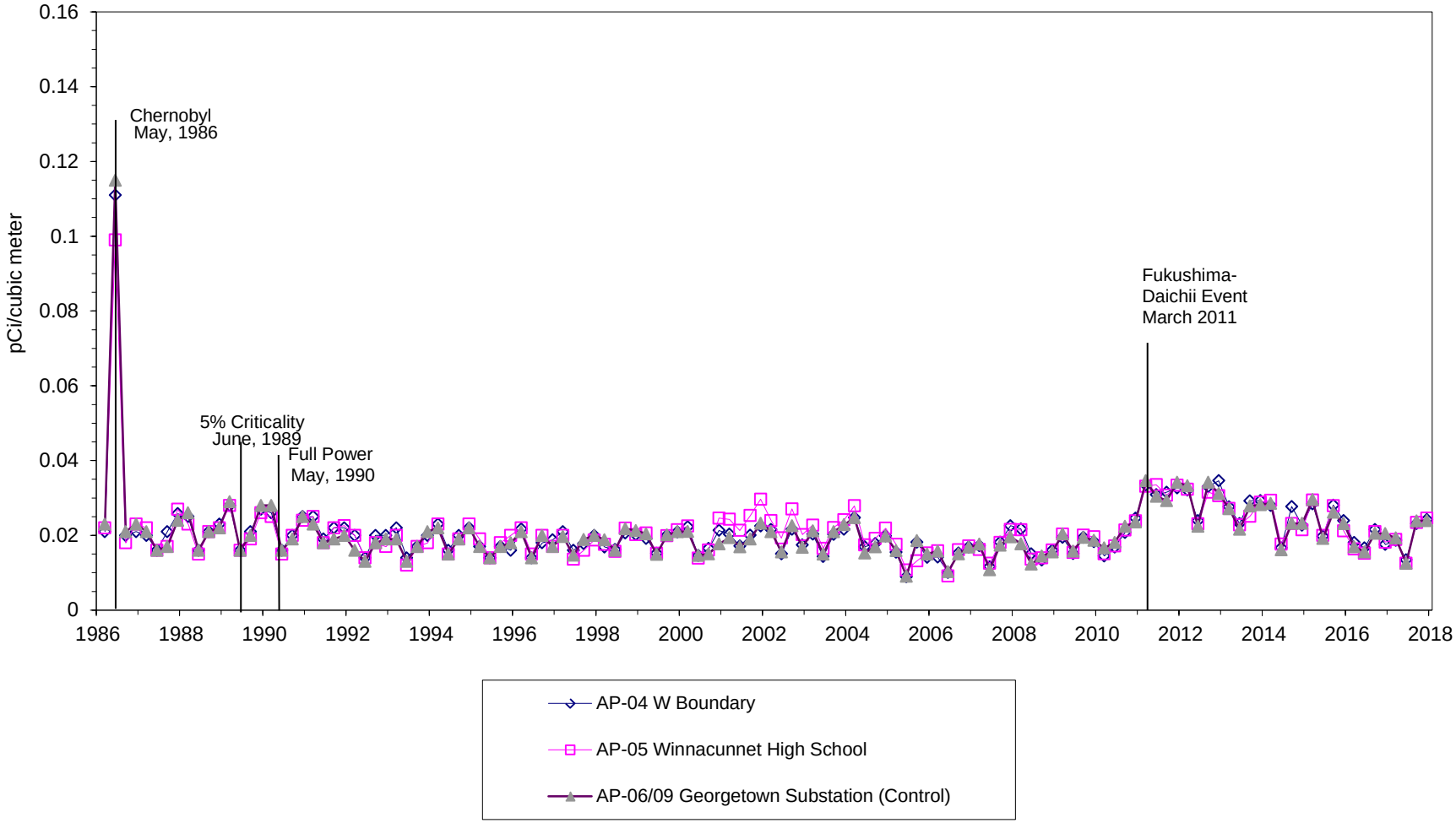


FIGURE 3.1.3

GROSS-BETA MEASUREMENTS OF AIR PARTICULATE FILTERS QUARTERLY AVERAGES
SEABROOK STATION

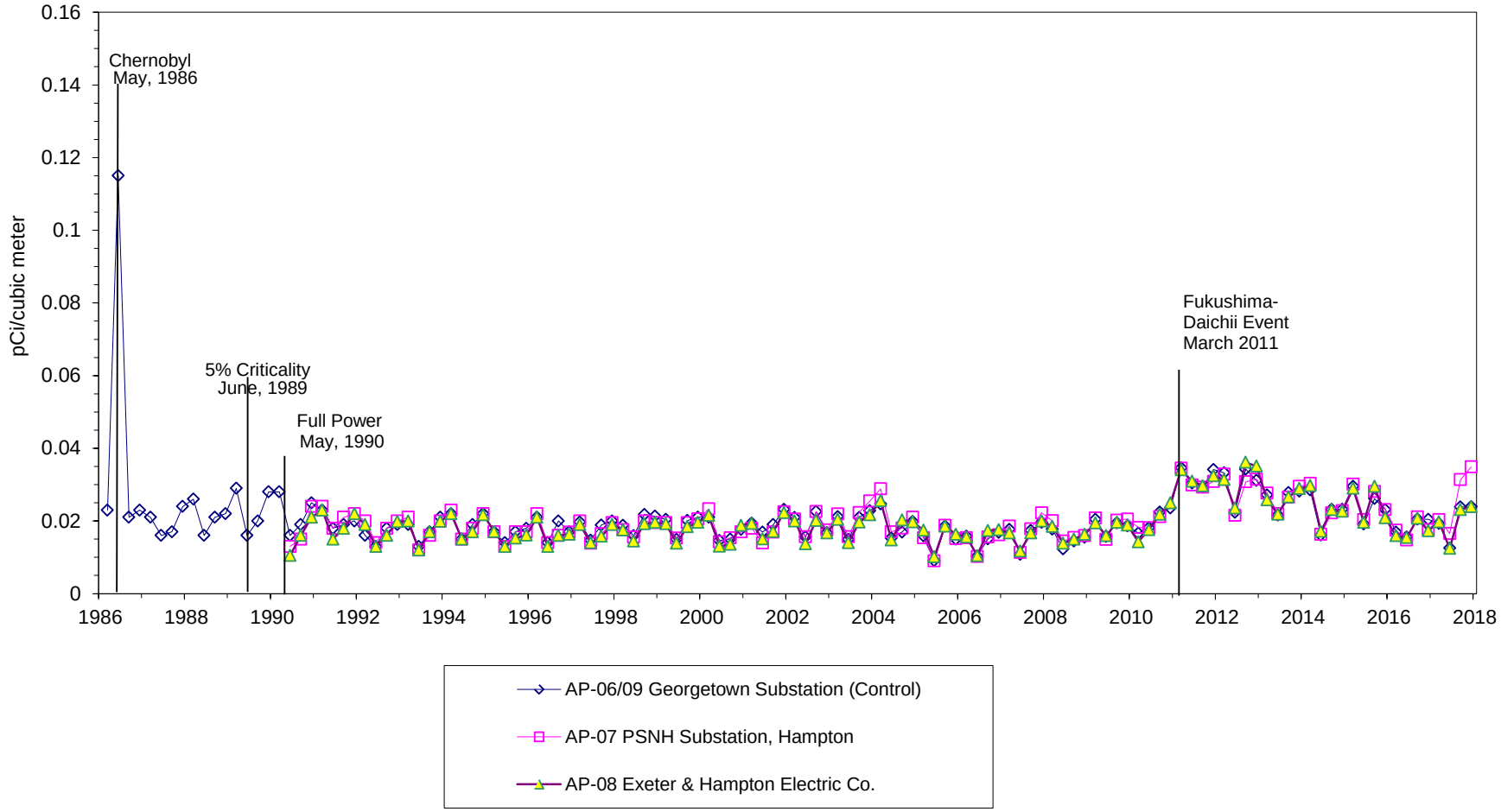


FIGURE 3.1.4

GROSS-BETA ON AIR PARTICULATE FILTERS
QUARTERLY AVERAGES
SEABROOK STATION

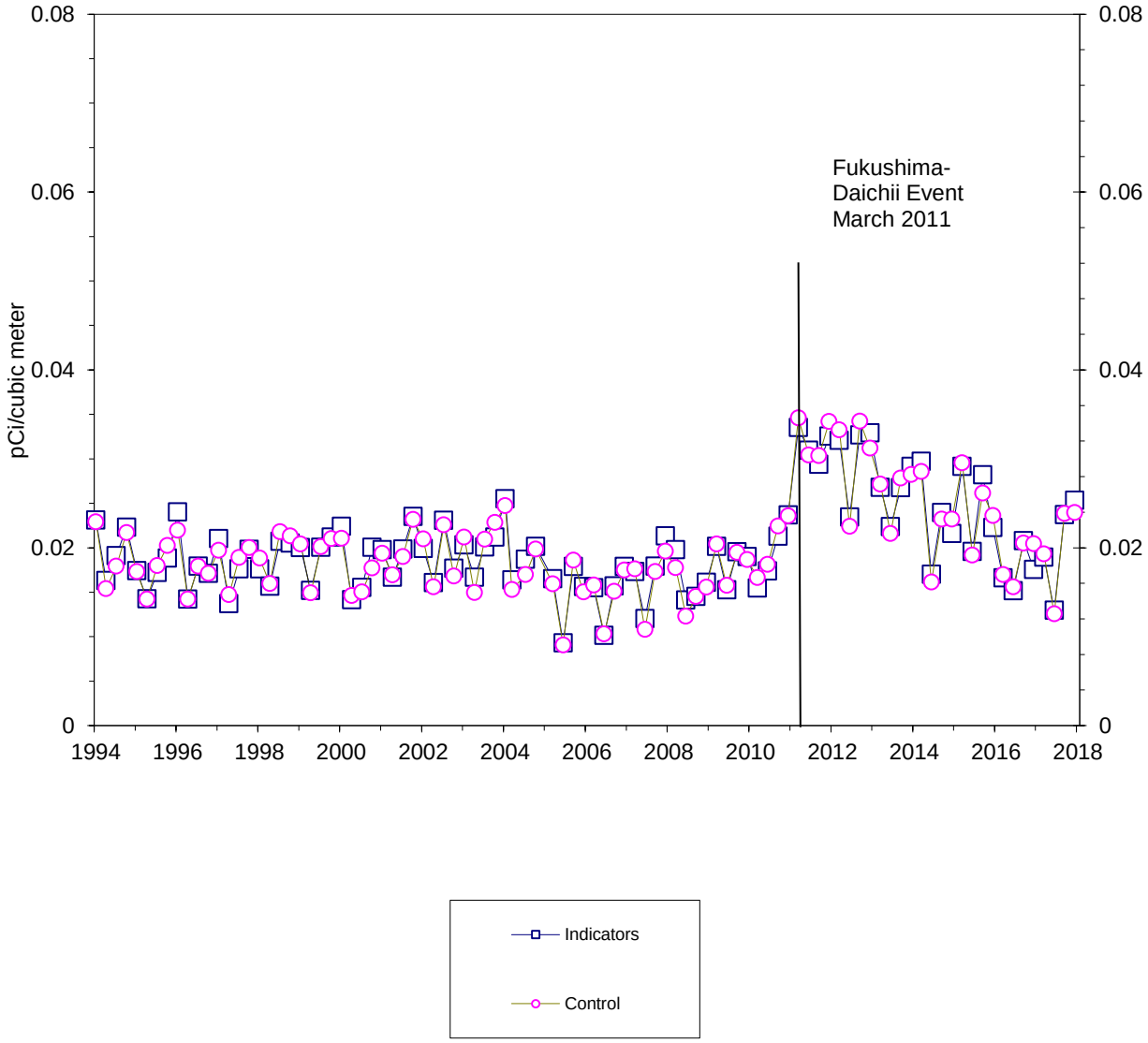


Table 3.1-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Air Particulates (AP) UNITS: pCi/cubic meter

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
BETA (208) (0)	0.01	2.0E -2 (6.2 - 44.6)E -3 (182/ 182)	07	2.6E -2 (1.1 - 4.5)E -2 (26/ 26)	2.0E -2 (7.3 - 27.6)E -3 (26/ 26)
Be-7 (32) (0)		1.1E -1 (7.5 - 20.0)E -2 (28/ 28)	07	1.6E -1 (1.2 - 2.0)E -1 (3/ 3)	1.0E -1 (8.4 - 12.8)E -2 (4/ 4)
K-40 (32) (0)		1.5E -3 (-2.8 - 5.5)E -3 (0/ 28)	03	3.3E -3 (2.4 - 4.6)E -3 (0/ 3)	2.7E -3 (-9.0 - 58.4)E -4 (0/ 4)
Cr-51 (32) (0)		-5.1E -5 (-1.0 - 0.9)E -2 (0/ 28)	09	4.2E -3 (5.6 - 62.2)E -4 (0/ 3)	2.0E -3 (-4.6 - 6.2)E -3 (0/ 4)
Mn-54 (32) (0)		0.0E 0 (-3.4 - 2.7)E -4 (0/ 28)	04	8.4E -5 (3.8 - 15.1)E -5 (0/ 3)	-1.1E -4 (-3.5 - 0.6)E -4 (0/ 4)
Co-57 (32) (0)		3.1E -5 (-1.6 - 1.8)E -4 (0/ 28)	02	8.0E -5 (-3.9 - 16.0)E -5 (0/ 3)	0.0E 0 (-1.0 - 0.8)E -4 (0/ 4)
Co-58 (32) (0)		2.7E -5 (-5.2 - 6.7)E -4 (0/ 28)	04	4.0E -4 (2.0 - 6.7)E -4 (0/ 3)	-5.5E -5 (-2.5 - 0.3)E -4 (0/ 4)
Fe-59 (32) (0)		2.0E -4 (-1.1 - 2.2)E -3 (0/ 28)	09	5.6E -4 (3.6 - 8.2)E -4 (0/ 3)	8.0E -4 (3.6 - 15.2)E -4 (0/ 4)
Co-60 (32) (0)		4.4E -5 (-3.1 - 2.6)E -4 (0/ 28)	07	1.2E -4 (4.8 - 16.1)E -5 (0/ 3)	8.5E -5 (-1.6 - 2.3)E -4 (0/ 4)
Zn-65 (32) (0)		-6.1E -5 (-9.2 - 7.7)E -4 (0/ 28)	08	3.0E -4 (1.1 - 6.3)E -4 (0/ 3)	4.2E -5 (-2.9 - 4.0)E -4 (0/ 4)
Se-75 (32) (0)		6.8E -5 (-4.2 - 4.7)E -4 (0/ 28)	08	2.8E -4 (1.8 - 4.7)E -4 (0/ 3)	1.5E -4 (-1.7 - 5.9)E -4 (0/ 4)
Nb-95 (32) (0)		-4.0E -5 (-4.2 - 4.3)E -4 (0/ 28)	01	3.8E -5 (-3.7 - 3.9)E -4 (0/ 11)	2.7E -5 (-2.2 - 3.9)E -4 (0/ 4)
Zr-95 (32) (0)		1.1E -4 (-1.4 - 1.3)E -3 (0/ 28)	07	6.4E -4 (1.6 - 12.8)E -4 (0/ 3)	-3.5E -4 (-4.4 - -1.7)E -4 (0/ 4)
Ru-103 (32) (0)		-3.8E -5 (-6.3 - 6.2)E -4 (0/ 28)	07	2.3E -4 (-7.6 - 62.4)E -5 (0/ 3)	3.2E -4 (1.1 - 7.7)E -4 (0/ 4)
Ru-106 (32) (0)		-1.2E -4 (-2.3 - 2.6)E -3 (0/ 28)	05	7.9E -4 (9.0 - 139.0)E -5 (0/ 3)	-5.8E -4 (-3.7 - 1.7)E -3 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.1-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Air Particulates (AP) UNITS: pCi/cubic meter

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Ag-108m (32) (0)		1.2E -5 (-2.5 - 3.3)E -4 (0/ 28)	03	1.2E -4 (-2.6 - 33.3)E -5 (0/ 3)	8.6E -5 (-2.7 - 15.6)E -5 (0/ 4)
Ag-110m (32) (0)		-1.7E -5 (-5.6 - 3.7)E -4 (0/ 28)	08	1.8E -4 (-1.4 - 3.7)E -4 (0/ 3)	8.0E -5 (-3.5 - 5.4)E -4 (0/ 4)
Sb-124 (32) (0)		2.1E -4 (-2.0 - 1.4)E -3 (0/ 28)	08	6.6E -4 (2.1 - 10.8)E -4 (0/ 3)	7.0E -4 (-5.2 - 14.2)E -4 (0/ 4)
Sb-125 (32) (0)		6.0E -5 (-6.5 - 7.6)E -4 (0/ 28)	09	3.1E -4 (-7.7 - 584.0)E -6 (0/ 3)	2.6E -4 (-7.7 - 584.0)E -6 (0/ 4)
I-131 (32) (0)		-7.3E -2 (-3.0 - 0.5)E -1 (0/ 28)	09	-2.3E -3 (-3.1 - 2.4)E -2 (0/ 3)	-1.7E -3 (-3.1 - 2.4)E -2 (0/ 4)
Cs-134 (32) (0)	0.05	3.1E -5 (-3.4 - 3.0)E -4 (0/ 28)	02	1.8E -4 (1.6 - 2.0)E -4 (0/ 3)	1.7E -5 (-5.9 - 6.2)E -5 (0/ 4)
Cs-137 (32) (0)	0.06	2.9E -5 (-5.2 - 4.2)E -4 (0/ 28)	08	9.6E -5 (1.9 - 21.5)E -5 (0/ 3)	-3.6E -5 (-2.0 - 1.5)E -4 (0/ 4)
Ba-140 (32) (0)		1.6E -2 (-5.1 - 9.9)E -2 (0/ 28)	02	6.4E -2 (4.2 - 9.9)E -2 (0/ 3)	3.5E -2 (1.9 - 112.0)E -3 (0/ 4)
La-140 (32) (0)		4.9E -3 (-4.5 - 10.4)E -2 (0/ 28)	03	4.6E -2 (8.0 - 10400.0)E -5 (0/ 3)	-2.5E -3 (-9.1 - 3.2)E -3 (0/ 4)
Ce-141 (32) (0)		-3.7E -4 (-2.5 - 1.2)E -3 (0/ 28)	04	4.3E -4 (-2.3 - 9.2)E -4 (0/ 3)	9.6E -4 (-2.8 - 27.1)E -4 (0/ 4)
Ce-144 (32) (0)		7.8E -5 (-1.4 - 2.3)E -3 (0/ 28)	05	1.9E -4 (-1.3 - 1.1)E -3 (0/ 3)	-2.9E -4 (-1.2 - 0.1)E -3 (0/ 4)
Ac-228 (32) (0)		-1.2E -4 (-1.9 - 1.3)E -3 (0/ 28)	09	2.3E -4 (-6.7 - 16.5)E -4 (0/ 3)	3.4E -4 (-6.7 - 16.5)E -4 (0/ 4)
Th-228 (32) (0)		2.4E -4 (-1.1 - 5.2)E -4 (0/ 28)	09	4.0E -4 (1.1 - 6.6)E -4 (0/ 3)	4.1E -4 (1.1 - 6.6)E -4 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.2 Charcoal Filters

Charcoal filter (CF) cartridges are placed in series behind the air particulate glass-fiber filters at each of the air sampling locations. Monitoring stations were established at a total of eight locations. Seven of these are indicators and one is a control. Charcoal filters from the air sampling stations were collected and analyzed for I-131 activity to a lower limit of detection (LLD) of 0.07 pCi/m^3 or lower.

During 2017, a total of 208 charcoal cartridges from eight locations were analyzed. As described for the air particulate samplers (see Section 3.1), the collection cycles for the charcoal filters were biweekly during 2017. Off-normal conditions, such as observed high differential pressure across the associated particulate filter (none detected in 2017) which might be indicative of excessive dust loading, could prompt switching to a temporary weekly cycle (see Section 3.1).

No sample analyses indicated a detectable level for I-131 that was statistically relevant (positive) at any of the air sampling locations during the year. Figure 3.2 shows the I-131 measurement responses in 2017 for all air sampling stations. All analyses were below their respective measurement minimum detectable concentrations (MDC).

From initial criticality in June 1989 to the Fukushima Daiichi accident in March 2011, the Seabrook REMP program had not detected I-131 at any offsite air sample locations. Following the March – April, 2011 air concentration spikes of I-131 related to the Fukushima Daiichi accident releases, no detectable I-131 has been observed. The pre-operational data for I-131 are consistent with present (2017) data. Therefore, there are no increasing or decreasing trends related to Seabrook Station operations for airborne I-131. The potential organ doses from I-131 in gaseous effluents, if assumed to be released at the MDA, are well below the 10CFR50, Appendix I dose criteria.

The REMP Summary Table 3.2-1 list the range of analysis results for iodine (I-131) at both Indicator and Control Stations. Attachment 1 to this report lists the individual analysis results for each air sample measurement under the Sample Type code CF.

Charcoal filter sample collection and analysis deviations from the ODCM required program (if any) are described in Section 5.

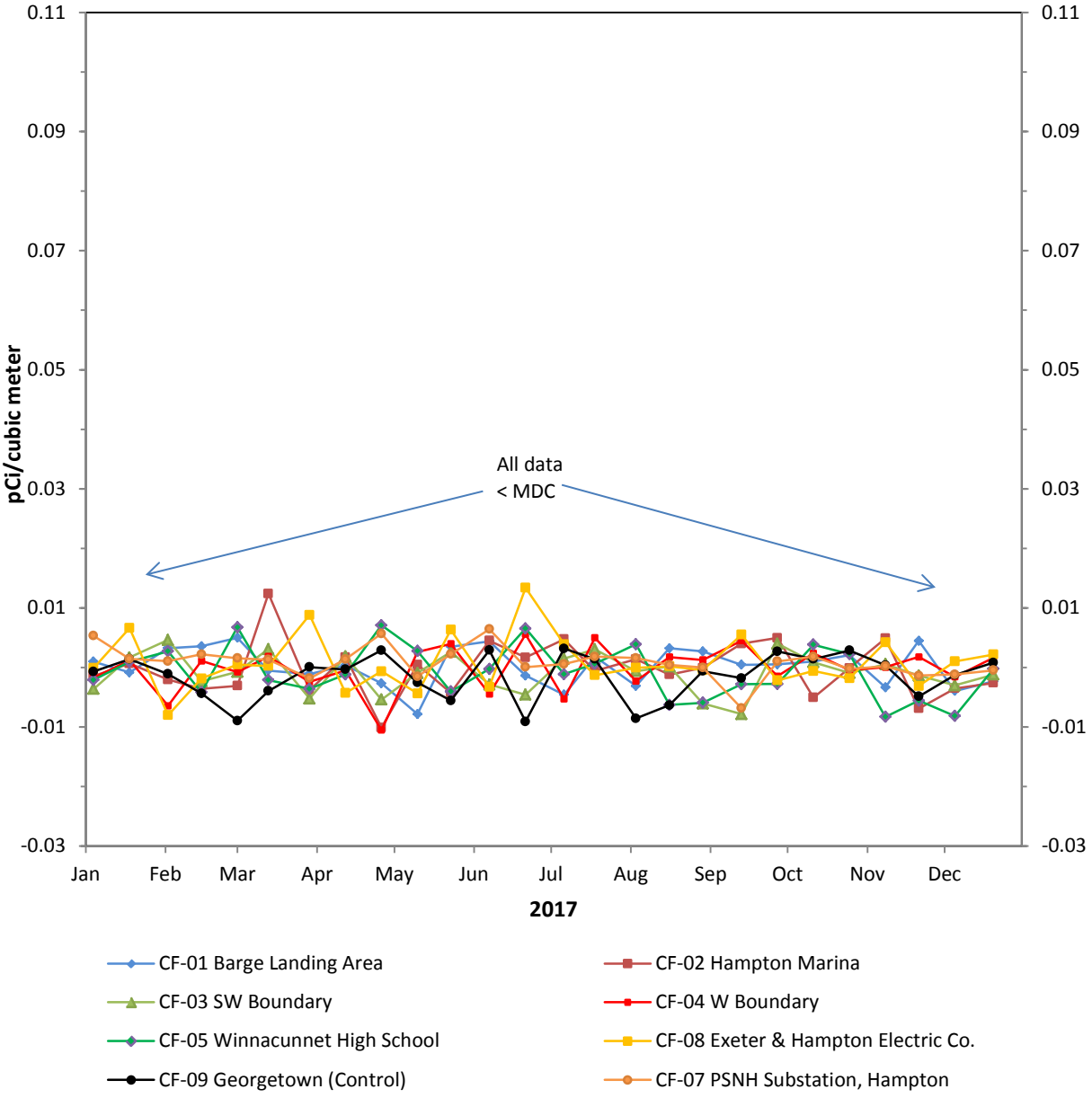
Table 3.2-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Charcoal Cartridge (CF) UNITS: pCi/cubic meter

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
I-131 (208) (0)	0.07	-1.9E -5 (-1.1 - 1.3)E -2 (0/ 182)	07	8.8E -4 (-6.8 - 6.4)E -3 (0/ 26)	-1.5E -3 (-9.1 - 3.2)E -3 (0/ 26)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

FIGURE 3.2
I-131 MEASUREMENTS OF AIR CHARCOAL CARTRIDGES
SEABROOK STATION



3.3 Milk

Milk samples (TM) were collected semi-monthly during the pasture season and monthly at other times. Samples are analyzed for low level I-131 and gamma-emitting radionuclides.

The ODCM (Table A.9.1-1) requires that milk samples be collected from three locations within 5 km of the plant having the highest dose potential. If there are none, then one sample is required from milking animals in each of three areas between 5 to 8 km distances where the doses are calculated to be greater than 1 mrem/yr. Due to the limited inventory of milk animals in the site area, as reconfirmed by the 2017 Land Use Census, the number of available sample locations required by the ODCM sampling program could not be met (insufficient numbers of milk animals within 5 km, and only one goat milk location [designated TM-15] between 5 and 8 km). The ODCM allows for broad leaf vegetation samples to be collected if milk sampling cannot be performed in accordance to the REMP requirements. As a result, two site boundary locations and one control vegetation location are sampled to compensate for the limited milk availability (see Section 3.12).

A total of 18 milk samples were collected during the year from one available location. Each sample was analyzed for gamma emitting radionuclides. In addition, all samples were evaluated for low levels of I-131 through an iodine extraction process. The gamma analyses on samples indicated that naturally-occurring K-40 was detectable in all milk samples. Also detected in all 18 milk samples was Cs-137 at an average concentration of 5.90 pCi/kg (positive measurements only) which falls in the range of past and pre-operational measurements. The highest single Cs-137 analysis result in 2017 was 10.3 pCi/kg. Though the Fukushima Daiichi event in March 2011 may have contributed to the Cs-137 levels observed in milk in 2017, Cs-137 has historically been detected at similar levels in milk before the nuclear accident in Japan. Residual Cs-137 from past weapons testing fallout has been the major contributor attributed to the currently observed values in milk. Figures 3.3, 3.3.1 and 3.3.2 illustrate the analysis results (without regard to whether individual analysis indicated detectable or statistically not detectable concentrations) for Cs-137 in milk over the current period (2017) and previous years.

Iodine-131 was not positively identified at any location for the year. This is consistent with previous years for both the pre-operational and operational phases of the program. All samples met the Lower Limit of Detection (LLD) requirements (1 pCi/kg) for I-131 in milk. No increasing or decreasing trends in the radioactivity content of milk were observed.

The REMP Summary Table 3.3-1 lists the range of analysis results by radionuclide for the Indicator station (Historical Control Stations for the milk have ceased operations). Attachment 1 to this report lists the individual analysis results for each measurement of milk under the Sample Type code TM. Section 5 identifies deviations in the sample measurement program (if any), such as missed lower limits of detection (LLD) requirements.

FIGURE 3.3

CESIUM-137 IN MILK
SEABROOK STATION

FIGURE 3.3.1

CESIUM-137 IN MILK
ANNUAL AVERAGE CONCENTRATIONS

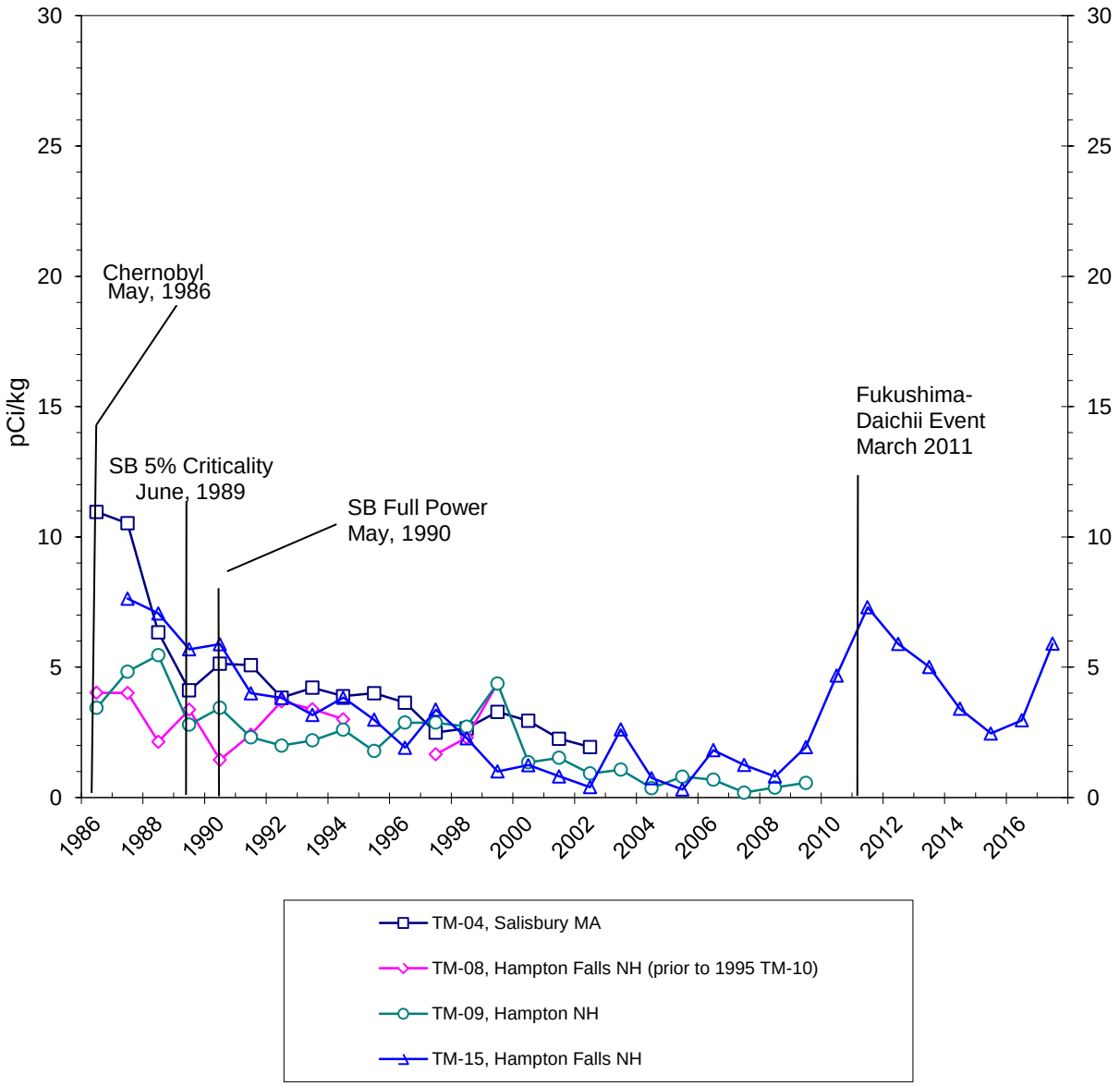


FIGURE 3.3.2

CESIUM-137 IN MILK
ANNUAL AVERAGE CONCENTRATIONS

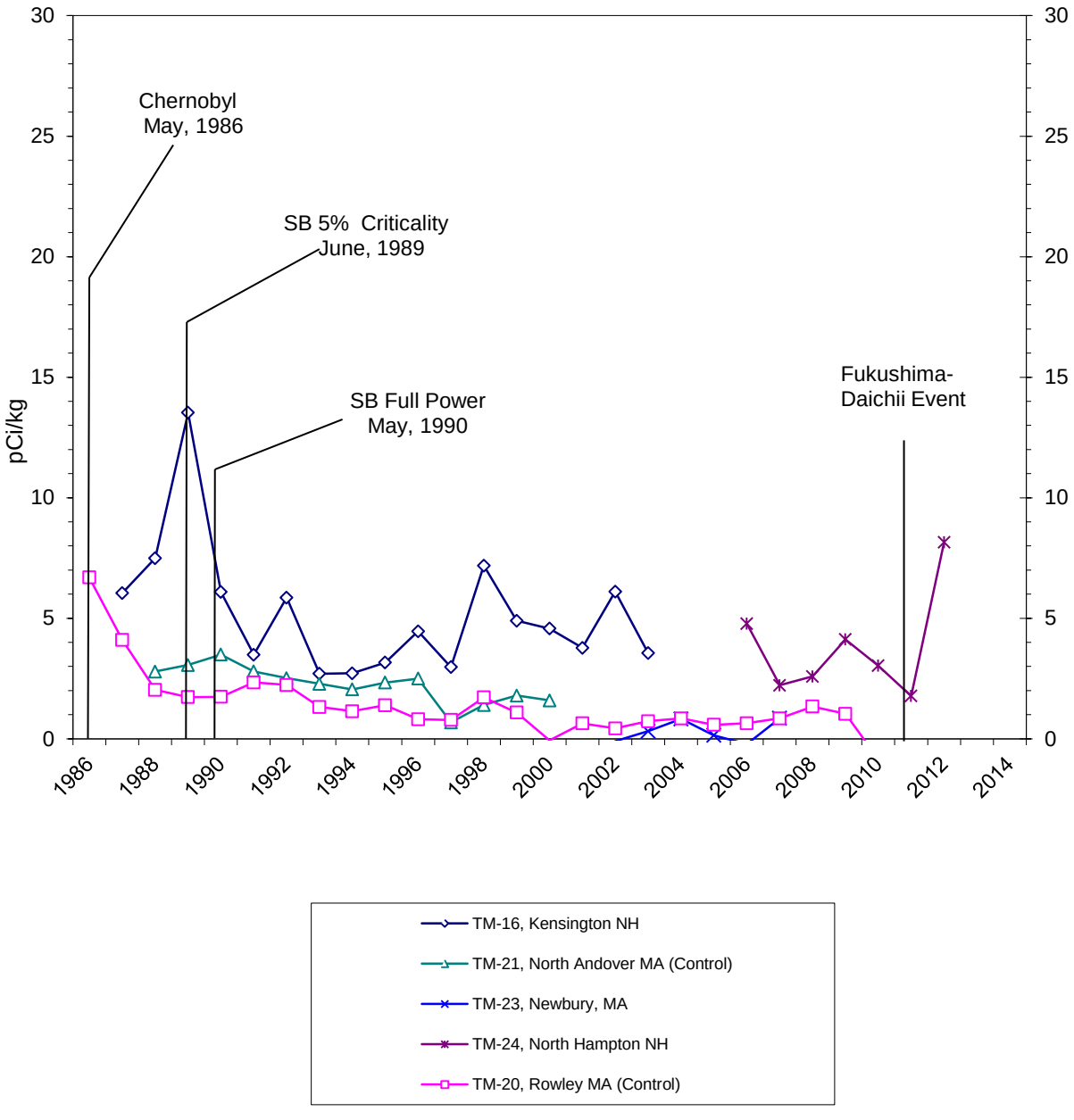


Table 3.3-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Milk (TM) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Be-7 (18) (0)		2.4E -1 (-3.9 - 5.9)E 0 (0/ 18)	15	2.4E -1 (-3.9 - 5.9)E 0 (0/ 18)	NO DATA
K-40 (18) (0)		1.6E 3 (1.4 - 1.7)E 3 (18/ 18)	15	1.6E 3 (1.4 - 1.7)E 3 (18/ 18)	NO DATA
Cr-51 (18) (0)		-5.1E -1 (-1.0 - 1.4)E 1 (0/ 18)	15	-5.1E -1 (-1.0 - 1.4)E 1 (0/ 18)	NO DATA
Mn-54 (18) (0)		1.8E -2 (-6.4 - 11.9)E -1 (0/ 18)	15	1.8E -2 (-6.4 - 11.9)E -1 (0/ 18)	NO DATA
Co-57 (18) (0)		-1.4E -1 (-9.1 - 6.7)E -1 (0/ 18)	15	-1.4E -1 (-9.1 - 6.7)E -1 (0/ 18)	NO DATA
Co-58 (18) (0)		-7.3E -3 (-1.3 - 0.8)E 0 (0/ 18)	15	-7.3E -3 (-1.3 - 0.8)E 0 (0/ 18)	NO DATA
Fe-59 (18) (0)		-1.6E -2 (-3.1 - 3.7)E 0 (0/ 18)	15	-1.6E -2 (-3.1 - 3.7)E 0 (0/ 18)	NO DATA
Co-60 (18) (0)		-5.6E -2 (-1.5 - 0.8)E 0 (0/ 18)	15	-5.6E -2 (-1.5 - 0.8)E 0 (0/ 18)	NO DATA
Zn-65 (18) (0)		1.2E -1 (-2.2 - 3.2)E 0 (0/ 18)	15	1.2E -1 (-2.2 - 3.2)E 0 (0/ 18)	NO DATA
Se-75 (18) (0)		1.5E -1 (-1.7 - 1.6)E 0 (0/ 18)	15	1.5E -1 (-1.7 - 1.6)E 0 (0/ 18)	NO DATA
Nb-95 (18) (0)		2.9E -1 (-1.5 - 1.6)E 0 (0/ 18)	15	2.9E -1 (-1.5 - 1.6)E 0 (0/ 18)	NO DATA
Zr-95 (18) (0)		-1.8E -1 (-1.9 - 1.3)E 0 (0/ 18)	15	-1.8E -1 (-1.9 - 1.3)E 0 (0/ 18)	NO DATA
Ru-103 (18) (0)		-3.7E -1 (-2.0 - 0.8)E 0 (0/ 18)	15	-3.7E -1 (-2.0 - 0.8)E 0 (0/ 18)	NO DATA
Ru-106 (18) (0)		2.0E 0 (-7.3 - 19.9)E 0 (0/ 18)	15	2.0E 0 (-7.3 - 19.9)E 0 (0/ 18)	NO DATA

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.3-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Milk (TM) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ag-108m (18) (0)		-1.5E -1 (-9.1 - 5.9)E -1 (0/ 18)	15	-1.5E -1 (-9.1 - 5.9)E -1 (0/ 18)	NO DATA
Ag-110m (18) (0)		1.4E -1 (-1.2 - 1.9)E 0 (0/ 18)	15	1.4E -1 (-1.2 - 1.9)E 0 (0/ 18)	NO DATA
Sb-124 (18) (0)		-8.1E -2 (-2.0 - 3.3)E 0 (0/ 18)	15	-8.1E -2 (-2.0 - 3.3)E 0 (0/ 18)	NO DATA
Sb-125 (18) (0)		-2.0E -1 (-4.8 - 2.7)E 0 (0/ 18)	15	-2.0E -1 (-4.8 - 2.7)E 0 (0/ 18)	NO DATA
I-131 (18) (0)	1	4.1E -2 (-1.7 - 4.5)E -1 (0/ 18)	15	4.1E -2 (-1.7 - 4.5)E -1 (0/ 18)	NO DATA
Cs-134 (18) (0)	15	3.0E -1 (-7.3 - 10.1)E -1 (0/ 18)	15	3.0E -1 (-7.3 - 10.1)E -1 (0/ 18)	NO DATA
Cs-137 (18) (0)	18	5.9E 0 (3.0 - 10.3)E 0 (18/ 18)	15	5.9E 0 (3.0 - 10.3)E 0 (18/ 18)	NO DATA
Ba-140 (18) (0)	15	1.1E -1 (-1.1 - 0.8)E 1 (0/ 18)	15	1.1E -1 (-1.1 - 0.8)E 1 (0/ 18)	NO DATA
La-140 (18) (0)	15	-8.0E -1 (-5.7 - 1.5)E 0 (0/ 18)	15	-8.0E -1 (-5.7 - 1.5)E 0 (0/ 18)	NO DATA
Ce-141 (18) (0)		-1.7E 0 (-7.3 - 2.1)E 0 (0/ 18)	15	-1.7E 0 (-7.3 - 2.1)E 0 (0/ 18)	NO DATA
Ce-144 (18) (0)		8.7E -1 (-7.4 - 9.2)E 0 (0/ 18)	15	8.7E -1 (-7.4 - 9.2)E 0 (0/ 18)	NO DATA
Ac-228 (18) (0)		-1.3E 0 (-1.0 - 0.6)E 1 (0/ 18)	15	-1.3E 0 (-1.0 - 0.6)E 1 (0/ 18)	NO DATA
Th-228 (18) (0)		5.9E -1 (-2.1 - 2.5)E 0 (0/ 18)	15	5.9E -1 (-2.1 - 2.5)E 0 (0/ 18)	NO DATA

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.4 Surface Water

Surface water (seawater - WS) grab samples are required at two locations (control and indicator) monthly. The indicator (WS-01) is over the vicinity of the plant's submerged discharge structure. The control location (WS-51) is situated in Ipswich Bay, MA, approximately 26.2 km from the plant. A gamma analysis is performed on each sample. A tritium analysis is performed on the quarterly composite of samples from each ODCM required location. Additional samples were collected from the Seabrook Marsh (WS-10) which borders the immediate plant property. The marsh samples are intended to provide indication of any ground water movement across the site area that might carry contamination into the surface waters of the marsh. Each of these samples is analyzed for both gamma emitters and tritium.

For 2017, a total of 26 gamma analyses were performed on surface water samples. The only radionuclides detected were naturally-occurring K-40, which was detected in all samples. No plant-related nuclides were detected. The present data for gamma emitters in seawater is consistent with that of the pre-operational program and previous years of operations. Therefore, no increasing or decreasing trends were observed.

Quarterly composites for the required off-shore locations (Stations WS-01 and WS-51) were analyzed for tritium. A total of 8 off-shore samples (composites) were analyzed in 2017, plus two additional samples from the non-ODCM required location (WS-10) situated approximately 600 feet SSE from the Containment Building in Seabrook Marsh. The quarterly composites and WS-10 samples showed no indication of tritium. All samples met the required minimum LLD (3000 pCi/kg) for tritium in seawater. These results are consistent with pre-operational tritium data. The achieved tritium Minimum Detectable Concentration (MDC) for the quarterly off-shore composite samples averaged 576.5 pCi/kg, while the marsh area samples from WS-10 had an average MDC of 410 pCi/kg.

The calculated dose as the result of plant effluents is not evaluated due to the fact that no plant-related radionuclides were or have been detected in the past. Therefore, no increasing or decreasing trends in dose were observed. This sampling program demonstrates that there is no impact to the public or environment, through this pathway from plant operations.

The REMP Summary Table 3.4-1 lists the range of analysis results by radionuclide for Indicator and Control Stations for the sea water environmental media. Attachment 1 to this report lists the individual analysis results for each measurement of sea water under the Sample Type code WS.

Any sample collection and analysis deviations from the ODCM required program or reportable concentrations that may have occurred during the year are described in Section 5.

Table 3.4-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Sea Water (WS) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
H-3 (10)	3000	9.5E 0	10	2.2E 2	4.9E 1
(0)		(-3.2 - 2.9)E 2 (0/ 6)		(1.5 - 2.9)E 2 (0/ 2)	(-1.6 - 2.7)E 2 (0/ 4)
Be-7 (26)		-4.1E -1	10	4.0E 0	-1.3E 0
(0)		(-8.0 - 6.8)E 0 (0/ 14)		(1.2 - 6.8)E 0 (0/ 2)	(-9.8 - 8.5)E 0 (0/ 12)
K-40 (26)		3.0E 2	01	3.3E 2	2.9E 2
(0)		(1.3 - 3.7)E 2 (14/ 14)		(2.9 - 3.7)E 2 (12/ 12)	(2.2 - 3.5)E 2 (12/ 12)
Cr-51 (26)		-1.7E 0	51	-7.2E -1	-7.2E -1
(0)		(-1.4 - 0.8)E 1 (0/ 14)		(-7.9 - 7.1)E 0 (0/ 12)	(-7.9 - 7.1)E 0 (0/ 12)
Mn-54 (26)	15	8.4E -2	01	9.6E -2	-1.2E -2
(0)		(-8.4 - 11.8)E -1 (0/ 14)		(-8.4 - 11.8)E -1 (0/ 12)	(-1.1 - 1.3)E 0 (0/ 12)
Co-57 (26)		8.8E -3	51	1.4E -1	1.4E -1
(0)		(-9.0 - 6.7)E -1 (0/ 14)		(-2.6 - 6.9)E -1 (0/ 12)	(-2.6 - 6.9)E -1 (0/ 12)
Co-58 (26)	15	-1.3E -1	10	2.8E -1	-2.3E -2
(0)		(-7.0 - 8.5)E -1 (0/ 14)		(-3.0 - 8.5)E -1 (0/ 2)	(-8.0 - 20.9)E -1 (0/ 12)
Fe-59 (26)	30	1.1E -1	10	7.4E -1	2.0E -1
(0)		(-1.3 - 2.1)E 0 (0/ 14)		(2.4 - 12.4)E -1 (0/ 2)	(-9.1 - 18.4)E -1 (0/ 12)
Co-60 (26)	15	1.7E -1	10	6.8E -1	4.3E -2
(0)		(-1.4 - 1.1)E 0 (0/ 14)		(2.7 - 10.9)E -1 (0/ 2)	(-5.9 - 10.8)E -1 (0/ 12)
Zn-65 (26)	30	3.8E -1	01	4.1E -1	1.9E -1
(0)		(-1.0 - 2.4)E 0 (0/ 14)		(-1.0 - 2.4)E 0 (0/ 12)	(-2.1 - 1.4)E 0 (0/ 12)
Se-75 (26)		3.3E -1	10	3.8E -1	-9.6E -2
(0)		(-4.7 - 12.4)E -1 (0/ 14)		(0.0 - 7.7)E -1 (0/ 2)	(-1.4 - 0.8)E 0 (0/ 12)
Nb-95 (26)	15	1.5E -1	10	5.7E -1	-6.6E -3
(0)		(-1.5 - 1.6)E 0 (0/ 14)		(1.1 - 10.3)E -1 (0/ 2)	(-1.6 - 1.1)E 0 (0/ 12)
Zr-95 (26)	15	8.7E -2	01	1.0E -1	-8.4E -2
(0)		(-9.5 - 10.6)E -1 (0/ 14)		(-9.5 - 10.6)E -1 (0/ 12)	(-1.6 - 1.0)E 0 (0/ 12)
Ru-103 (26)		-2.6E -1	01	-2.2E -1	-3.5E -1
(0)		(-1.1 - 0.7)E 0 (0/ 14)		(-1.1 - 0.7)E 0 (0/ 12)	(-2.2 - 1.2)E 0 (0/ 12)
Ru-106 (26)		-5.8E -1	10	-3.8E -1	-3.9E -1
(0)		(-7.3 - 8.9)E 0 (0/ 14)		(-1.4 - 0.6)E 0 (0/ 2)	(-6.3 - 7.0)E 0 (0/ 12)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.4-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Sea Water (WS) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Ag-108m (26) (0)		-1.2E -1 (-9.2 - 4.9)E -1 (0/ 14)	10	7.5E -3 (-3.1 - 3.2)E -1 (0/ 2)	-1.8E -1 (-7.9 - 5.2)E -1 (0/ 12)
Ag-110m (26) (0)		-1.7E -1 (-1.0 - 1.3)E 0 (0/ 14)	51	3.9E -1 (-9.2 - 32.6)E -1 (0/ 12)	3.9E -1 (-9.2 - 32.6)E -1 (0/ 12)
Sb-124 (26) (0)		-1.0E 0 (-9.9 - 2.1)E 0 (0/ 14)	10	5.4E -2 (-2.2 - 3.2)E -1 (0/ 2)	-5.2E -1 (-1.8 - 1.7)E 0 (0/ 12)
Sb-125 (26) (0)		7.4E -2 (-2.3 - 3.1)E 0 (0/ 14)	51	2.8E -1 (-3.3 - 3.2)E 0 (0/ 12)	2.8E -1 (-3.3 - 3.2)E 0 (0/ 12)
I-131 (26) (0)	15	-2.2E -1 (-1.5 - 1.1)E 0 (0/ 14)	51	3.8E -1 (-1.3 - 2.0)E 0 (0/ 12)	3.8E -1 (-1.3 - 2.0)E 0 (0/ 12)
Cs-134 (26) (0)	15	4.0E -1 (-5.0 - 22.4)E -1 (0/ 14)	01	4.8E -1 (-5.0 - 22.4)E -1 (0/ 12)	1.4E -1 (-4.7 - 7.3)E -1 (0/ 12)
Cs-137 (26) (0)	18	2.0E -1 (-9.9 - 13.6)E -1 (0/ 14)	10	8.9E -1 (7.0 - 10.7)E -1 (0/ 2)	3.0E -1 (-7.5 - 10.8)E -1 (0/ 12)
Ba-140 (26) (0)	15	-4.1E -1 (-9.7 - 5.1)E 0 (0/ 14)	51	1.1E 0 (-6.2 - 7.9)E 0 (0/ 12)	1.1E 0 (-6.2 - 7.9)E 0 (0/ 12)
La-140 (26) (0)	15	-6.5E -1 (-2.5 - 0.3)E 0 (0/ 14)	10	-4.8E -1 (-5.8 - -3.8)E -1 (0/ 2)	-6.5E -1 (-2.5 - 0.3)E 0 (0/ 12)
Ce-141 (26) (0)		-1.4E 0 (-4.5 - 0.8)E 0 (0/ 14)	01	-1.3E 0 (-4.5 - 0.8)E 0 (0/ 12)	-1.7E 0 (-7.2 - 2.5)E 0 (0/ 12)
Ce-144 (26) (0)		-4.6E -1 (-5.9 - 3.5)E 0 (0/ 14)	51	1.1E 0 (-4.7 - 8.0)E 0 (0/ 12)	1.1E 0 (-4.7 - 8.0)E 0 (0/ 12)
Pb-212 (26) (0)		4.1E -1 (-2.5 - 3.0)E 0 (0/ 14)	10	1.3E 0 (0.0 - 2.5)E 0 (0/ 2)	8.8E -1 (-2.8 - 5.3)E 0 (0/ 12)
Pb-214 (26) (0)		1.8E -1 (-3.8 - 4.7)E 0 (0/ 14)	10	4.1E -1 (0.0 - 8.2)E -1 (0/ 2)	-8.4E -1 (-3.5 - 3.6)E 0 (0/ 12)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses

Table 3.4-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Sea Water (WS) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Bi-214 (26) (0)		3.0E -1 (-2.1 - 2.2)E 0 (0/ 14)	01	4.5E -1 (-2.1 - 2.2)E 0 (0/ 12)	-1.1E -1 (-4.7 - 2.5)E 0 (0/ 12)
Ac-228 (26) (0)		4.5E -1 (-4.6 - 9.2)E 0 (0/ 14)	10	2.2E 0 (-1.7 - 45.1)E -1 (0/ 2)	2.0E 0 (-3.7 - 8.3)E 0 (0/ 12)
Th-228 (26) (0)		4.1E -1 (-2.5 - 3.0)E 0 (0/ 14)	10	1.3E 0 (0.0 - 2.5)E 0 (0/ 2)	8.8E -1 (-2.8 - 5.3)E 0 (0/ 12)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.5 Ground Water

There is no requirement in the ODCM to collect ground water (WG) samples. For the year, quarterly ground water samples were collected when available from three locations. These samples were collected from the town water line (WG-01) supplied to the Site (by the Town of Seabrook), from an inactive well (WG-13) located approximately 1 km north of the plant, and from a private well 1.3 km NNW (WG-14). For 2017, a total of 12 samples were collected. All samples were analyzed for gross-beta activity, gamma-emitters and tritium.

Gross beta activity was detected in 7 of the 12 samples due to naturally-occurring radium and its daughter products. The gross beta activity is consistent with results from previous years of commercial operations. Figures 3.5 and 3.5.1 indicate the current year (2017) and the long-term measurement history for gross beta in well waters. No tritium or plant-related gamma emitters were detected in any of the ground water samples collected during the year. Table 3.5-1 identifies the results of the search for radionuclides of which only naturally-occurring K-40 was detected in 1 of 12 samples, naturally-occurring Pb-212 and Th-228 were detected in 1 of 12 samples, naturally-occurring Pb-214 was detected in 2 of 12 samples and naturally-occurring Bi-214 was detected in 3 of 12 samples.

The dose potential to the public from drinking ground water is not evaluated due to the fact that plant-related radionuclides have not been detected. Therefore, no increasing or decreasing trends were observed. There is no impact to the public, through this pathway, from plant operations.

The REMP Summary Table 3.5-1 lists the range of analysis results by radionuclide for all ground water environmental samples. Attachment 1 to this report lists the individual analysis results for each measurement of ground water under the Sample Type code WG.

Any reportable sample concentrations that may have occurred during the year are described in Section 5.

FIGURE 3.5

GROSS-BETA MEASUREMENTS OF GROUND WATER
SEABROOK STATION

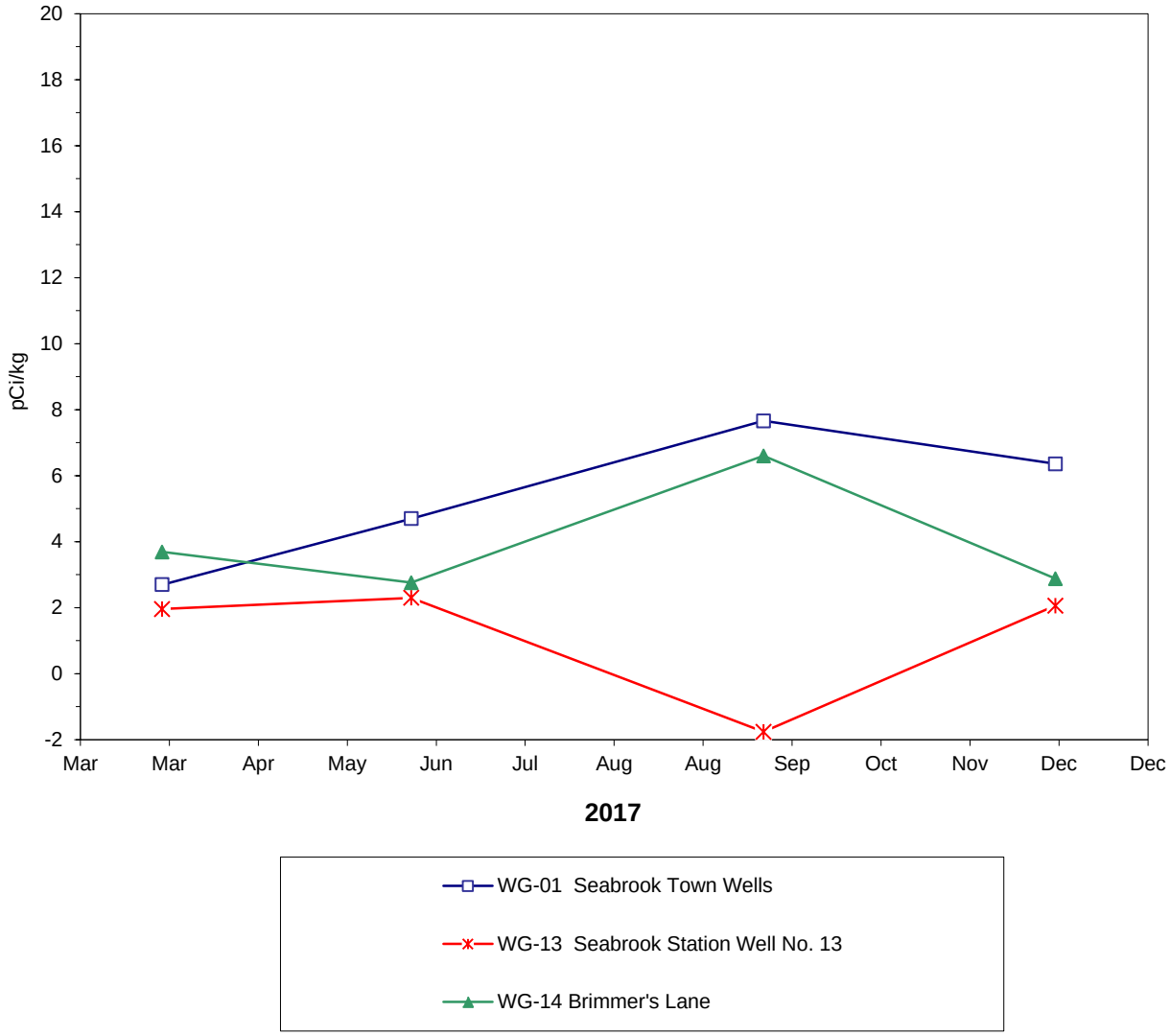


FIGURE 3.5.1

GROSS-BETA MEASUREMENTS OF GROUND WATER
SEMI-ANNUAL AVERAGES
SEABROOK STATION

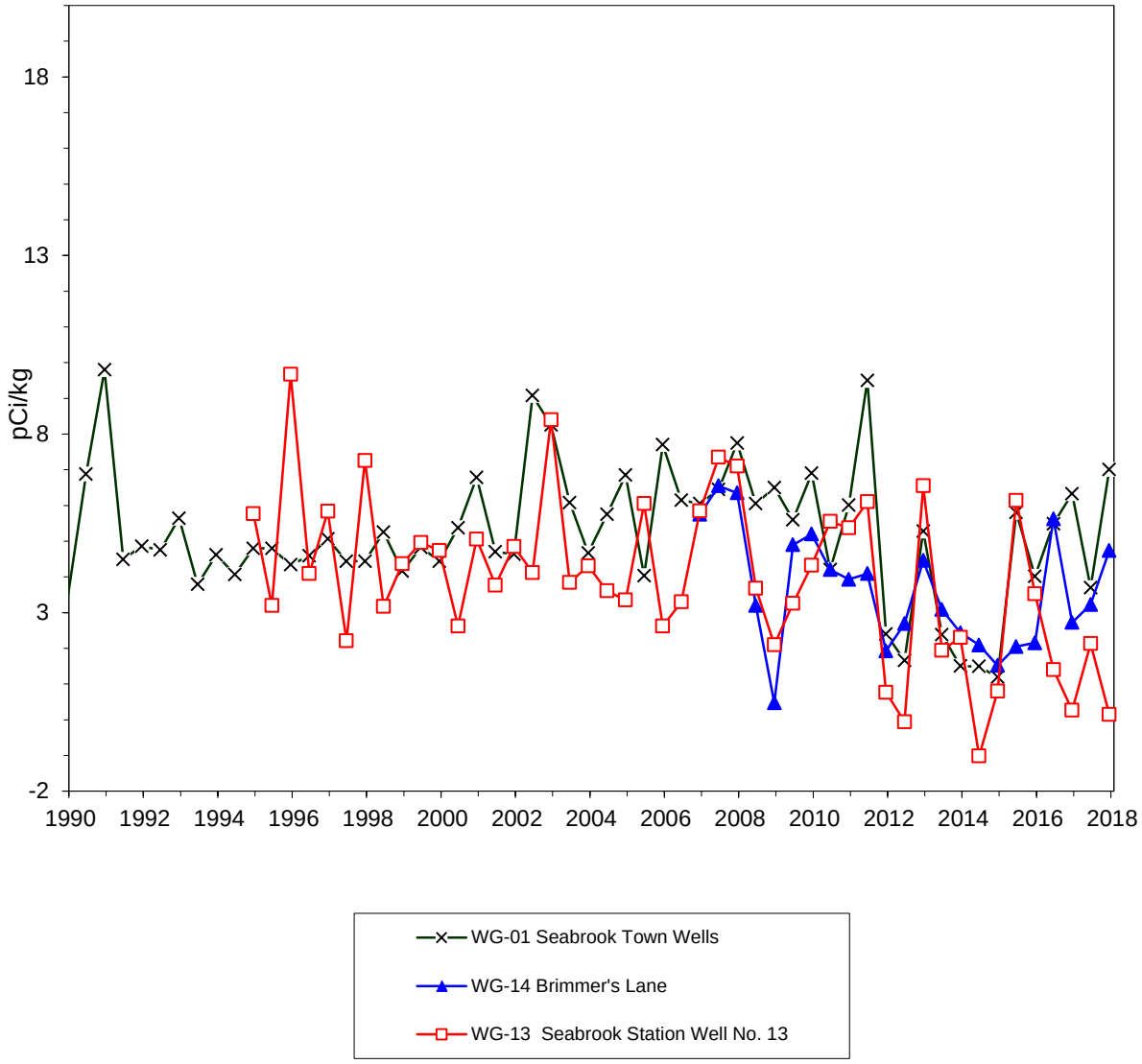


Table 3.5-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Ground Water (WG) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
BETA (12) (0)	4	3.5E 0 (-1.8 - 7.7)E 0 (7/ 12)	01	5.4E 0 (2.7 - 7.7)E 0 (4/ 4)	NO DATA
H-3 (12) (0)	3000	5.2E 1 (-1.0 - 3.1)E 2 (0/ 12)	01	8.8E 1 (-4.1 - 20.1)E 1 (0/ 4)	NO DATA
Be-7 (12) (0)		-1.1E 0 (-9.5 - 5.4)E 0 (0/ 12)	13	1.3E 0 (-1.3 - 5.2)E 0 (0/ 4)	NO DATA
K-40 (12) (0)		-3.2E 0 (-2.8 - 3.5)E 1 (1/ 12)	01	4.7E 0 (-9.3 - 34.6)E 0 (1/ 4)	NO DATA
Cr-51 (12) (0)		-2.3E -1 (-1.1 - 1.3)E 1 (0/ 12)	13	1.6E 0 (-5.0 - 12.8)E 0 (0/ 4)	NO DATA
Mn-54 (12) (0)	15	-3.0E -1 (-1.9 - 0.4)E 0 (0/ 12)	13	-2.2E -1 (-7.5 - 3.5)E -1 (0/ 4)	NO DATA
Co-57 (12) (0)		1.4E -1 (-7.6 - 19.2)E -1 (0/ 12)	14	5.4E -1 (-1.9 - 19.2)E -1 (0/ 4)	NO DATA
Co-58 (12) (0)	15	-8.7E -2 (-9.0 - 5.8)E -1 (0/ 12)	14	1.7E -1 (-5.1 - 5.8)E -1 (0/ 4)	NO DATA
Fe-59 (12) (0)	30	-9.9E -1 (-3.2 - 0.2)E 0 (0/ 12)	13	-6.4E -1 (-1.7 - -0.1)E 0 (0/ 4)	NO DATA
Co-60 (12) (0)	15	6.2E -2 (-6.6 - 9.9)E -1 (0/ 12)	13	1.7E -1 (-4.2 - 9.2)E -1 (0/ 4)	NO DATA
Zn-65 (12) (0)	30	3.0E -2 (-1.6 - 1.6)E 0 (0/ 12)	13	3.3E -1 (-1.1 - 1.2)E 0 (0/ 4)	NO DATA
Se-75 (12) (0)		-6.0E -3 (-8.7 - 7.3)E -1 (0/ 12)	14	2.5E -1 (-1.3 - 7.3)E -1 (0/ 4)	NO DATA
Nb-95 (12) (0)	15	3.9E -1 (-9.5 - 21.2)E -1 (0/ 12)	14	9.8E -1 (0.0 - 2.1)E 0 (0/ 4)	NO DATA

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.5-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Ground Water (WG) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Zr-95 (12) (0)	15	-2.9E -1 (-1.6 - 0.6)E 0 (0/ 12)	01	-1.9E -1 (-1.3 - 0.6)E 0 (0/ 4)	NO DATA
Ru-103 (12) (0)		-1.4E -1 (-6.6 - 6.5)E -1 (0/ 12)	14	-3.5E -2 (-6.6 - 6.5)E -1 (0/ 4)	NO DATA
Ru-106 (12) (0)		-6.8E -1 (-1.0 - 1.2)E 1 (0/ 12)	13	2.6E 0 (-5.2 - 12.3)E 0 (0/ 4)	NO DATA
Ag-108m (12) (0)		-2.3E -1 (-7.3 - 7.1)E -1 (0/ 12)	01	-5.8E -2 (-4.7 - 7.1)E -1 (0/ 4)	NO DATA
Ag-110m (12) (0)		-7.3E -2 (-7.2 - 6.5)E -1 (0/ 12)	14	8.6E -2 (-2.1 - 6.5)E -1 (0/ 4)	NO DATA
Sb-124 (12) (0)		-4.8E -1 (-2.2 - 1.2)E 0 (0/ 12)	01	-6.4E -2 (-9.1 - 11.9)E -1 (0/ 4)	NO DATA
Sb-125 (12) (0)		-2.4E -1 (-2.6 - 1.2)E 0 (0/ 12)	13	3.4E -1 (-3.3 - 11.8)E -1 (0/ 4)	NO DATA
I-131 (12) (0)	15	-3.7E -1 (-3.8 - 1.1)E 0 (0/ 12)	13	-2.8E -4 (-5.4 - 5.7)E -1 (0/ 4)	NO DATA
Cs-134 (12) (0)	15	1.8E -1 (-8.0 - 10.6)E -1 (0/ 12)	13	4.1E -1 (5.2 - 106.0)E -2 (0/ 4)	NO DATA
Cs-137 (12) (0)	18	7.3E -2 (-9.8 - 7.1)E -1 (0/ 12)	14	3.1E -1 (-3.4 - 7.1)E -1 (0/ 4)	NO DATA
Ba-140 (12) (0)	15	-5.1E -1 (-3.8 - 3.0)E 0 (0/ 12)	14	4.7E -1 (-3.8 - 3.0)E 0 (0/ 4)	NO DATA
La-140 (12) (0)	15	-1.0E -1 (-1.7 - 1.0)E 0 (0/ 12)	14	5.5E -1 (-1.7 - 10.1)E -1 (0/ 4)	NO DATA
Ce-141 (12) (0)		-1.6E 0 (-3.8 - 1.9)E 0 (0/ 12)	13	-7.6E -2 (-1.4 - 1.9)E 0 (0/ 4)	NO DATA

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., >3 standard deviations with no uncertain identification) is shown in parentheses.

Table 3.5-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Ground Water (WG) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ce-144 (12) (0)		1.3E 0 (-3.7 - 7.9)E 0 (0/ 12)	13	1.9E 0 (-3.7 - 7.9)E 0 (0/ 4)	NO DATA
Pb-212 (12) (0)		1.5E 0 (-4.6 - 46.9)E -1 (1/ 12)	14	1.9E 0 (0.0 - 2.8)E 0 (0/ 4)	NO DATA
Pb-214 (12) (0)		6.5E 1 (-3.6 - 331.0)E 0 (2/ 12)	14	1.6E 2 (2.9 - 33.1)E 1 (1/ 4)	NO DATA
Bi-214 (12) (0)		6.1E 1 (0.0 - 3.0)E 2 (3/ 12)	14	1.5E 2 (2.7 - 29.8)E 1 (1/ 4)	NO DATA
Ac-228 (12) (0)		5.4E -1 (-8.9 - 7.3)E 0 (0/ 12)	01	4.1E 0 (1.8 - 7.3)E 0 (0/ 4)	NO DATA
Th-228 (12) (0)		1.5E 0 (-4.6 - 46.9)E -1 (1/ 12)	14	1.9E 0 (0.0 - 2.8)E 0 (0/ 4)	NO DATA

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.6 Sediment

Semiannual sediment sampling is required at one indicator location, although a total of five locations, three indicators and two controls, are collected. The indicator stations are comprised of two sets of beach sediment cores from Hampton Beach (SE-07) and Seabrook Beach (SE-08), plus two sub-tidal sediment cores taken from near the discharge structure (SE-02). The control locations, Plum Island Beach (SE-57) and sub-tidal Ipswich Bay (SE-52), are both located within Ipswich Bay. A total of 10 samples were collected for the year from all locations. All cores were analyzed as single or whole samples without segmenting. A gamma analysis was performed on each core.

Table 3.6-1 identifies the results of the search for radionuclides of which several naturally-occurring were detected. The naturally-occurring radionuclides include K-40 and nuclides of the Uranium-238 decay chain (Th-230, Ra-226, Pb-214 and Bi-214) and the Thorium-232 decay chain (Ac-228, Th-228, Pb-212, and Tl-208). No plant-related radionuclides were detected in any core. No increasing or decreasing trends were observed. This is consistent with the pre-operational program and with previous years of plant operations. There is no plant related dose to the public or impact to the environment from any pathways associated with this media.

The REMP Summary Table 3.6-1 lists the range of analysis results by radionuclide for Indicator and Control Stations for the sediment environmental media. Attachment 1 to this report lists the individual analysis results for each measurement of sediment under the Sample Type code SE.

Any sample collection and analysis deviations from the ODCM required program, or reportable concentrations that may have occurred during the year are described in Section 5.

Table 3.6-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Sediment (SE) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Be-7 (10) (0)		-6.5E 1 (-2.3 - 0.5)E 2 (0/ 6)	07	4.3E 1 (3.4 - 5.2)E 1 (0/ 2)	-2.0E 0 (-4.3 - 3.3)E 1 (0/ 4)
K-40 (10) (0)		1.6E 4 (1.2 - 2.0)E 4 (6/ 6)	08	1.9E 4 (1.8 - 2.0)E 4 (2/ 2)	1.4E 4 (1.1 - 1.7)E 4 (4/ 4)
Cr-51 (10) (0)		4.3E 1 (-2.3 - 4.2)E 2 (0/ 6)	08	3.3E 2 (2.4 - 4.2)E 2 (0/ 2)	2.0E 1 (-3.0 - 2.6)E 2 (0/ 4)
Mn-54 (10) (0)		7.5E 0 (-9.2 - 33.1)E 0 (0/ 6)	57	1.8E 1 (1.2 - 2.5)E 1 (0/ 2)	1.7E 1 (4.8 - 27.7)E 0 (0/ 4)
Co-57 (10) (0)		-1.4E 0 (-1.2 - 1.3)E 1 (0/ 6)	02	6.7E 0 (8.5 - 126.0)E -1 (0/ 2)	-5.0E -2 (-1.4 - 1.4)E 1 (0/ 4)
Co-58 (10) (0)		1.6E 0 (-1.1 - 2.8)E 1 (0/ 6)	02	1.1E 1 (-7.2 - 28.2)E 0 (0/ 2)	-6.5E 0 (-3.6 - 0.6)E 1 (0/ 4)
Fe-59 (10) (0)		-2.4E 1 (-8.5 - 4.9)E 1 (0/ 6)	08	3.6E 1 (2.4 - 4.9)E 1 (0/ 2)	-5.4E 0 (-7.6 - 7.8)E 1 (0/ 4)
Co-60 (10) (0)		5.8E 0 (-5.9 - 21.4)E 0 (0/ 6)	07	8.9E 0 (-3.7 - 21.4)E 0 (0/ 2)	-4.0E 0 (-2.1 - 1.8)E 1 (0/ 4)
Zn-65 (10) (0)		1.8E 1 (-1.8 - 6.7)E 1 (0/ 6)	02	2.9E 1 (2.3 - 3.5)E 1 (0/ 2)	-3.1E 1 (-6.5 - -0.4)E 1 (0/ 4)
Se-75 (10) (0)		1.2E 0 (-1.5 - 2.1)E 1 (0/ 6)	57	2.6E 1 (1.7 - 3.5)E 1 (0/ 2)	1.4E 1 (-1.6 - 34.7)E 0 (0/ 4)
Nb-95 (10) (0)		-1.9E 1 (-6.4 - 0.3)E 1 (0/ 6)	57	1.7E 1 (1.7 - 1.7)E 1 (0/ 2)	1.4E 1 (3.2 - 19.7)E 0 (0/ 4)
Zr-95 (10) (0)		2.3E 1 (-3.7 - 8.5)E 1 (0/ 6)	07	5.3E 1 (2.1 - 8.5)E 1 (0/ 2)	0.0E 0 (-2.3 - 3.7)E 1 (0/ 4)
Ru-103 (10) (0)		-1.8E 0 (-1.3 - 1.3)E 1 (0/ 6)	57	6.9E 0 (1.3 - 12.6)E 0 (0/ 2)	-2.0E 0 (-2.9 - 1.3)E 1 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.6-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Sediment (SE) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ru-106 (10) (0)		-2.1E 0 (-1.5 - 1.2)E 2 (0/ 6)	07	7.9E 1 (4.2 - 11.7)E 1 (0/ 2)	-1.2E 0 (-8.6 - 9.6)E 1 (0/ 4)
Ag-108m (10) (0)		-3.6E 0 (-1.8 - 0.8)E 1 (0/ 6)	52	1.0E 1 (-9.5 - 209.0)E -1 (0/ 2)	5.5E 0 (-9.5 - 209.0)E -1 (0/ 4)
Ag-110m (10) (0)		3.4E 0 (-2.6 - 4.2)E 1 (0/ 6)	02	3.9E 1 (3.6 - 4.2)E 1 (0/ 2)	2.9E 0 (-1.2 - 1.8)E 1 (0/ 4)
Sb-124 (10) (0)		2.0E 1 (-2.5 - 4.5)E 1 (0/ 6)	02	2.8E 1 (2.0 - 3.6)E 1 (0/ 2)	-2.9E 1 (-5.7 - -0.8)E 1 (0/ 4)
Sb-125 (10) (0)		8.0E 0 (-1.9 - 3.7)E 1 (0/ 6)	02	2.5E 1 (1.2 - 3.7)E 1 (0/ 2)	7.8E 0 (-1.1 - 3.0)E 1 (0/ 4)
I-131 (10) (0)		-1.0E 2 (-3.8 - 1.1)E 2 (0/ 6)	52	4.9E 1 (-9.2 - 18.9)E 1 (0/ 2)	-9.4E 1 (-5.4 - 1.9)E 2 (0/ 4)
Cs-134 (10) (0)	150	2.7E 1 (0.0 - 5.4)E 1 (0/ 6)	02	5.2E 1 (4.9 - 5.4)E 1 (0/ 2)	5.5E -1 (-6.8 - 9.0)E 0 (0/ 4)
Cs-137 (10) (0)	180	-4.1E 0 (-1.1 - 0.0)E 1 (0/ 6)	57	1.8E 0 (-3.4 - 7.1)E 0 (0/ 2)	-8.2E 0 (-3.2 - 0.7)E 1 (0/ 4)
Ba-140 (10) (0)		-1.9E 1 (-3.2 - 1.8)E 2 (0/ 6)	57	3.6E 2 (2.5 - 4.7)E 2 (0/ 2)	2.1E 2 (-7.3 - 46.6)E 1 (0/ 4)
La-140 (10) (0)		-5.7E 1 (-1.3 - -0.1)E 2 (0/ 6)	52	5.1E 1 (-2.3 - 12.6)E 1 (0/ 2)	-1.1E 1 (-1.3 - 1.3)E 2 (0/ 4)
Ce-141 (10) (0)		-9.1E 0 (-2.7 - 1.2)E 1 (0/ 6)	08	1.8E 0 (-4.3 - 8.0)E 0 (0/ 2)	-1.8E 1 (-4.7 - 1.8)E 1 (0/ 4)
Ce-144 (10) (0)		-6.8E -1 (-9.1 - 3.5)E 1 (0/ 6)	52	4.3E 1 (-4.7 - 90.6)E 0 (0/ 2)	-2.3E 0 (-8.2 - 9.1)E 1 (0/ 4)
Tl-208 (10) (0)		1.8E 2 (7.4 - 43.7)E 1 (6/ 6)	52	7.0E 2 (6.7 - 7.3)E 2 (2/ 2)	3.8E 2 (4.3 - 72.6)E 1 (4/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.6-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Sediment (SE) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Pb-212 (10) (0)		6.4E 2 (3.3 - 16.7)E 2 (6/ 6)	52	2.4E 3 (2.4 - 2.5)E 3 (2/ 2)	1.4E 3 (1.9 - 24.6)E 2 (4/ 4)
Pb-214 (10) (0)		3.4E 2 (0.0 - 1.4)E 3 (3/ 6)	52	8.1E 2 (0.0 - 1.6)E 3 (1/ 2)	4.7E 2 (0.0 - 1.6)E 3 (2/ 4)
Bi-214 (10) (0)		3.5E 2 (0.0 - 9.3)E 2 (5/ 6)	52	1.3E 3 (1.2 - 1.4)E 3 (2/ 2)	7.2E 2 (0.0 - 1.4)E 3 (3/ 4)
Ra-226 (10) (0)		3.5E 2 (0.0 - 9.3)E 2 (5/ 6)	52	1.3E 3 (1.2 - 1.4)E 3 (2/ 2)	7.2E 2 (0.0 - 1.4)E 3 (3/ 4)
Ac-228 (10) (0)		4.1E 2 (0.0 - 1.0)E 3 (4/ 6)	52	2.2E 3 (2.0 - 2.3)E 3 (2/ 2)	1.2E 3 (0.0 - 2.3)E 3 (3/ 4)
Th-228 (10) (0)		6.4E 2 (3.3 - 16.7)E 2 (6/ 6)	52	2.4E 3 (2.4 - 2.5)E 3 (2/ 2)	1.4E 3 (1.9 - 24.6)E 2 (4/ 4)
Th-230 (10) (0)		3.5E 2 (0.0 - 9.3)E 2 (5/ 6)	52	1.3E 3 (1.2 - 1.4)E 3 (2/ 2)	7.2E 2 (0.0 - 1.4)E 3 (3/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.7 Fish

Semiannual fish (FH) and invertebrate samples are required by the ODCM REMP from two locations. Quarterly collections are attempted to ensure the sampling requirements are met. This section presents the results for fish sampling only. Invertebrate results may be found in Sections 3.8 and 3.9, entitled Lobsters and Shellfish, respectively.

During the year, a total of 9 fish samples were collected. The fish species available from Station FH-03 (indicator station) and Station FH-53 (control station) were dominated by Winter and Yellowtail Flounder which are bottom dwelling species. One sample of Cunner fish was also collected from sample location FH-06, which is located in the Hampton Bay area of the plant's discharge. Samples of Whitefish, Silver Hake and Longhorn Sculp were also collected from Stations FH-03 and FH-53.

A gamma analysis was performed on the edible portion of each sample collected. In 2017, the only radionuclide detected was naturally-occurring K-40 (all samples). Table 3.7-1 summarizes the results for radionuclides in fish. Similar to past years, no plant-related radionuclides were detected in any samples. As a result, no increasing or decreasing trends were observed. Subsequently, there is no dose to the public or impact to the environment through this pathway due to plant operations. This is consistent with previous years of plant operations, as well as the pre-operational program.

In addition to the required program for fish as defined in the ODCM, sampling was attempted to collect a local fish species (Cunner fish) that resides in the upper regions of the water column using an alternate collection method from that used for the more prevalent bottom species (Flounder). For 2017, one Cunner sample was collected from Hampton Bay. The results are listed in Attachment 1 as laboratory number 438701003 (11/20/2017). No plant radionuclides were detected in the Cunner fish sample, with only naturally-occurring K-40 being found.

The REMP Summary Table 3.7-1 also lists the range of analysis results by radionuclide for Indicator and Control Stations for all fish environmental media. Attachment 1 to this report lists the individual analysis results for each measurement of fish under the Sample Type code FH.

Any sample collection and analysis deviations from the ODCM required program, or reportable concentrations that may have occurred during the year are described in Section 5.

Table 3.7-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Fish (FH) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Be-7 (9)		4.3E 1	03	4.5E 1	-1.4E 0
(0)		(2.4 - 7.3)E 1		(2.4 - 7.3)E 1	(-2.2 - 5.1)E 1
		(0/ 5)		(0/ 4)	(0/ 4)
K-40 (9)		2.8E 3	53	3.2E 3	3.2E 3
(0)		(2.0 - 3.4)E 3		(2.7 - 3.7)E 3	(2.7 - 3.7)E 3
		(5/ 5)		(4/ 4)	(4/ 4)
Cr-51 (9)		-7.8E 1	06	5.5E 1	6.1E -1
(0)		(-4.2 - 0.5)E 2			(-3.9 - 7.9)E 1
		(0/ 5)		(0/ 1)	(0/ 4)
Mn-54 (9)	130	-1.9E -1	03	2.0E -1	-6.7E -1
(0)		(-3.1 - 3.7)E 0		(-3.1 - 3.7)E 0	(-5.7 - 2.0)E 0
		(0/ 5)		(0/ 4)	(0/ 4)
Co-57 (9)		-5.6E -1	03	5.8E -1	-9.4E -1
(0)		(-5.1 - 4.3)E 0		(-1.1 - 4.3)E 0	(-2.4 - 0.3)E 0
		(0/ 5)		(0/ 4)	(0/ 4)
Co-58 (9)	130	-6.7E -1	53	8.0E -2	8.0E -2
(0)		(-3.3 - 2.6)E 0		(-3.5 - 4.8)E 0	(-3.5 - 4.8)E 0
		(0/ 5)		(0/ 4)	(0/ 4)
Fe-59 (9)	260	-7.5E 0	06	5.9E 0	-1.1E 0
(0)		(-2.6 - 0.6)E 1			(-1.6 - 1.0)E 1
		(0/ 5)		(0/ 1)	(0/ 4)
Co-60 (9)	130	-6.1E -1	06	2.8E 0	1.1E -1
(0)		(-6.5 - 5.5)E 0			(-3.3 - 3.4)E 0
		(0/ 5)		(0/ 1)	(0/ 4)
Zn-65 (9)	260	2.3E 0	03	2.9E 0	-6.4E 0
(0)		(-4.5 - 12.9)E 0		(-4.5 - 12.9)E 0	(-1.3 - -0.3)E 1
		(0/ 5)		(0/ 4)	(0/ 4)
Se-75 (9)		8.8E -1	06	2.1E 0	9.3E -1
(0)		(-1.1 - 2.1)E 0			(-2.4 - 3.9)E 0
		(0/ 5)		(0/ 1)	(0/ 4)
Nb-95 (9)		3.6E 0	03	4.1E 0	4.0E -2
(0)		(-1.6 - 16.8)E 0		(-1.6 - 16.8)E 0	(-4.8 - 5.9)E 0
		(0/ 5)		(0/ 4)	(0/ 4)
Zr-95 (9)		7.5E 0	06	9.2E 0	1.4E 0
(0)		(-3.9 - 20.9)E 0			(-3.1 - 8.6)E 0
		(0/ 5)		(0/ 1)	(0/ 4)
Ru-103 (9)		-1.1E 1	06	1.9E 0	-4.5E -1
(0)		(-4.6 - 0.2)E 1			(-9.5 - 10.0)E 0
		(0/ 5)		(0/ 1)	(0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.7-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Fish (FH) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Ru-106 (9)		9.7E 0	03	1.4E 1	3.6E 0
(0)		(-8.7 - 48.1)E 0 (0/ 5)		(-3.4 - 48.1)E 0 (0/ 4)	(-1.1 - 1.6)E 1 (0/ 4)
Ag-108m (9)		1.5E -2	06	2.1E 0	-1.2E 0
(0)		(-1.8 - 2.1)E 0 (0/ 5)		(0/ 1)	(-3.1 - 1.3)E 0 (0/ 4)
Ag-110m (9)		-2.2E -1	03	4.6E -1	-9.6E -1
(0)		(-5.7 - 4.2)E 0 (0/ 5)		(-5.7 - 4.2)E 0 (0/ 4)	(-6.3 - 3.3)E 0 (0/ 4)
Sb-124 (9)		4.7E 0	03	4.7E 0	-4.4E -1
(0)		(-1.0 - 8.5)E 0 (0/ 5)		(-1.0 - 8.5)E 0 (0/ 4)	(-6.8 - 9.1)E 0 (0/ 4)
Sb-125 (9)		-2.0E 0	03	-2.0E 0	-2.7E 0
(0)		(-7.5 - 4.7)E 0 (0/ 5)		(-7.5 - 4.7)E 0 (0/ 4)	(-6.9 - 0.7)E 0 (0/ 4)
I-131 (9)		-1.1E 4	06	1.8E 0	-1.0E 1
(0)		(-5.3 - 0.0)E 4 (0/ 5)		(0/ 1)	(-4.2 - 0.4)E 1 (0/ 4)
Cs-134 (9)	130	-1.7E -1	06	1.4E 0	1.3E 0
(0)		(-4.9 - 6.4)E 0 (0/ 5)		(0/ 1)	(-1.5 - 3.5)E 0 (0/ 4)
Cs-137 (9)	150	2.3E 0	03	2.9E 0	1.1E 0
(0)		(-1.3 - 5.6)E 0 (0/ 5)		(-1.3 - 5.6)E 0 (0/ 4)	(-3.8 - 8.1)E 0 (0/ 4)
Ba-140 (9)		-7.4E 2	06	4.0E 1	1.6E 1
(0)		(-3.7 - 0.0)E 3 (0/ 5)		(0/ 1)	(-1.1 - 5.7)E 1 (0/ 4)
La-140 (9)		-4.3E 2	53	6.6E 0	6.6E 0
(0)		(-2.2 - 0.0)E 3 (0/ 5)		(-3.9 - 26.1)E 0 (0/ 4)	(-3.9 - 26.1)E 0 (0/ 4)
Ce-141 (9)		-4.2E -1	06	4.1E 0	-6.8E 0
(0)		(-4.5 - 4.1)E 0 (0/ 5)		(0/ 1)	(-1.1 - -0.2)E 1 (0/ 4)
Ce-144 (9)		-9.6E -1	06	2.5E 1	-3.8E 0
(0)		(-2.2 - 2.5)E 1 (0/ 5)		(0/ 1)	(-2.9 - 0.9)E 1 (0/ 4)
Tl-208 (9)		-1.4E -1	53	1.0E 0	1.0E 0
(0)		(-3.9 - 6.1)E 0 (0/ 5)		(-1.6 - 3.9)E 0 (0/ 4)	(-1.6 - 3.9)E 0 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.7-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Fish (FH) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Pb-212 (9) (0)		8.3E -1 (-6.0 - 7.8)E 0 (0/ 5)	53	3.0E 0 (1.4 - 4.2)E 0 (0/ 4)	3.0E 0 (1.4 - 4.2)E 0 (0/ 4)
Pb-214 (9) (0)		4.6E 0 (-6.1 - 13.3)E 0 (0/ 5)	06	8.5E 0 (0/ 1)	5.6E 0 (-1.4 - 14.1)E 0 (0/ 4)
Bi-214 (9) (0)		1.1E 1 (3.3 - 21.7)E 0 (0/ 5)	03	1.2E 1 (3.3 - 21.7)E 0 (0/ 4)	6.9E 0 (-4.4 - 123.0)E -1 (0/ 4)
Ra-226 (9) (0)		1.1E 1 (3.3 - 21.7)E 0 (0/ 5)	03	1.2E 1 (3.3 - 21.7)E 0 (0/ 4)	6.9E 0 (-4.4 - 123.0)E -1 (0/ 4)
Ac-228 (9) (0)		-2.2E 0 (-2.5 - 1.7)E 1 (0/ 5)	53	4.8E 0 (-7.0 - 18.2)E 0 (0/ 4)	4.8E 0 (-7.0 - 18.2)E 0 (0/ 4)
Th-228 (9) (0)		8.3E -1 (-6.0 - 7.8)E 0 (0/ 5)	53	3.0E 0 (1.4 - 4.2)E 0 (0/ 4)	3.0E 0 (1.4 - 4.2)E 0 (0/ 4)
Th-230 (9) (0)		1.1E 1 (3.3 - 21.7)E 0 (0/ 5)	03	1.2E 1 (3.3 - 21.7)E 0 (0/ 4)	6.9E 0 (-4.4 - 123.0)E -1 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.8 Lobsters

Semiannual fish and invertebrate samples were required from two locations. This section provides the results for one type of invertebrate – *Homarus americanus (*American lobsters) which is an important commercial food species from local waters. Lobsters (HA) were collected from an indicator location near the discharge (HA-04) and from a control location (HA-54) within Ipswich Bay. A total of four samples were collected for the year. Fish and shellfish results may be found in Sections 3.7 and 3.9, respectively.

A gamma analysis was performed on each sample. The only radionuclide detected in lobster samples in 2017 was naturally-occurring K-40 (all samples). Similar to past years, no plant-related radionuclides were detected in any sample. Therefore, no increasing or decreasing trends were observed. Consequently, there is no dose to the public or impact to the environment from this pathway due to plant operations. This is consistent with previous years as well as the pre-operational program.

The REMP Summary Table 3.8-1 also lists the range of analysis results by radionuclide for Indicator and Control Stations for all lobster samples. Attachment 1 to this report lists the individual analysis results for each measurement of lobsters under the Sample Type code HA.

Any sample collection and analysis deviations from the ODCM required program, or reportable concentrations that may have occurred during the year are described in Section 5.

Table 3.8-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: American Lobster (HA) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)		Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Be-7	(4)		-3.2E 1	54	-3.1E 1	-3.1E 1
	(0)		(-4.1 - -2.3)E 1 (0/ 2)		(-6.1 - 0.0)E 1 (0/ 2)	(-6.1 - 0.0)E 1 (0/ 2)
K-40	(4)		2.6E 3	04	2.6E 3	1.9E 3
	(0)		(2.1 - 3.0)E 3 (2/ 2)		(2.1 - 3.0)E 3 (2/ 2)	(1.7 - 2.2)E 3 (2/ 2)
Cr-51	(4)		-3.9E 1	04	-3.9E 1	-4.4E 1
	(0)		(-5.5 - -2.3)E 1 (0/ 2)		(-5.5 - -2.3)E 1 (0/ 2)	(-4.8 - -3.9)E 1 (0/ 2)
Mn-54	(4)	130	-2.3E 0	54	-6.1E -1	-6.1E -1
	(0)		(-3.5 - -1.2)E 0 (0/ 2)		(-3.0 - 1.8)E 0 (0/ 2)	(-3.0 - 1.8)E 0 (0/ 2)
Co-57	(4)		-2.0E 0	54	1.0E 0	1.0E 0
	(0)		(-2.4 - -1.6)E 0 (0/ 2)		(-2.3 - 22.4)E -1 (0/ 2)	(-2.3 - 22.4)E -1 (0/ 2)
Co-58	(4)	130	2.2E 0	04	2.2E 0	-4.9E 0
	(0)		(6.1 - 37.8)E -1 (0/ 2)		(6.1 - 37.8)E -1 (0/ 2)	(-8.2 - -1.6)E 0 (0/ 2)
Fe-59	(4)	260	-4.1E 0	04	-4.1E 0	-7.8E 0
	(0)		(-4.3 - -3.9)E 0 (0/ 2)		(-4.3 - -3.9)E 0 (0/ 2)	(-1.6 - 0.1)E 1 (0/ 2)
Co-60	(4)	130	2.5E 0	04	2.5E 0	1.6E 0
	(0)		(-7.2 - 58.2)E -1 (0/ 2)		(-7.2 - 58.2)E -1 (0/ 2)	(-4.5 - 36.9)E -1 (0/ 2)
Zn-65	(4)	260	-2.4E 0	04	-2.4E 0	-5.7E 0
	(0)		(-1.2 - 0.7)E 1 (0/ 2)		(-1.2 - 0.7)E 1 (0/ 2)	(-8.3 - -3.0)E 0 (0/ 2)
Se-75	(4)		7.9E -1	04	7.9E -1	-3.1E 0
	(0)		(-1.8 - 3.4)E 0 (0/ 2)		(-1.8 - 3.4)E 0 (0/ 2)	(-4.7 - -1.5)E 0 (0/ 2)
Nb-95	(4)		5.0E 0	04	5.0E 0	-7.7E -1
	(0)		(4.7 - 5.4)E 0 (0/ 2)		(4.7 - 5.4)E 0 (0/ 2)	(-5.6 - 4.1)E 0 (0/ 2)
Zr-95	(4)		2.1E 0	04	2.1E 0	-1.4E 1
	(0)		(-4.6 - 424.0)E -2 (0/ 2)		(-4.6 - 424.0)E -2 (0/ 2)	(-1.8 - -1.1)E 1 (0/ 2)
Ru-103	(4)		-2.3E 0	54	-1.6E 0	-1.6E 0
	(0)		(-4.3 - -0.2)E 0 (0/ 2)		(-1.9 - -1.3)E 0 (0/ 2)	(-1.9 - -1.3)E 0 (0/ 2)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.8-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: American Lobster (HA) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ru-106 (4)		-1.2E 1	54	-1.1E 0	-1.1E 0
(0)		(-2.2 - -0.3)E 1 (0/ 2)		(-3.5 - 3.2)E 1 (0/ 2)	(-3.5 - 3.2)E 1 (0/ 2)
Ag-108m (4)		1.7E 0	04	1.7E 0	1.5E -1
(0)		(9.0 - 25.0)E -1 (0/ 2)		(9.0 - 25.0)E -1 (0/ 2)	(-4.8 - 7.8)E -1 (0/ 2)
Ag-110m (4)		-4.8E 0	54	-2.1E -1	-2.1E -1
(0)		(-1.1 - 0.1)E 1 (0/ 2)		(-3.3 - 2.9)E 0 (0/ 2)	(-3.3 - 2.9)E 0 (0/ 2)
Sb-124 (4)		6.4E 0	54	1.2E 1	1.2E 1
(0)		(5.4 - 7.3)E 0 (0/ 2)		(-8.8 - 33.8)E 0 (0/ 2)	(-8.8 - 33.8)E 0 (0/ 2)
Sb-125 (4)		9.2E 0	04	9.2E 0	-9.1E 0
(0)		(3.8 - 14.6)E 0 (0/ 2)		(3.8 - 14.6)E 0 (0/ 2)	(-1.4 - -0.4)E 1 (0/ 2)
I-131 (4)		8.1E 0	04	8.1E 0	-1.9E -1
(0)		(5.1 - 11.0)E 0 (0/ 2)		(5.1 - 11.0)E 0 (0/ 2)	(-1.4 - 1.0)E 0 (0/ 2)
Cs-134 (4)	130	2.6E 0	54	8.6E 0	8.6E 0
(0)		(2.5 - 2.7)E 0 (0/ 2)		(2.6 - 14.7)E 0 (0/ 2)	(2.6 - 14.7)E 0 (0/ 2)
Cs-137 (4)	150	2.7E 0	04	2.7E 0	-2.2E -1
(0)		(2.3 - 3.2)E 0 (0/ 2)		(2.3 - 3.2)E 0 (0/ 2)	(-4.3 - 0.0)E -1 (0/ 2)
Ba-140 (4)		-1.7E 1	54	1.6E 1	1.6E 1
(0)		(-4.2 - 0.8)E 1 (0/ 2)		(-7.3 - 38.7)E 0 (0/ 2)	(-7.3 - 38.7)E 0 (0/ 2)
La-140 (4)		-3.5E 0	54	-9.7E -1	-9.7E -1
(0)		(-9.3 - 2.2)E 0 (0/ 2)		(-7.0 - 5.1)E 0 (0/ 2)	(-7.0 - 5.1)E 0 (0/ 2)
Ce-141 (4)		-1.1E 1	54	-3.2E 0	-3.2E 0
(0)		(-1.3 - -0.9)E 1 (0/ 2)		(-4.0 - -2.4)E 0 (0/ 2)	(-4.0 - -2.4)E 0 (0/ 2)
Ce-144 (4)		-2.5E 1	54	-2.3E 0	-2.3E 0
(0)		(-2.6 - -2.4)E 1 (0/ 2)		(-6.9 - 2.4)E 0 (0/ 2)	(-6.9 - 2.4)E 0 (0/ 2)
Tl-208 (4)		-2.9E 0	04	-2.9E 0	-8.0E 0
(0)		(-3.4 - -2.4)E 0 (0/ 2)		(-3.4 - -2.4)E 0 (0/ 2)	(-1.2 - -0.4)E 1 (0/ 2)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.8-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: American Lobster (HA) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Pb-212 (4) (0)		4.3E 0 (1.3 - 7.4)E 0 (0/ 2)	04	4.3E 0 (1.3 - 7.4)E 0 (0/ 2)	-5.3E 0 (-1.9 - 0.8)E 1 (0/ 2)
Pb-214 (4) (0)		1.2E 1 (4.6 - 19.3)E 0 (0/ 2)	04	1.2E 1 (4.6 - 19.3)E 0 (0/ 2)	4.8E 0 (2.1 - 7.5)E 0 (0/ 2)
Bi-214 (4) (0)		6.2E 0 (5.8 - 6.6)E 0 (0/ 2)	54	7.3E 0 (2.2 - 12.4)E 0 (0/ 2)	7.3E 0 (2.2 - 12.4)E 0 (0/ 2)
Ra-226 (4) (0)		6.2E 0 (5.8 - 6.6)E 0 (0/ 2)	54	7.3E 0 (2.2 - 12.4)E 0 (0/ 2)	7.3E 0 (2.2 - 12.4)E 0 (0/ 2)
Ac-228 (4) (0)		1.9E 1 (2.7 - 35.0)E 0 (0/ 2)	04	1.9E 1 (2.7 - 35.0)E 0 (0/ 2)	1.6E 1 (1.4 - 1.9)E 1 (0/ 2)
Th-228 (4) (0)		4.3E 0 (1.3 - 7.4)E 0 (0/ 2)	04	4.3E 0 (1.3 - 7.4)E 0 (0/ 2)	-5.3E 0 (-1.9 - 0.8)E 1 (0/ 2)
Th-230 (4) (0)		6.2E 0 (5.8 - 6.6)E 0 (0/ 2)	54	7.3E 0 (2.2 - 12.4)E 0 (0/ 2)	7.3E 0 (2.2 - 12.4)E 0 (0/ 2)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.9 Shellfish

Semiannual fish and invertebrate samples are required by the ODCM from two locations. This section provides the results for shellfish (MU) samples only. In 2017, four locations (two indicators and two controls) were included in the sample collections. Fish and lobster results may be found in the Sections 3.7 and 3.8, entitled Fish and Lobsters, respectively.

During the year there were two species of mussels (MU) harvested for analysis. *Modiolus (horse mussels)* was collected by divers from near the discharge outfall (indicator station MU-06) and from Ipswich Bay (control MU-56). *Mytilus* (blue mussels) were collected from the intertidal areas of Hampton Harbor (indicator MU-09) and Plum Island (control MU-59). A total of eight samples were collected in 2017 and analyzed for radioactivity in the edible portion or meat of the shellfish.

The only radionuclides detected in edible shellfish body samples in 2017 were naturally-occurring Be-7 (2 out of 8 samples), K-40 (all 8 samples) and Tl-208 in one of the control samples. Similar to past years, no plant-related gamma emitting radionuclides were detected in any sample. Therefore, no increasing or decreasing trends were observed. Consequently, there is no dose to the public or impact to the environment from this pathway due to plant operations. This is consistent with the pre-operational program and with previous years of plant operations.

Additional analyses were conducted on the May and November shellfish collections from both indicator (MS-06) and control (MS-56) locations. Mussel shells (MS) were analyzed for Strontium 89 and 90 (four samples) to see if there was any indication of strontium uptake into the shell. For 2017, no Sr-89/90 was detected in any sample. No shell analyses are required by the REMP as defined in the ODCM.

The REMP Summary Table 3.9-1 (mussel bodies) and Table 3.9-2 (mussel shells) list the range of analysis results by radionuclide for Indicator and Control Stations for all shellfish samples. Attachment 1 to this report lists the individual analysis results for each measurement of shellfish under the Sample Type code MU for the edible portions and MS for shells only.

Any sample collection and analysis deviations from the ODCM required program, or reportable concentrations that may have occurred during the year, are described in Section 5.

Table 3.9-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Mussel Body (MU) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Be-7 (8)		3.5E 1	09	4.8E 1	1.7E 1
(0)		(-1.2 - 10.7)E 1 (1/ 4)		(-1.2 - 10.7)E 1 (1/ 2)	(-2.1 - 3.4)E 1 (1/ 4)
K-40 (8)		1.0E 3	59	1.4E 3	1.4E 3
(0)		(7.8 - 12.7)E 2 (4/ 4)		(1.2 - 1.6)E 3 (2/ 2)	(1.2 - 1.6)E 3 (4/ 4)
Cr-51 (8)		-3.5E 1	59	6.8E 0	-2.1E 0
(0)		(-1.2 - 0.4)E 2 (0/ 4)		(-1.4 - 2.7)E 1 (0/ 2)	(-1.4 - 2.7)E 1 (0/ 4)
Mn-54 (8)	130	-4.0E -1	56	2.3E 0	-3.8E -1
(0)		(-2.1 - 1.3)E 0 (0/ 4)		(3.3 - 41.8)E -1 (0/ 2)	(-3.0 - 4.2)E 0 (0/ 4)
Co-57 (8)		6.8E -2	56	6.9E -1	3.7E -1
(0)		(-8.7 - 21.9)E -1 (0/ 4)		(-6.6 - 20.4)E -1 (0/ 2)	(-6.6 - 20.4)E -1 (0/ 4)
Co-58 (8)	130	5.8E -1	59	1.2E 0	7.8E -1
(0)		(-1.7 - 3.8)E 0 (0/ 4)		(-1.4 - 3.9)E 0 (0/ 2)	(-1.4 - 3.9)E 0 (0/ 4)
Fe-59 (8)	260	2.6E 0	59	9.1E 0	4.3E 0
(0)		(-5.6 - 9.5)E 0 (0/ 4)		(5.3 - 12.9)E 0 (0/ 2)	(-2.2 - 12.9)E 0 (0/ 4)
Co-60 (8)	130	1.1E -1	09	1.4E 0	-4.5E -1
(0)		(-1.7 - 2.8)E 0 (0/ 4)		(3.6 - 277.0)E -2 (0/ 2)	(-2.9 - 2.2)E 0 (0/ 4)
Zn-65 (8)	260	-5.7E 0	59	6.4E 0	1.6E 0
(0)		(-1.2 - -0.3)E 1 (0/ 4)		(-6.2 - 19.0)E 0 (0/ 2)	(-7.5 - 19.0)E 0 (0/ 4)
Se-75 (8)		8.9E -1	06	3.0E 0	-1.2E 0
(0)		(-2.8 - 4.1)E 0 (0/ 4)		(1.9 - 4.1)E 0 (0/ 2)	(-5.5 - 1.9)E 0 (0/ 4)
Nb-95 (8)		-2.0E 0	56	6.0E -2	-3.7E -1
(0)		(-5.2 - 0.0)E 0 (0/ 4)		(-1.0 - 1.1)E 0 (0/ 2)	(-2.9 - 1.4)E 0 (0/ 4)
Zr-95 (8)		1.2E 0	59	9.1E 0	3.8E 0
(0)		(-8.1 - 6.7)E 0 (0/ 4)		(-1.1 - 19.3)E 0 (0/ 2)	(-1.8 - 19.3)E 0 (0/ 4)
Ru-103 (8)		-2.1E 0	56	3.3E 0	1.2E 0
(0)		(-1.1 - 0.2)E 1 (0/ 4)		(3.1 - 63.3)E -1 (0/ 2)	(-2.4 - 6.3)E 0 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.9-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Mussel Body (MU) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ru-106 (8)		-1.1E 1	56	8.7E 0	4.8E 0
(0)		(-3.4 - 2.2)E 1 (0/ 4)		(3.6 - 13.8)E 0 (0/ 2)	(-4.1 - 4.3)E 1 (0/ 4)
Ag-108m (8)		-1.1E 0	59	1.5E 0	3.2E -1
(0)		(-5.5 - 2.5)E 0 (0/ 4)		(1.3 - 1.8)E 0 (0/ 2)	(-1.4 - 1.8)E 0 (0/ 4)
Ag-110m (8)		-2.4E 0	56	4.0E 0	5.2E -1
(0)		(-9.0 - 0.4)E 0 (0/ 4)		(3.0 - 5.0)E 0 (0/ 2)	(-7.1 - 5.0)E 0 (0/ 4)
Sb-124 (8)		5.3E 0	09	7.8E 0	2.2E 0
(0)		(-7.5 - 23.2)E 0 (0/ 4)		(-7.5 - 23.2)E 0 (0/ 2)	(-2.8 - 13.0)E 0 (0/ 4)
Sb-125 (8)		-4.9E -1	56	4.0E 0	3.9E 0
(0)		(-4.3 - 3.2)E 0 (0/ 4)		(3.4 - 4.6)E 0 (0/ 2)	(-3.8 - 11.4)E 0 (0/ 4)
I-131 (8)		1.0E 1	09	2.1E 1	-3.3E 0
(0)		(-5.7 - 21.4)E 0 (0/ 4)		(2.1 - 2.1)E 1 (0/ 2)	(-9.2 - 2.7)E 0 (0/ 4)
Cs-134 (8)	130	-1.0E 0	56	1.4E 0	1.9E -1
(0)		(-5.0 - 2.5)E 0 (0/ 4)		(-5.7 - 33.5)E -1 (0/ 2)	(-1.6 - 3.4)E 0 (0/ 4)
Cs-137 (8)	150	-7.7E -1	59	2.1E 0	1.2E 0
(0)		(-2.9 - 2.3)E 0 (0/ 4)		(-2.1 - 6.2)E 0 (0/ 2)	(-2.1 - 6.2)E 0 (0/ 4)
Ba-140 (8)		1.1E 1	59	4.0E 1	3.6E 1
(0)		(-9.1 - 41.0)E 0 (0/ 4)		(1.0 - 6.9)E 1 (0/ 2)	(1.0 - 6.9)E 1 (0/ 4)
La-140 (8)		1.6E -1	09	1.0E 1	-5.5E 0
(0)		(-1.2 - 1.5)E 1 (0/ 4)		(5.5 - 15.4)E 0 (0/ 2)	(-2.5 - 0.3)E 1 (0/ 4)
Ce-141 (8)		-2.7E 0	59	5.1E 0	3.7E 0
(0)		(-1.0 - 0.2)E 1 (0/ 4)		(-5.7 - 15.9)E 0 (0/ 2)	(-5.7 - 15.9)E 0 (0/ 4)
Ce-144 (8)		7.9E -1	09	6.7E 0	-1.3E 0
(0)		(-1.3 - 1.4)E 1 (0/ 4)		(-7.1 - 141.0)E -1 (0/ 2)	(-6.2 - 3.1)E 0 (0/ 4)
Tl-208 (8)		-7.9E -1	56	6.6E 0	4.1E 0
(0)		(-6.9 - 4.0)E 0 (0/ 4)		(5.4 - 7.9)E 0 (1/ 2)	(-8.5 - 78.8)E -1 (1/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.9-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Mussel Body (MU) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Pb-212 (8) (0)		1.6E 0 (-1.1 - 1.5)E 1 (0/ 4)	09	7.4E 0 (0.0 - 1.5)E 1 (0/ 2)	1.6E 0 (0.0 - 4.4)E 0 (0/ 4)
Pb-214 (8) (0)		9.3E 0 (1.6 - 17.1)E 0 (0/ 4)	09	1.7E 1 (1.7 - 1.7)E 1 (0/ 2)	7.8E 0 (-3.0 - 19.3)E 0 (0/ 4)
Bi-214 (8) (0)		3.2E 0 (5.2 - 52.6)E -1 (0/ 4)	09	3.5E 0 (3.3 - 3.7)E 0 (0/ 2)	-8.4E 0 (-2.6 - 0.4)E 1 (0/ 4)
Ra-226 (8) (0)		3.2E 0 (5.2 - 52.6)E -1 (0/ 4)	09	3.5E 0 (3.3 - 3.7)E 0 (0/ 2)	-8.4E 0 (-2.6 - 0.4)E 1 (0/ 4)
Ac-228 (8) (0)		1.3E 1 (6.4 - 19.2)E 0 (0/ 4)	06	1.7E 1 (1.6 - 1.9)E 1 (0/ 2)	3.9E 0 (1.5 - 5.8)E 0 (0/ 4)
Th-228 (8) (0)		1.6E 0 (-1.1 - 1.5)E 1 (0/ 4)	09	7.4E 0 (0.0 - 1.5)E 1 (0/ 2)	1.6E 0 (0.0 - 4.4)E 0 (0/ 4)
Th-230 (8) (0)		3.2E 0 (5.2 - 52.6)E -1 (0/ 4)	09	3.5E 0 (3.3 - 3.7)E 0 (0/ 2)	-8.4E 0 (-2.6 - 0.4)E 1 (0/ 4)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.9-2
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Mussel Shell (MS) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Sr-89 **(4)**		**-2.1E 2**	**06**	**-2.1E 2**	**-3.1E 2**
(0)		**(-4.6 - 0.5)E 2**		**(-4.6 - 0.5)E 2**	**(-3.1 - -3.0)E 2**
		(0/ 2)		**(0/ 2)**	**(0/ 2)**
Sr-90 **(4)**		**-5.8E 1**	**56**	**-2.0E 1**	**-2.0E 1**
(0)		**(-1.5 - 0.3)E 2**		**(-1.6 - 1.2)E 2**	**(-1.6 - 1.2)E 2**
		(0/ 2)		**(0/ 2)**	**(0/ 2)**

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.10 Irish Moss

There is no REMP technical requirement defined in the ODCM to collect Irish Moss (algae) samples. As a supplement to the required REMP, semiannual Chondrus (Irish Moss) samples were collected from an indicator area (AL-05) near the plant discharge and a control location (AL-55) within Ipswich Bay. If plant-related radionuclides were re-concentrating in the aquatic environment, an early indication of this might be shown in this type of environmental species. Four routine samples (two indicators and two controls) were collected for the year.

A gamma analysis was performed on each sample. Although not required by Table 5.2-1, the LLDs associated with food products were applied to ensure adequate counting statistics. Naturally-occurring K-40 was detected in all samples and Be-7 was detected in one out of the four samples. Other naturally-occurring radionuclides detected include Th-228 (1 sample). For the off-shore indicator station (AL-05), no plant-related radionuclides were detected in any sample. Therefore, no plant-related increasing or decreasing trends were observed. Subsequently, there is no dose or impact to the environment from plant operations. This is consistent with the pre-operational program and previous years of plant operations.

The REMP Summary Table 3.10-1 lists the range of analysis results by radionuclide for Indicator and Control Stations for Irish Moss samples. Attachment 1 lists the individual analysis results for each measurement of Irish moss under the Sample Type code AL.

Any sample collection and analysis deviations from the ODCM defined program, or reportable concentrations that may have occurred during the year, are described in Section 5.

Table 3.10-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Irish Moss (AL) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Be-7 (4)		2.0E 1	55	3.0E 2	3.0E 2
(0)		(0.0 - 3.9)E 1 (0/ 2)		(0.0 - 5.9)E 2 (1/ 2)	(0.0 - 5.9)E 2 (1/ 2)
K-40 (4)		9.1E 3	05	9.1E 3	8.7E 3
(0)		(9.0 - 9.3)E 3 (2/ 2)		(9.0 - 9.3)E 3 (2/ 2)	(8.6 - 8.8)E 3 (2/ 2)
Cr-51 (4)		-1.7E 1	55	5.9E 1	5.9E 1
(0)		(-2.8 - -0.6)E 1 (0/ 2)		(1.0 - 10.7)E 1 (0/ 2)	(1.0 - 10.7)E 1 (0/ 2)
Mn-54 (4)		-6.1E 0	55	2.2E 0	2.2E 0
(0)		(-6.4 - -5.9)E 0 (0/ 2)		(1.4 - 3.0)E 0 (0/ 2)	(1.4 - 3.0)E 0 (0/ 2)
Co-57 (4)		-3.4E 0	55	1.7E 0	1.7E 0
(0)		(-7.2 - 0.3)E 0 (0/ 2)		(4.4 - 29.8)E -1 (0/ 2)	(4.4 - 29.8)E -1 (0/ 2)
Co-58 (4)		-3.9E 0	05	-3.9E 0	-7.3E 0
(0)		(-6.0 - -1.7)E 0 (0/ 2)		(-6.0 - -1.7)E 0 (0/ 2)	(-1.3 - -0.1)E 1 (0/ 2)
Fe-59 (4)		1.6E 1	05	1.6E 1	-1.3E 1
(0)		(2.1 - 29.8)E 0 (0/ 2)		(2.1 - 29.8)E 0 (0/ 2)	(-2.2 - -0.3)E 1 (0/ 2)
Co-60 (4)		-5.2E 0	55	4.5E 0	4.5E 0
(0)		(-1.1 - 0.1)E 1 (0/ 2)		(1.5 - 88.1)E -1 (0/ 2)	(1.5 - 88.1)E -1 (0/ 2)
Zn-65 (4)		-1.2E 1	55	6.9E 0	6.9E 0
(0)		(-1.8 - -0.6)E 1 (0/ 2)		(5.2 - 8.5)E 0 (0/ 2)	(5.2 - 8.5)E 0 (0/ 2)
Se-75 (4)		1.2E 1	05	1.2E 1	4.4E 0
(0)		(5.4 - 18.1)E 0 (0/ 2)		(5.4 - 18.1)E 0 (0/ 2)	(4.3 - 4.5)E 0 (0/ 2)
Nb-95 (4)		-6.8E 0	55	3.9E 0	3.9E 0
(0)		(-9.7 - -4.0)E 0 (0/ 2)		(3.1 - 4.7)E 0 (0/ 2)	(3.1 - 4.7)E 0 (0/ 2)
Zr-95 (4)		-8.1E 0	05	-8.1E 0	-1.1E 1
(0)		(-1.9 - 0.3)E 1 (0/ 2)		(-1.9 - 0.3)E 1 (0/ 2)	(-2.1 - 0.0)E 1 (0/ 2)
Ru-103 (4)		-1.2E 0	05	-1.2E 0	-1.7E 0
(0)		(-3.4 - 1.0)E 0 (0/ 2)		(-3.4 - 1.0)E 0 (0/ 2)	(-3.6 - 0.3)E 0 (0/ 2)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.10-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Irish Moss (AL) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ru-106 (4) (0)		-9.1E 0 (-2.5 - 0.7)E 1 (0/ 2)	55	5.8E 0 (5.7 - 5.9)E 0 (0/ 2)	5.8E 0 (5.7 - 5.9)E 0 (0/ 2)
Ag-108m (4) (0)		-3.0E 0 (-3.6 - -2.4)E 0 (0/ 2)	55	1.8E 0 (-1.7 - 5.3)E 0 (0/ 2)	1.8E 0 (-1.7 - 5.3)E 0 (0/ 2)
Ag-110m (4) (0)		-1.3E 1 (-1.7 - -0.9)E 1 (0/ 2)	55	1.7E 0 (9.0 - 25.8)E -1 (0/ 2)	1.7E 0 (9.0 - 25.8)E -1 (0/ 2)
Sb-124 (4) (0)		-8.3E 0 (-1.8 - 0.1)E 1 (0/ 2)	55	-7.1E 0 (-1.1 - -0.3)E 1 (0/ 2)	-7.1E 0 (-1.1 - -0.3)E 1 (0/ 2)
Sb-125 (4) (0)		-6.9E 0 (-1.2 - -0.2)E 1 (0/ 2)	55	-7.1E -1 (-1.1 - 1.0)E 1 (0/ 2)	-7.1E -1 (-1.1 - 1.0)E 1 (0/ 2)
I-131 (4) (0)	60	3.6E 0 (-1.9 - 9.0)E 0 (0/ 2)	55	1.0E 1 (0.0 - 2.0)E 1 (0/ 2)	1.0E 1 (0.0 - 2.0)E 1 (0/ 2)
Cs-134 (4) (0)	60	-4.0E 0 (-8.9 - 0.9)E 0 (0/ 2)	55	1.1E 0 (-6.5 - 234.0)E -2 (0/ 2)	1.1E 0 (-6.5 - 234.0)E -2 (0/ 2)
Cs-137 (4) (0)	80	-5.7E 0 (-8.5 - -3.0)E 0 (0/ 2)	55	7.4E 0 (4.5 - 10.2)E 0 (0/ 2)	7.4E 0 (4.5 - 10.2)E 0 (0/ 2)
Ba-140 (4) (0)		-4.6E 0 (-1.4 - 0.5)E 1 (0/ 2)	55	1.5E 1 (-2.6 - 5.6)E 1 (0/ 2)	1.5E 1 (-2.6 - 5.6)E 1 (0/ 2)
La-140 (4) (0)		-1.8E 1 (-2.4 - -1.1)E 1 (0/ 2)	55	-3.7E 0 (-1.0 - 0.3)E 1 (0/ 2)	-3.7E 0 (-1.0 - 0.3)E 1 (0/ 2)
Ce-141 (4) (0)		-1.9E 1 (-2.1 - -1.7)E 1 (0/ 2)	55	-5.6E -1 (-2.3 - 1.2)E 0 (0/ 2)	-5.6E -1 (-2.3 - 1.2)E 0 (0/ 2)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.10-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Irish Moss (AL) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Ce-144 (4) (0)		-1.5E 1 (-2.9 - -0.1)E 1 (0/ 2)	55	-9.1E 0 (-1.7 - -0.1)E 1 (0/ 2)	-9.1E 0 (-1.7 - -0.1)E 1 (0/ 2)
Ac-228 (4) (0)		2.2E 1 (-2.0 - 6.4)E 1 (0/ 2)	05	2.2E 1 (-2.0 - 6.4)E 1 (0/ 2)	1.0E 1 (-5.1 - 26.1)E 0 (0/ 2)
Th-228 (4) (0)		4.1E 0 (4.2 - 76.8)E -1 (0/ 2)	55	2.4E 1 (1.8 - 3.0)E 1 (1/ 2)	2.4E 1 (1.8 - 3.0)E 1 (1/ 2)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.11 Food Crop

There is no requirement for food crop or vegetation samples as long as the required milk locations are available. As noted in Section 3.3, milk sampling at the minimum required number of locations in 2017 was not possible due to the limited inventory of milk animal sites in the plant vicinity. To compensate for this, vegetation samples were collected as part of the REMP. Section 3.12 describes the alternate broad leafy vegetation (TG) collections.

In addition to the broad leafy vegetation sampling, nine food crop (TF) samples were collected from three locations listed on Table 2.0-2 (two indicator stations, TF-02 and TF-03, and one control station, TF-06) during the growing season months (June, July and August). These included strawberries in June (Lab numbers 426365001, 2, & 3), blueberries and green beans in July (Lab numbers 428521001, 2, & 3) and tomatoes in August (Lab numbers 431061001, 2 & 3).

A gamma analysis was performed on each sample. Naturally-occurring K-40 was detected in all samples for both indicator and control stations. Similar to past years, no plant-related radionuclides were detected in any samples. Therefore, no increasing or decreasing trends are identified. Subsequently, there is no dose to the public or impact on the environment through this pathway due to plant operations. This is consistent with the pre-operational program and with previous years of plant operations.

The following REMP Summary (Table 3.11-1) lists the range of analysis results by radionuclide for indicator and control stations for the Food Crop environmental media. Attachment 1 to this report lists the individual analysis results for each measurement of Food Crops under the Sample Type code TF.

Any sample collection and analysis deviations from the ODCM defined program, or reportable concentrations that may have occurred during the year, are described in Section 5.

Table 3.11-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Food Crop (TF) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Be-7 (9) (0)		4.1E 0 (-2.8 - 3.8)E 1 (0/ 6)	02	6.3E 0 (0.0 - 1.5)E 1 (0/ 3)	2.6E 0 (-2.1 - 9.8)E 0 (0/ 3)
K-40 (9) (0)		1.6E 3 (5.6 - 21.6)E 2 (6/ 6)	03	1.7E 3 (1.3 - 2.2)E 3 (3/ 3)	1.4E 3 (6.9 - 25.5)E 2 (3/ 3)
Cr-51 (9) (0)		-6.2E 0 (-3.2 - 1.1)E 1 (0/ 6)	02	-5.7E 0 (-2.9 - 0.8)E 1 (0/ 3)	-1.8E 1 (-2.3 - -0.9)E 1 (0/ 3)
Mn-54 (9) (0)		-4.3E -1 (-4.6 - 1.7)E 0 (0/ 6)	06	1.4E 0 (3.9 - 18.9)E -1 (0/ 3)	1.4E 0 (3.9 - 18.9)E -1 (0/ 3)
Co-57 (9) (0)		1.0E 0 (-1.1 - 2.7)E 0 (0/ 6)	03	1.0E 0 (-1.1 - 2.7)E 0 (0/ 3)	-8.4E -1 (-1.3 - -0.5)E 0 (0/ 3)
Co-58 (9) (0)		-7.6E -1 (-2.2 - 3.1)E 0 (0/ 6)	03	-2.4E -1 (-2.2 - 3.1)E 0 (0/ 3)	-6.2E -1 (-3.0 - 1.6)E 0 (0/ 3)
Fe-59 (9) (0)		2.1E 0 (-7.8 - 12.3)E 0 (0/ 6)	03	6.9E 0 (2.8 - 12.3)E 0 (0/ 3)	1.5E 0 (-2.5 - 4.1)E 0 (0/ 3)
Co-60 (9) (0)		1.2E 0 (-1.6 - 10.4)E 0 (0/ 6)	02	2.6E 0 (-1.4 - 10.4)E 0 (0/ 3)	3.6E -1 (-7.4 - 24.5)E -1 (0/ 3)
Zn-65 (9) (0)		8.0E -3 (-4.9 - 6.0)E 0 (0/ 6)	03	3.6E 0 (2.0 - 59.7)E -1 (0/ 3)	1.3E 0 (-2.6 - 5.2)E 0 (0/ 3)
Se-75 (9) (0)		9.2E -1 (-2.1 - 4.8)E 0 (0/ 6)	03	3.0E 0 (1.8 - 4.8)E 0 (0/ 3)	2.4E 0 (-3.8 - 75.2)E -1 (0/ 3)
Nb-95 (9) (0)		1.2E 0 (-3.3 - 3.9)E 0 (0/ 6)	03	2.1E 0 (7.7 - 39.3)E -1 (0/ 3)	-3.7E -1 (-2.2 - 1.0)E 0 (0/ 3)
Zr-95 (9) (0)		4.3E -1 (-5.5 - 5.4)E 0 (0/ 6)	03	4.5E -1 (-5.5 - 5.4)E 0 (0/ 3)	-1.6E 0 (-3.6 - 1.8)E 0 (0/ 3)
Ru-103 (9) (0)		-2.1E 0 (-4.6 - 1.7)E 0 (0/ 6)	06	-4.3E -1 (-2.0 - 0.5)E 0 (0/ 3)	-4.3E -1 (-2.0 - 0.5)E 0 (0/ 3)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.11-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Food Crop (TF) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations Mean Range (No. Detected**)	Station With Highest Mean Station	Station With Highest Mean Mean Range (No. Detected**)	Control Stations Mean Range (No. Detected**)
Ru-106 (9)		-6.2E 0	06	3.3E 1	3.3E 1
(0)		(-2.4 - 1.7)E 1 (0/ 6)		(-4.1 - 54.0)E 0 (0/ 3)	(-4.1 - 54.0)E 0 (0/ 3)
Ag-108m (9)		-7.3E -1	06	-2.4E -2	-2.4E -2
(0)		(-3.8 - 3.0)E 0 (0/ 6)		(-3.7 - 2.1)E -1 (0/ 3)	(-3.7 - 2.1)E -1 (0/ 3)
Ag-110m (9)		2.3E -1	03	1.1E 0	9.4E -1
(0)		(-3.2 - 9.0)E 0 (0/ 6)		(-3.2 - 9.0)E 0 (0/ 3)	(-3.0 - 4.6)E 0 (0/ 3)
Sb-124 (9)		5.0E -1	06	1.3E 0	1.3E 0
(0)		(-2.3 - 6.1)E 0 (0/ 6)		(-1.6 - 5.5)E 0 (0/ 3)	(-1.6 - 5.5)E 0 (0/ 3)
Sb-125 (9)		-6.9E 0	06	3.9E 0	3.9E 0
(0)		(-1.6 - 0.4)E 1 (0/ 6)		(0.0 - 1.0)E 1 (0/ 3)	(0.0 - 1.0)E 1 (0/ 3)
I-131 (9)	60	9.2E -1	03	4.5E 0	-6.5E 0
(0)		(-5.9 - 8.9)E 0 (0/ 6)		(3.4 - 89.0)E -1 (0/ 3)	(-1.2 - -0.1)E 1 (0/ 3)
Cs-134 (9)	60	2.5E 0	02	4.5E 0	-1.6E 0
(0)		(-2.1 - 6.0)E 0 (0/ 6)		(2.6 - 6.0)E 0 (0/ 3)	(-3.2 - 1.2)E 0 (0/ 3)
Cs-137 (9)	80	2.0E -1	03	1.2E 0	8.4E -1
(0)		(-1.6 - 2.9)E 0 (0/ 6)		(-9.8 - 29.0)E -1 (0/ 3)	(1.7 - 131.0)E -2 (0/ 3)
Ba-140 (9)		8.5E 0	03	1.6E 1	1.0E 0
(0)		(-6.2 - 27.4)E 0 (0/ 6)		(8.2 - 27.4)E 0 (0/ 3)	(-1.3 - 0.9)E 1 (0/ 3)
La-140 (9)		-2.2E 0	02	-7.0E -1	-1.5E 0
(0)		(-7.5 - 5.1)E 0 (0/ 6)		(-5.1 - 5.1)E 0 (0/ 3)	(-5.4 - 3.5)E 0 (0/ 3)
Ce-141 (9)		-6.1E -1	02	9.5E -1	-3.2E 0
(0)		(-6.2 - 4.6)E 0 (0/ 6)		(-6.2 - 4.6)E 0 (0/ 3)	(-6.4 - 0.8)E 0 (0/ 3)
Ce-144 (9)		-1.2E 0	06	5.5E 0	5.5E 0
(0)		(-1.8 - 1.8)E 1 (0/ 6)		(-1.1 - 3.3)E 1 (0/ 3)	(-1.1 - 3.3)E 1 (0/ 3)
Ac-228 (9)		1.3E 1	02	2.1E 1	8.5E 0
(0)		(1.2 - 433.0)E -1 (0/ 6)		(3.9 - 433.0)E -1 (0/ 3)	(-5.9 - 177.0)E -1 (0/ 3)
Th-228 (9)		3.0E 0	03	5.7E 0	1.4E 0
(0)		(-2.7 - 8.4)E 0 (0/ 6)		(1.6 - 8.4)E 0 (0/ 3)	(-1.9 - 3.1)E 0 (0/ 3)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.12 Vegetation

In lieu of milk sampling, the ODCM, Table A.9.1-1, requires that broad leafy vegetation (TG) samples grown in the nearest of two different offsite locations with the highest D/Q, and from one control location 15-30 km distant in the least prevalent wind direction, be collected when available (growing season). Offsite locations are defined in the UFSAR as the land beyond a 3000-foot radius of the two Containment Building centerlines. The analysis of garden locations in the Land Use Census provides a ranking of potential sampling sites for use in determining sampling locations in the general population. Since sampling of broad leaf garden vegetables at high D/Q locations is not feasible due to uncertain availability, other types of broad leafy vegetation were utilized.

Two locations at the site boundary with a maximum D/Q (higher values than determined in the 2017 Land Use Census garden listing) were selected over ranked D/Q gardens in the general population. These two Indicator locations (TG-08 and TG-09) are on site property in areas with available sample media. A third far-field control location (TG-10) was selected in Georgetown, MA. Samples consisted of tree leaves, as broad leaf vegetation provides increased reliability for sample availability. For 2017, a total of 18 monthly (growing season) broad leaf vegetation samples were collected and analyzed by gamma spectroscopy.

A gamma analysis was performed on each sample. Naturally-occurring K-40 and Be-7 were detected in all samples for both indicator and control stations. Naturally-occurring Ac-228 was detected in 3 out of 18 samples. No plant-related radionuclides were detected in any samples. Therefore, no increasing or decreasing trends are identified. Subsequently, there is no dose to the public or impact on the environment through this pathway due to plant operations.

The following REMP Summary (Table 3.12-1) lists the range of analysis results by radionuclide for indicator and control stations for the broad leaf vegetation environmental media. Attachment 1 to this report lists the individual analysis results for each measurement of broad leaf vegetation under the Sample Type code TG.

Any sample collection and analysis deviations from the ODCM required program, or reportable concentrations that may have occurred during the year, are described in Section 5.

Table 3.12-1
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Vegetation (TG) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Be-7 (18) (0)		1.1E 3 (3.9 - 26.7)E 2 (12/ 12)	10	1.6E 3 (6.7 - 28.1)E 2 (6/ 6)	1.6E 3 (6.7 - 28.1)E 2 (6/ 6)
K-40 (18) (0)		4.5E 3 (3.4 - 5.6)E 3 (12/ 12)	09	4.7E 3 (3.7 - 5.4)E 3 (6/ 6)	3.9E 3 (2.5 - 5.6)E 3 (6/ 6)
Cr-51 (18) (0)		-1.7E 1 (-9.1 - 5.6)E 1 (0/ 12)	10	-4.5E 0 (-7.1 - 8.2)E 1 (0/ 6)	-4.5E 0 (-7.1 - 8.2)E 1 (0/ 6)
Mn-54 (18) (0)		4.6E 0 (-8.8 - 19.5)E 0 (0/ 12)	09	4.8E 0 (-1.5 - 19.5)E 0 (0/ 6)	2.8E 0 (-9.0 - 10.9)E 0 (0/ 6)
Co-57 (18) (0)		-2.2E 0 (-6.0 - 1.6)E 0 (0/ 12)	10	-1.9E -1 (-6.6 - 11.0)E 0 (0/ 6)	-1.9E -1 (-6.6 - 11.0)E 0 (0/ 6)
Co-58 (18) (0)		7.1E -1 (-8.0 - 12.8)E 0 (0/ 12)	08	2.5E 0 (-5.5 - 12.8)E 0 (0/ 6)	2.2E 0 (-1.6 - 1.4)E 1 (0/ 6)
Fe-59 (18) (0)		-6.2E 0 (-2.6 - 1.3)E 1 (0/ 12)	10	6.4E 0 (-5.4 - 14.8)E 0 (0/ 6)	6.4E 0 (-5.4 - 14.8)E 0 (0/ 6)
Co-60 (18) (0)		9.1E -1 (-1.4 - 1.8)E 1 (0/ 12)	09	3.3E 0 (-1.2 - 1.8)E 1 (0/ 6)	2.1E 0 (-1.0 - 1.5)E 1 (0/ 6)
Zn-65 (18) (0)		-3.6E 0 (-2.9 - 2.8)E 1 (0/ 12)	10	-2.5E 0 (-4.2 - 1.6)E 1 (0/ 6)	-2.5E 0 (-4.2 - 1.6)E 1 (0/ 6)
Se-75 (18) (0)		2.0E 0 (-1.6 - 2.3)E 1 (0/ 12)	08	5.6E 0 (-6.4 - 22.5)E 0 (0/ 6)	1.0E 0 (-1.4 - 2.0)E 1 (0/ 6)
Nb-95 (18) (0)		-1.2E 0 (-1.2 - 1.1)E 1 (0/ 12)	10	9.0E 0 (2.0 - 18.4)E 0 (0/ 6)	9.0E 0 (2.0 - 18.4)E 0 (0/ 6)
Zr-95 (18) (0)		-2.6E 0 (-2.0 - 0.8)E 1 (0/ 12)	10	-1.1E 0 (-2.0 - 1.2)E 1 (0/ 6)	-1.1E 0 (-2.0 - 1.2)E 1 (0/ 6)
Ru-103 (18) (0)		-5.7E -1 (-1.1 - 0.9)E 1 (0/ 12)	10	5.5E -1 (-6.3 - 6.1)E 0 (0/ 6)	5.5E -1 (-6.3 - 6.1)E 0 (0/ 6)
Ru-106 (18) (0)		9.3E -1 (-7.5 - 6.4)E 1 (0/ 12)	10	3.1E 1 (-3.7 - 10.9)E 1 (0/ 6)	3.1E 1 (-3.7 - 10.9)E 1 (0/ 6)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

Table 3.12-1 (Continued)
Radiological Environmental Monitoring Program Summary
Seabrook Nuclear Power Station, Seabrook, NH
(January - December 2017)

MEDIUM: Vegetation (TG) UNITS: pCi/kg

Radionuclides (No. Analyses) (Non-Routine*)	Required LLD	Indicator Stations: Mean Range (No. Detected**)	Station With Highest Mean: Station	Station With Highest Mean: Mean Range (No. Detected**)	Control Stations: Mean Range (No. Detected**)
Ag-108m (18) (0)		6.8E -1 (-1.1 - 1.2)E 1 (0/ 12)	09	3.3E 0 (-6.6 - 12.3)E 0 (0/ 6)	-5.5E 0 (-1.4 - 0.0)E 1 (0/ 6)
Ag-110m (18) (0)		2.1E 0 (-1.8 - 2.3)E 1 (0/ 12)	08	2.5E 0 (-7.0 - 22.6)E 0 (0/ 6)	-2.4E 0 (-1.9 - 2.4)E 1 (0/ 6)
Sb-124 (18) (0)		-1.5E 0 (-2.0 - 1.8)E 1 (0/ 12)	10	1.2E 1 (-3.0 - 4.8)E 1 (0/ 6)	1.2E 1 (-3.0 - 4.8)E 1 (0/ 6)
Sb-125 (18) (0)		-3.7E 0 (-2.0 - 1.9)E 1 (0/ 12)	10	1.9E 0 (-2.7 - 4.9)E 1 (0/ 6)	1.9E 0 (-2.7 - 4.9)E 1 (0/ 6)
I-131 (18) (0)	60	-5.0E 0 (-9.6 - 4.3)E 1 (0/ 12)	08	4.3E 0 (-1.0 - 4.3)E 1 (0/ 6)	-8.4E 0 (-2.5 - 0.7)E 1 (0/ 6)
Cs-134 (18) (0)	60	1.8E 0 (-1.4 - 2.1)E 1 (0/ 12)	08	5.1E 0 (-6.6 - 20.7)E 0 (0/ 6)	-4.1E 0 (-2.3 - 0.9)E 1 (0/ 6)
Cs-137 (18) (0)	80	1.9E 0 (-1.7 - 1.8)E 1 (0/ 12)	10	1.2E 1 (5.7 - 268.0)E -1 (0/ 6)	1.2E 1 (5.7 - 268.0)E -1 (0/ 6)
Ba-140 (18) (0)		1.6E 1 (-5.1 - 13.4)E 1 (0/ 12)	09	1.9E 1 (-1.4 - 5.4)E 1 (0/ 6)	-1.0E 1 (-6.9 - 1.8)E 1 (0/ 6)
La-140 (18) (0)		-4.4E 0 (-3.1 - 1.2)E 1 (0/ 12)	10	4.3E 0 (-1.3 - 2.5)E 1 (0/ 6)	4.3E 0 (-1.3 - 2.5)E 1 (0/ 6)
Ce-141 (18) (0)		-5.1E 0 (-4.5 - 2.1)E 1 (0/ 12)	10	-3.7E -2 (-2.4 - 2.0)E 1 (0/ 6)	-3.7E -2 (-2.4 - 2.0)E 1 (0/ 6)
Ce-144 (18) (0)		-1.2E 1 (-8.2 - 5.4)E 1 (0/ 12)	08	8.8E -1 (-3.4 - 3.6)E 1 (0/ 6)	-1.4E 1 (-5.8 - 2.1)E 1 (0/ 6)
Ac-228 (18) (0)		1.9E 1 (-2.5 - 11.5)E 1 (0/ 12)	10	1.1E 2 (-6.8 - 30.7)E 1 (3/ 6)	1.1E 2 (-6.8 - 30.7)E 1 (3/ 6)
Th-228 (18) (0)		2.3E 0 (-4.1 - 2.7)E 1 (0/ 12)	09	6.2E 0 (-4.9 - 20.5)E 0 (0/ 6)	-1.6E 0 (-4.0 - 1.3)E 1 (0/ 6)

* Non-Routine refers to those radionuclides that exceeded the Reporting Levels in ODCM Table A.9.1-3.
** The fraction of detectable measurements (i.e., > MDC with no uncertain identification) is shown in parentheses.

3.13 Direct Radiation

Direct gamma radiation exposure was measured with thermoluminescent dosimeters (TLDs). Two TLD badges are placed at each of the designated monitoring stations. Each TLD badge has three $CaSO_4$:Tm elements. The badges were collected and read on a quarterly schedule. A location result is an average of six independent readings per quarter. A total of forty-six stations are located offsite, forty of which are required by the ODCM.

The exposure rates were normalized to a standard 91-day quarter so that quarterly results from any monitoring location can be compared to another location based on an equivalent time period of exposure. A summary of the 2017 data for the plant operational REMP is shown in Table 3.13-1. Figures 3.6 through 3.14 provide a comparison of quarterly TLD location responses in 2017 and illustrate the naturally variation in exposure rates quarter to quarter. Figures 3.6.1 through 3.14.1 provide a long term trend line for each of the environmental TLD locations.

The exposure rate response at individual monitoring stations have on occasion exhibited step changes at some point in the past that are related to changes in local conditions in the area of the dosimeter measurement. As an example, the outer ring TL-33 (a parking lot located 9.8 km south of the plant) was observed for several quarters in the recent past to approach or exceed the normal expected environmental fluctuations based on observed history. The average TLD exposure rate from the 2nd quarter 2011 through the 4th quarter of 2013 is reported as 21.8 mR/quarter. For the 7 prior quarters (3rd quarter 2009 to the 1st quarter 2011), the average TLD response was 18.6 mR/quarter, or approximately 17% lower than the most recent trend history. Since no other TLDs in the same sector or closer to the plant showed an average increase in measured response above the expected, the change at TL-33 was attributed to a local change in the background radiation associated with parking lot modifications and not with Seabrook Station operations. Field investigations of TL-33 indicated that the parking lot appeared to be re-graded with new fill/gravel material which could have increased the natural concentration of background radiation that the TLD measures. The expected background exposure level for location TL-33 was re-indexed to 20.6 mR/quarter in 2013 to reflect the observed change in background radiation. Two other locations (TL-01 and TL-69) also indicated changes in background exposure rates trends over time (un-related to Seabrook operations) and had their expected background exposure levels re-indexed to 17.4 mR/quarter and 13.7 mR/quarter, respectively, in 2013.

Overall, the REMP direct radiation program showed no statistically significant indication of increased direct radiation above the variable background measured exposure rate in unrestricted areas. This is demonstrated by the fact that indicator location results (as a group) are statistically the same as control locations. The 2017 annual mean of all indicator locations was 15.7 mR/91-day quarter while the mean of all control locations was 16.3 mR/91-day quarter. This indicates that collectively there is no statistical difference in the annual direct dose as a function of distance from the plant. As a result, no direct radiation dose beyond the site boundary was attributed to station operation during 2017.

Starting in 2015, a supplemental analytical method was implemented to evaluate the TLD measurements. Using the method described in ANSI/HPS N13.37-2014, quarterly and annual baseline dose for each TLD location was determined using appropriate statistical analytical methods considering data from 2004 through 2014. Quarterly and annual dose for 2017 was compared to baseline values to determine if an Investigation Level had been exceeded for evaluation of potential dose to a member of the public. An Investigation Level is considered to be exceeded under the following conditions:

$$\text{Quarterly: If } M_Q > (B_Q + MDD_Q), \text{ then } F_Q = M_Q - B_Q$$

Where:

M_Q is the normalized quarterly field measurement result
B_Q is the quarterly baseline background dose
MDD_Q is the quarterly minimum differential dose and
F_Q is the quarterly facility related dose

Or: Annually: If $M_A > (B_A + MDD_A)$, then $F_A = M_A - B_A$

Where:

M_A is the sum of the four normalized quarterly measurement values
B_A is the annual baseline background dose
MDD_A is the annual minimum differential dose
F_A is the annual facility related dose

Table 3.13-3 summarizes the evaluation of the TLD measurements using the methodology described in ANSI/HPS N13.37-2014. No TLD location exceeded the Quarterly or Annual Investigation Level in 2017. Therefore, no evaluation of dose to a member of the public from direct or scattered radiation was performed.

The direct radiation-monitoring program demonstrated that no increasing or decreasing trends were detected. Therefore, there was no offsite dose to the public or impact to the environment from the operation of the plant.

Any TLD collection and analysis deviations from the ODCM required program that may have occurred during the year are described in Section 5.

TABLE 3.13-1

Environmental TLD Measurements
Net Exposure in mR/Standard Quarter (91 days)

2017

Sta. No.	Description	1st Quarter Exp.	S.D.	2nd Quarter Exp.	S.D.	3rd Quarter Exp.	S.D.	4th Quarter Exp.	S.D.	Qtr Ave. Exp.
TL-01	Brimmer's Lane	17.7	± 0.9	17.5	± 0.7	18.4	± 0.7	17.4	± 0.7	17.8
TL-02	Landing Road	14.6	± 0.8	13.6	± 0.5	14.6	± 0.6	13.6	± 0.7	14.1
TL-03	Glade Path	14.3	± 0.8	13.8	± 0.6	14.6	± 0.6	13.3	± 0.6	14.0
TL-04	Island Path	14.6	± 0.7	14.4	± 0.4	15.1	± 0.8	13.9	± 0.6	14.5
TL-05	Harbor Road	15.1	± 0.7	14.1	± 0.7	14.6	± 0.7	13.6	± 0.5	14.4
TL-06	Barge Landing	13.8	± 0.6	14.1	± 0.6	14.7	± 0.6	13.5	± 0.6	14.0
TL-07	Cross Road	12.4	± 0.7	12.6	± 0.6	12.9	± 0.6	12.3	± 0.6	12.6
TL-08	Farm Lane	14.7	± 0.6	14.1	± 0.7	15.4	± 1.0	13.9	± 0.6	14.5
TL-09	Farm Lane	15.1	± 0.7	15.3	± 0.5	16.2	± 0.6	15.8	± 0.6	15.6
TL-10	Site Boundary	15.2	± 0.7	15.2	± 0.6	16.8	± 1.0	14.8	± 0.8	15.5
TL-11	Site Boundary	18.0	± 0.7	16.8	± 0.7	17.7	± 0.8	16.9	± 0.7	17.4
TL-12	Site Boundary	17.6	± 0.8	17.8	± 0.8	19.5	± 1.0	17.6	± 0.9	18.1
TL-13	Inside Site Boundary	17.3	± 0.7	17.6	± 0.6	18.2	± 0.8	17.5	± 0.7	17.7
TL-14	Trailer Park	15.6	± 0.7	15.3	± 0.6	16.7	± 0.7	15.7	± 0.7	15.8
TL-15	Brimmer's Lane	17.8	± 0.8	17.3	± 1.2	19.2	± 0.9	18.3	± 1.1	18.2
TL-16	Brimmer's Lane	15.7	± 0.7	15.8	± 0.5	16.6	± 0.7	16.2	± 0.6	16.1
TL-17	South Road	15.3	± 0.8	15.5	± 0.6	16.5	± 0.7	14.8	± 1.0	15.5
TL-18	Mill Road	16.0	± 0.8	15.9	± 0.8	17.4	± 0.9	16.6	± 0.6	16.5
TL-19	Appledore Avenue	14.8	± 0.7	14.8	± 0.5	15.2	± 0.8	14.7	± 0.6	14.9
TL-20	Ashworth Avenue	17.0	± 0.6	16.6	± 0.6	16.3	± 0.8	16.7	± 1.0	16.7
TL-21	Route 1A	18.2	± 0.8	18.0	± 0.6	18.1	± 0.7	17.4	± 0.7	17.9
TL-22	Cable Avenue	15.0	± 0.8	15.0	± 0.6	15.8	± 0.6	14.7	± 0.6	15.1
TL-23	Ferry Road	15.4	± 0.7	14.8	± 0.5	17.7	± 0.7	14.7	± 0.6	15.7
TL-24	Ferry Lots Lane	16.8	± 0.7	16.5	± 0.9	18.2	± 0.7	17.1	± 0.8	17.2
TL-25	Elm Street	14.9	± 0.8	15.3	± 0.6	15.9	± 0.7	15.2	± 0.7	15.3
TL-26	Route 107A	14.7	± 0.8	14.4	± 0.7	15.6	± 0.7	14.6	± 0.6	14.8
TL-27	Highland Street	15.6	± 0.7	15.5	± 0.6	15.8	± 0.9	15.6	± 0.8	15.6
TL-28	Route 150	15.7	± 0.7	16.5	± 0.9	16.8	± 0.6	15.8	± 0.5	16.2
TL-29	Frying Pan Lane	14.6	± 0.8	14.6	± 0.7	16.0	± 0.6	14.2	± 0.6	14.9
TL-30	Route 27	15.1	± 0.7	15.6	± 0.6	17.3	± 0.7	16.3	± 0.7	16.1
TL-31	Alumni Drive	13.5	± 0.6	14.2	± 0.6	14.7	± 0.7	13.9	± 0.6	14.1
TL-32	SB Elementary School	16.9	± 0.7	17.5	± 0.6	18.1	± 0.8	16.8	± 0.8	17.3
TL-33	Dock Area	11.0	± 0.6	10.8	± 0.5	11.0	± 0.7	10.5	± 0.5	10.8
TL-34	Bow Street	18.5	± 0.9	19.0	± 0.8	19.9	± 1.1	19.3	± 0.9	19.2
TL-35	Lincoln Ack. School	16.2	± 0.9	17.3	± 0.7	18.7	± 0.7	17.4	± 0.7	17.4
TL-36	Route 97(Control)	14.3	± 0.8	14.5	± 0.6	14.9	± 0.7	14.4	± 0.6	14.5
TL-37	Plaistow, NH (Control)	16.7	± 0.8	17.3	± 0.6	17.5	± 0.7	16.8	± 0.8	17.1
TL-38	Hampstead, NH (Control)	15.3	± 0.8	16.1	± 0.5	18.6	± 0.7	17.3	± 0.8	16.8

TABLE 3.13-1 (Continued)

Environmental TLD Measurements
Net Exposure in mR/Standard Quarter (91 days)

2017

Sta. No.	Description	1st Quarter Exp.	S.D.	2nd Quarter Exp.	S.D.	3rd Quarter Exp.	S.D.	4th Quarter Exp.	S.D.	Qtr. Ave. Exp.
TL-39	Fremont, NH (Control)	18.9	± 0.9	20.1	± 0.7	20.7	± 1.3	19.7	± 0.8	19.9
TL-40	Newmarket, NH (Control)	15.0	± 0.6	16.1	± 0.6	16.2	± 0.9	16.1	± 0.6	15.9
TL-41	Portsmouth, NH (Control)	16.3	± 0.8	15.9	± 0.8	17.0	± 0.8	15.9	± 0.8	16.3
TL-42	Ipswich, MA (Control)	13.4	± 0.5	13.2	± 0.7	14.2	± 0.6	13.5	± 0.6	13.6
TL-44	SB Education Center	14.4	± 0.6	14.0	± 0.5	15.1	± 0.6	14.3	± 0.6	14.5
TL-45	Hampton Fire Station	14.8	± 0.6	15.8	± 0.6	15.7	± 0.7	15.0	± 0.7	15.3
TL-46	SB Police Station	16.0	± 0.6	16.3	± 0.7	16.3	± 0.7	15.4	± 0.6	16.0
TL-47	Route 84	15.5	± 0.7	16.1	± 0.8	16.2	± 0.7	16.0	± 0.7	16.0
	Mean of Indicators	15.5		15.5		16.4		15.4		15.7
	Mean of Controls	15.7		16.2		17.0		16.2		16.3

Table 3.13-2

Pre-Operational Environmental TLD Measurements
Net Exposure in mR/Standard Quarter (91 days)

	1st Quarter Exp.	2nd Quarter Exp.	3rd Quarter Exp.	4th Quarter Exp.	Qtr. Ave Over Yr Exp.
1982					
Mean of Indicators	--	17.1	18.1	17.5	17.6
Mean of Controls	--	16.9	18.1	17.9	16.8
1983					
Mean of Indicators	16.7	17.1	18.8	17.9	17.6
Mean of Controls	16.9	17.5	18.7	18.4	17.9
1984					
Mean of Indicators	16.1	17.1	16.9	17.5	17.0
Mean of Controls	17.6	17.4	15.8	18.7	17.4
1985					
Mean of Indicators	16.9	18.0	18.9	16.1	17.4
Mean of Controls	16.8	17.7	18.9	16.1	17.4
1986					
Mean of Indicators	14.0	15.5	15.3	15.0	15.0
Mean of Controls	13.9	18.0	16.8	15.1	16.0
1987					
Mean of Indicators	12.7	14.8	15.0	14.4	14.2
Mean of Controls	13.0	14.8	15.3	15.0	14.6
1988					
Mean of Indicators	13.5	14.1	14.7	14.9	14.3
Mean of Controls	13.3	14.4	18.1	14.6	15.1
1989					
Mean of Indicators	14.4	14.3	--	--	14.4
Mean of Controls	14.0	14.4	--	--	14.2
All Pre-Operational					
Mean of Indicators	14.9	16.0	16.8	16.2	15.9
Mean of Controls	15.1	16.4	17.4	16.5	16.2

Table 3.13-3

Facility Related Dose using ANSI/HPS N13.37-2014 Methodology

		Quarterly Ave.					Quarterly Facility Dose				Annual	2017	Annual Facility Dose
		Baseline, B_Q	2017 Quarterly Monitoring Data, M_Q (mR/qtr)				$F_Q = M_Q - (B_Q+MDD_Q)$				Baseline, B_A	Annual TLD Data, M_A	$F_A = M_A - (B_A+MDD_A)$
		mR	1	2	3	4	1	2	3	4	mR	mR	
TL-01	Brimmer's Lane	18.6	17.7	17.5	18.4	17.4	ND	ND	ND	ND	74.5	70.9	ND
TL-02	Landing Road	13.8	14.6	13.6	14.6	13.6	ND	ND	ND	ND	55.1	56.5	ND
TL-03	Glade Path	14.9	14.3	13.8	14.6	13.3	ND	ND	ND	ND	59.5	55.9	ND
TL-04	Island Path	15.9	14.6	14.4	15.1	13.9	ND	ND	ND	ND	63.7	58.0	ND
TL-05	Harbor Road	14.6	15.1	14.1	14.6	13.6	ND	ND	ND	ND	58.1	57.4	ND
TL-06	Barge Landing	14.6	13.8	14.1	14.7	13.5	ND	ND	ND	ND	58.6	56.0	ND
TL-07	Cross Road	12.5	12.4	12.6	12.9	12.3	ND	ND	ND	ND	50.0	50.2	ND
TL-08	Farm Lane	15.8	14.7	14.1	15.4	13.9	ND	ND	ND	ND	63.1	58.1	ND
TL-09	Farm Lane	16.3	15.1	15.3	16.2	15.8	ND	ND	ND	ND	65.3	62.4	ND
TL-10	Site Boundary	17.2	15.2	15.2	16.8	14.8	ND	ND	ND	ND	68.7	62.1	ND
TL-11	Site Boundary	17.5	18.0	16.8	17.7	16.9	ND	ND	ND	ND	69.9	69.4	ND
TL-12	Site Boundary	18.2	17.6	17.8	19.5	17.6	ND	ND	ND	ND	72.6	72.5	ND
TL-13	Inside Site Boundary	19.2	17.3	17.6	18.2	17.5	ND	ND	ND	ND	77.0	70.6	ND
TL-14	Trailer Park	15.9	15.6	15.3	16.7	15.7	ND	ND	ND	ND	63.5	63.3	ND
TL-15	Brimmer's Lane	18.8	17.8	17.3	19.2	18.3	ND	ND	ND	ND	75.0	72.6	ND
TL-16	Brimmer's Lane	16.2	15.7	15.8	16.6	16.2	ND	ND	ND	ND	64.8	64.4	ND
TL-17	South Road	16.3	15.3	15.5	16.5	14.8	ND	ND	ND	ND	65.2	62.1	ND
TL-18	Mill Road	15.5	16.0	15.9	17.4	16.6	ND	ND	ND	ND	62.0	65.8	ND
TL-19	Appledore Avenue	15.5	14.8	14.8	15.2	14.7	ND	ND	ND	ND	62.1	59.6	ND
TL-20	Ashworth Avenue	17.5	17.0	16.6	16.3	16.7	ND	ND	ND	ND	70.2	66.6	ND
TL-21	Route 1A	16.6	18.2	18.0	18.1	17.4	ND	ND	ND	ND	66.3	71.7	ND
TL-22	Cable Avenue	16.3	15.0	15.0	15.8	14.7	ND	ND	ND	ND	65.4	60.5	ND
TL-23	Ferry Road	15.7	15.4	14.8	17.7	14.7	ND	ND	ND	ND	62.7	62.6	ND

Table 3.13-3 (Cont'd)

Facility Related Dose using ANSI/HPS N13.37-2014 Methodology

		Baseline B_Q	Quarterly Ave. 2017 Quarterly Monitoring Data, M_Q (mR/qtr)				Quarterly Facility Dose $F_Q = M_Q - (B_Q+MDD_Q)$				Annual Baseline B_A	2017 Annual TLD Data, M_A	Annual Facility Dose $F_A = M_A - (B_A+MDD_A)$
		mR	1	2	3	4	1	2	3	4	mR	mR	
TL-24	Ferry Lots Lane	15.1	16.8	16.5	18.2	17.1	ND	ND	ND	ND	60.4	68.5	ND
TL-25	Elm Street	15.6	14.9	15.3	15.9	15.2	ND	ND	ND	ND	62.3	61.4	ND
TL-26	Route 107A	15.4	14.7	14.4	15.6	14.6	ND	ND	ND	ND	61.8	59.2	ND
TL-27	Highland Street	16.1	15.6	15.5	15.8	15.6	ND	ND	ND	ND	64.3	62.5	ND
TL-28	Route 150	16.2	15.7	16.5	16.8	15.8	ND	ND	ND	ND	64.9	64.8	ND
TL-29	Frying Pan Lane	15.4	14.6	14.6	16.0	14.2	ND	ND	ND	ND	61.6	59.4	ND
TL-30	Route 27	15.7	15.1	15.6	17.3	16.3	ND	ND	ND	ND	62.9	64.4	ND
TL-31	Alumni Drive	14.3	13.5	14.2	14.7	13.9	ND	ND	ND	ND	57.0	56.3	ND
TL-32	SB Elementary School	17.8	16.9	17.5	18.1	16.8	ND	ND	ND	ND	71.2	69.3	ND
TL-33	Dock Area	21.4	11.0	10.8	11.0	10.5	ND	ND	ND	ND	84.4	43.3	ND
TL-34	Bow Street	19.5	18.5	19.0	19.9	19.3	ND	ND	ND	ND	78.2	76.7	ND
TL-35	Lincoln Ack. School	18.2	16.2	17.3	18.7	17.4	ND	ND	ND	ND	72.6	69.6	ND
TL-36	Route 97(Control)	15.4	14.3	14.5	14.9	14.4	ND	ND	ND	ND	61.9	58.1	ND
TL-37	Plaistow, NH (Control)	18.0	16.7	17.3	17.5	16.8	ND	ND	ND	ND	72.0	68.3	ND
TL-38	Hampstead, NH (Control)	19.8	15.3	16.1	18.6	17.3	ND	ND	ND	ND	79.3	67.3	ND
TL-39	Fremont, NH (Control)	21.3	18.9	20.1	20.7	19.7	ND	ND	ND	ND	85.2	79.4	ND
TL-40	Newmarket, NH (Control)	16.7	15.0	16.1	16.2	16.1	ND	ND	ND	ND	66.9	63.5	ND
TL-41	Portsmouth, NH (Control)	16.9	16.3	15.9	17.0	15.9	ND	ND	ND	ND	67.6	65.0	ND
TL-42	Ipswich, MA (Control)	14.3	13.4	13.2	14.2	13.5	ND	ND	ND	ND	57.2	54.3	ND
TL-44	SB Education Center	14.8	14.4	14.0	15.1	14.3	ND	ND	ND	ND	59.0	57.7	ND

Table 3.13-3 (Cont'd)

Facility Related Dose using ANSI/HPS N13.37-2014 Methodology

		Baseline B_Q	Quarterly Ave. 2017 Quarterly Monitoring Data, M_Q (mR/qtr)				Quarterly Facility Dose $F_Q = M_Q - (B_Q+MDD_Q)$				Annual Baseline B_A	2017 Annual TLD Data, M_A	Annual Facility Dose $F_A = M_A - (B_A+MDD_A)$
		mR	1	2	3	4	1	2	3	4	mR	mR	
TL-45	Hampton Fire Station	16.9	14.8	15.8	15.7	15.0	ND	ND	ND	ND	67.7	61.3	ND
TL-46	SB Police Station	16.7	16.0	16.3	16.3	15.4	ND	ND	ND	ND	66.7	63.9	ND
TL-47	Route 84	15.6	15.5	16.1	16.2	16.0	ND	ND	ND	ND	62.4	63.8	ND

MDD_Q = 4.46 = minimum differential exposure, quarterly, 3 times 90th percentile S_Q determined from analysis in mR.

MDD_A = 8.89 = minimum differential exposure, annual, 3 times 90th percentile S_A determined from analysis in mR.

B_Q = Quarterly baseline exposure (mR).

M_Q = location's 91 day standard quarterly exposure (mR).

L_Q = Quarterly Investigative Level exposure (mR).

B_A = Quarterly baseline background average exposure (mR).

M_A = Annual monitoring data, determined by summing the quarterly data over all four quarters (mR).

L_A = Annual Investigative Level exposure (mR).

ND = Facility contribution to exposure "Not Detected"

FIGURE 3.6

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs) SEABROOK STATION

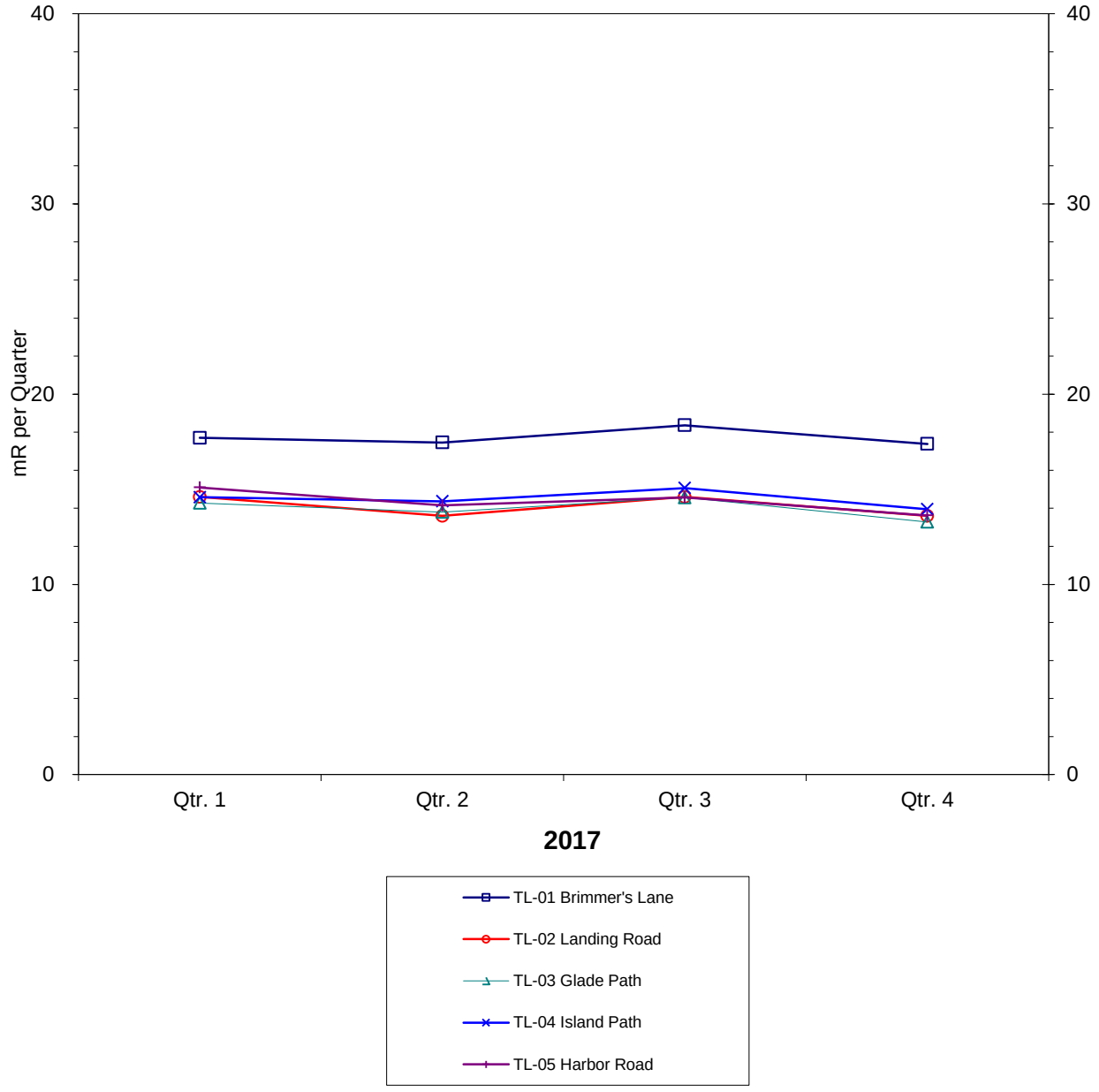


FIGURE 3.6.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

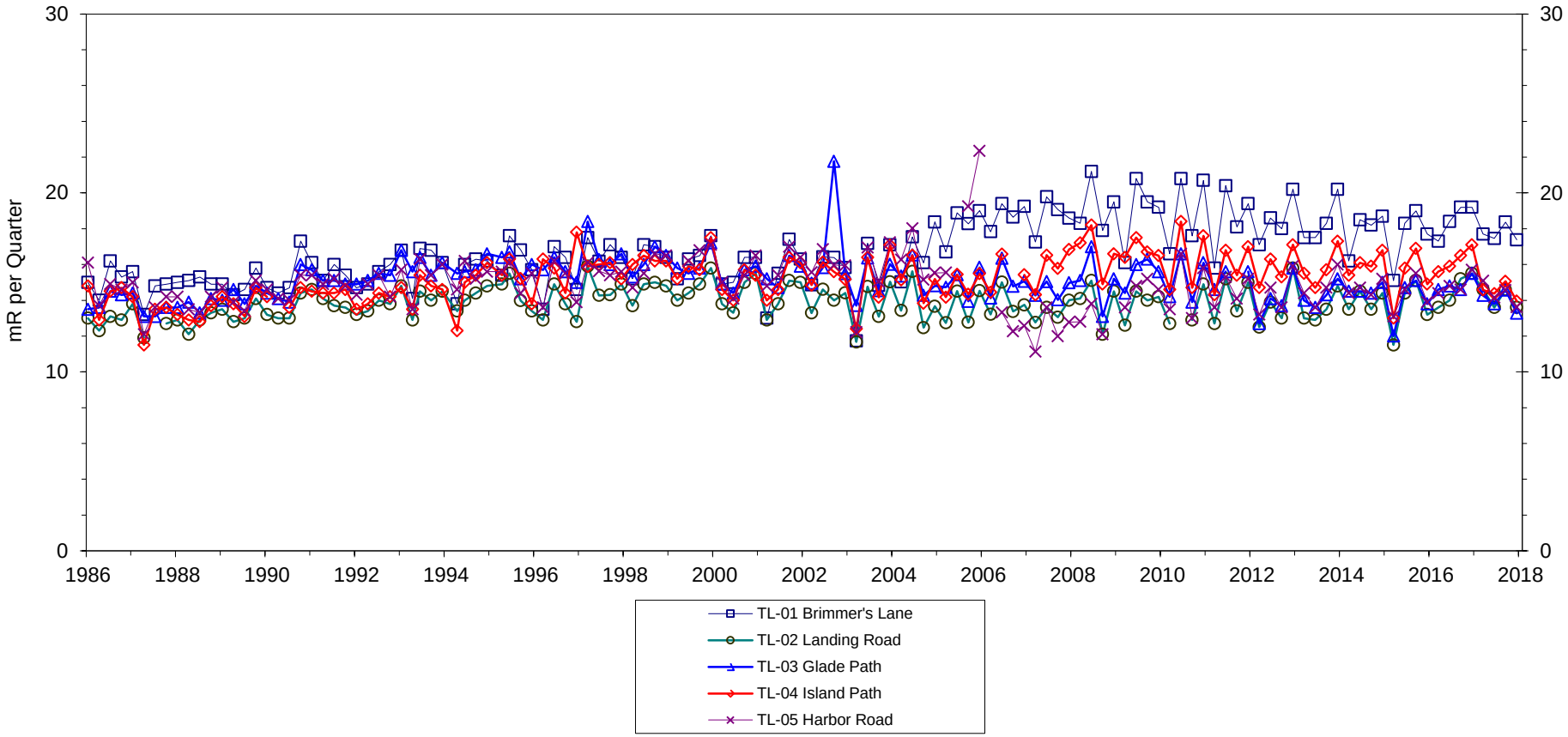


FIGURE 3.7

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

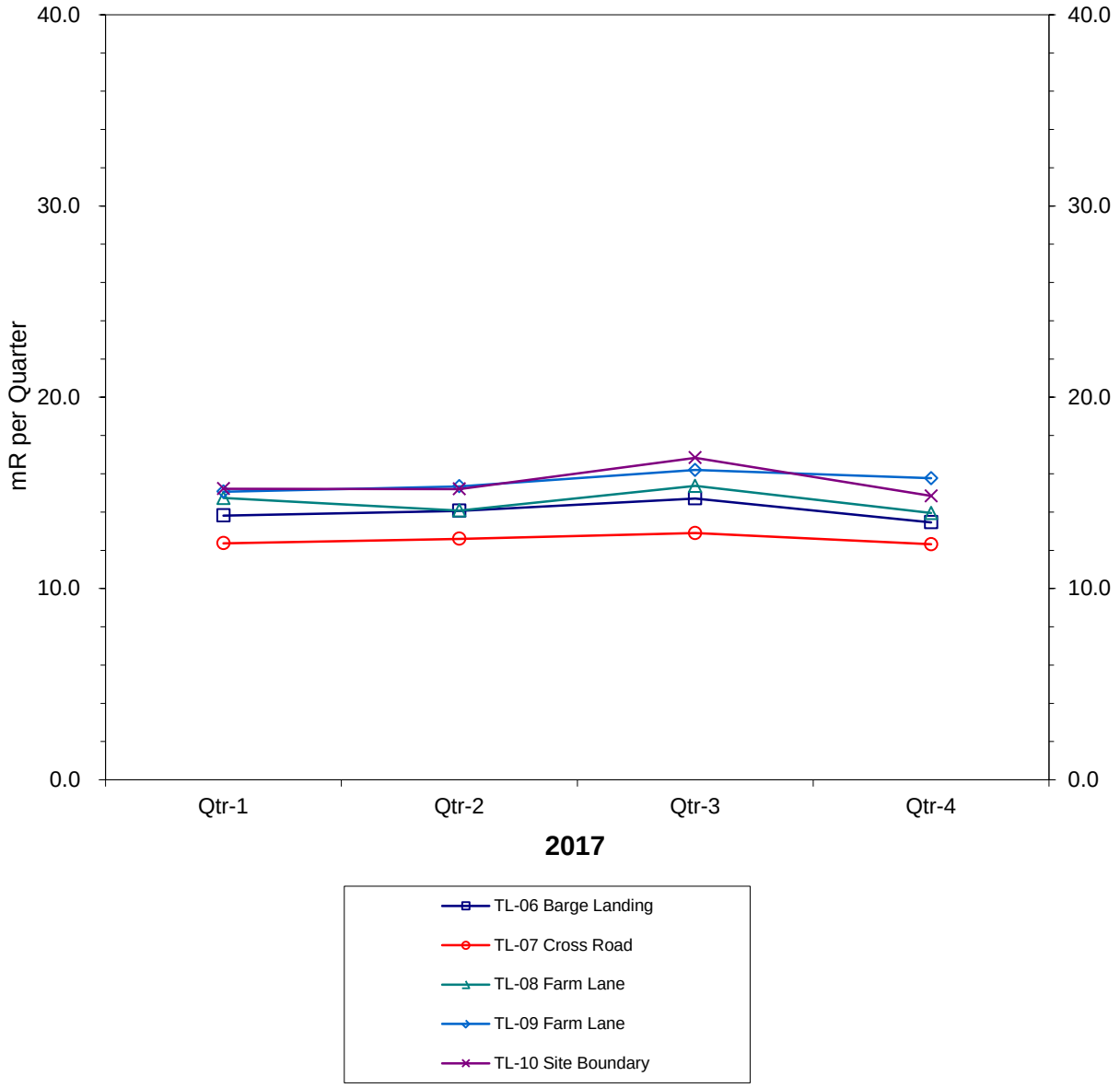


FIGURE 3.7.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

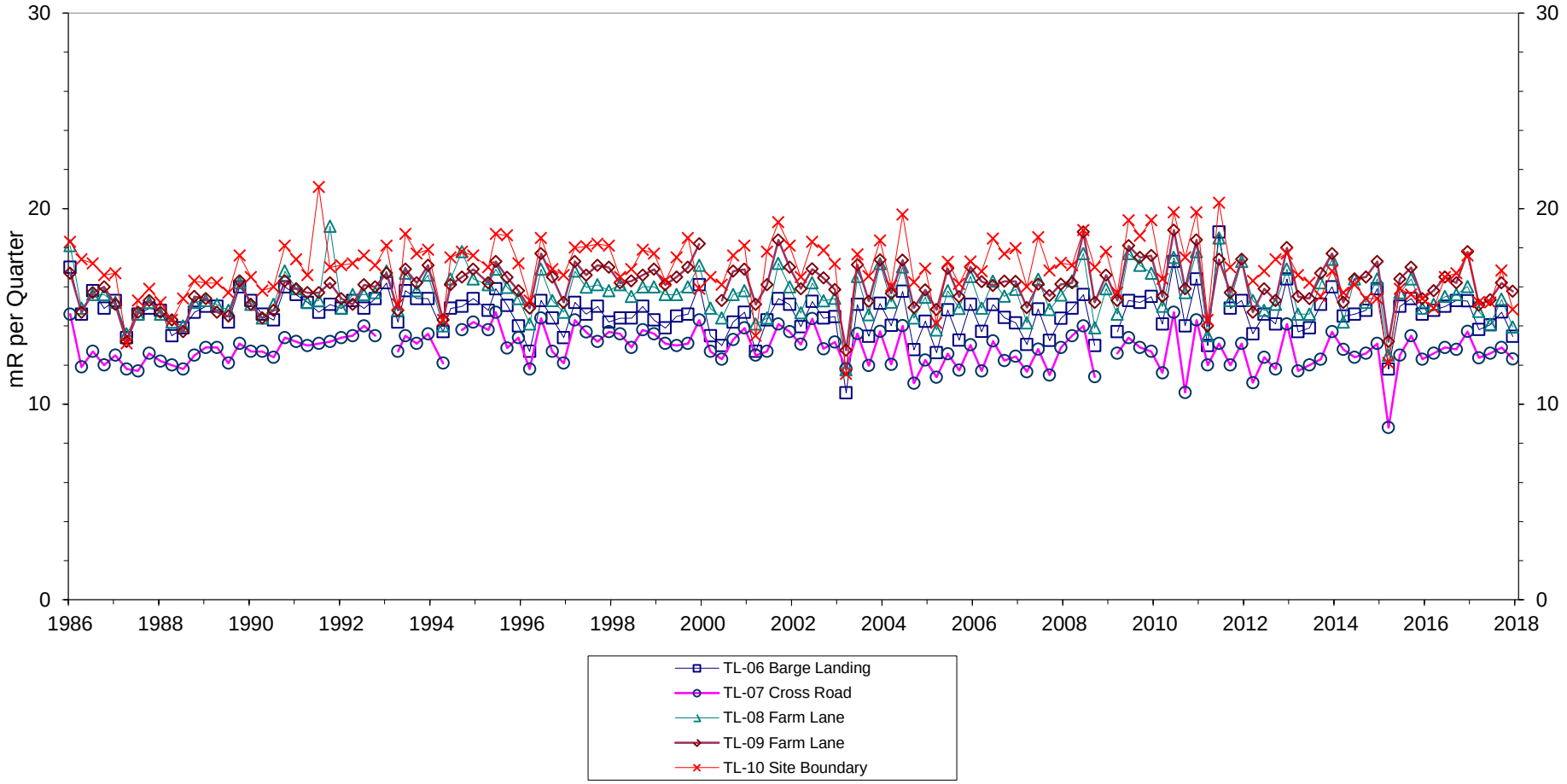


FIGURE 3.8

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

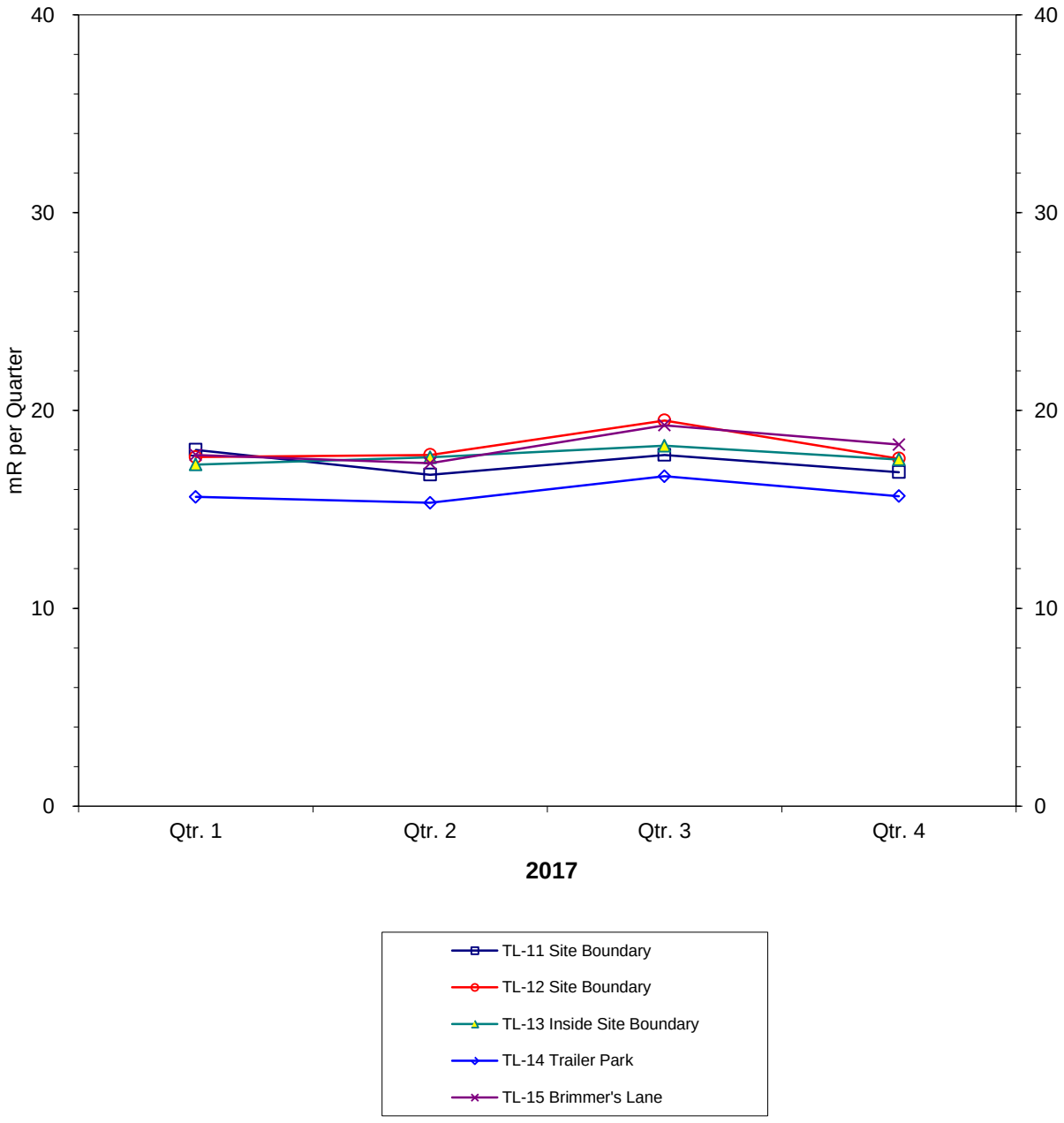


FIGURE 3.8.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

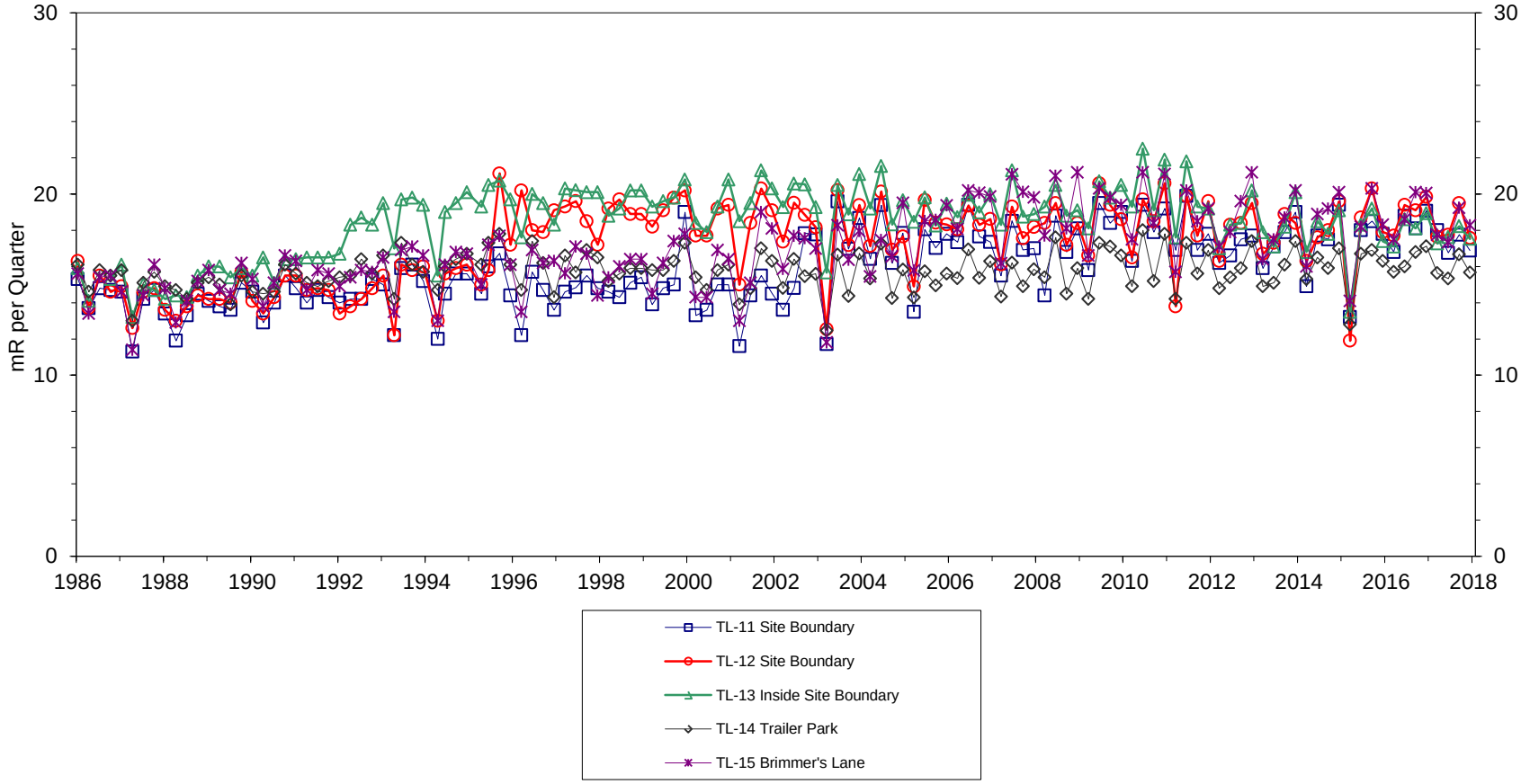


FIGURE 3.9

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs) SEABROOK STATION

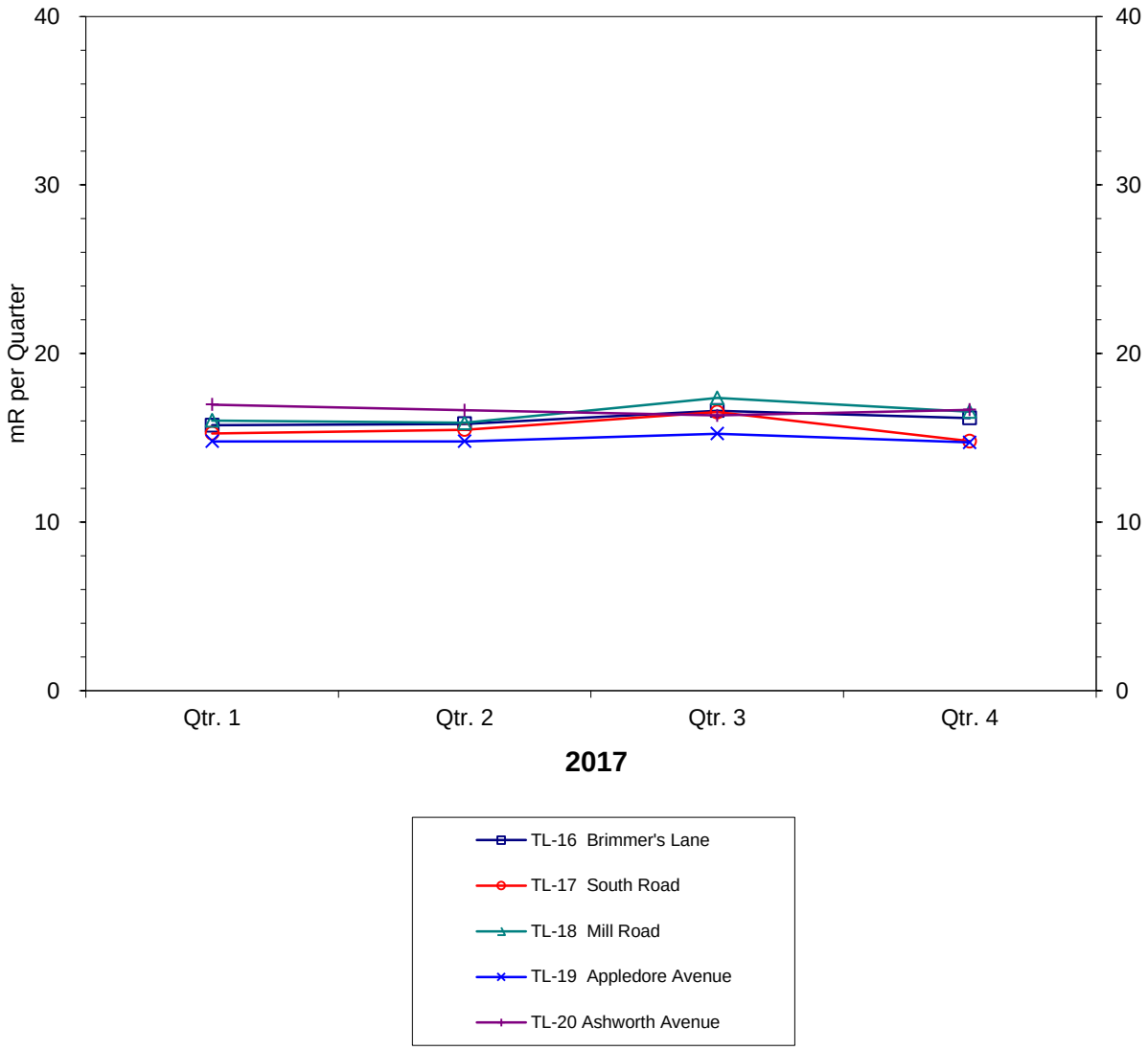


FIGURE 3.9.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs) SEABROOK STATION

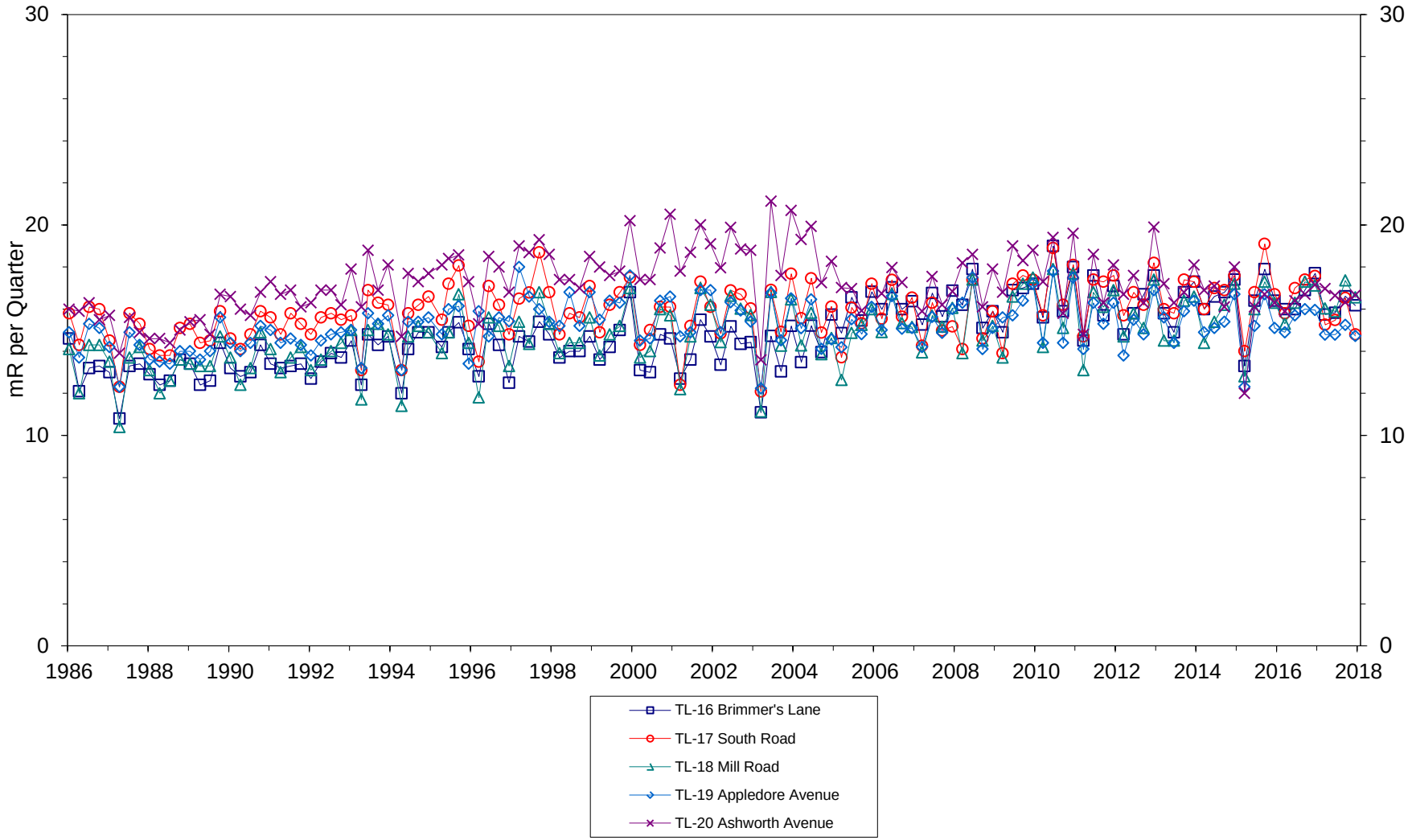


FIGURE 3.10

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

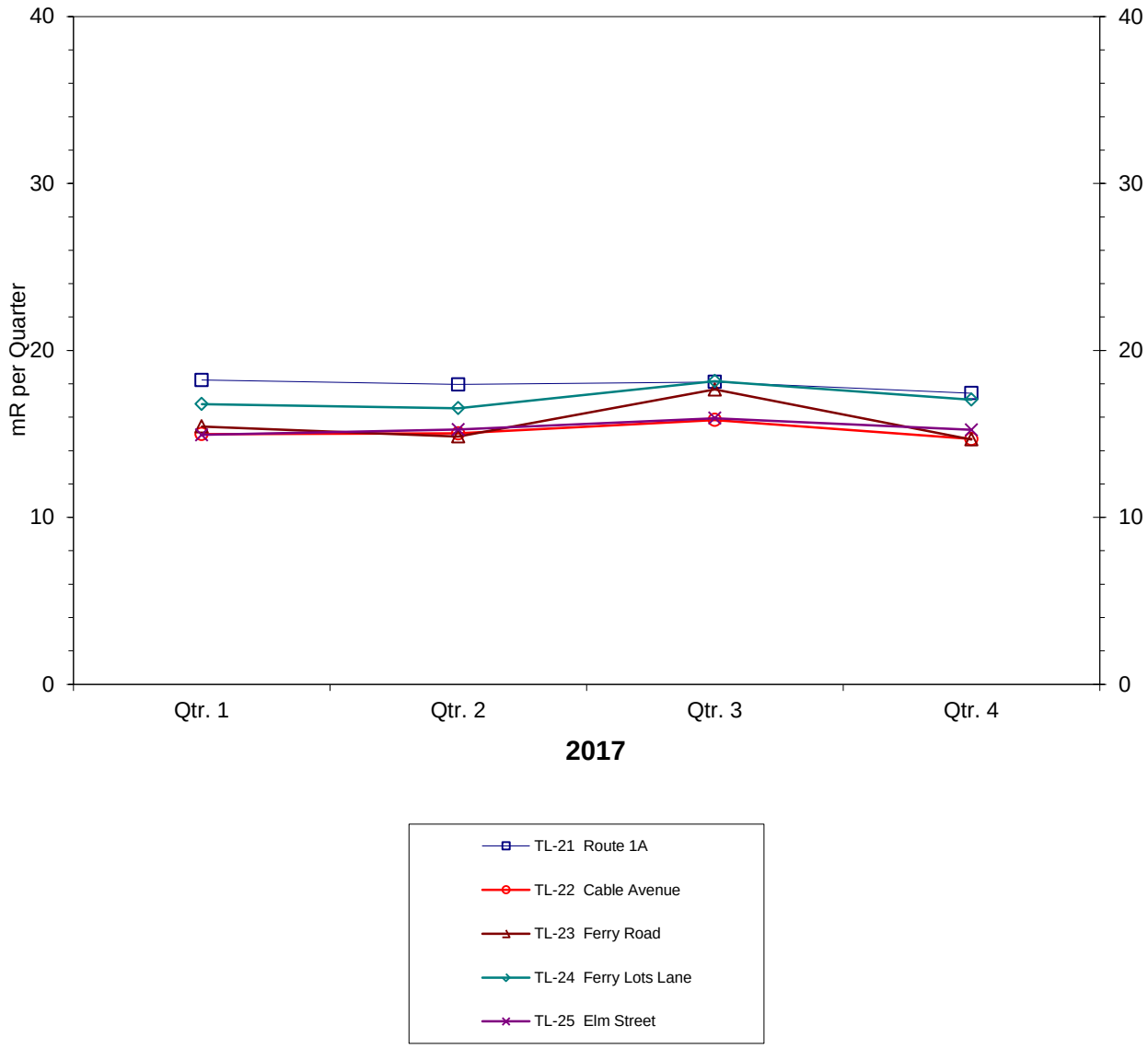


FIGURE 3.10.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

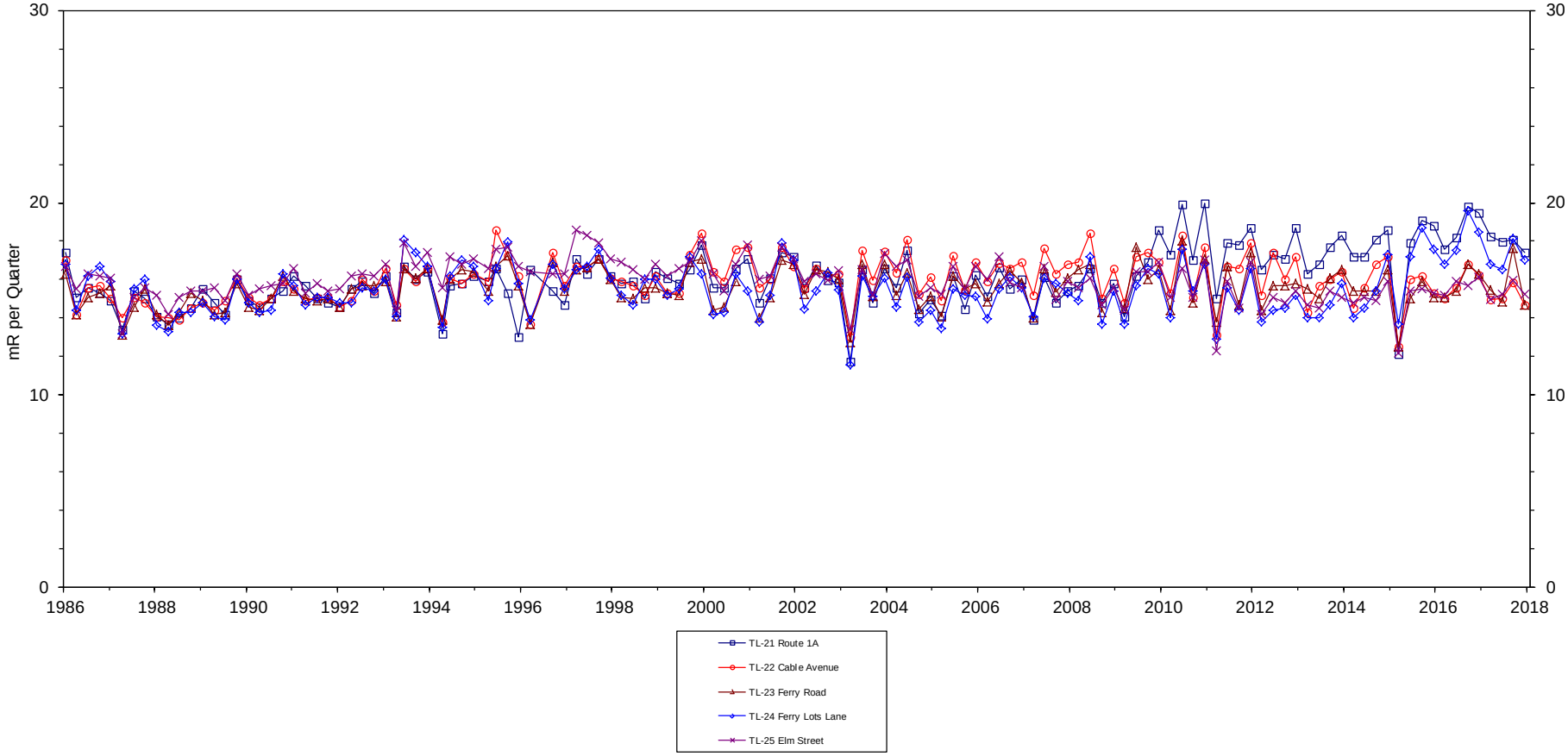


FIGURE 3.11

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs) SEABROOK STATION

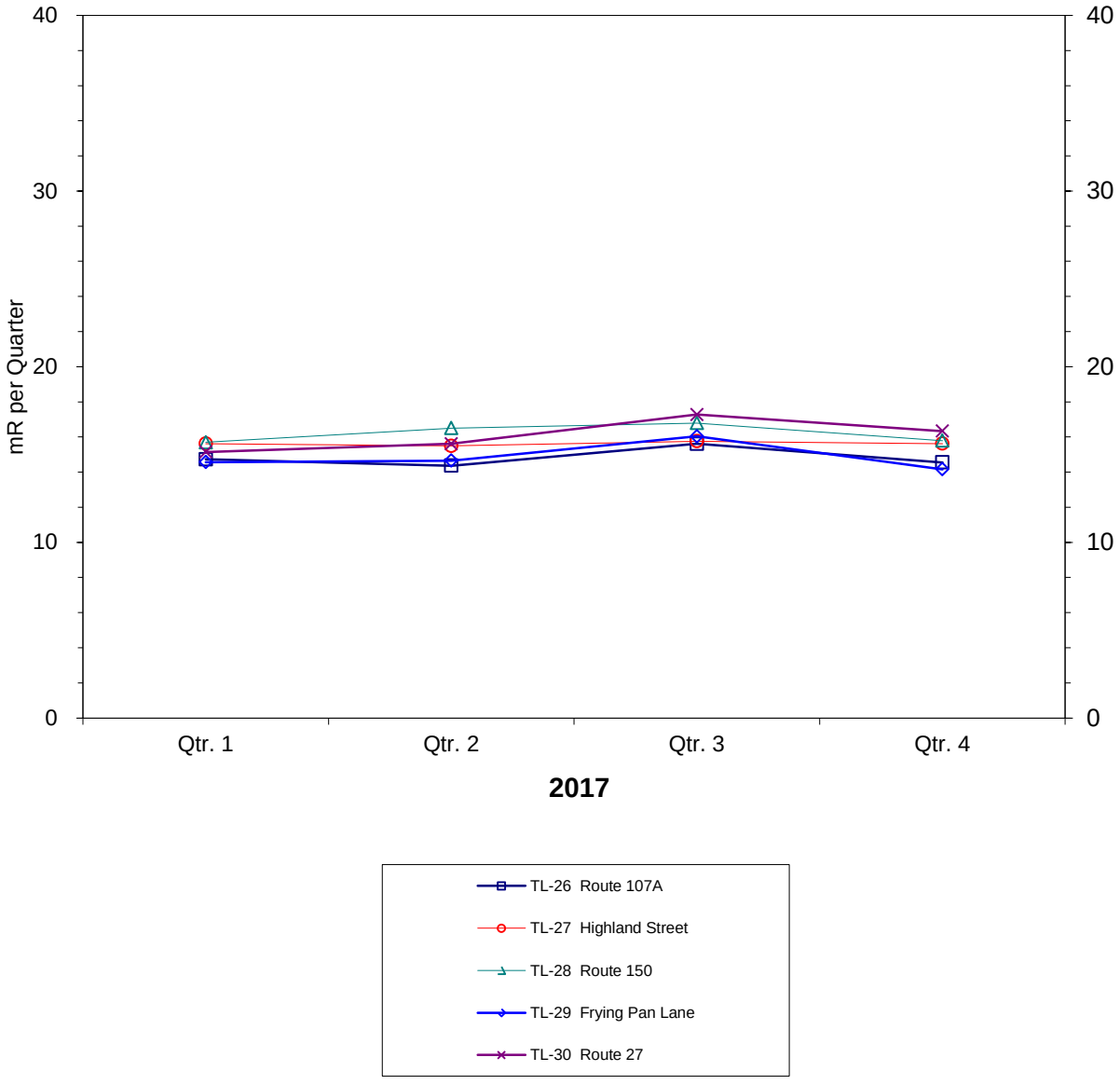


FIGURE 3.11.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

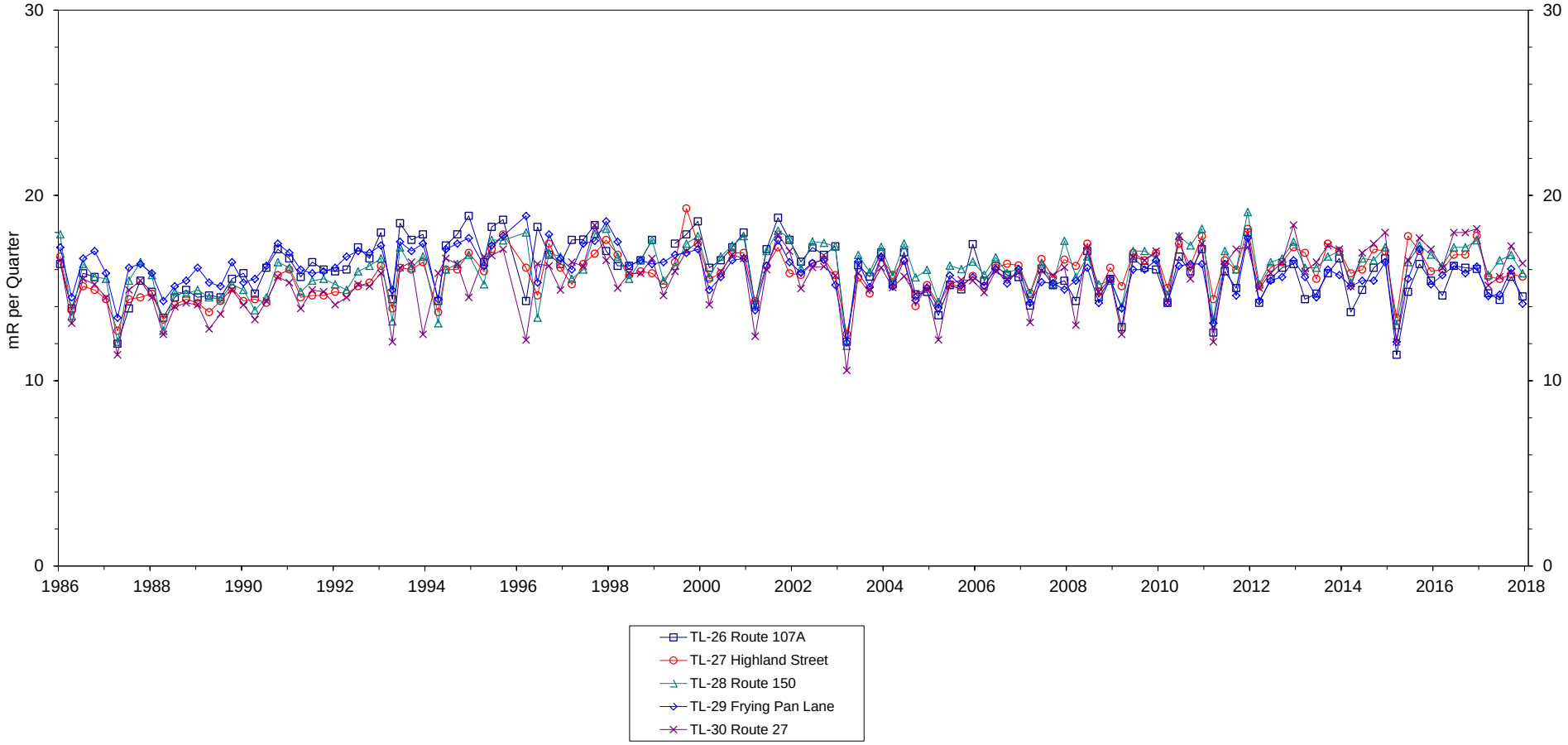


FIGURE 3.12

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

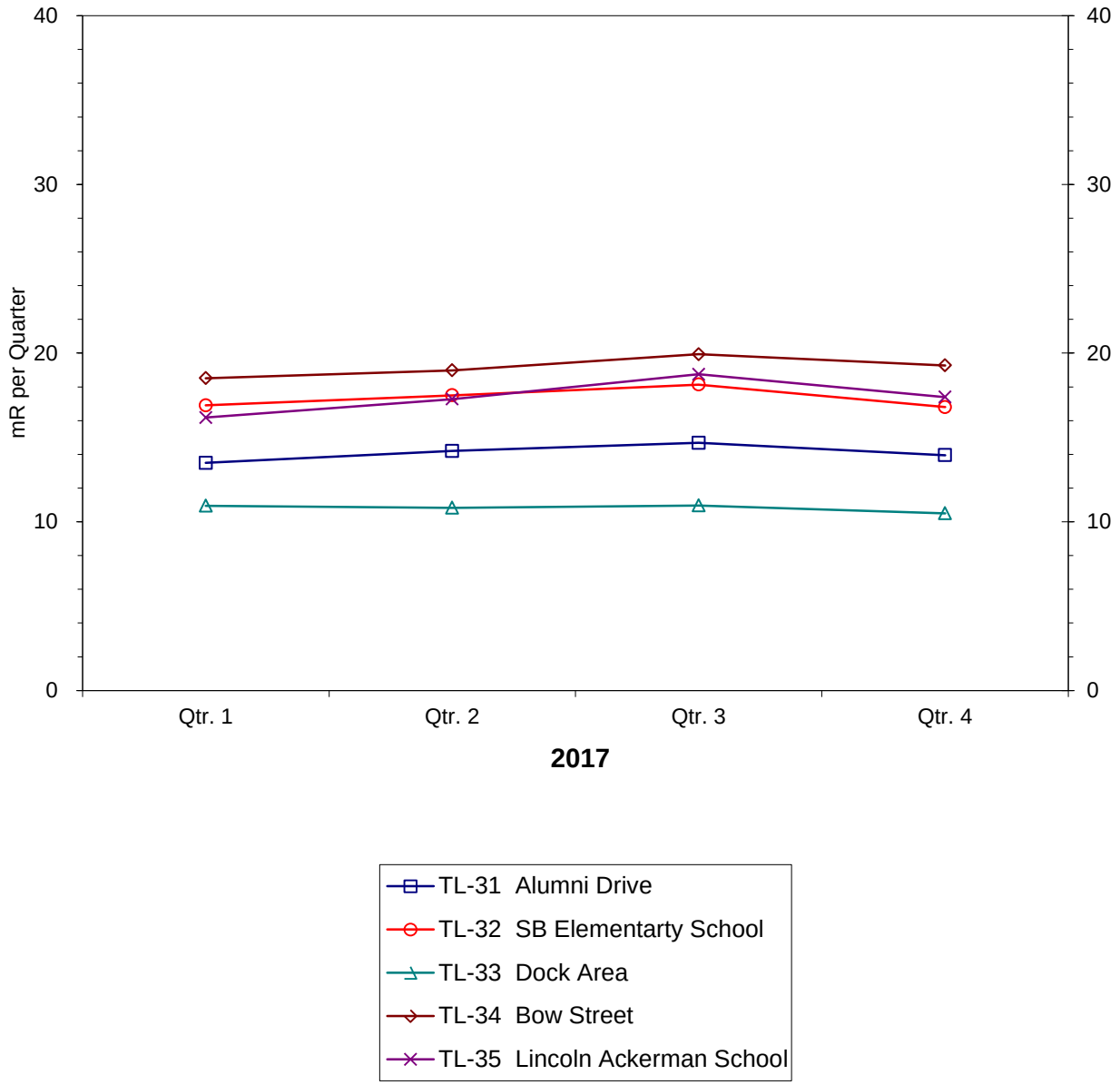


FIGURE 3.12.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

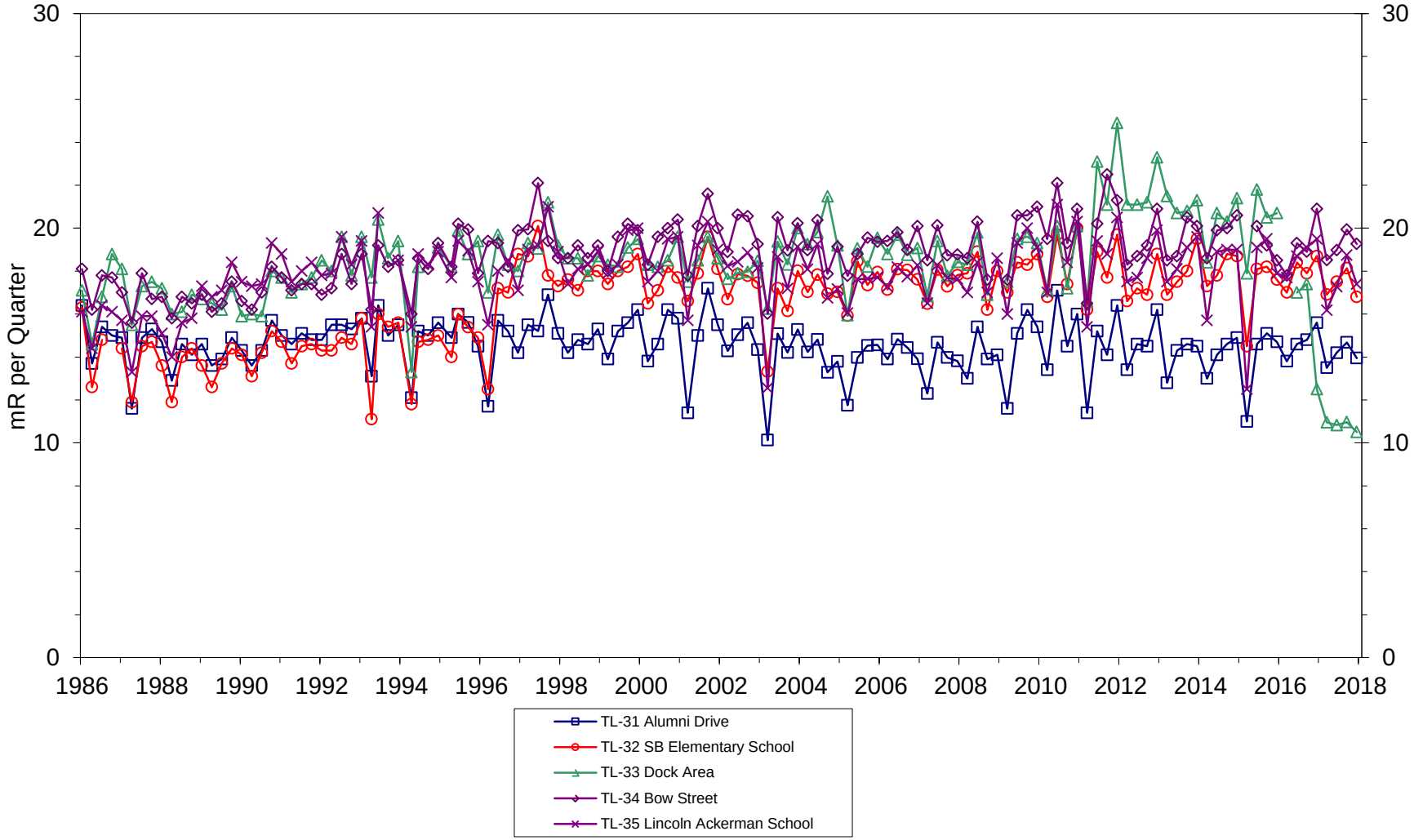


FIGURE 3.13

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs) SEABROOK STATION

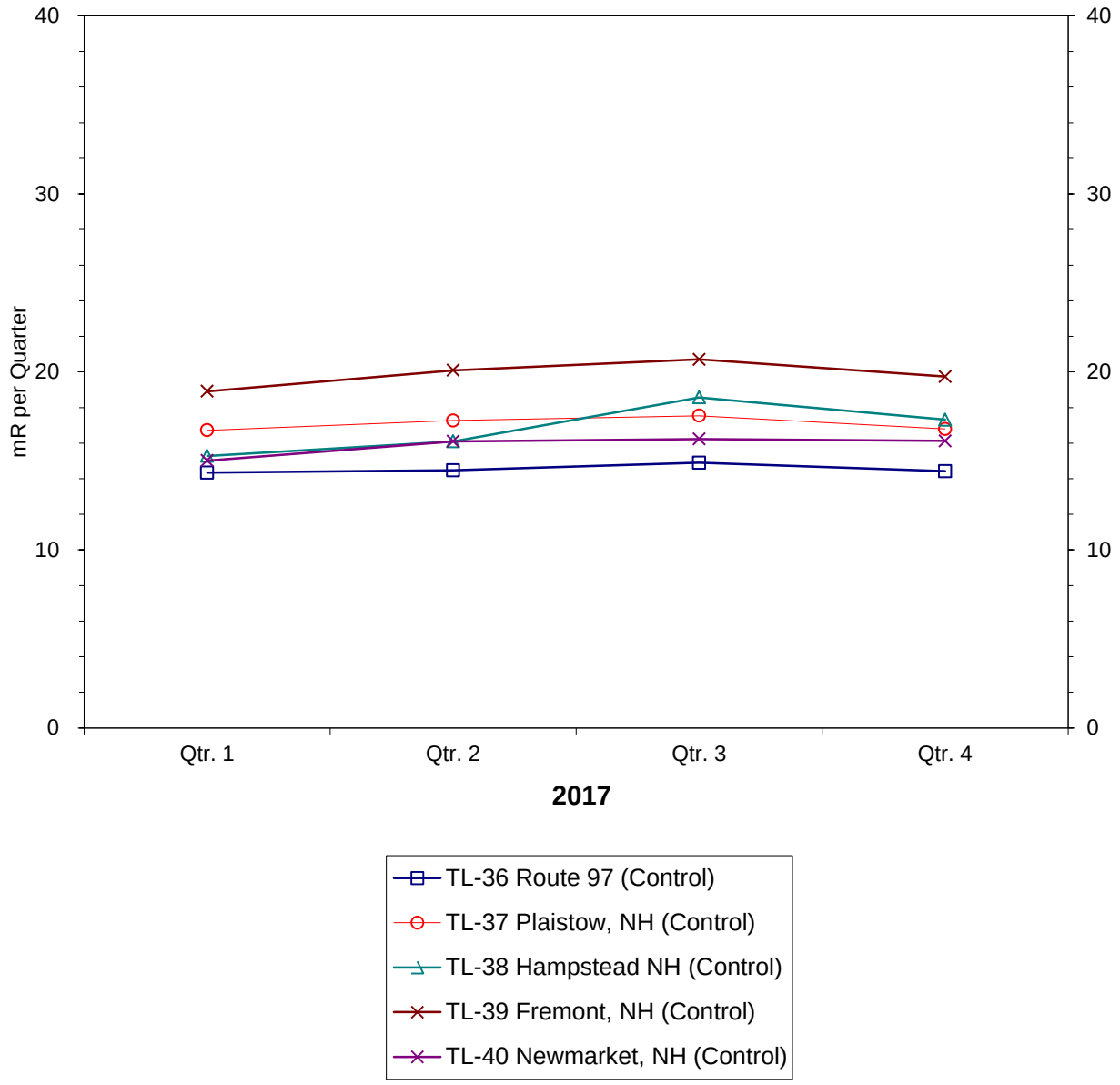


FIGURE 3.13.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

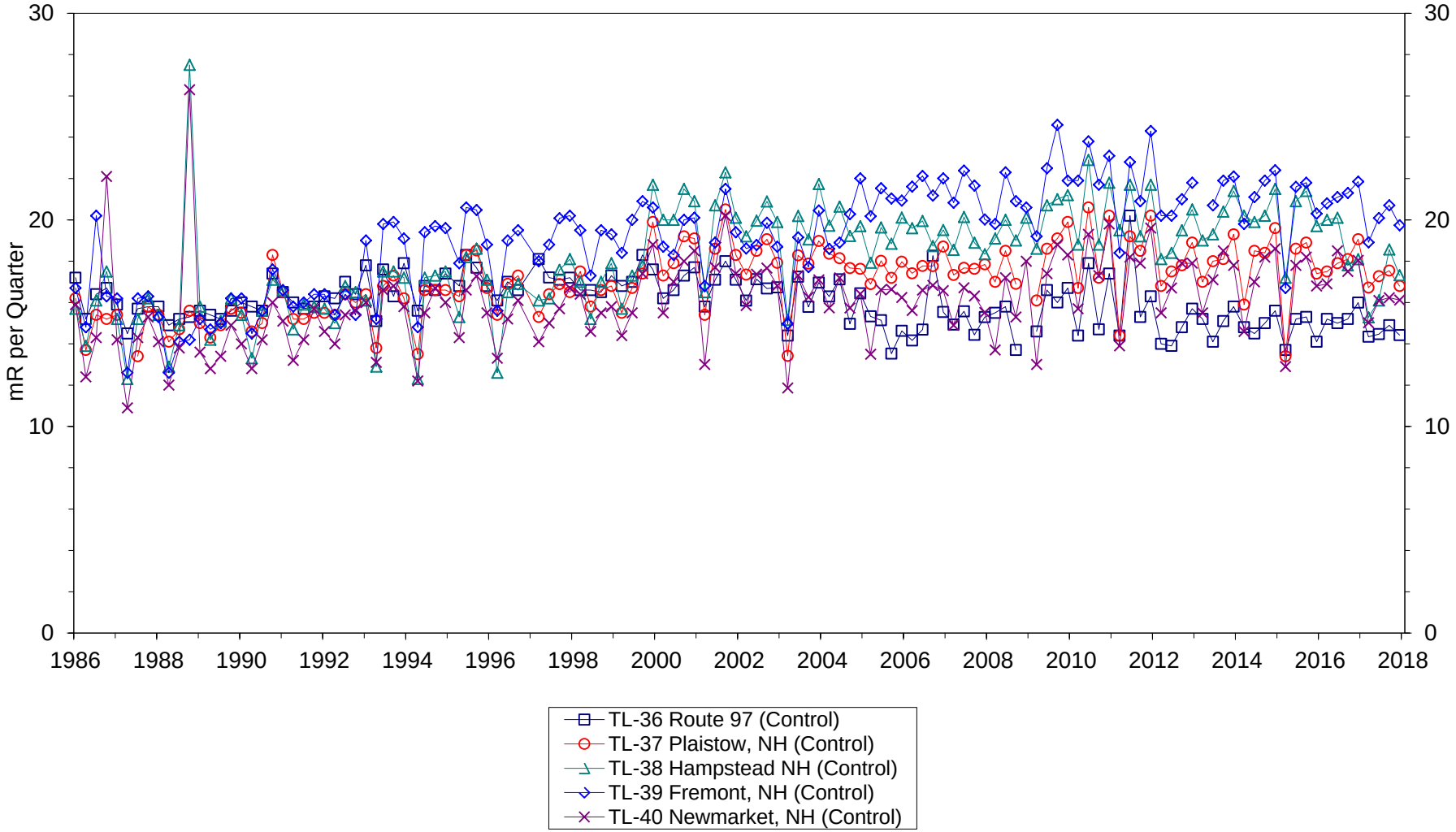


FIGURE 3.14

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

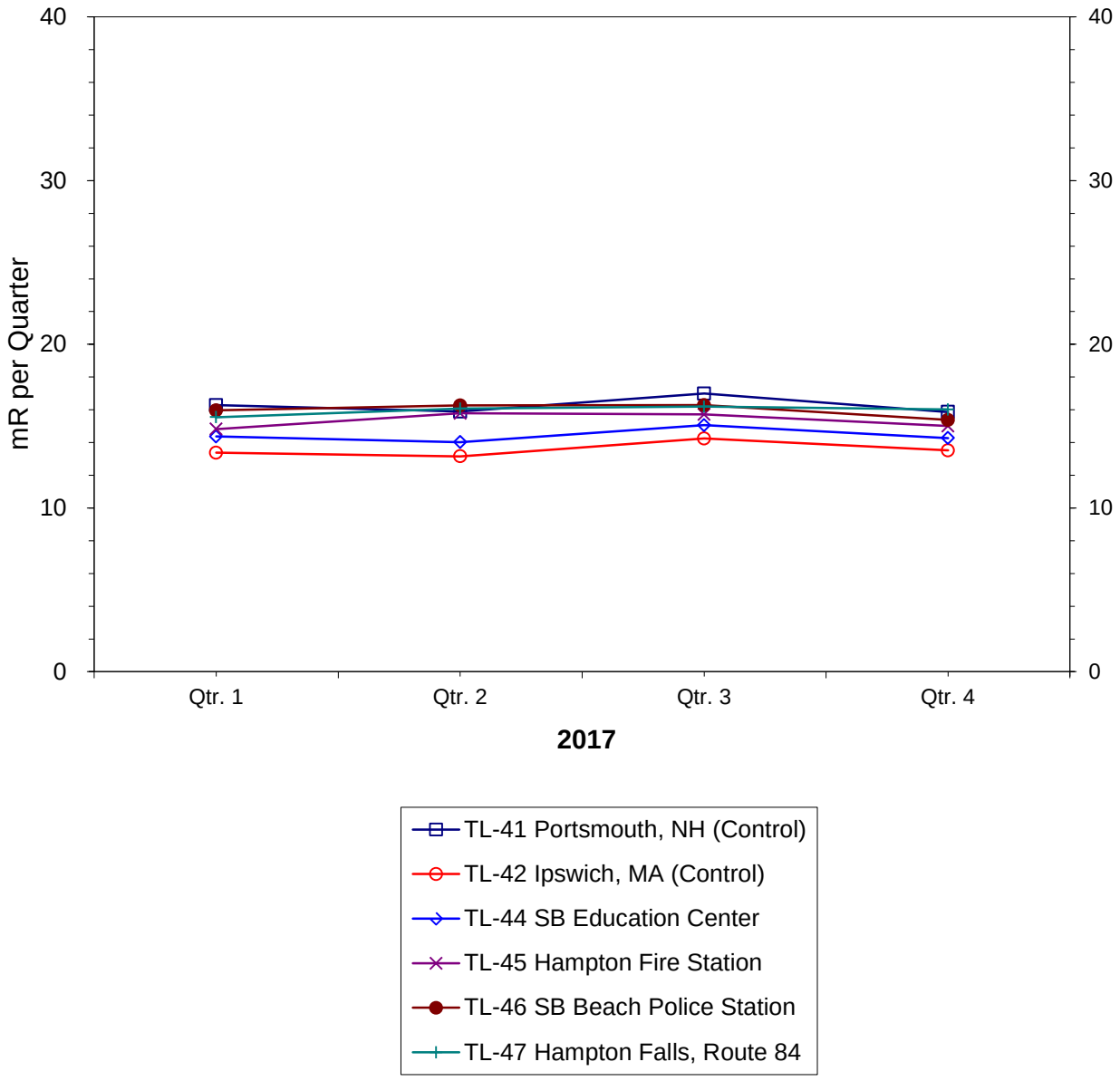
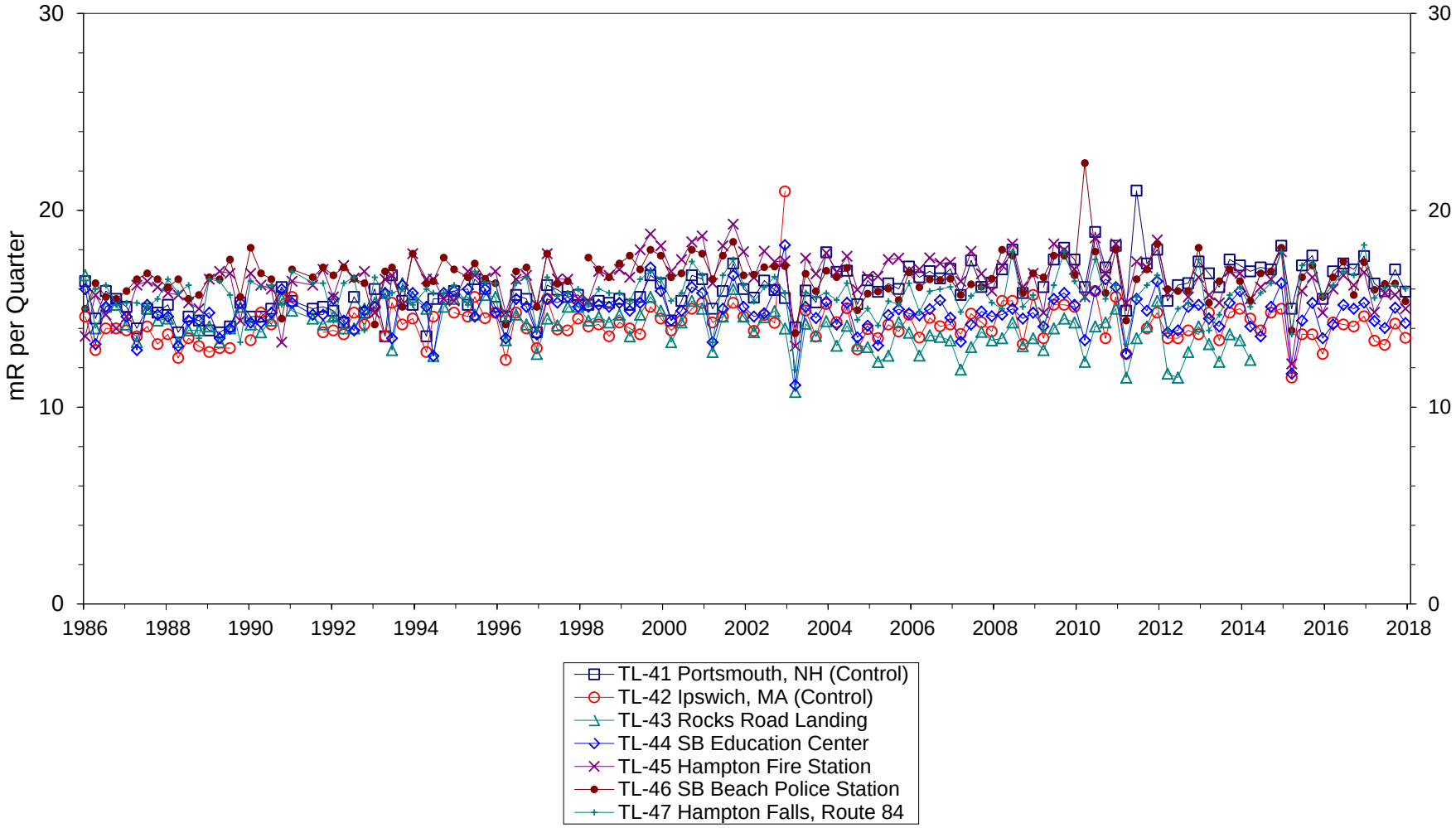


FIGURE 3.14.1

ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION



4.0 Dry Fuel Storage REMP & Data Summary

The Dry Fuel Storage (DFS) radiological environmental monitoring program required by ODCM Control C.9.4.1 provides representative measurements of direct (including scattered) radiation exposure at those locations that have the highest potential for dose to members of the public resulting from dry fuel storage operations. The design of the storage facility is such that there are no liquid or gaseous effluents released to the environment from DFS and, therefore, no associated exposure pathways for liquids and gases requiring the collection and analysis of such sample media. As a result, only direct (including scattered) radiation from the DFS modules need to be monitored for integrated exposures in areas where doses to members of the public need to be limited.

At locations near the DFS where members of the public might be present (off-site areas near the site boundary and on-site special use locations, i.e., the Science and Nature Center, the new Fitness Center located in the High Rise office building east of the DFS facility and the Firing Range located on the west site boundary), TLDs were placed at least 1 year (4 quarterly measurements) prior to used fuel being placed into storage. The DFS received its first load of fuel for storage on July 28, 2008. A total of 6 fuel canisters were placed in the NUHOMS© Horizontal Storage Modules (HSM) on the DFS pad during 2008 with the last one being loaded on September 4, 2008. A second fuel transfer campaign was conducted during August and September, 2013, with an additional 8 fuel canisters placed into storage, and a third fuel transfer campaign during August – October of 2017 with an additional 8 fuel canisters bringing the total to 22 canisters in storage.

The DFS radiological environmental monitoring stations are listed in Table 4.0-1. At the end of 2013, TLD location SB-35, which was located inside the old Fitness Center, and location TL-67 (first quarter of 2014), which was located outside the old Fitness Center south of the DFS, were removed from the program due to the relocation of the fitness center to the High Rise Office Building. TLD locations SB-32 and SB-33 now provide monitoring for the new Fitness Center location. The measurement locations with respect to the Seabrook site area are shown on Figure 4.0.1.

4.1 Direct Radiation from DFS

As with the plant operations TLD program described in Section 3.13, the DFS TLD exposure rates were normalized to a standard 91-day quarter. A summary of the 2017 data for the DFS REMP is shown in Table 4.1-1. Figures 4.1, 4.2 and 4.3 show the quarterly 2017 TLD trend lines for the control and indicator monitoring locations. Figures 4.4, 4.5 and 4.6 provide a comparison of long term trend lines (17 years) for the same control locations, site boundary and special use sites.

Overall, the direct radiation program showed no statistically significant indication of increased direct radiation above the variable background measured exposure rate in unrestricted areas. The 2017 annual mean of all indicator locations for the DFS was 16.6 mR/91-day quarter with the mean of all control locations also calculated as 16.3 mR/91-day quarter. There was no notable difference detected in the annual exposure rates in areas were members of the public could occupy (site boundary and inside special use locations) and the control locations. Starting in the 4th quarter of 2013, location TL-67 indicated a notable measurement increase in exposure rate following the expansion of fuel storage in the DFS facility in the third quarter of 2013. However, by late November, 2013, the fitness center operations had been transferred from its original location south of the DFS to the High Rise Office Building east of the DFS, thereby ending use of the original fitness center facility and its parking lot by members of the public.

Starting in 2015, an additional analytical method was implemented to evaluate the TLD measurements. Using the method described in ANSI/HPS N13.37-2014, quarterly and annual baseline dose for each DFS TLD location was determined using appropriate statistical analytical methods considering data from 2004 through 2014. Quarterly and annual dose for 2017 was compared to baseline values to determine if an Investigation Level had been exceeded for evaluation of potential dose to a member of the public. An Investigation Level is considered to be exceeded under the following conditions:

$$\text{Quarterly: If } M_Q > (B_Q + MDD_Q), \text{ then } F_Q = M_Q - B_Q$$

Where:

M_Q is the normalized quarterly field measurement result
B_Q is the quarterly baseline background dose
MDD_Q is the quarterly minimum differential dose and
F_Q is the quarterly facility related dose

or:

$$\text{Annually: If } M_A > (B_A + MDD_A), \text{ then } F_A = M_A - B_A$$

Where:

M_A is the sum of the four normalized quarterly measurement values
B_A is the annual baseline background dose
MDD_A is the annual minimum differential dose
F_A is the annual facility related dose

Table 4.1-2 summarizes the evaluation of the TLD measurements using the methodology described in ANSI/HPS N13.37-2014. As noted in Table 4.1-2, TLD location SB-33 (High-Rise Building 1st floor, Fitness Center) was found to have a calculated annual facility related dose of 12 mR when comparing the measured TLD value against the annual baseline values. However, as this is an on-site fitness center under Station control, an annual occupancy factor for this location of 0.0416 (1 hour per day x 7 days a week x 52 weeks per year/8760 hours) can be applied. This results in an annual dose of 0.5 mR.

Any sample collection and analysis deviations from the ODCM required program, or reportable concentrations that may have occurred during the year are described in Section 5.

Figure 4.0.1
Dry Fuel Storage TLD Environmental Monitoring Locations

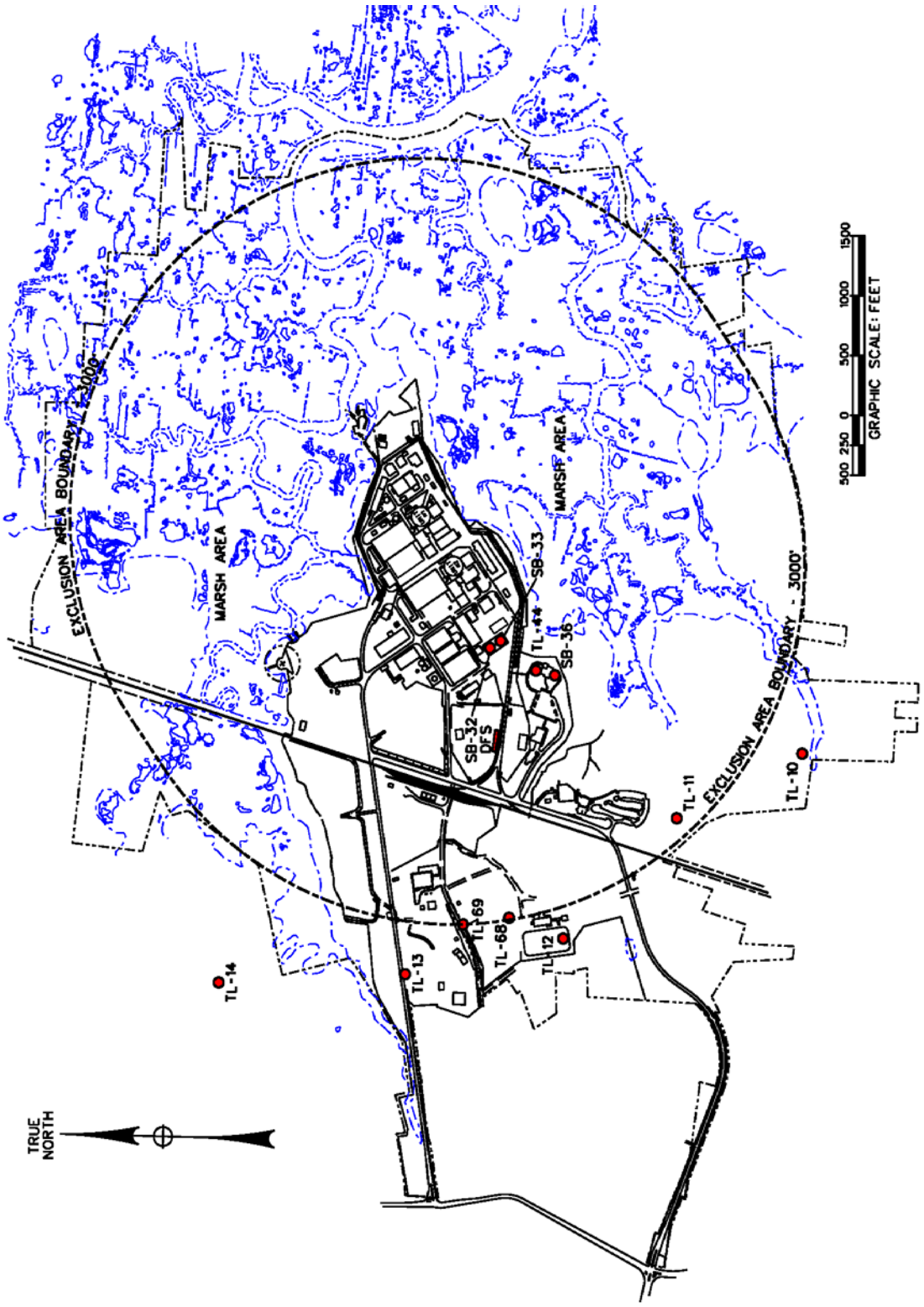


Table 4.0-1

Dry Fuel Storage (DFS) TLD Monitoring Locations

Site Designation Code	TLD Sample Location Description[3]	Distance From DFS Pad (km)	Direction From DFS Pad
TL-44	On-site, outside Science & Nature Center [1][2]	0.21	ESE
SB-36	On-site, inside Science & Nature Center	0.24	SE
SB-32	High-Rise Building, 3rd Floor[1]	0.23	E
SB-33	High-Rise Building, 1st Floor (new Fitness Center)[1]	0.23	E
TL-68	Nearby site boundary (firing range) to DFS	0.45	W
TL-69	Nearby site boundary (Rocks Rd) to DFS	0.47	W
TL-10	Site Boundary Fence [2]	0.77	S
TL-11	Site Boundary Fence [2]	0.52	SSW
TL-12	Site Boundary fence [2]	0.53	WSW
TL-13	Inside Site Boundary [2]	0.61	WNW
TL-14	Trailer Park, Seabrook [2]	0.94	NW
TL-36	Rt 97, Georgetown (Control) [2]	22	SSW
TL-37	Plaistow, NH (Control) [2]	21	WSW
TL-38	Hampstead, NH (Control) [2]	27	W
TL-39	Fremont, NH (Control) [2]	27	WNW
TL-40	Newmarket, NH (Control) [2]	22	NNW
TL-41	Portsmouth, NH (Control) [1][2]	22	NNE
TL-42	Ipswich, MA (Control) [1][2]	22	SSE

(1) This location is not part of the required DFS radiological monitoring program as defined in Table A.9.4-1 of the Seabrook ODCM.

(2) Shared environmental monitoring locations for both Seabrook Station REMP and DFS monitoring.

(3) TL-67 and SB-35 locations were removed in 2014 due to relocation of the Fitness Center to the High Rise office building.

TABLE 4.1-1

DFS Environmental TLD Measurements
Net Exposures in mR/Standard Quarter (91 days)

2017

Sta. No.	Description	1st Quarter Exp.	1st Quarter S.D.	2nd Quarter Exp.	2nd Quarter S.D.	3rd Quarter Exp.	3rd Quarter S.D.	4th Quarter Exp.	4th Quarter S.D.	Qtr Ave Exp.
TL-44	Outside Science & Nature C.(1)	14.4	0.6	14.0	0.5	15.1	0.6	14.3	0.6	14.5
SB-36	Inside Science & Nature C.	17.8	0.8	16.6	0.7	17.0	0.8	15.3	0.6	16.7
SB-32	High-Rise 3rd Floor (1)	15.1	0.7	14.2	0.8	14.6	0.8	13.8	0.7	14.4
SB-33	High-Rise 1st Fl.(Fitness Cntr)(1)	20.3	0.9	20.3	1.0	21.0	0.9	19.6	0.8	20.3
TL-68	Nearby Site Boundary to DFS	17.7	0.7	17.4	0.8	18.7	1.0	18.9	0.9	18.2
TL-69	Nearby Site Boundary to DFS	14.1	0.8	13.9	0.6	14.7	0.7	14.1	0.6	14.2
TL-10	Site Boundary Fence (2)	15.2	0.7	15.2	0.6	16.8	1.0	14.8	0.8	15.5
TL-11	Site Boundary Fence (2)	18.0	0.7	16.8	0.7	17.7	0.8	16.9	0.7	17.4
TL-12	Site Boundary Fence (2)	17.6	0.8	17.8	0.8	19.5	1.0	17.6	0.9	18.1
TL-13	Inside Site Boundary (2)	17.3	0.7	17.6	0.6	18.2	0.8	17.5	0.7	17.7
TL-14	Trailer Park Seabrook (2)	15.6	0.7	15.3	0.6	16.7	0.7	15.7	0.7	15.8
TL-36	Rt 97, Georgetown (control)(2)	14.3	0.8	14.5	0.6	14.9	0.7	14.4	0.6	14.5
TL-37	Plaistow, NH (Control)(2)	16.7	0.8	17.3	0.6	17.5	0.7	16.8	0.8	17.1
TL-38	Hampstead, NH (Control)(2)	15.3	0.8	16.1	0.5	18.6	0.7	17.3	0.8	16.8
TL-39	Fremont, NH (Control)(2)	18.9	0.9	20.1	0.7	20.7	1.3	19.7	0.8	19.9
TL-40	Newmarket, NH (Control)(2)	15.0	0.6	16.1	0.6	16.2	0.9	16.1	0.6	15.9
TL-41	Portsmouth, NH (Control)(1)(2)	16.3	0.8	15.9	0.8	17.0	0.8	15.9	0.8	16.3
TL-42	Ipswich, MA (Control)(1)(2)	13.4	0.5	13.2	0.7	14.2	0.6	13.5	0.6	13.6
	Mean of Indicators	16.6		16.3		17.3		16.2		16.6
	Mean of Controls	15.7		16.2		17.0		16.2		16.3

(1) This location is not part of the DFS required program defined by the ODCM.

(2) Shared environmental monitoring locations for both plant REMP and DFS monitoring.

Table 4.1-2

DFS Facility Related Dose using ANSI/HPS N13.37-2014 Methodology

		Quarterly Ave. Baseline, B_Q	2017 Quarterly Monitoring Data, M_Q (mR/qtr)				Quarterly Facility Dose $F_Q = M_Q - (B_Q+MDD_Q)$				Annual Baseline, B_A	2017 Annual TLD Data, M_A	Annual Facility Dose $F_A = M_A - (B_A+MDD_A)$
		mR	1	2	3	4	1	2	3	4	mR	mR	
TL-44	On-site, outside Science & Nature Center	14.8	14.4	14.0	15.1	14.3	ND	ND	ND	ND	59.0	57.7	ND
SB-36	On-site, inside Science & Nature Center	16.2	17.8	16.6	17.0	15.3	ND	ND	ND	ND	64.7	66.6	ND
SB-32	High-Rise Building, 3rd floor	14.0	15.1	14.2	14.6	13.8	ND	ND	ND	ND	55.7	57.6	ND
SB-33	High-Rise Building 1st floor, Fitness Center	17.5	20.3	20.3	21.0	19.6	ND	ND	ND	ND	69.2	81.2	12.0[1]
TL-68	Nearby site boundary (firing Range)	17.7	17.7	17.4	18.7	18.9	ND	ND	ND	ND	70.8	72.6	ND
TL-69	Nearby site boundary (Rocks Rd)	14.6	14.1	13.9	14.7	14.1	ND	ND	ND	ND	58.2	56.8	ND
TL-10	Site Boundary	17.2	15.2	15.2	16.8	14.8	ND	ND	ND	ND	68.7	62.1	ND
TL-11	Site Boundary	17.5	18.0	16.8	17.7	16.9	ND	ND	ND	ND	69.9	69.4	ND
TL-12	Site Boundary	18.2	17.6	17.8	19.5	17.6	ND	ND	ND	ND	72.6	72.5	ND
TL-13	Inside Site Boundary	19.2	17.3	17.6	18.2	17.5	ND	ND	ND	ND	77.0	70.6	ND
TL-14	Trailer Park	15.9	15.6	15.3	16.7	15.7	ND	ND	ND	ND	63.5	63.3	ND
TL-36	Route 97(Control)	15.4	14.3	14.5	14.9	14.4	ND	ND	ND	ND	61.9	58.1	ND
TL-37	Plaistow, NH (Control)	18.0	16.7	17.3	17.5	16.8	ND	ND	ND	ND	72.0	68.3	ND
TL-38	Hampstead, NH (Control)	19.8	15.3	16.1	18.6	17.3	ND	ND	ND	ND	79.3	67.3	ND
TL-39	Fremont, NH (Control)	21.3	18.9	20.1	20.7	19.7	ND	ND	ND	ND	85.2	79.4	ND
TL-40	Newmarket, NH (Control)	16.7	15.0	16.1	16.2	16.1	ND	ND	ND	ND	66.9	63.5	ND
TL-41	Portsmouth, NH (Control)	16.9	16.3	15.9	17.0	15.9	ND	ND	ND	ND	67.6	65.0	ND
TL-42	Ipswich, MA (Control)	14.3	13.4	13.2	14.2	13.5	ND	ND	ND	ND	57.2	54.3	ND

Table 4.1-2 (cont'd)

DFS Facility Related Dose using ANSI/HPS N13.37-2014 Methodology

MDD_Q = 4.48 = minimum differential exposure, quarterly, 3 times 90th percentile S_Q determined from analysis in mR.

MDD_A = 10.17 = minimum differential exposure, annual, 3 times 90th percentile S_A determined from analysis in mR.

B_Q = Quarterly baseline exposure (mR).

M_Q = location's 91 day standard quarterly exposure (mR).

L_Q = Quarterly Investigative Level exposure (mR).

B_A = Quarterly baseline background average exposure (mR).

M_A = Annual monitoring data, determined by summing the quarterly data over all four quarters (mR).

L_A = Annual Investigative Level exposure (mR).

ND = Facility contribution to exposure "Not Detected"

[1] Note that this location is a fitness center and is not occupied full time. Applying an annual occupancy factor for this location of 0.0416 (1 hour per day x 7 days a week x 52 weeks per year/8760 hours) results in an annual dose of 0.5 mR.

FIGURE 4.1

DFS CONTROL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

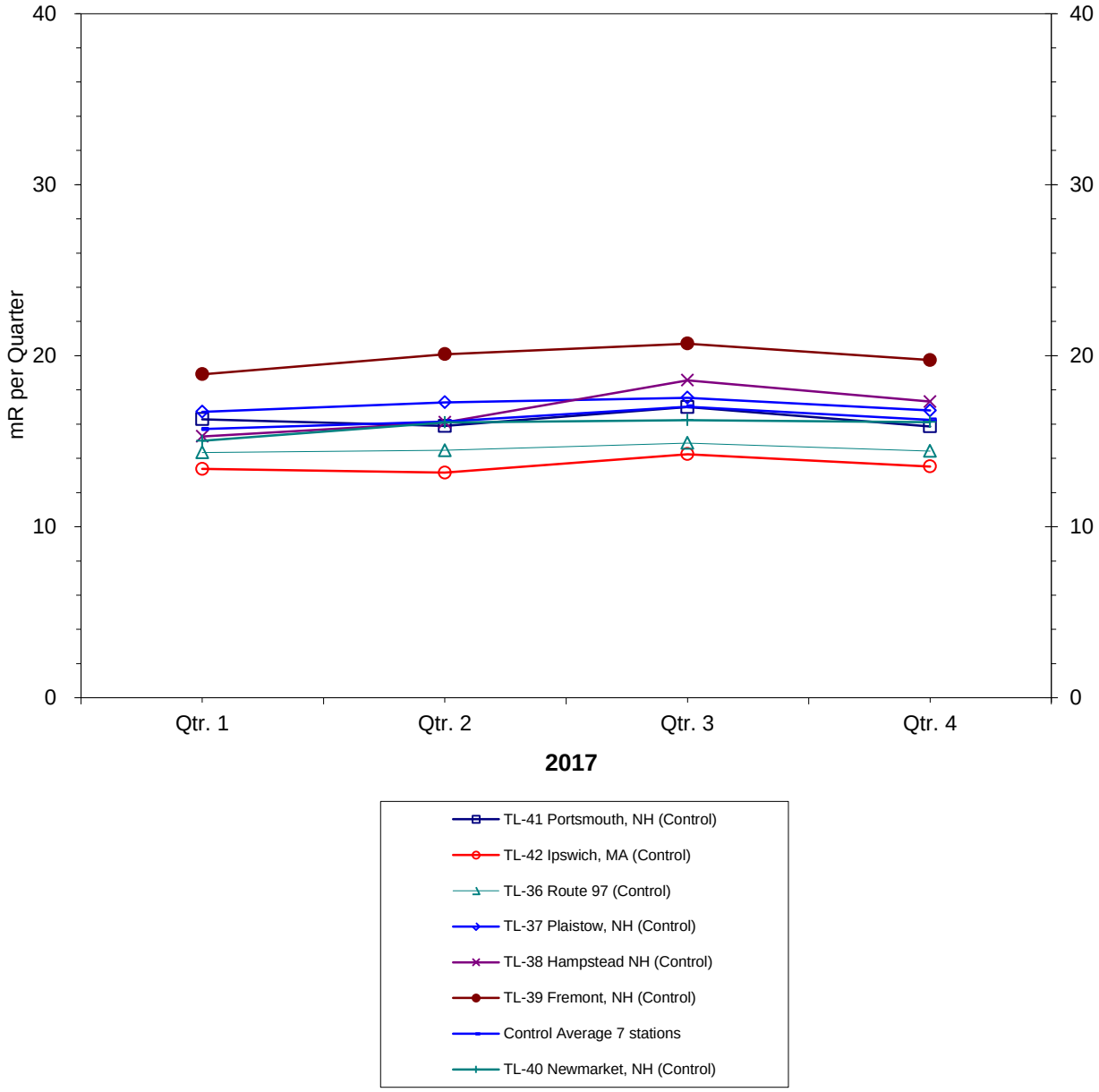


FIGURE 4.2

DFS ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

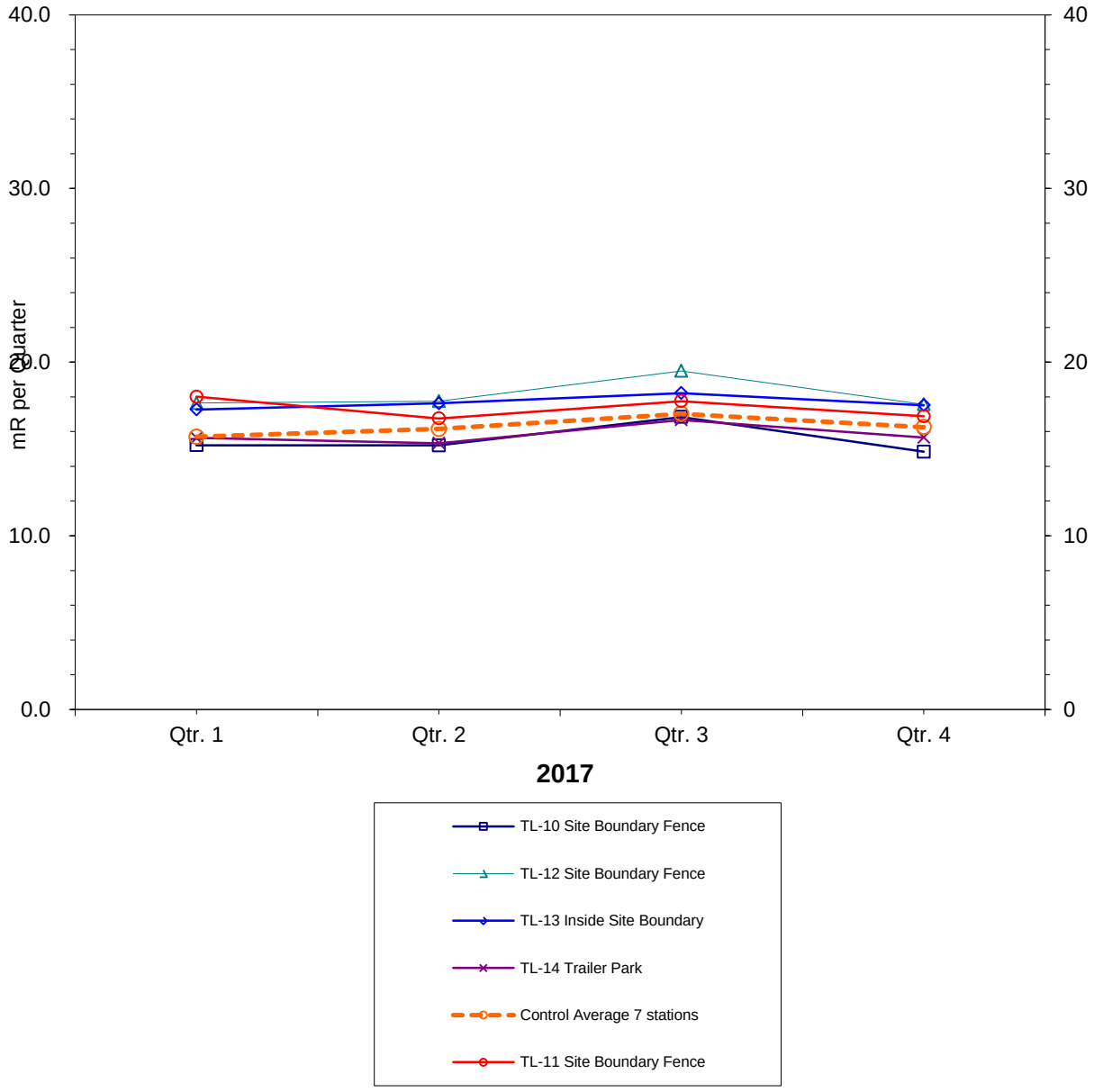


FIGURE 4.3

DFS ENVIRONMENTAL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

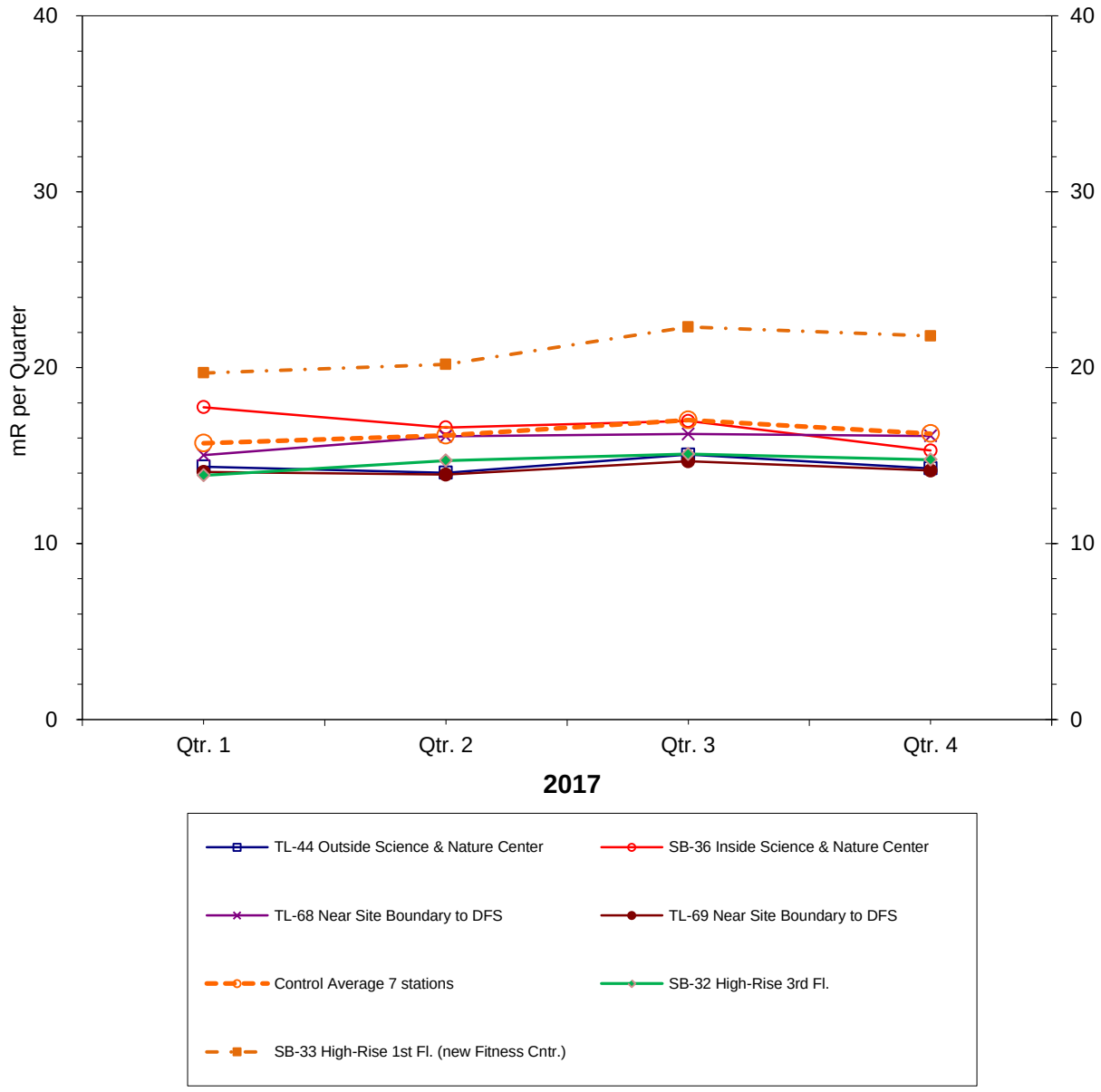


FIGURE 4.4

DFS CONTROL RADIATION MEASUREMENTS (USING TLDs)
SEABROOK STATION

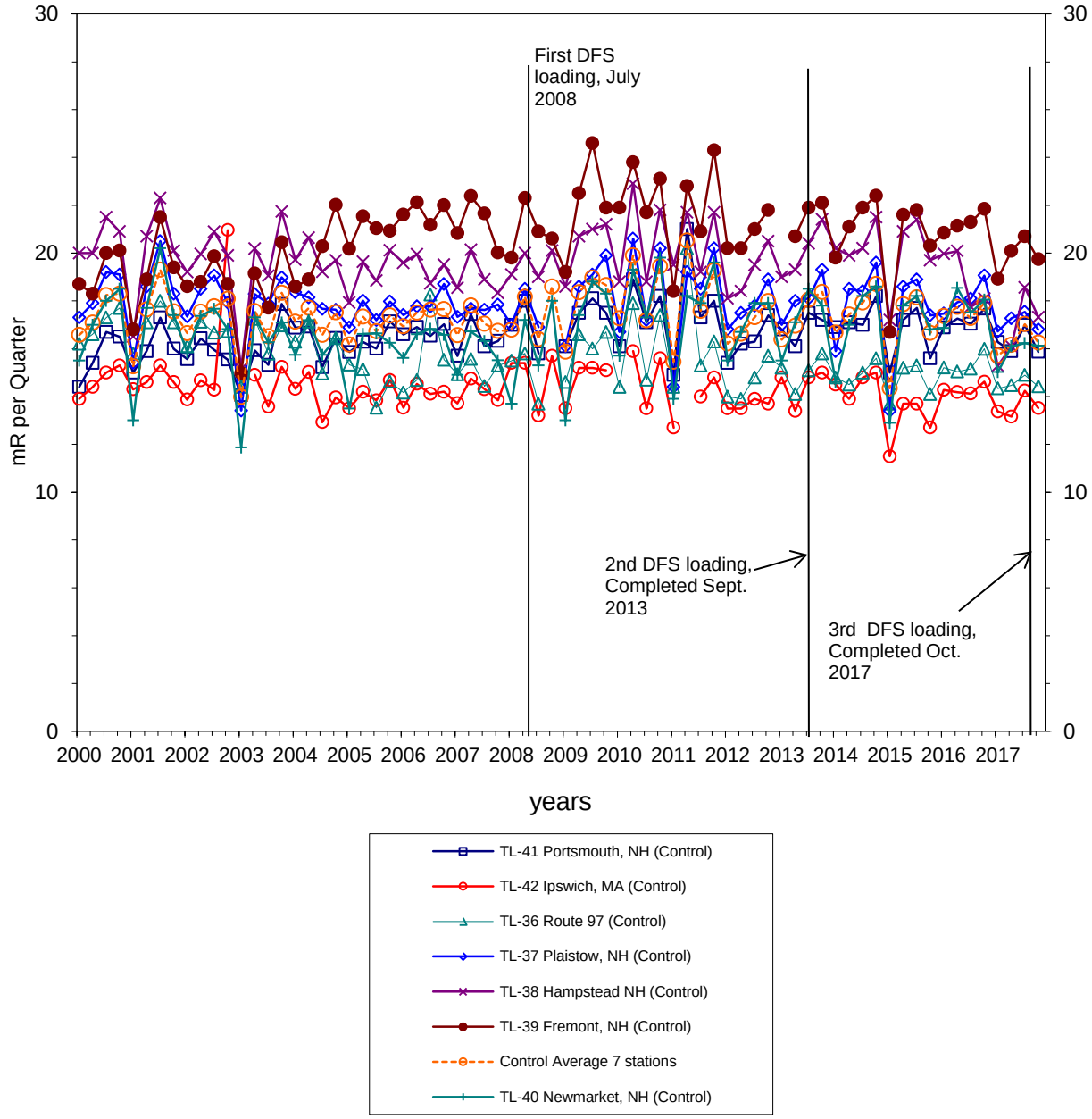


FIGURE 4.5

DFS RADIATION MEASUREMENTS TRENDS (USING TLDs)
SEABROOK STATION

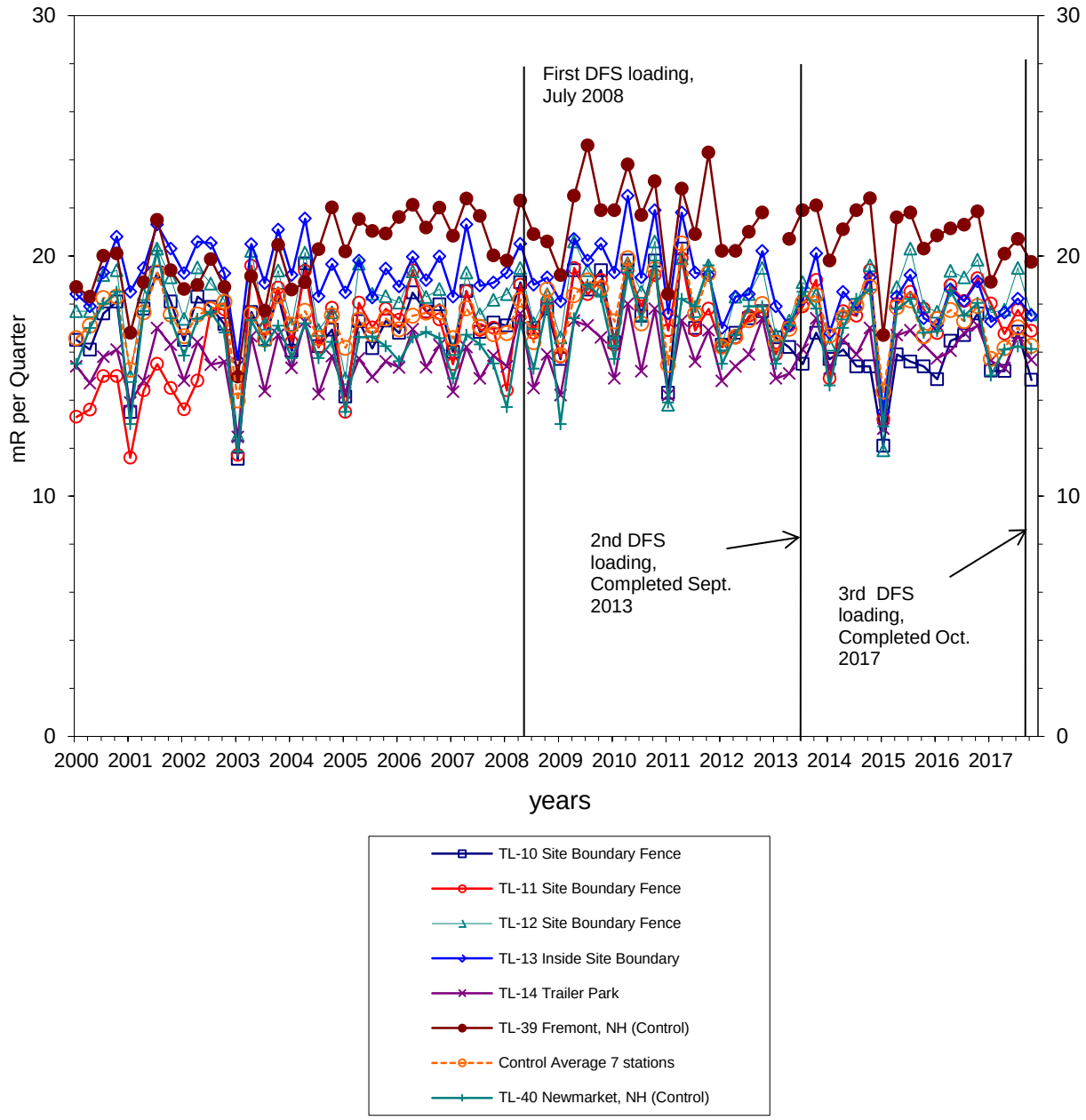
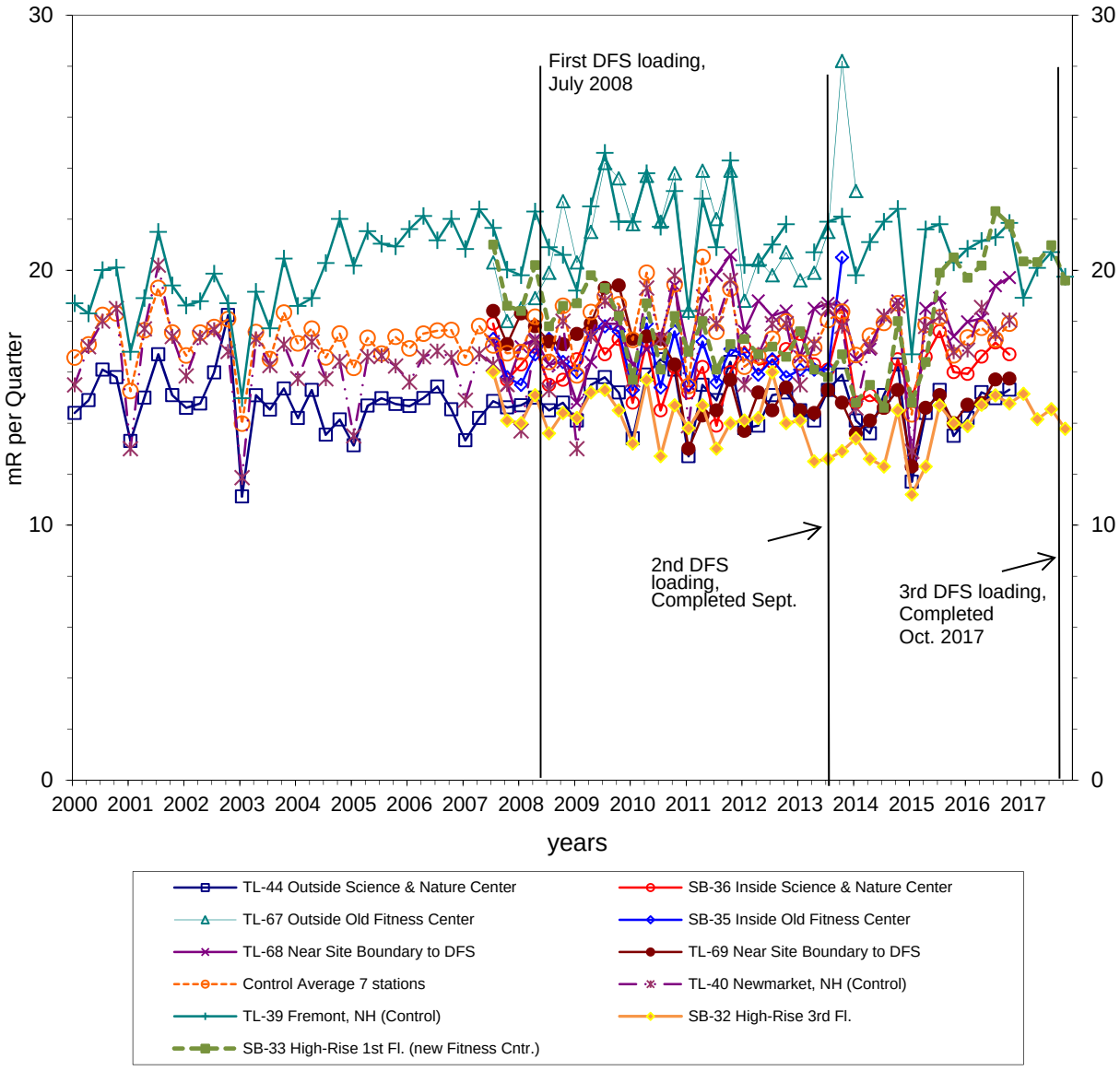


FIGURE 4.6

DFS RADIATION MEASUREMENTS TRENDS (USING TLDs)
SEABROOK STATION



5.0 Program Deviations and Reporting

5.1 Sampling Program Deviations

Table A.9.1-1 of the Offsite Dose Calculation Manual (ODCM) allows for deviations in the REMP sampling schedule "if specimens are unobtainable due to circumstances such as hazardous conditions, seasonal unavailability and malfunction of automatic sampling equipment." All deviations from the sampling schedule shall be documented each year in the Radiological Environmental Operating Report. The deviations for 2017 are as follows:

- A brief loss of power to air sampling station AP/CF-01 (duration approximately 8 seconds) was recorded on 5/23/17. Once the power was restored, the equipment returned to normal operation. The out of service time did not impact the ability to collect sufficient sample volume over the collection cycle for this analysis. AR 02206676 was written to document this program deviation.
- On 7/24/17, 6 out of 8 air sampling locations cycled on and off throughout the day. The out of service time did not impact the ability to collect sufficient sample volume over the collection cycle for this analysis. AR 02216510 was written to document this program deviation.
- On 10/30/2017, there was a loss of power to air sampling stations AP/CF-03 (Southwest Boundary (Rock Pile) and AP/CF-05 (Winnacunnet High School) due to a rain/wind storm. Once the power was restored, the equipment returned to normal operation. The out of service time did not impact the ability to collect sufficient sample volume over the collection cycle for this analysis. AR 02233543 was written to document this program deviation.

5.2 Comparison of Achieved LLDs with Requirements

Table A.9.1-2 of the ODCM indicates the required Lower Limits of Detection (LLDs) for environmental sample analyses. (This table is duplicated in Table 5.2-1 of this report.) Occasionally an LLD for short-lived radionuclides is not achieved due to low sample volume or delays between sample collection and time of analysis. In such cases, ODCM Table A.9.1-2 requires a discussion of the event in the annual Radiological Environmental Operating Report.

For each analysis having an LLD requirement in ODCM Table A.9.1-2, the *a posteriori* (after the fact) Minimum Detectable Concentration (MDC) calculated for that analysis was compared with the required LLD. During 2017, 1328 analyses had an LLD requirement listed in Table 5.2-1. All analyses except for three I-131 analyses of vegetation samples taken in September (LSNs 435141001 – 435141004) met the required LLDs. The reason for the missed LLD in the vegetation samples was the short half-life for I-131.

5.3 Comparison of Results against Reporting Levels

Seabrook Station ODCM Section 10.1 requires the notification of the NRC by special report within 30 days of receipt from the environmental laboratory whenever a Reporting Level in Table 5.3-1 is exceeded. Reporting Levels are the environmental concentrations that relate to the ALARA design dose objectives of 10 CFR 50, Appendix I. It should be noted that environmental concentrations are averaged over calendar quarters for the purposes of this comparison, and that Reporting Levels apply only to measured levels of radioactivity due to plant effluents. During 2017, no Reporting Levels were exceeded.

Table 5.2-1

DETECTION CAPABILITIES FOR ENVIRONMENTAL SAMPLE ANALYSIS[a]

Lower Limit of Detection (LLD)

Analysis	Water (pCi/kg)	Airborne Particulate or Gas (pCi/m^3)	Fish and Invertebrates (pCi/kg, wet)	Milk (pCi/kg)	Food Products (pCi/kg, wet)	Sediment (pCi/kg, dry)
Gross Beta	4	0.01				
H-3	3,000					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95	15[c]					
I-131	15	0.07		1	60[b]	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15[c]			15		

a. Reference Seabrook Station ODCM, Table A.9.1-2 for clarifications.
b. Broad leaf vegetation only.
c. Parent only.

Table 5.3-1

REPORTING LEVELS FOR RADIOACTIVITY CONCENTRATIONS IN ENVIRONMENTAL SAMPLES[a]

Analysis	Water (pCi/kg)	Airborne Particulate or Gas (pCi/m^3)	Fish and Invertebrates (pCi/kg, wet)	Milk (pCi/kg)	Food Products (pCi/kg, wet)
H-3	30,000				
Mn-54	1,000		30,000		
Fe-59	400		10,000		
Co-58	1,000		30,000		
Co-60	300		10,000		
Zn-65	300		20,000		
Zr-Nb-95	400				
I-131	100	0.9		3	100[b]
Cs-134	30	10	1,000	60	1,000
Cs-137	50	20	2,000	70	2,000
Ba-La-140	200			300	

a. Reference Seabrook Station ODCM Table A.9.1-3 for clarifications.
b. Broad leaf vegetation only.

6.0 QUALITY ASSURANCE PROGRAM

6.1 GEL Laboratories QA

GEL's primary goals are to ensure that all measurement data generated are scientifically and legally defensible, of known and acceptable quality per the data quality objectives (DQOs), and thoroughly documented to provide sound support for environmental decisions. In addition, GEL continues to ensure compliance with all contractual requirements, environmental standards, and regulations established by local, state and federal authorities.

GEL administers the QA program in accordance with their Quality Assurance Plan, GL-QS-B-001. The Quality Systems include all quality assurance (QA) policies and quality control (QC) procedures necessary to plan, implement, and assess the work that GEL performs. GEL's QA Program establishes a quality management system (QMS) that governs all of the activities of the organization.

The results of GEL's assessment of their laboratory activities listed in this section entails their quality assurance program for the proficiency testing and environmental monitoring aspects of GEL for 2017. GEL's QA Program is designed to monitor the quality of analytical processing associated with environmental, radiobioassay, effluent (10 CFR Part 50), and waste (10 CFR Part 61) sample analysis.

This summary was extracted from GEL Laboratories report entitled "2017 Annual Quality Assurance Report for the Radiological Environmental Monitoring Program (REMP)", dated March 9, 2018, and includes:

- Intra-laboratory QC results analyzed during 2017.
- Inter-laboratory QC results analyzed during 2017 where known values were available.

Quality Assurance Programs for Inter-laboratory, Intra-laboratory and Third Party Cross Check

In addition to internal and client audits, GEL's laboratory participates in annual performance evaluation studies conducted by independent providers. GEL routinely participates in the following types of performance audits:

- Proficiency testing and other inter-laboratory comparisons
- Performance requirements necessary to retain Certifications
- Evaluation of recoveries of certified reference and in-house secondary reference materials using statistical process control data.
- Evaluation of relative percent difference between measurements through statistical process control (SPC) data.

GEL also participates in a number of proficiency testing programs for federal and state agencies and as required by contracts. It is GEL's policy that no proficiency evaluation samples be analyzed in any special manner. GEL's annual performance evaluation participation generally includes a combination of studies that support the following:

- US Environmental Protection Agency Discharge Monitoring Report, Quality Assurance Program (DMR-QA). Annual national program sponsored by EPA for laboratories engaged in the analysis of samples associated with the NPDES monitoring program. Participation is mandatory for all holders of NPDES permits. The permit holder must analyze for all of the parameters listed on the discharge permit. Parameters include general chemistry, metals, BOD/COD, oil and grease, ammonia, nitrates, etc.

- Department of Energy Mixed Analyte Performance Evaluation Program (MAPEP). A semiannual program developed by DOE in support of DOE contractors performing waste analyses.

Participation is required for all laboratories that perform environmental analytical measurements in support of environmental management activities. This program includes radioactive isotopes in water, soil, vegetation and air filters.

- ERA's MRAD-Multimedia Radiochemistry Proficiency test program. This program is for labs seeking certification for radionuclides in wastewater and solid waste. The program is conducted in strict compliance with USEPA National Standards for Water Proficiency study.

- ERA's InterLab RadChem Proficiency Testing Program for radiological analyses. This program completes the process of replacing the USEPA EMSL-LV Nuclear Radiation Assessment Division program discontinued in 1998. Laboratories seeking certification for radionuclide analysis in drinking water also use the study. This program is conducted in strict compliance with the USEPA National Standards for Water Proficiency Testing Studies. This program encompasses Uranium by EPA method 200.8 (for drinking water certification in Utah/Primary NELAP), gamma emitters, Gross Alpha/Beta, Iodine-131, naturally-occurring radioactive isotopes, Strontium-89/90, and Tritium.

- ERA's Water Pollution (WP) biannual program for waste methodologies includes parameters for both organic and inorganic analytes.

- ERA's Water Supply (WS) biannual program for drinking water methodologies includes parameters for organic and inorganic analytes.

- Environmental Cross-Check Program administered by Eckert & Ziegler Analytics, Inc. This program encompasses radionuclides in water, soil, milk, naturally-occurring radioactive isotopes in soil and air filters.

GEL procures single-blind performance evaluation samples from Eckert & Ziegler Analytics to verify the analysis of sample matrices processed at GEL. Samples are received on a quarterly basis. GEL's Third-Party Cross-Check Program provides environmental matrices encountered in a typical nuclear utility REMP. The Third-Party Cross-Check Program is intended to meet or exceed the inter-laboratory comparison program requirements discussed in NRC Regulatory Guide 4.15. Once performance evaluation samples have been prepared in accordance with the instructions provided by the program test (PT) provider, samples are managed and analyzed in the same manner as environmental samples from GEL's clients.

Quality Assurance Program for Internal and External Audits

During each annual reporting period, at least one internal assessment of each area of the laboratory is conducted in accordance with the pre-established schedule from Standard Operating Procedure for the Conduct of Quality Audits, GL-QS-E-001. The annual internal audit plan is reviewed for adequacy and includes the scheduled frequency and scope of quality control actions necessary to GEL's QA program. Internal audits are conducted at least annually in accordance with a schedule approved by the Quality Systems Director. Supplier audits are contingent upon the categorization of the supplier, and may or may not be conducted prior to the use of a supplier or subcontractor. Type I suppliers and subcontractors, regardless of how they were initially qualified, are re-evaluated at least once every three years.

In addition, prospective customers audit GEL during pre-contract audits. GEL hosts several external audits each year for both our clients and other programs. These programs include environmental monitoring, waste characterization, and radiobioassay. The following list of programs may audit GEL at least annually or up to every three years depending on the program.

- TNI, The NELAC Institute, National Environmental Laboratory Accreditation Program
- DOECAP, U.S. Department of Energy Consolidated Audit Program
- DOELAP, U.S. Department of Energy Laboratory Accreditation Program

- DOE QSAS, U.S. Department of Energy, Quality Systems for Analytical Services
- ISO/IEC 17025:2005
- A2LA, American Association for Laboratory Accreditation
- DOD ELAP, US Department of Defense Environmental Accreditation Program
- NUPIC, Nuclear Procurement Issues Committee
- South Carolina Department of Health and Environmental Control (SC DHEC)

The annual radiochemistry laboratory internal audit (17-RAD-001) was conducted in May, 2017. One (1) finding, six (6) observations, and five (5) recommendations resulted from this assessment. By July, 2017, the finding was closed and appropriate laboratory staff addressed each observation and recommendation.

Performance Evaluation Acceptance Criteria for Environmental Sample Analysis

GEL utilized an acceptance protocol based upon two performance models. For those inter-laboratory programs that already have established performance criteria for bias (i.e., MAPEP, and ERA/ELAP), GEL will utilize the criteria for the specific program. For intra-laboratory or third party quality control programs that do not have a specific acceptance criteria (i.e. the Eckert-Ziegler Analytics Environmental Cross-check Program), results will be evaluated in accordance with GEL's internal acceptance criteria.

Performance Evaluation Samples

Performance Evaluation (PE) results and internal quality control sample results are evaluated in accordance with GEL acceptance criteria. The first criterion concerns bias, which is defined as the deviation of any one result from the known value. The second criterion concerns precision, which deals with the ability of the measurement to be replicated by comparison of an individual result with the mean of all results for a given sample set.

GEL also evaluates its analytical performance on a regular basis through statistical process control (SPC) acceptance criteria. Where feasible, this criterion is applied to both measures of precision and accuracy and is specific to sample matrix. GEL establishes environmental process control limits at least annually.

For Radiochemistry analysis, quality control evaluation is based on static limits rather than those that are statistically derived. Current process control limits are maintained in GEL's AlphaLIMS. GEL also measures precision with matrix duplicates and/or matrix spike duplicates. The upper and lower control limits (UCL and LCL respectively) for precision are plus or minus three times the standard deviation from the mean of a series of relative percent differences. The static precision criteria for radiochemical analyses are 0 - 20%, for activity levels exceeding the contract required detection limit (CRDL).

Quality Control Program for Environmental Sample Analysis

GEL's internal QA Program is designed to include QC functions such as instrumentation calibration checks (to insure proper instrument response), blank samples, instrumentation backgrounds, duplicates, as well as overall staff qualification analyses and statistical process controls. Both quality control and qualification analyses samples are used to be as similar as the matrix type of those samples submitted for analysis by the various laboratory clients. These performance test samples (or performance evaluation samples) are either actual samples submitted in duplicate in order to evaluate the precision of laboratory measurements, or fortified blank samples, which have been given a known quantity of a radioisotope that is in the interest to GEL's clients.

Accuracy (or Bias) is measured through laboratory control samples and/or matrix spikes, as well as surrogates and internal standards. The UCLs and LCLs for accuracy are plus or minus three times the standard deviation from the mean of a series of recoveries. The static limit for radiochemical analyses is 75 - 125%. Specific instructions for out-of-control situations are provided in the applicable analytical SOP.

GEL's Laboratory Control Standard (LCS) is an aliquot of reagent water or other blank matrix to which known quantities of the method analytes are added in the laboratory. The LCS is analyzed exactly like a sample, and its purpose is to determine whether the methodology is in control, and whether the laboratory is capable of making accurate and precise measurements. Some methods may refer to these samples as Laboratory Fortified Blanks (LFB). The requirement for recovery is between 75 and 125% for radiological analyses excluding drinking water matrix.

$$\text{Bias (\%)} = \frac{\text{(observed concentration)}}{\text{(known concentration)}} * 100\ \%$$

Precision is a data quality indicator of the agreement between measurements of the same property, obtained under similar conditions, and how well they conform to themselves. Precision is usually expressed as standard deviation, variance or range in either absolute or relative (percentage) terms.

GEL's laboratory duplicate (DUP or LCSD) is an aliquot of a sample taken from the same container and processed in the same manner under identical laboratory conditions. The aliquot is analyzed independently from the parent sample and the results are compared to measure precision and accuracy.

If a sample duplicate is analyzed, it will be reported as Relative Percent Difference (RPD). The RPD must be 20 percent or less, if both samples are greater than 5 times the MDC. If both results are less than 5 times MDC, then the RPD must be equal to or less than 100%. If one result is above the MDC and the other is below the MDC, then the RPD can be calculated using the MDC for the result of the one below the MDC. The RPD must be 100% or less. In the situation where both results are above the MDC but one result is greater than 5 times the MDC and the other is less than 5 times the MDC, the RPD must be less than or equal to 20%. If both results are below MDC, then the limits on % RPD are not applicable.

$$\text{Difference (\%)} = \frac{\text{(high duplicate result – low duplicate result)}}{\text{(average of results)}} * 100\ \%$$

Summary of Data Results

During 2017, forty-five (45) radioisotopes associated with seven (7) matrix types were analyzed under GEL's Performance Evaluation program in participation with ERA, MAPEP, and Eckert & Ziegler Analytics. Matrix types were representative of client analyses performed during 2017. Of the four hundred sixty-two (462) total results reported, 99.4% (459 of 462) were found to be acceptable. The list below contains the type of matrix evaluated by GEL:

- Air Filter
- Cartridge
- Water
- Milk
- Soil
- Liquid
- Vegetation

A summary list of all Inter-laboratory radiological proficiency test results and their evaluation against their acceptance criteria is provided in Table 6.1-1. This list reflects GEL's participation in the MAPEP Monitoring Program, the ERA MRaD PT Program, the ERA PT Program, and the Eckert & Ziegler Analytics Environmental Cross-Check Program.

Summaries of GEL's Intra-laboratory test results for bias and precision by sample matrix are provided in Table 6.1-3 (REMP Related) and Table 6.1-4 (All Samples).

Summary of Participation in the Eckert & Ziegler Analytics Environmental Cross-Check Program

Eckert & Ziegler Analytics provided samples for ninety-two (92) individual environmental analyses. The accuracy of each result reported to Eckert & Ziegler Analytics, Inc. is measured by the ratio of GEL's result to the known value. All results fell within GEL's acceptance criteria (100%). Table 6.1-2 list the results specific to the Eckert & Ziegler Analytics sample provided in 2017. No corrective action reports were noted for these results.

Summary of Participation in the MAPEP Monitoring Program

MAPEP Series 36 and 37 were analyzed by the laboratory. All one hundred twenty-four (124) analyses fell within the PT provider's acceptance criteria (100% within acceptance). No corrective action reports were noted for these results.

Summary of Participation in the ERA MRaD PT Program

The ERA MRad program provided samples (MRAD-26 and MRAD-27) for one hundred ninety-seven (197) individual environmental analyses. All analyses fell within the PT provider's acceptance criteria (100% within acceptance). No corrective action reports were noted for these results.

Summary of Participation in the ERA PT Program

The ERA program provided samples (RAD-108, RAD-109 and RAD-110) for forty-nine (49) individual environmental analyses. Of the 49 analyses, 93.9% (46 out of 49) of all results fell within the PT provider's acceptance criteria. CARR 170227-1085 documents the unacceptable result of Gross Alpha in water (two methods) from Study RAD-108. CARR170828-1125 documents the unacceptable result of Iodine-131 in water from Study RAD-110. All corrective actions are provided in Table 6.1-5.

Corrective Action Request and Report (CARR)

There are two categories of corrective action at GEL. One is corrective action implemented at the analytical and data review level in accordance with the analytical standard operating procedures (SOP). The other is formal corrective action documented by the Quality Systems Team in accordance with GEL's standard operating procedure GL-QS-E-002. A formal corrective action is initiated when a nonconformance reoccurs or is so significant that permanent elimination or prevention of the problem is required. Formal corrective action investigations include root cause analysis.

GEL includes quality requirements in most analytical standard operating procedures to ensure that data are reported only if the quality control criteria are met or the quality control measures that did not meet the acceptance criteria are documented. A formal corrective action is implemented according to GEL's standard operating procedure GL-QS-E-002 for Conducting Corrective/Preventive Action and Identifying Opportunities for Improvement. Recording and documentation is performed following guidelines stated in GEL's standard operating procedure GL-QS-E-012 for Client NCR Database Operation.

Any employee at GEL can identify and report a nonconformance and request that corrective action be taken. Any GEL employee can participate on a corrective action team as requested by the QS team or Group Leaders. The steps for conducting corrective action are detailed in GEL's standard operating procedure GL-QS-E-002. In the event that correctness or validity of the laboratory's test results in doubt, the laboratory will take corrective action. If investigations show that the results have been impacted, affected clients will be informed of the issue in writing within five (5) calendar days of the discovery.

Table 6.1-5 provides the status of CARRs for radiological performance testing during 2017. GEL has determined that causes of the failures did not impact any data reported to its clients.

Table 6.1-1
2017 INTER-LAB RADIOLOGICAL PROFICIENCY TESTING RESULTS AND ACCEPTANCE CRITERIA

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Barium-133	86.7	85.6	72.0 - 94.2	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Cesium-134	51.2	52.6	42.4 - 57.9	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Cesium-137	118	112	101 - 126	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Cobalt-60	118	113	102 - 126	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Zinc-65	202	189	170 - 222	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Gross Alpha	71.6	52.3	27.3 - 65.5	Not Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Gross Alpha	69.6	52.3	27.3 - 65.5	Not Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Gross Beta	37.6	41.6	27.7 - 49.0	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Radium-226	12.3	12.7	9.48 - 14.7	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Radium-226	13.1	12.7	9.48 - 14.7	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Radium-226	14.2	12.7	9.48 - 14.7	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Radium-228	6.31	6.2	3.83 - 8.08	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Radium-228	6.36	6.2	3.83 - 8.08	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Uranium (Nat)	12.2	12.6	9.91 - 14.4	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	µg/L	Uranium (Nat) mass	19.7	18.4	14.5 - 21.1	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	µg/L	Uranium (Nat) mass	18.9	18.4	14.5 - 21.1	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Tritium	11300	12500	10900 - 13800	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Tritium	11600	12500	10900 - 13800	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Strontium-89	60.2	55.5	44.3 - 63.2	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Strontium-89	54.5	55.5	44.3 - 63.2	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Strontium-90	35.9	43.1	31.8 - 49.5	Acceptable
ERA	1st/2017	2/27/17	RAD-108	Water	pCi/L	Strontium-90	37.7	43.1	31.8 - 49.5	Acceptable
EZA	1st/2017	07/07/17	E11818	Cartridge	pCi	Iodine-131	9.93E+01	9.46E+01	1.05	Acceptable
EZA	1st/2017	07/07/17	E11819	Milk	pCi/L	Strontium-89	8.86E+01	9.96E+01	0.89	Acceptable
EZA	1st/2017	07/07/17	E11819	Milk	pCi/L	Strontium-90	1.97E+01	2.55E+01	0.77	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Iodine-131	9.57E+01	9.68E+01	0.99	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Cerium-141	1.21E+02	1.19E+02	1.02	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Chromium-51	1.76E+02	2.12E+02	0.83	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Cesium-134	1.71E+02	1.89E+02	0.9	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Cesium-137	2.31E+02	2.27E+02	1.02	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Cobalt-58	1.89E+02	1.78E+02	1.06	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Manganese-54	2.74E+02	2.49E+02	1.1	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Iron-59	1.35E+02	1.27E+02	1.06	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Zinc-65	3.22E+02	2.96E+02	1.09	Acceptable
EZA	1st/2017	07/07/17	E11820	Milk	pCi/L	Cobalt-60	2.85E+02	2.93E+02	0.97	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Iodine-131	9.68E+01	8.79E+01	1.1	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Cerium-141	1.24E+02	1.19E+02	1.05	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Chromium-51	2.43E+02	2.11E+02	1.15	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Cesium-134	1.84E+02	1.88E+02	0.98	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Cesium-137	2.49E+02	2.26E+02	1.1	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Cobalt-58	1.88E+02	1.77E+02	1.06	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Manganese-54	2.79E+02	2.48E+02	1.13	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Iron-59	1.46E+02	1.27E+02	1.15	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Zinc-65	3.36E+02	2.95E+02	1.14	Acceptable
EZA	1st/2017	07/07/17	E11821	Water	pCi/L	Cobalt-60	3.07E+02	2.92E+02	1.05	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Americium-241	65.7	67.0	46.9-87.1	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Cesium-134	1470	1550	1085-2015	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Cesium-137	679	611	428-794	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Cobalt-57	0.812		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Cobalt-60	958	891	624-1158	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Iron-55	804	812	568-1056	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Manganese-54	1080	967	677-1257	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Nickel-63	-46		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Plutonium-238	0.574	0.41	Sens. Eval.	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Plutonium-239/240	51.2	59.8	41.9-77.7	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Potassium-40	624	607	425-789	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Strontium-90	548	624	437-811	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Technetium-99	641	656	459-853	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	U-234/233	56.9	48.1	33.7-62.5	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Uranium-238	53.9	48.8	34.2-63.7	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaS36	Soil	Bq/Kg	Zinc-65	-4.0		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Americium-241	0.8070	0.846	0.592-1.1	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Cesium-134	0.037		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Cesium-137	12.2	11.1	7.8-14.4	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Cobalt-57	29.0	28.5	20.0-37.1	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Cobalt-60	12.8	12.3	8.6-16.0	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Hydrogen-3	245	249	174-324	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Iron-55	2.01	1.7	Sens. Eval.	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Manganese-54	15.7	14.9	10.4-19.4	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Nickel-63	13.6	12.2	8.5-15.9	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Plutonium-238	0.635	0.703	0.492-0.914	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Plutonium-239/240	0.841	0.934	0.654-1.214	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Potassium-40	276	254	178-330	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Radium-226	0.443	0.504	0.353-0.655	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Strontium-90	9.27	10.1	7.1-13.1	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Technetium-99	5.81	6.25	4.38-8.13	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Uranium-234/233	1.11	1.16	0.81-1.51	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Uranium-238	1.16	1.20	0.84-1.56	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-MaW36	Water	Bq/L	Zinc-65	-0.0504		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-XaW36	Water	Bq/L	Iodine-129	0.01		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	ug/sample	Uranium-235	0.058	0.0623	0.0436-0.0810	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	ug/sample	Uranium-238	8.49	8.6	6.0-11.2	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	ug/sample	Uranium-Total	8.55	8.7	6.1-11.3	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Americium-241	0.0386	0.0376	0.0263-0.0489	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Cesium-134	1.38	1.42	0.99-1.85	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Cesium-137	0.781	0.685	0.480-0.891	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Cobalt-57	1.77	1.70	1.19-2.21	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Cobalt-60	0.863	0.78	0.55-1.01	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Manganese-54	-0.0344		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Plutonium-238	0.0539	0.0598	0.0419-0.0777	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Plutonium-239/240	0.0419	0.046	0.0322-0.0598	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Strontium-90	0.543	0.651	0.456-0.846	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Uranium-234/233	0.105	0.104	0.073-0.135	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Uranium-238	0.106	0.107	0.075-0.139	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdF36	Filter	Bq/sample	Zinc-65	1.34	1.29	0.9-1.68	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Americium-241	0.000411		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Cesium-134	6.56	6.95	4.87-9.04	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Cesium-137	4.84	4.60	3.22-5.98	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Cobalt-57	0.0141		False Pos Test	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Cobalt-60	9.35	8.75	6.13-11.38	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Manganese-54	3.39	3.28	2.3-4.26	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Plutonium-238	0.0506	0.0598	0.0419-0.0777	Acceptable

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MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Plutonium-239/240	0.0754	0.089	0.062-0.166	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Strontium-90	1.50	1.75	1.23-2.28	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Uranium-234/233	0.19	0.179	0.125-0.233	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Uranium-238	1.930	0.186	0.130-0.242	Acceptable
MAPEP	2nd/2017	06/13/17	MAPEP-17-RdV36	Vegetation	Bq/sample	Zinc-65	6.26	5.39	3.77-7.01	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Actinium-228	1240	1240	795 - 1720	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Americium-241	480	448	262 - 582	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Bismuth-212	929	1240	330 - 1820	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Bismuth-214	2790	2750	1660 - 3960	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Cesium-134	8660	8860	5790 - 10600	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Cesium-137	8300	7500	5750 - 9650	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Cobalt-60	4620	4430	3000 - 6100	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Lead-212	1300	1240	812 - 1730	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Lead-214	3170	2890	1690 - 4310	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Manganese-54	<38.6	<1000	0.00 - 1000	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Plutonium-238	494	648	390 - 894	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Plutonium-239	442	484	316 - 669	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Potassium-40	11000	10600	7740 - 14200	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Strontium-90	6150	9150	3490 - 14500	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Thorium-234	3360	1940	614 - 3650	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-234	1820	1950	1190 - 2500	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-234	2030	1950	1190 - 2500	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-234	2410	1950	1190 - 2500	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-238	1800	1940	1200 - 2460	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-238	1970	1940	1200 - 2460	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-238	1450	1940	1200 - 2460	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-Total	3540	3980	2160 - 5250	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-Total	3750	3980	2160 - 5250	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Uranium-Total	4090	3980	2160 - 5250	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	µg/kg	Uranium-Total	3860	3980	2160 - 5250	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	µg/kg	Uranium-Total (mass)	5280	5800	3200 - 7290	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	µg/kg	Uranium-Total (mass)	5420	5800	3200 - 7290	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	µg/kg	Uranium-Total (mass)	5900	5800	3200 - 7290	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Soil	µg/kg	Uranium-Total	4440	5800	3200 - 7290	Acceptable

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						(mass)				
ERA	2nd/2017	05/23/17	MRAD-26	Soil	pCi/kg	Zinc-65	7020	6090	4850 - 8090	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Americium-241	1700	1860	1140 - 2470	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Cesium-134	1660	1830	1180 - 2380	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Cesium-137	2470	2500	1810 - 3480	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Cobalt-60	1350	1390	959 - 1940	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Curium-244	629	734	360 - 1140	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Manganese-54	<32.2	<300	0.00 - 300	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Plutonium-238	2880	3250	1940 - 4450	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Plutonium-239	1990	2150	1320 - 2960	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Potassium-40	30900	30900	22300 - 43400	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Strontium-90	701	726	414 - 963	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-234	2720	3090	2030 - 3970	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-234	3080	3090	2030 - 3970	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-238	2820	3060	2040 - 3890	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-238	3020	3060	2040 - 3890	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-Total	5970	6290	4260 - 7830	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-Total	5690	6290	4260 - 7830	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Uranium-Total	6238	6290	4260 - 7830	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	µg/kg	Uranium-Total (mass)	8910	9250	6200 - 11700	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	µg/kg	Uranium-Total (mass)	8440	9250	6200 - 11700	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	µg/kg	Uranium-Total (mass)	9030	9250	6200 - 11700	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Vegetation	pCi/kg	Zinc-65	907	853	615 - 1200	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Americium-241	80.6	76.4	47.1 - 103	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Cesium-134	1140	1100	700 - 1360	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Cesium-137	1490	1390	1040 - 1830	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Cobalt-60	1120	1030	797 - 1290	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Iron-55	242	256	79.4 - 500	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Manganese-54	<7.53	<50.0	0.00 - 50.0	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Plutonium-238	54.1	54.3	37.2 - 71.4	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Plutonium-239	58.2	62	44.9 - 81.0	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Strontium-90	52.2	52.4	25.6 - 78.5	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-234	71.1	73.1	45.3 - 110	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-234	79	73.1	45.3 - 110	Acceptable

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ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-238	70.7	72.4	46.8 - 100	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-238	77.1	72.4	46.8 - 100	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-Total	154	149	82.5 - 227	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-Total	145	149	82.5 - 227	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Uranium-Total	159.5	149	82.5 - 227	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	µg/Filter	Uranium-Total (mass)	230	217	139 - 306	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	µg/Filter	Uranium-Total (mass)	212	217	139 - 306	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	µg/Filter	Uranium-Total (mass)	231	217	139 - 306	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Zinc-65	1160	984	705 - 1360	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Gross Alpha	112	85.5	28.6 - 133	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Filter	pCi/Filter	Gross Beta	54.9	45.2	28.6 - 65.9	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Americium-241	150	140	94.3 - 188	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Cesium-134	2380	2510	1840 - 2880	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Cesium-137	1480	1400	1190 - 1680	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Cobalt-60	2570	2540	2210 - 2970	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Iron-55	923	984	587 - 1340	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Manganese-54	<6.36	<100	0.00 - 100	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Plutonium-238	108	128	94.7 - 159	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Plutonium-239	73.3	85.8	66.6 - 108	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Strontium-90	685	714	465 - 944	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-234	82.1	90.3	67.8 - 116	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-234	92	90.3	67.8 - 116	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-234	87.1	90.3	67.8 - 116	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-238	86.7	89.5	68.2 - 110	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-238	84.1	89.5	68.2 - 110	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-238	98	89.5	68.2 - 110	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-Total	181	184	135 - 238	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-Total	173	184	135 - 238	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-Total	180	184	135 - 238	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Uranium-Total	185	184	135 - 238	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	µg/L	Uranium-Total (mass)	270	268	214 - 324	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	µg/L	Uranium-Total (mass)	260	268	214 - 324	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	µg/L	Uranium-Total (mass)	252	268	214 - 324	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
ERA	2nd/2017	05/23/17	MRAD-26	Water	µg/L	Uranium-Total (mass)	276	268	214 - 324	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Zinc-65	2160	1960	1630 - 2470	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Gross Alpha	125	89.5	31.8 - 139	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Gross Beta	59.6	61	34.9 - 90.4	Acceptable
ERA	2nd/2017	05/23/17	MRAD-26	Water	pCi/L	Tritium	18900	19400	13000 - 27700	Acceptable
ERA	2nd/2017	05/30/17	RAD-109	Water	pCi/L	Gross Alpha	79.7	75	39.5 - 92.3	Acceptable
ERA	2nd/2017	05/30/17	RAD-109	Water	pCi/L	Gross Alpha	72.9	75	39.5 - 92.3	Acceptable
ERA	2nd/2017	05/30/17	RAD-109	Water	pCi/L	Gross Alpha	72.9	75	39.5 - 92.3	Acceptable
EZA	2nd/2017	08/02/17	E11873	Cartridge	pCi	Iodine-131	8.65E+01	8.46E+01	1.02	Acceptable
EZA	2nd/2017	08/02/17	E11874	Milk	pCi/L	Strontium-89	8.88E+01	9.26E+01	0.96	Acceptable
EZA	2nd/2017	08/02/17	E11874	Milk	pCi/L	Strontium-90	9.50E+00	1.35E+01	0.71	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Cerium-141	1.62E+02	1.51E+02	1.07	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Cobalt-58	1.53E+02	1.55E+02	0.98	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Cobalt-60	2.07E+02	1.91E+02	1.08	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Chromium-51	3.65E+02	3.15E+02	1.16	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Cesium-134	1.74E+02	1.88E+02	0.92	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Cesium-137	1.57E+02	1.50E+02	1.05	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Iron-59	1.28E+02	1.15E+02	1.11	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Iodine-131	9.93E+01	9.36E+01	1.06	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Manganese-54	1.95E+02	1.72E+02	1.14	Acceptable
EZA	2nd/2017	08/02/17	E11875	Milk	pCi/L	Zinc-65	2.18E+02	2.04E+02	1.07	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Cerium-141	2.09E+02	1.99E+02	1.05	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Cobalt-58	2.11E+02	2.04E+02	1.04	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Cobalt-60	2.57E+02	2.50E+02	1.03	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Chromium-51	4.41E+02	4.13E+02	1.07	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Cesium-134	2.38E+02	2.47E+02	0.96	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Cesium-137	2.20E+02	1.97E+02	1.12	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Iron-59	1.64E+02	1.51E+02	1.09	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Iodine-131	8.69E+01	8.12E+01	1.07	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Manganese-54	2.43E+02	2.25E+02	1.08	Acceptable
EZA	2nd/2017	08/02/17	E11876	Water	pCi/L	Zinc-65	2.95E+02	2.67E+02	1.10	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Barium-133	68.8	66.3	55.2 - 72.9	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Cesium-134	24.7	24.4	18.7 - 27.2	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Cesium-137	51.7	51.6	46.4 - 59.6	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Cobalt-60	97	88.6	79.7 - 99.8	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Zinc-65	39.7	32.7	27.3 - 41.6	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Gross Alpha	26.3	25.7	13.0 - 34.1	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Gross Alpha	31.9	25.7	13.0 - 34.1	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Gross Beta	54.4	63	43.5 - 69.6	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Radium-226	1.6	1.29	1.07 - 1.95	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Radium-226	1.21	1.29	1.07 - 1.95	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Radium-228	6.49	5.66	3.45 - 7.47	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Radium-228	5.59	5.66	3.45 - 7.47	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Uranium (Nat)	65	66.7	54.3 - 73.9	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Uranium (Nat)	66.2	66.7	54.3 - 73.9	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	µg/L	Uranium (Nat) mass	97	98.1	79.8 - 109	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	µg/L	Uranium (Nat) mass	104.7	98.1	79.8 - 109	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Tritium	5120	5060	4340 - 5570	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Tritium	4620	5060	4340 - 5570	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Strontium-89	29.9	26.4	18.4 - 32.9	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Strontium-89	28.2	26.4	18.4 - 32.9	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Strontium-90	37.8	36	26.4 - 41.5	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Strontium-90	34	36	26.4 - 41.5	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Iodine-131	28	25.5	21.2 - 30.1	Acceptable
ERA	3rd / 2017	08/28/17	RAD - 110	Water	pCi/L	Iodine-131	33	25.5	21.2 - 30.1	Not Acceptable
EZA	3rd/2017	11/10/17	E11926	Cartridge	pCi	Iodine-131	6.30E+01	6.48E+01	0.97	Acceptable
EZA	3rd/2017	11/10/17	E11927	Milk	pCi/L	Strontium-89	7.50E+01	8.27E+01	0.91	Acceptable
EZA	3rd/2017	11/10/17	E11927	Milk	pCi/L	Strontium-90	1.01E+01	1.21E+01	0.84	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Iodine-131	7.35E+01	7.10E+01	1.04	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Cerium-141	8.31E+01	8.70E+01	0.95	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Chromium-51	2.37E+02	2.17E+02	0.92	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Cesium-134	1.85E+02	2.01E+02	0.92	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Cesium-137	1.67E+02	1.72E+02	0.97	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Cobalt-58	1.21E+02	1.17E+02	1.03	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Manganese-54	1.28E+02	1.23E+02	1.04	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Iron-59	1.56E+02	1.25E+02	1.24	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Zinc-65	1.97E+02	1.84E+02	1.07	Acceptable
EZA	3rd/2017	11/10/17	E11928	Milk	pCi/L	Cobalt-60	2.59E+02	2.62E+02	0.99	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Iodine-131	8.08E+01	7.92E+01	1.02	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Cerium-141	1.09E+02	9.95E+01	1.1	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Chromium-51	2.47E+02	2.48E+02	1	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Cesium-134	2.06E+02	2.29E+02	0.9	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Cesium-137	2.00E+02	1.96E+02	1.02	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Cobalt-58	1.41E+02	1.34E+02	1.05	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Manganese-54	1.50E+02	1.40E+02	1.07	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Iron-59	1.58E+02	1.43E+02	1.10	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Zinc-65	2.37E+02	2.10E+02	1.13	Acceptable
EZA	3rd/2017	11/10/17	E11929	Water	pCi/L	Cobalt-60	3.18E+02	2.99E+02	1.06	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Americium-241	63.1	59	41.2-76.4	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Cesium-134	414.00	448	314-582	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Cesium-137	772	722	505-939	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Cobalt-57	1500	1458	1021-1895	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Cobalt-60	0.179	0	False Pos Test	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Iron-55	933	1010	707-1313	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Manganese-54	894.00	825	578-1073	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Nickel-63	1240	1220	854-1586	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Plutonium-238	85.8	92.0	64-120	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Plutonium-239/240	64.9	68.8	48.2-89.4	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Potassium-40	631	592	414-770	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Strontium-90	240	289	202-376	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Technetium-99	1170	1195	837-1554	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	U-234/233	72	69	48-90	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Uranium-238	209	219	153-285	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaS37	Soil	Bq/Kg	Zinc-65	633.0	559	391-727	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Americium-241	0.874	0.892	0.624-1.160	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Cesium-134	10.50	11.5	8.1-15.0	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Cesium-137	16.800	16.3	11.2-21.2	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Cobalt-57	12.1	12.1	8.5-15.7	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Cobalt-60	10.800	10.7	7.5-13.9	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Hydrogen-3	250	258	181-335	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Iron-55	20.1	19.4	13.6-25.2	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Manganese-54	15.5	14.9	10.4-19.4	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Nickel-63	0.764	0	False Pos Test	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Plutonium-238	0.528	0.60	0.422-0.784	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Plutonium-239/240	0.654	0.781	0.547-1.015	Acceptable

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MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Potassium-40	-1.2	0	False Pos Test	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Radium-226	0.774	0.86	0.601-1.115	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Strontium-90	7.04	8	5.44-10.10	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Technetium-99	6.41	6.73	4.71-8.75	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Uranium-234/233	1.09	1.01	0.71-1.31	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Uranium-238	1.140	1.040	0.73-1.35	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-MaW37	Water	Bq/L	Zinc-65	17.3	15.5	10.9	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-XaW37	Alk. Water	Bq/L	Iodine-129	2.590	2.310	1.62-3.00	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	ug/sample	Uranium-235	0.0521	0.0507	0.0355-0.0659	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	ug/sample	Uranium-238	7.8	7.0	4.90-9.10	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	ug/sample	Uranium-Total	7.84	7.05	4.94-9.17	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Americium-241	0.053300	0	0.0458-0.0796	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Cesium-134	1.0300	1.00	0.7-1.30	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Cesium-137	0.88	0.82	0.57-1.07	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Cobalt-57	0.01	0.00	False Pos Test	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Cobalt-60	0.75	0.68	0.48-0.88	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Manganese-54	1.48	1.30	0.91-1.69	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Plutonium-238	0.0257	0.0298	0.0209-0.0387	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Plutonium-239/240	0.0408	0.0468	0.0328-0.0608	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Strontium-90	0.608	0.801	0.561-1.041	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Uranium-234/233	0.086	0.084	0.059-0.109	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Uranium-238	0.093	0.087	0.061-0.113	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdF37	Filter	Bq/sample	Zinc-65	1.2500	1.08	0.76-1.40	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Americium-241	0.080	0.077	0.054-0.1	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Cesium-134	2.30	2.32	1.62-3.02	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Cesium-137	0.0191	0.00	False Pos Test	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Cobalt-57	2.92	2.80	2.0-3.6	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Cobalt-60	2.24	2.07	1.45-2.69	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Manganese-54	2.78	2.62	1.83-3.41	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Plutonium-238	0.0762	0.0830	0.058-0.108	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Plutonium-239/240	0.104	0.108	0.076-0.140	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Strontium-90	0.960	1.23	0.86-1.6	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Uranium-234/233	0.162	0.159	0.111-0.207	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Uranium-238	0.166	0.163	0.114-0.212	Acceptable
MAPEP	4th/2017	12/01/17	MAPEP-17-RdV37	Vegetation	Bq/sample	Zinc-65	5.93	5.37	3.76-6.98	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Actinium-228	1200	1240	795 - 1720	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Americium-241	1180	1140	667 - 1480	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Bismuth-212	1600	1240	330 - 1820	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Bismuth-214	1460	1890	1140 - 2720	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Cesium-134	5770	6320	4130 - 7590	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Cesium-137	3940	3830	2930 - 4930	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Cobalt-60	4110	4130	2790 - 5690	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Lead-212	1270	1240	812 - 1730	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Lead-214	1720	1980	1160 - 2950	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Manganese-54	<29.2	<1000	<1000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Plutonium-238	508	615	370 - 849	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Plutonium-239	578	506	331 - 699	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Potassium-40	10600	10600	7740 - 14200	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Strontium-90	2530	3460	1320 - 5470	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Thorium-234	4160	3690	1170 - 6940	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-234	4310	3720	2270 - 4770	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-234	3350	3720	2270 - 4770	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-234	3400	3720	2270 - 4770	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-238	3590	3690	2280 - 4680	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-238	4380	3690	2280 - 4680	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-238	3260	3690	2280 - 4680	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-Total	7732	7580	4110 - 10000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-Total	7190	7580	4110 - 10000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-Total	7780	7580	4110 - 10000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Uranium-Total	8090	7580	4110 - 10000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	µg/kg	Uranium-Total (mass)	12100	11100	6120 - 14000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	µg/kg	Uranium-Total (mass)	10800	11100	6120 - 14000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	µg/kg	Uranium-Total (mass)	12200	11100	6120 - 14000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	µg/kg	Uranium-Total (mass)	9770	11100	6120 - 14000	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Soil	pCi/kg	Zinc-65	7380	6660	5300 - 8850	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Americium-241	681	670	410 - 891	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Cesium-134	1530	1670	1070 - 2170	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Cesium-137	1890	1840	1330 - 2560	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Cobalt-60	2320	2180	1500 - 3050	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Curium-244	2380	2790	1370 - 4350	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Manganese-54	<36.1	<300	<300	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Plutonium-238	3340	4180	2490 - 5720	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Plutonium-239	950	1060	651 - 1460	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Potassium-40	34900	30900	22300 - 43400	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Strontium-90	2580	2650	1510 - 3510	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-234	985	995	654 - 1280	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-234	1100	995	654 - 1280	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-238	1040	987	659 - 1250	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-238	821	987	659 - 1250	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-Total	2320	2030	1380 - 2530	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-Total	1845	2030	1380 - 2530	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Uranium-Total	2390	2030	1380 - 2530	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	µg/kg	Uranium-Total (mass)	3200	2980	2000 - 3780	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	µg/kg	Uranium-Total (mass)	2460	2980	2000 - 3780	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	µg/kg	Uranium-Total (mass)	3460	2980	2000 - 3780	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Vegetation	pCi/kg	Zinc-65	1670	1400	1010 - 1970	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Americium-241	15.4	14.9	9.18 - 20.2	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Cesium-134	1410	1440	916 - 1790	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Cesium-137	1010	954	717 - 1250	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Cobalt-60	296	271	210 - 339	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Iron-55	1010	1080	335 - 2110	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Manganese-54	<3.18	<50.0	<50.0	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Plutonium-238	61.8	63.9	43.8 - 84.0	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Plutonium-239	40.2	44.4	32.1 - 58.0	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Strontium-90	115	121	59.1 - 181	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-234	42.8	41.5	25.7 - 62.6	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-234	38.5	41.5	25.7 - 62.6	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-238	41.1	41.2	26.6 - 57.0	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-238	37.5	41.2	26.6 - 57.0	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-Total	82	84.6	46.8 - 129	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-Total	86.7	84.6	46.8 - 129	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Uranium-Total	83	84.6	46.8 - 129	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
ERA	4th/2017	11/17/17	MRAD-27	Filter	µg/Filter	Uranium-Total (mass)	129	123	78.7 - 173	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	µg/Filter	Uranium-Total (mass)	124	123	78.7 - 173	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	µg/Filter	Uranium-Total (mass)	113	123	78.7 - 173	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Zinc-65	146	123	88.1 - 170	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Gross Alpha	60	50.1	16.8 - 77.8	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Filter	pCi/Filter	Gross Beta	68.3	61.8	39.1 - 90.1	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Americium-241	176	158	106 - 212	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Cesium-134	1340	1400	1030 - 1610	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Cesium-137	390	378	321 - 453	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Cobalt-60	1990	1830	1590 - 2140	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Iron-55	1550	1640	978 - 2230	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Manganese-54	<9.38	<100	<100	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Plutonium-238	136	158	117 - 197	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Plutonium-239	114	134	104 - 169	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Strontium-90	218	222	145 - 293	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-234	163	160	120 - 206	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-234	153	160	120 - 206	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-234	157	160	120 - 206	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-238	169	158	120 - 194	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-238	136	158	120 - 194	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-Total	306	325	239 - 420	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-Total	310	325	239 - 420	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Uranium-Total	343	325	239 - 420	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	µg/L	Uranium-Total (mass)	510	474	378 - 573	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	µg/L	Uranium-Total (mass)	463	474	378 - 573	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	µg/L	Uranium-Total (mass)	407	474	378 - 573	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Zinc-65	2090	1750	1460 - 2210	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Gross Alpha	109	113	40.1 - 175	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Gross Beta	127	130	74.4 - 193	Acceptable
ERA	4th/2017	11/17/17	MRAD-27	Water	pCi/L	Tritium	21100	22500	15100 - 32100	Acceptable
EZA	4th/2017	02/02/18	E12067	Cartridge	pCi	Iodine-131	4.84E+01	4.81E+01	1.01	Acceptable
EZA	4th/2017	02/02/18	E12068	Milk	pCi/L	Strontium-89	9.54E+01	9.23E+01	1.03	Acceptable
EZA	4th/2017	02/02/18	E12068	Milk	pCi/L	Strontium-90	1.34E+01	1.69E+01	0.79	Acceptable

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte/ Nuclide	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Cerium-141	1.07E+02	9.83E+01	1.09	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Cobalt-58	9.29E+01	8.99E+01	1.03	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Cobalt-60	1.95E+02	1.73E+02	1.13	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Chromium-51	2.69E+02	2.42E+02	1.11	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Cesium-134	1.20E+02	1.25E+02	0.96	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Cesium-137	1.63E+02	1.41E+02	1.15	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Iron-59	1.27E+02	1.13E+02	1.12	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Iodine-131	6.59E+01	5.78E+01	1.14	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Manganese-54	1.79E+02	1.61E+02	1.11	Acceptable
EZA	4th/2017	02/02/18	E12069	Milk	pCi/L	Zinc-65	2.34E+02	2.11E+02	1.11	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Cerium-141	6.60E+01	6.24E+01	1.06	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Cobalt-58	5.95E+01	5.70E+01	1.04	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Cobalt-60	1.15E+02	1.10E+02	1.05	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Chromium-51	1.68E+02	1.54E+02	1.09	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Cesium-134	7.47E+01	7.92E+01	0.94	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Cesium-137	9.31E+01	8.97E+01	1.04	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Iron-59	8.74E+01	7.19E+01	1.22	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Iodine-131	5.36E+01	4.95E+01	1.08	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Manganese-54	1.14E+02	1.02E+02	1.12	Acceptable
EZA	4th/2017	02/02/18	E12070	Water	pCi/L	Zinc-65	1.57E+02	1.34E+02	1.17	Acceptable

Table 6.1-2
2017 ECKERT & ZIEGLER ANALYTICS PERFORMANCE EVALUATION RESULTS

Report Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Ratio	Evaluation
07/07/17	E11818	Cartridge	pCi	Iodine-131	9.93E+01	9.46E+01	1.05	Acceptable
07/07/17	E11819	Milk	pCi/L	Strontium-89	8.86E+01	9.96E+01	0.89	Acceptable
07/07/17	E11819	Milk	pCi/L	Strontium-90	1.97E+01	2.55E+01	0.77	Acceptable
07/07/17	E11820	Milk	pCi/L	Iodine-131	9.57E+01	9.68E+01	0.99	Acceptable
07/07/17	E11820	Milk	pCi/L	Cerium-141	1.21E+02	1.19E+02	1.02	Acceptable
07/07/17	E11820	Milk	pCi/L	Chromium-51	1.76E+02	2.12E+02	0.83	Acceptable
07/07/17	E11820	Milk	pCi/L	Cesium-134	1.71E+02	1.89E+02	0.9	Acceptable
07/07/17	E11820	Milk	pCi/L	Cesium-137	2.31E+02	2.27E+02	1.02	Acceptable
07/07/17	E11820	Milk	pCi/L	Cobalt-58	1.89E+02	1.78E+02	1.06	Acceptable
07/07/17	E11820	Milk	pCi/L	Manganese-54	2.74E+02	2.49E+02	1.1	Acceptable
07/07/17	E11820	Milk	pCi/L	Iron-59	1.35E+02	1.27E+02	1.06	Acceptable
07/07/17	E11820	Milk	pCi/L	Zinc-65	3.22E+02	2.96E+02	1.09	Acceptable
07/07/17	E11820	Milk	pCi/L	Cobalt-60	2.85E+02	2.93E+02	0.97	Acceptable
07/07/17	E11821	Water	pCi/L	Iodine-131	9.68E+01	8.79E+01	1.1	Acceptable
07/07/17	E11821	Water	pCi/L	Cerium-141	1.24E+02	1.19E+02	1.05	Acceptable
07/07/17	E11821	Water	pCi/L	Chromium-51	2.43E+02	2.11E+02	1.15	Acceptable
07/07/17	E11821	Water	pCi/L	Cesium-134	1.84E+02	1.88E+02	0.98	Acceptable
07/07/17	E11821	Water	pCi/L	Cesium-137	2.49E+02	2.26E+02	1.1	Acceptable
07/07/17	E11821	Water	pCi/L	Cobalt-58	1.88E+02	1.77E+02	1.06	Acceptable
07/07/17	E11821	Water	pCi/L	Manganese-54	2.79E+02	2.48E+02	1.13	Acceptable
07/07/17	E11821	Water	pCi/L	Iron-59	1.46E+02	1.27E+02	1.15	Acceptable
07/07/17	E11821	Water	pCi/L	Zinc-65	3.36E+02	2.95E+02	1.14	Acceptable
07/07/17	E11821	Water	pCi/L	Cobalt-60	3.07E+02	2.92E+02	1.05	Acceptable
08/02/17	E11873	Cartridge	pCi	Iodine-131	8.65E+01	8.46E+01	1.02	Acceptable
08/02/17	E11874	Milk	pCi/L	Strontium-89	8.88E+01	9.26E+01	0.96	Acceptable
08/02/17	E11874	Milk	pCi/L	Strontium-90	9.50E+00	1.35E+01	0.71	Acceptable
08/02/17	E11875	Milk	pCi/L	Cerium-141	1.62E+02	1.51E+02	1.07	Acceptable
08/02/17	E11875	Milk	pCi/L	Cobalt-58	1.53E+02	1.55E+02	0.98	Acceptable
08/02/17	E11875	Milk	pCi/L	Cobalt-60	2.07E+02	1.91E+02	1.08	Acceptable
08/02/17	E11875	Milk	pCi/L	Chromium-51	3.65E+02	3.15E+02	1.16	Acceptable

Report Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Ratio	Evaluation
08/02/17	E11875	Milk	pCi/L	Cesium-134	1.74E+02	1.88E+02	0.92	Acceptable
08/02/17	E11875	Milk	pCi/L	Cesium-137	1.57E+02	1.50E+02	1.05	Acceptable
08/02/17	E11875	Milk	pCi/L	Iron-59	1.28E+02	1.15E+02	1.11	Acceptable
08/02/17	E11875	Milk	pCi/L	Iodine-131	9.93E+01	9.36E+01	1.06	Acceptable
08/02/17	E11875	Milk	pCi/L	Manganese-54	1.95E+02	1.72E+02	1.14	Acceptable
08/02/17	E11875	Milk	pCi/L	Zinc-65	2.18E+02	2.04E+02	1.07	Acceptable
08/02/17	E11876	Water	pCi/L	Cerium-141	2.09E+02	1.99E+02	1.05	Acceptable
08/02/17	E11876	Water	pCi/L	Cobalt-58	2.11E+02	2.04E+02	1.04	Acceptable
08/02/17	E11876	Water	pCi/L	Cobalt-60	2.57E+02	2.50E+02	1.03	Acceptable
08/02/17	E11876	Water	pCi/L	Chromium-51	4.41E+02	4.13E+02	1.07	Acceptable
08/02/17	E11876	Water	pCi/L	Cesium-134	2.38E+02	2.47E+02	0.96	Acceptable
08/02/17	E11876	Water	pCi/L	Cesium-137	2.20E+02	1.97E+02	1.12	Acceptable
08/02/17	E11876	Water	pCi/L	Iron-59	1.64E+02	1.51E+02	1.09	Acceptable
08/02/17	E11876	Water	pCi/L	Iodine-131	8.69E+01	8.12E+01	1.07	Acceptable
08/02/17	E11876	Water	pCi/L	Manganese-54	2.43E+02	2.25E+02	1.08	Acceptable
08/02/17	E11876	Water	pCi/L	Zinc-65	2.95E+02	2.67E+02	1.10	Acceptable
11/10/17	E11926	Cartridge	pCi	Iodine-131	6.30E+01	6.48E+01	0.97	Acceptable
11/10/17	E11927	Milk	pCi/L	Strontium-89	7.50E+01	8.27E+01	0.91	Acceptable
11/10/17	E11927	Milk	pCi/L	Strontium-90	1.01E+01	1.21E+01	0.84	Acceptable
11/10/17	E11928	Milk	pCi/L	Iodine-131	7.35E+01	7.10E+01	1.04	Acceptable
11/10/17	E11928	Milk	pCi/L	Cerium-141	8.31E+01	8.70E+01	0.95	Acceptable
11/10/17	E11928	Milk	pCi/L	Chromium-51	2.37E+02	2.17E+02	0.92	Acceptable
11/10/17	E11928	Milk	pCi/L	Cesium-134	1.85E+02	2.01E+02	0.92	Acceptable
11/10/17	E11928	Milk	pCi/L	Cesium-137	1.67E+02	1.72E+02	0.97	Acceptable
11/10/17	E11928	Milk	pCi/L	Cobalt-58	1.21E+02	1.17E+02	1.03	Acceptable
11/10/17	E11928	Milk	pCi/L	Manganese-54	1.28E+02	1.23E+02	1.04	Acceptable
11/10/17	E11928	Milk	pCi/L	Iron-59	1.56E+02	1.25E+02	1.24	Acceptable
11/10/17	E11928	Milk	pCi/L	Zinc-65	1.97E+02	1.84E+02	1.07	Acceptable
11/10/17	E11928	Milk	pCi/L	Cobalt-60	2.59E+02	2.62E+02	0.99	Acceptable
11/10/17	E11929	Water	pCi/L	Iodine-131	8.08E+01	7.92E+01	1.02	Acceptable
11/10/17	E11929	Water	pCi/L	Cerium-141	1.09E+02	9.95E+01	1.1	Acceptable
11/10/17	E11929	Water	pCi/L	Chromium-51	2.47E+02	2.48E+02	1	Acceptable
11/10/17	E11929	Water	pCi/L	Cesium-134	2.06E+02	2.29E+02	0.9	Acceptable
11/10/17	E11929	Water	pCi/L	Cesium-137	2.00E+02	1.96E+02	1.02	Acceptable
11/10/17	E11929	Water	pCi/L	Cobalt-58	1.41E+02	1.34E+02	1.05	Acceptable

Report Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Ratio	Evaluation
11/10/17	E11929	Water	pCi/L	Manganese-54	1.50E+02	1.40E+02	1.07	Acceptable
11/10/17	E11929	Water	pCi/L	Iron-59	1.58E+02	1.43E+02	1.10	Acceptable
11/10/17	E11929	Water	pCi/L	Zinc-65	2.37E+02	2.10E+02	1.13	Acceptable
11/10/17	E11929	Water	pCi/L	Cobalt-60	3.18E+02	2.99E+02	1.06	Acceptable
02/02/18	E12067	Cartridge	pCi	Iodine-131	4.84E+01	4.81E+01	1.01	Acceptable
02/02/18	E12068	Milk	pCi/L	Strontium-89	9.54E+01	9.23E+01	1.03	Acceptable
02/02/18	E12068	Milk	pCi/L	Strontium-90	1.34E+01	1.69E+01	0.79	Acceptable
02/02/18	E12069	Milk	pCi/L	Cerium-141	1.07E+02	9.83E+01	1.09	Acceptable
02/02/18	E12069	Milk	pCi/L	Cobalt-58	9.29E+01	8.99E+01	1.03	Acceptable
02/02/18	E12069	Milk	pCi/L	Cobalt-60	1.95E+02	1.73E+02	1.13	Acceptable
02/02/18	E12069	Milk	pCi/L	Chromium-51	2.69E+02	2.42E+02	1.11	Acceptable
02/02/18	E12069	Milk	pCi/L	Cesium-134	1.20E+02	1.25E+02	0.96	Acceptable
02/02/18	E12069	Milk	pCi/L	Cesium-137	1.63E+02	1.41E+02	1.15	Acceptable
02/02/18	E12069	Milk	pCi/L	Iron-59	1.27E+02	1.13E+02	1.12	Acceptable
02/02/18	E12069	Milk	pCi/L	Iodine-131	6.59E+01	5.78E+01	1.14	Acceptable
02/02/18	E12069	Milk	pCi/L	Manganese-54	1.79E+02	1.61E+02	1.11	Acceptable
02/02/18	E12069	Milk	pCi/L	Zinc-65	2.34E+02	2.11E+02	1.11	Acceptable
02/02/18	E12070	Water	pCi/L	Cerium-141	6.60E+01	6.24E+01	1.06	Acceptable
02/02/18	E12070	Water	pCi/L	Cobalt-58	5.95E+01	5.70E+01	1.04	Acceptable
02/02/18	E12070	Water	pCi/L	Cobalt-60	1.15E+02	1.10E+02	1.05	Acceptable
02/02/18	E12070	Water	pCi/L	Chromium-51	1.68E+02	1.54E+02	1.09	Acceptable
02/02/18	E12070	Water	pCi/L	Cesium-134	7.47E+01	7.92E+01	0.94	Acceptable
02/02/18	E12070	Water	pCi/L	Cesium-137	9.31E+01	8.97E+01	1.04	Acceptable
02/02/18	E12070	Water	pCi/L	Iron-59	8.74E+01	7.19E+01	1.22	Acceptable
02/02/18	E12070	Water	pCi/L	Iodine-131	5.36E+01	4.95E+01	1.08	Acceptable
02/02/18	E12070	Water	pCi/L	Manganese-54	1.14E+02	1.02E+02	1.12	Acceptable
02/02/18	E12070	Water	pCi/L	Zinc-65	1.57E+02	1.34E+02	1.17	Acceptable

Table 6.1-3
REMP INTRA-LABORATORY DATA SUMMARY: BIAS AND PRECISION BY MATRIX

2017 Total All REMP Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
MILK				
Gamma Iodine-131	11	0	105	0
Gas Flow Sr 2nd count	33	0	35	0
Gas Flow Total Strontium	17	0	18	0
Gamma Spec Liquid RAD A-013 with Ba, La	31	0	85	0
SOLID				
Gamma Spec Solid RAD A-013	14	0	23	0
LSC Nickel 63	3	0	3	0
Gas Flow Sr 2nd count	6	0	7	0
Gas Flow Total Strontium	3	0	5	0
Gamma Spec Solid RAD A-013 with Ba, La	3	0	9	0
Gamma Spec Solid RAD A-013 with Iodine	9	0	9	0
FILTER				
Gamma Spec Filter RAD A-013	3	0	3	0
Gas Flow Sr 2nd Count	5	0	5	0
Gross A & B	381	0	311	0
Gas Flow Sr-90	1	0	1	0
Gamma Spec Filter	33	0	51	0
LIQUID				
Alpha Spec Uranium	4	0	6	0
Tritium	183	0	214	0
LSC Iron-55	7	0	7	0
LSC Nickel 63	7	0	7	0
Gamma Spec Liquid RAD A-013	2	0	2	0
Gamma Iodine-131	25	0	24	0
Alpha Spec Plutonium	6	0	6	0
Gas Flow Sr 2nd count	3	0	3	0
Alpha Spec Am241 Curium	8	0	8	0
Gas Flow Total Strontium	17	0	15	0
Gross Alpha Non Vol Beta	29	0	50	0
Gamma Spec Liquid RAD A-013 with Ba, La	66	0	146	0
Gamma Spec Liquid RAD A-013 with Iodine	24	0	67	0
TISSUE				
Gamma Spec Solid RAD A-013	35	0	35	0
Gas Flow Sr 2nd count	8	0	8	0
Gas Flow Total Strontium	7	0	7	0
Gamma Spec Solid RAD A-013 with Iodine	10	0	11	0

2017 Total All REMP Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
SEA WATER				
LSC Iron-55	8	0	8	0
LSC Nickel 63	8	0	8	0
Gas Flow Total Strontium	8	0	9	0
Gross Alpha Non Vol Beta	9	0	9	0
Gamma Spec Liquid RAD A-013 with Iodine	11	0	11	0
VEGETATION				
Gamma Spec Solid RAD A-013	5	0	5	0
Gas Flow Sr 2nd count	11	0	11	0
Gamma Spec Solid RAD A-013 with Iodine	76	0	87	0
AIR CHARCOAL				
Gamma Iodine 131 RAD A-013	381	0	529	0
Carbon-14 (Ascarite/Soda Lime Filter per Liter)	26	0	26	0
DRINKING WATER				
Tritium	39	0	36	0
LSC Iron-55	15	0	15	0
LSC Nickel 63	15	0	15	0
Gamma Iodine-131	21	0	20	0
Gas Flow Sr 2nd count	11	0	11	0
Gas Flow Total Strontium	16	0	17	0
Gross Alpha Non Vol Beta	78	0	75	0
Gamma Spec Liquid RAD A-013 with Ba, La	16	0	68	0
Total	**1748**	**0**	**2246**	**0**

Note 1: The RPD must be 20 percent or less, if both samples are greater than 5 times the MDC. If both results are less than 5 times MDC, then the RPD must be equal to or less than 100%. If one result is above the MDC and the other is below the MDC, then the RPD can be calculated using the MDC for the result of the one below the MDC. The RPD must be 100% or less. In the situation where both results are above the MDC but one result is greater than 5 times the MDC and the other is less than 5 times the MDC, the RPD must be less than or equal to 20%. If both results are below MDC, then the limits on % RPD are not applicable.

Table 6.1-4
ALL RADIOLOGICAL INTRA-LABORATORY DATA SUMMARY:
BIAS AND PRECISION BY MATRIX

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
MILK				
Gamma Iodine-129	2	0	2	0
Gamma Iodine-131	11	0	105	0
Gas Flow Sr 2nd count	33	0	35	0
Gas Flow Strontium 90	6	0	6	0
Gas Flow Total Strontium	17	0	18	0
Gamma Spec Liquid RAD A-013 with Ba, La	31	0	85	0
Gamma Spec Liquid RAD A-013 with Iodine	4	0	4	0
SOLID				
Gas Flow Radium 228	89	0	101	0
Tritium	265	0	304	0
Tritium by Pyrolysis	0	0	2	0
Carbon-14	154	0	202	0
Carbon-14 by Pyrolysis	0	0	2	0
ICP-MS Tc-99 in Filter	0	0	1	0
LSC Iron-55	93	0	99	0
Alpha Spec Polonium Solid	51	0	63	0
Gamma Nickel 59 RAD A-022	81	0	94	0
LSC Chlorine-36 in Solids	2	0	2	0
Gamma Spec Ra226 RAD A-013	24	0	25	0
Gamma Spec Solid RAD A-013	910	0	1238	0
LSC Nickel 63	190	0	190	0
LSC Plutonium	180	0	191	0
Technetium-99	350	0	411	0
Gross Alpha Beta Soil Leach	4	0	7	0
ICP-MS Tc-99 Prep in Filter	0	0	1	0
ICP-MS Technetium-99 in Soil	5	0	3	0
LSC Selenium 79	9	0	15	0
Total Activity,	4	0	6	0
Tritium	44	0	45	0
Alpha Spec Am243	33	0	42	0
Gamma Iodine-129	93	0	117	0
Gross Alpha/Beta	2	0	2	0
Gas Flow Lead 210	13	0	13	0
Total Uranium KPA	10	0	16	0
Alpha Spec Uranium	394	0	510	0
LSC Promethium 147	4	0	4	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
LSC, Rapid Strontium 89 and 90	50	0	59	0
Alpha Spec Thorium	304	0	390	0
Gas Flow Radium 228	0	0	68	0
ICP-MS Uranium-233, 234 in Solid	36	0	36	0
LSC Sulfur 35	1	0	1	0
Alpha Spec Plutonium	402	0	447	0
ICP-MS Technetium-99 Prep in Soil	6	0	4	0
LSC Calcium 45	2	0	2	0
Alpha Spec Neptunium	299	0	320	0
Alpha Spec Plutonium	104	0	122	0
Alpha Spec Radium 226	43	0	62	0
Gas Flow Sr 2nd count	27	0	32	0
Gas Flow Strontium 90	216	0	218	0
Gas Flow Total Radium	1	0	1	0
Lucas Cell Radium 226	166	0	249	0
Total Activity Screen	6	0	16	0
Alpha Spec Am241 Curium	351	0	382	0
Alpha Spec Total Uranium	9	0	11	0
Gas Flow Total Strontium	96	0	101	0
ICP-MS Uranium-233, 234 Prep in Solid	34	0	34	0
ICP-MS Uranium-235, 236, 238 in Solid	44	0	35	0
Alpha Spec Polonium Solid	2	0	2	0
Gamma Spec Solid RAD A-013 with Ba, La	3	0	9	0
Gamma Spec Solid RAD A-013 with Iodine	9	0	9	0
GFC Chlorine-36 in Solids	12	0	14	0
Gamma Spec Solid RAD A-013 (pCi/Sample)	3	0	3	0
Technetium-99	1	0	1	0
Tritium	7	0	7	0
Alpha Spec Am241 (pCi/Sample)	2	0	2	0
ICP-MS Uranium-234, 235, 236, 238 in Solid	162	0	152	0
ICP-MS Uranium-235, 236, 238 Prep in Solid	35	0	40	0
Gross Alpha/Beta (Am/Cs Calibration) Solid	2	0	2	0
Alpha Spec Uranium	1	0	2	0
Gross Alpha/Beta	325	0	469	0
Alpha Spec Plutonium	2	0	3	0
Gas Flow Strontium 90	5	0	3	0
Gross Alpha/Beta (Americium Calibration) Solid	2	0	2	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Solid	78	0	77	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
FILTER				
Alpha Spec Uranium	5	0	19	0
Alpha Spec Polonium	1	0	11	0
Gamma I-131, filter	4	0	4	0
LSC Plutonium Filter	76	0	94	0
Tritium	48	0	134	0
Tritium by Pyrolysis	0	0	1	0
Carbon-14	19	0	83	0
Carbon-14 by Pyrolysis	0	0	1	0
ICP-MS Tc-99 in Filter	0	0	3	0
Nickel-63	0	0	16	0
LSC Iron-55	45	0	60	0
Gamma Nickel 59 RAD A-022	53	0	62	0
Gamma Iodine 131 RAD A-013	0	0	1	0
LSC Nickel 63	56	0	64	0
Technetium-99	26	0	72	0
Gamma Spec Filter RAD A-013	118	0	174	0
ICP-MS Tc-99 Prep in Filter	0	0	3	0
LSC Selenium 79	1	0	2	0
Alphaspec Np Filter per Liter	11	0	21	0
Alphaspec Pu Filter per Liter	29	0	32	0
Gamma Iodine-125	3	0	0	0
Gamma Iodine-129	6	0	46	0
Alpha Spec Am243	7	0	13	0
Alpha Spec Radium,Filter/Liter	1	0	1	0
Gas Flow Lead 210	0	0	2	0
Total Uranium KPA	4	0	14	0
Alpha Spec Uranium	50	0	80	0
LSC Promethium 147	0	0	3	0
LSC, Rapid Strontium 89 and 90	59	0	72	0
Alpha Spec Thorium	36	0	55	0
Gas Flow Radium 228	0	0	1	0
Alpha Spec Plutonium	77	0	125	0
ICP-MS Uranium-233, 234 in Filter	0	0	4	0
Alpha Spec Neptunium	52	0	61	0
Alpha Spec Plutonium	64	0	84	0
Alpha Spec Polonium,(Filter/Liter)	0	0	2	0
Alpha Spec Radium 226	0	0	2	0
Alpha/Beta (Americium Calibration)	1	0	1	0
Gas Flow Sr 2nd Count	48	0	61	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
Gas Flow Strontium 90	56	0	82	0
LSC Plutonium 241 Filter per Liter	6	0	16	0
Lucas Cell Radium-226	1	0	2	0
Alpha Spec Am241Curium	102	0	146	0
Gas Flow Total Strontium	3	0	5	0
ICP-MS Uranium-233, 234 Prep in Filter	0	0	4	0
ICP-MS Uranium-235, 236, 238 in Filter	0	0	4	0
Total Activity in Filter,	2	0	4	0
Alphaspec Am241 Curium Filter per Liter	11	0	30	0
Tritium	82	0	93	0
GFC Chlorine-36 in Filters	2	0	2	0
Gamma Spec Filter RAD A-013 Direct Count	2	0	6	0
Carbon-14	8	0	11	0
GFC Chlorine-36 in Filters PL	2	0	3	0
Gross A & B (Americium Calibration) Liquid	0	0	21	0
Direct Count-Gross Alpha/Beta	69	0	0	0
Gross Alpha/Beta	31	0	41	0
ICP-MS Uranium-234, 235, 236, 238 in Filter	6	0	8	0
ICP-MS Uranium-235, 236, 238 Prep in Filter	0	0	4	0
Alpha Spec U	10	0	36	0
Gross A & B	420	0	358	0
LSC Iron-55	3	0	11	0
Technetium-99	10	0	17	0
Gas Flow Sr-90	8	0	16	0
LSC Nickel 63	12	0	22	0
Gas Flow Pb-210	7	0	22	0
Gas Flow Ra-228	4	0	10	0
Gamma Iodine 129	9	0	9	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Filter	3	0	4	0
Gamma Spec Filter	84	0	115	0
Lucas Cell Ra-226	10	0	21	0
Alpha Spec Thorium	12	0	29	0
LIQUID				
Alpha Spec Uranium	409	0	612	0
Alpha Spec Polonium	9	0	17	0
Electrolytic Tritium	11	0	19	0
Tritium	1104	0	1179	0
Carbon-14	168	0	197	0
Plutonium	84	0	107	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
Chlorine-36 in Liquids	6	0	11	0
Iodine-131	4	0	2	0
LSC Iron-55	101	0	138	0
Gamma Nickel 59 RAD A-022	13	0	25	0
Gamma Iodine 131 RAD A-013	2	0	2	0
LSC Nickel 63	127	0	167	0
LSC Radon 222	14	0	14	0
Technetium-99	450	0	503	0
Direct Tritium	26	0	26	0
Gamma Spec Liquid RAD A-013	730	0	770	0
Alpha Spec Total U RAD A-011	25	0	29	0
LSC Selenium 79	35	0	36	0
Alpha Spec Am243	11	0	17	0
Gamma Iodine-129	122	0	143	0
Gamma Iodine-131	25	0	24	0
ICP-MS Technetium-99 in Water	11	0	29	0
Gas Flow Lead 210	22	0	24	0
Total Uranium KPA	55	0	119	0
LSC Promethium 147	17	0	18	0
LSC, Rapid Strontium 89 and 90	6	0	9	0
Alpha Spec Polonium	1	0	2	0
Alpha Spec Thorium	209	0	295	0
Gas Flow Radium 228	462	0	541	0
Gas Flow Radium 228	10	0	10	0
Alpha Spec Plutonium	311	0	421	0
LSC Sulfur 35	11	0	12	0
Alpha Spec Neptunium	135	0	196	0
Alpha Spec Plutonium	23	0	34	0
Alpha Spec Radium 226	31	0	36	0
Gas Flow Sr 2nd count	113	0	127	0
Gas Flow Strontium 90	448	0	498	0
Gas Flow Total Radium	72	0	96	0
ICP-MS Technetium-99 Prep in Water	11	0	29	0
ICP-MS Uranium-233, 234 in Liquid	6	0	7	0
LSC Calcium 45	12	0	12	0
Lucas Cell Radium 226	510	0	604	0
Lucas Cell Radium-226	7	0	10	0
Total Activity Screen	1	0	1	0
Chlorine-36 in Liquids	13	0	15	0
Alpha Spec Am241 Curium	285	0	397	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
Gas Flow Total Strontium	90	0	90	0
Gross Alpha Non Vol Beta	865	0	1072	0
LSC Phosphorus-32	3	0	8	0
ICP-MS Uranium-233, 234 Prep in Liquid	6	0	7	0
Tritium in Drinking Water by EPA 906.0	5	0	5	0
Gamma Spec Liquid RAD A-013 with Ba, La	66	0	149	0
Gamma Spec Liquid RAD A-013 with Iodine	104	0	146	0
Gas Flow Strontium 89 & 90	2	0	0	0
ICP-MS Uranium-235, 236, 238 in Liquid	11	0	9	0
Gas Flow Total Alpha Radium	4	0	2	0
Gross Alpha Co-precipitation	8	0	15	0
ICP-MS Uranium-235, 236, 238 Prep in Liquid	8	0	9	0
Gross Alpha/Beta	0	0	1	0
ICP-MS Uranium-234, 235, 236, 238 in Liquid	88	0	94	0
Gross Alpha Beta (Americium Calibration) Liquid	28	0	52	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Liquid	46	0	50	0
Alpha/Beta (Americium Calibration) Drinking Water	22	0	15	0
TISSUE				
Gamma Spec Solid RAD A-013	60	0	72	0
Alpha Spec Uranium	6	0	8	0
Alpha Spec Thorium	0	0	1	0
Alpha Spec Plutonium	7	0	7	0
Alpha Spec Radium 226	0	0	1	0
Gas Flow Sr 2nd count	8	0	8	0
Gas Flow Strontium 90	12	0	13	0
Alpha Spec Am241 Curium	3	0	3	0
Gas Flow Total Strontium	7	0	7	0
Gamma Spec Solid RAD A-013 with Iodine	10	0	11	0
Gross Alpha/Beta	2	0	2	0
SEA WATER				
LSC Iron-55	8	0	8	0
LSC Nickel 63	8	0	8	0
Gas Flow Total Strontium	8	0	9	0
Gross Alpha Non Vol Beta	9	0	9	0
Gamma Spec Liquid RAD A-013 with Iodine	11	0	11	0
VEGETATION				
Carbon-14	7	0	7	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
Gamma Nickel 59 RAD A-022	1	0	1	0
Gamma Spec Solid RAD A-013	27	0	27	0
LSC Nickel 63	1	0	1	0
LSC Plutonium	1	0	1	0
Technetium-99	1	0	1	0
Tritium	7	0	7	0
Gamma Iodine-129	1	0	1	0
Gas Flow Lead 210	3	0	3	0
Total Uranium KPA	4	0	4	0
Alpha Spec Uranium	23	0	31	0
Alpha Spec Thorium	11	0	14	0
Alpha Spec Plutonium	15	0	14	0
Gas Flow Sr 2nd count	11	0	11	0
Gas Flow Strontium 90	14	0	15	0
Gas Flow Total Radium	2	0	3	0
Alpha Spec Am241 Curium	5	0	4	0
Gamma Spec Solid RAD A-013 with Iodine	76	0	87	0
Gamma Spec Solid RAD A-013 (pCi/Sample)	1	0	2	0
Alpha Spec Am241 (pCi/Sample)	1	0	2	0
ICP-MS Uranium-234, 235, 236, 238 in Solid	8	0	4	0
Alpha Spec Uranium	0	0	2	0
Gross Alpha/Beta	13	0	18	0
Alpha Spec Plutonium	0	0	2	0
Gas Flow Strontium 90	4	0	2	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Solid	4	0	2	0
AIR CHARCOAL				
Gamma Iodine 131 RAD A-013	381	0	529	0
Gamma Iodine-125	1	0	0	0
Gamma Iodine-129	15	0	6	0
Alpha Spec Uranium	0	0	1	0
Alpha Spec Plutonium	0	0	1	0
Alpha Spec Am241Curium	0	0	1	0
Carbon-14	13	0	13	0
Carbon-14 (Ascarite/Soda Lime Filter per Liter)	26	0	26	0
Gamma Iodine 129	12	0	12	0
Gamma Spec Filter	12	0	12	0
DRINKING WATER				
Alpha Spec Uranium	2	0	2	0
Alpha Spec Polonium	0	0	1	0

2017 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
Tritium	39	0	36	0
Iodine-131	1	0	7	0
LSC Iron-55	15	0	15	0
LSC Nickel 63	15	0	15	0
LSC Radon 222	34	0	29	0
Gamma Spec Liquid RAD A-013	25	0	26	0
Gamma Iodine-129	1	0	4	0
Gamma Iodine-131	21	0	20	0
Total Uranium KPA	2	0	4	0
Alpha Spec Thorium	2	0	2	0
Gas Flow Radium 228	33	0	39	0
Gas Flow Sr 2nd count	11	0	11	0
Gas Flow Strontium 90	10	0	18	0
Gas Flow Total Radium	1	0	1	0
LSC Calcium 45	2	0	2	0
Lucas Cell Radium 226	0	0	1	0
Lucas Cell Radium-226	48	0	48	0
Gamma Spec Drinking Water RAD A-013	4	0	20	0
Gas Flow Total Strontium	16	0	17	0
Gross Alpha Non Vol Beta	328	0	270	0
Tritium in Drinking Water by EPA 906.0	47	0	61	0
Gamma Spec Liquid RAD A-013 with Ba, La	16	0	68	0
Gas Flow Strontium 89 & 90	23	0	20	0
Gross Alpha Co-precipitation	127	0	94	0
Alpha/Beta (Americium Calibration) Drinking Water	11	0	11	0
ECLS-R-GA NJ 48 Hr Rapid Gross Alpha	1	0	1	0
Total	**17140**	**0**	**21176**	**0**

Note 1: The RPD must be 20 percent or less, if both samples are greater than 5 times the MDC. If both results are less than 5 times MDC, then the RPD must be equal to or less than 100%. If one result is above the MDC and the other is below the MDC, then the RPD can be calculated using the MDC for the result of the one below the MDC. The RPD must be 100% or less. In the situation where both results are above the MDC but one result is greater than 5 times the MDC and the other is less than 5 times the MDC, the RPD must be less than or equal to 20%. If both results are below MDC, then the limits on % RPD are not applicable.

Table 6.1-5
2017 CORRECTIVE ACTION REPORT SUMMARY

CORRECTIVE ACTION ID# & PE FAILURE	DISPOSITION
CARR170227-1085 ISO Documentation of PT Failures in RAD 108 for Gross Alpha.	**Root Cause Analysis** **Gross Alpha** **EPA 00-02 and EPA 9310** After a review of the data, it was determined that an unknown error occurred during the preparation and/or analysis of these samples because all quality control criteria were met for the batch. The following steps were taken to prove that this positive bias was an isolated occurrence and that our overall process is within control. 1. The batch quality control samples were reviewed and found to be compliant. The LCSs recovered at 119% (EPA 00-02) and 96.9% (EPA 900 & 9310). 2. The sample was duplicated within each batch and met criteria with RPDs of 2.52% & 3.48%. (EPA 00-02) and 0.211% and 16.4% (EPA 900.0 & 9310). 3. The LCS control charts were review for biases. None were noted. **Permanent Corrective/Preventive Actions or Improvements** : The laboratory must assume unidentified random errors caused the biases because all quality control criteria were met for the batches**.** The sample was re-analyzed after the "Not Acceptable" rating was received and a result that fell within the acceptance range was obtained.
CARR170828-1125 ISO Documentation of PT Failure in RAD 110 for I-131	**Root Cause Analysis** **Iodine-131**: After a review of the data, it was determined that an unknown error occurred during the analysis of these samples because all quality control criteria were met for the batch. The following steps were taken to prove that this positive bias was an isolated occurrence and that the laboratory's overall process is in control: 1. The batch quality control samples were reviewed and found to be compliant. 2. The sample was duplicated within the batch and met criteria. The duplicate result is within the acceptance

	limits of the study. 3. The control charts were reviewed for biases and none were noted. **Permanent Corrective/Preventive Actions or Improvements** None needed at this time. The laboratory must assume unidentified random errors caused the biases because all quality control criteria were met for the batches**.**

6.2 Environmental TLD QA

Environmental dosimetry services for the reporting period of January – December, 2017 were provided through Stanford Dosimetry, with TLD processing by the Environmental Dosimetry Company (EDC), Sterling, Massachusetts. The TLD systems at the Environmental Dosimetry Company (EDC) are calibrated and operated to ensure consistent and accurate evaluation of TLDs. The quality of the dosimetric results reported to EDC clients is ensured by in-house performance testing and independent performance testing by EDC clients.

The purpose of the dosimetry quality assurance program is to provide performance documentation of the routine processing of EDC dosimeters. Performance testing provides a statistical measure of the bias and precision of dosimetry processing against a reliable standard, which in turn points out any trends or performance changes. Dosimetry quality control tests are performed on EDC Panasonic 814 Environmental dosimeters. These tests include: (1) the in-house testing program conducted by the EDC QA Officer and (2) independent test perform by EDC clients. In-house test are performed using six pairs of 814 dosimeters, a pair is reported as an individual result and six pairs are reported as the mean result.

Excluded from this report are instrumentation checks. Although instrumentation checks represent an important aspect of the quality assurance program, they are not included as process checks in this report. Instrumentation checks represent between 5-10% of the TLDs processed.

Table 6.2-1 provides a summary of individual dosimeter results evaluated against the EDC internal acceptance criteria for high-energy photons (Cs-137) only. The internal acceptance (tolerance) criteria for the Panasonic Environmental dosimeters are: ± 15% for bias and ± 12.8% for precision. During this period, 100% (72/72) of the individual dosimeters, evaluated against these criteria met the tolerance limits for accuracy and 100% (72/72) met the criterion for precision.

Table 6.2-2 provides the Bias + Standard deviation results for each group (N=6) of dosimeters evaluated against the internal tolerance criteria. Overall, 100% (12/12) of the dosimeter sets evaluated against the internal tolerance performance criteria met these criteria.

Table 6.2-3 presents the independent blind spike results for irradiated dosimeters provided by client utilities during this annual period. All results passed the performance acceptance criterion.

Table 6.2-4 presents the independent blind duplicate results for dosimeters co-located with field dosimeters provided by the client utility (Seabrook Station) during the annual period. All results passed the performance criteria of agreement to within 20% (within 3-sigma) of the field dosimeter.

TABLE 6.2-1

PERCENTAGE OF INDIVIDUAL DOSIMETERS THAT PASSED EDC INTERNAL CRITERIA JANUARY – DECEMBER 2017[(1), (2)]

Dosimeter Type	Number Tested	% Passed Bias Criteria	% Passed Precision Criteria
Panasonic Environmental	72	100	100

[(1)]This table summarizes results of tests conducted by EDC.
[(2)]Environmental dosimeter results are free in air.

TABLE 6.2-2

MEAN DOSIMETER ANALYSES (N=6)
JANUARY – DECEMBER 2017[1], [2]

Process Date	Exposure Level	Mean Bias %	Standard Deviation %	Tolerance Limit +/-15%
5/01/2017	31	1.0	0.9	Pass
5/08/2017	57	-0.4	1.0	Pass
5/08/2017	85	0.8	2.4	Pass
7/25/2017	36	-2.5	1.7	Pass
07/29/2017	67	5.5	1.0	Pass
8/8/2017	123	-3.8	0.9	Pass
10/23/2017	44	3.8	2.8	Pass
10/31/2017	74	1.7	1.2	Pass
11/12/2017	94	0.5	1.0	Pass
2/01/2018	27	2.6	1.4	Pass
2/06/2018	50	3.0	0.6	Pass
2/08/2018	105	0.5	2.0	Pass

[1] This table summarizes results of tests conducted by EDC for TLDs issued in 2017.
[2] Environmental dosimeter results are free in air.

TABLE 6.2-3
SUMMARY OF INDEPENDENT BLIND SPIKE DOSIMETER TESTING
JANUARY – DECEMBER 2017[1], [2]

Issuance Period	Client	Mean Bias %	Standard Deviation %	Pass / Fail
1st Qtr. 2017	Millstone	2.9	1.5	Pass
2nd Qtr.2017	Millstone	2.8	1.2	Pass
3rd Qtr. 2017	Millstone	1.1	2.7	Pass
4th Qtr.2017	Millstone	-3.5	2.4	Pass
4th Qtr.2017	Seabrook	8.6	1.6	Pass

[1] Performance criterion is +/- 30%.
[2] Blind spike irradiations using Cs-137

TABLE 6.2-4
SUMMARY OF INDEPENDENT BLIND DUPLICATE DOSIMETER TESTING
JANUARY – DECEMBER 2017[(1)]

Issuance Period	Client	Number Tested	Mean Bias %	Standard Deviation %	% Passed Precision Criteria
1st Qtr. 2017	Seabrook	12	-5.2	4.3	100
2nd Qtr. 2017	Seabrook	6	-0.6	3.5	100
3rd Qtr. 2017	Seabrook	12	-1.1	4.5	100
4th Qtr. 2017	Seabrook	6	-2.4	3.9	100

(1) Performance criterion is Bias % within ± 20% for each test dosimeter.

7.0 Land Use Census

The Offsite Dose Calculation Manual (ODCM Control 9.2.1) requires that a Land Use Census be conducted annually to identify the location of the nearest residence, milk animal and nearest garden of greater than 50 square meters producing broad leaf vegetation in each of the 16 meteorological sectors within five miles of the plant. The 2017 census was completed in accordance with the requirements of the ODCM. In 2017, a global positioning system was used to determine locations in the off-site environs with respect to the center of the site (Unit 1 Containment).

The nearest resident, garden and milk animal locations identified in the 2017 Land Use Census and their distances are shown in Table 7.0-1. There were no changes in nearest resident locations from last year's land use census. There were five sectors which had a new nearest garden location different from last year's land use census. The new nearest garden locations are in the NNE, NE, ENE, ESE and WNW sectors, at 3,198 m, 4,238 m, 2,528 m, 3,118 m and 2,187 m respectively.

There were no new milk locations identified within 5 miles (8 km) of the plant that were different from those reported in last year's land use census. As a result, there still remains an insufficient number of milk producing locations to qualify milk sampling as a REMP media per the requirements of ODCM Table A.9.1-1.

The results of this year's census also showed that the sampling locations used in the REMP continue to have the highest calculated dose commitments of available locations. In 2017, broad leaf vegetation continued as part of the sample collection and analysis program due to the absence of sufficient milk producing locations to provide REMP samples. Sampling locations for broad leaf vegetation are at the site boundary near points of highest predicted D/Q. This option continues, as opposed to public owned vegetable gardens located by the land use census, in order to ensure adequate availability of samples for REMP analysis from locations with the highest potential for detecting plant effluents.

Table 7.0-1

2017 Land Use Census Results
(Within 5 Miles)

Sector	Nearest Residence (km)	Nearest Garden (km)	Nearest Milk Animal (km)
N	2.78	3.99	
NNE	3.09	3.20 [a]	
NE	2.92	4.24 [a]	
ENE	2.31	2.53 [a]	
E	2.56	---	
ESE	2.43	3.12 [a]	
SE	2.36	4.69	
SSE	1.65	---	
S	1.21	1.25	
SSW	1.12	1.22	
SW	1.13	1.57	4.52 [b]
WSW	1.87	2.33	
W	1.25	1.55	
WNW	1.11	2.19 [a]	
NW	1.22	2.35	6.93
NNW	1.04	1.07	5.32 [a, c]

[a] New locations in 2017.
[b] Owner indicates that all milk is for personal use and is not interested in participating in REMP sampling.
[c] Location has no milking goats. Therefore, it is not a viable REMP sampling location.

Attachment 1: Sample Analysis Data List for 2017

FLAGS

A blank Flag field indicates that the measured activity is considered positive as it is greater than the MDC and has no other qualifiers noted.

U: Target isotope was analyzed for but not detected above the MDC and LLD.
UI: Uncertain identification for gamma spectroscopy.
X: Lab-specific qualifier:
(1) False positive due to the presence of radon gas in the water.
M: Reported result is less than the LLD and greater than the MDC.
DL: Measured MDC is greater than the LLD.
DL*: Near miss of MDC being within round-off difference of being greater than the LLD.

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
AL	05	424066001	5/16/2017	Ac-228	-1.95E+01	1.78E+01	3.88E+01	U
AL	05	424066001	5/16/2017	Ag-108m	-3.64E+00	3.29E+00	6.34E+00	U
AL	05	424066001	5/16/2017	Ag-110m	-8.72E+00	4.22E+00	1.03E+01	U
AL	05	424066001	5/16/2017	Ba-140	-1.39E+01	1.66E+01	5.21E+01	U
AL	05	424066001	5/16/2017	Be-7	3.92E+01	3.60E+01	7.96E+01	U
AL	05	424066001	5/16/2017	Ce-141	-1.73E+01	7.07E+00	1.26E+01	U
AL	05	424066001	5/16/2017	Ce-144	-1.42E+00	1.37E+01	4.39E+01	U
AL	05	424066001	5/16/2017	Co-57	2.89E-01	1.77E+00	5.76E+00	U
AL	05	424066001	5/16/2017	Co-58	-1.66E+00	3.11E+00	9.66E+00	U
AL	05	424066001	5/16/2017	Co-60	6.28E-01	2.79E+00	9.35E+00	U
AL	05	424066001	5/16/2017	Cr-51	-5.93E+00	2.30E+01	7.78E+01	U
AL	05	424066001	5/16/2017	Cs-134	9.30E-01	2.99E+00	9.70E+00	U
AL	05	424066001	5/16/2017	Cs-137	-8.46E+00	3.77E+00	7.84E+00	U
AL	05	424066001	5/16/2017	Fe-59	2.13E+00	7.13E+00	2.43E+01	U
AL	05	424066001	5/16/2017	I-131	-1.93E+00	7.02E+00	2.35E+01	U
AL	05	424066001	5/16/2017	K-40	9.33E+03	3.10E+02	7.08E+01	
AL	05	424066001	5/16/2017	La-140	-1.14E+01	6.59E+00	1.69E+01	U
AL	05	424066001	5/16/2017	Mn-54	-5.88E+00	3.81E+00	8.85E+00	U
AL	05	424066001	5/16/2017	Nb-95	-3.95E+00	4.20E+00	9.89E+00	U
AL	05	424066001	5/16/2017	Ru-103	1.03E+00	2.49E+00	8.38E+00	U
AL	05	424066001	5/16/2017	Ru-106	-2.51E+01	2.69E+01	8.30E+01	U
AL	05	424066001	5/16/2017	Sb-124	1.41E+00	5.36E+00	1.78E+01	U
AL	05	424066001	5/16/2017	Sb-125	-1.15E+01	6.55E+00	1.87E+01	U
AL	05	424066001	5/16/2017	Se-75	5.38E+00	3.48E+00	1.06E+01	U
AL	05	424066001	5/16/2017	Th-228	7.68E+00	6.05E+00	1.59E+01	U
AL	05	424066001	5/16/2017	Zn-65	-6.41E+00	7.58E+00	2.43E+01	U
AL	05	424066001	5/16/2017	Zr-95	3.24E+00	5.00E+00	1.64E+01	U
AL	05	438693001	11/22/2017	Ac-228	6.36E+01	3.64E+01	1.20E+02	U
AL	05	438693001	11/22/2017	Ag-108m	-2.35E+00	5.52E+00	1.79E+01	U
AL	05	438693001	11/22/2017	Ag-110m	-1.71E+01	9.60E+00	2.16E+01	U
AL	05	438693001	11/22/2017	Ba-140	4.79E+00	3.17E+01	1.06E+02	U
AL	05	438693001	11/22/2017	Be-7	0.00E+00	1.14E+02	1.72E+02	U
AL	05	438693001	11/22/2017	Ce-141	-2.14E+01	1.39E+01	3.48E+01	U
AL	05	438693001	11/22/2017	Ce-144	-2.93E+01	3.84E+01	1.09E+02	U
AL	05	438693001	11/22/2017	Co-57	-7.16E+00	5.79E+00	1.52E+01	U
AL	05	438693001	11/22/2017	Co-58	-6.04E+00	6.81E+00	1.95E+01	U
AL	05	438693001	11/22/2017	Co-60	-1.11E+01	7.41E+00	1.85E+01	U
AL	05	438693001	11/22/2017	Cr-51	-2.83E+01	6.23E+01	1.84E+02	U
AL	05	438693001	11/22/2017	Cs-134	-8.93E+00	6.62E+00	1.69E+01	U
AL	05	438693001	11/22/2017	Cs-137	-2.96E+00	6.32E+00	1.97E+01	U
AL	05	438693001	11/22/2017	Fe-59	2.98E+01	1.90E+01	5.03E+01	U
AL	05	438693001	11/22/2017	I-131	9.04E+00	1.15E+01	3.98E+01	U
AL	05	438693001	11/22/2017	K-40	8.95E+03	6.42E+02	2.45E+02	
AL	05	438693001	11/22/2017	La-140	-2.43E+01	1.34E+01	2.02E+01	U
AL	05	438693001	11/22/2017	Mn-54	-6.41E+00	5.86E+00	1.58E+01	U
AL	05	438693001	11/22/2017	Nb-95	-9.71E+00	7.99E+00	1.91E+01	U
AL	05	438693001	11/22/2017	Ru-103	-3.38E+00	6.22E+00	1.97E+01	U
AL	05	438693001	11/22/2017	Ru-106	6.84E+00	5.66E+01	1.87E+02	U
AL	05	438693001	11/22/2017	Sb-124	-1.81E+01	1.54E+01	3.81E+01	U
AL	05	438693001	11/22/2017	Sb-125	-2.30E+00	1.56E+01	5.19E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
AL	05	438693001	11/22/2017	Se-75	1.81E+01	8.76E+00	2.89E+01	U
AL	05	438693001	11/22/2017	Th-228	4.23E-01	1.44E+01	4.72E+01	U
AL	05	438693001	11/22/2017	Zn-65	-1.76E+01	1.82E+01	5.54E+01	U
AL	05	438693001	11/22/2017	Zr-95	-1.94E+01	1.43E+01	3.98E+01	U
AL	55	424066002	5/16/2017	Ac-228	2.61E+01	2.76E+01	5.98E+01	U
AL	55	424066002	5/16/2017	Ag-108m	-1.70E+00	3.03E+00	9.51E+00	U
AL	55	424066002	5/16/2017	Ag-110m	9.02E-01	5.16E+00	1.74E+01	U
AL	55	424066002	5/16/2017	Ba-140	-2.63E+01	2.57E+01	7.70E+01	U
AL	55	424066002	5/16/2017	Be-7	5.93E+02	6.98E+01	9.67E+01	
AL	55	424066002	5/16/2017	Ce-141	1.22E+00	4.86E+00	1.58E+01	U
AL	55	424066002	5/16/2017	Ce-144	-1.16E+00	1.51E+01	4.91E+01	U
AL	55	424066002	5/16/2017	Co-57	4.35E-01	1.83E+00	5.98E+00	U
AL	55	424066002	5/16/2017	Co-58	-1.34E+01	6.98E+00	1.25E+01	U
AL	55	424066002	5/16/2017	Co-60	1.54E-01	4.32E+00	1.36E+01	U
AL	55	424066002	5/16/2017	Cr-51	1.00E+01	3.41E+01	1.10E+02	U
AL	55	424066002	5/16/2017	Cs-134	-6.48E-02	3.87E+00	1.30E+01	U
AL	55	424066002	5/16/2017	Cs-137	4.54E+00	5.90E+00	1.31E+01	U
AL	55	424066002	5/16/2017	Fe-59	-3.37E+00	9.47E+00	3.12E+01	U
AL	55	424066002	5/16/2017	I-131	0.00E+00	1.90E+01	3.24E+01	U
AL	55	424066002	5/16/2017	K-40	8.61E+03	4.28E+02	9.57E+01	
AL	55	424066002	5/16/2017	La-140	2.63E+00	6.62E+00	2.25E+01	U
AL	55	424066002	5/16/2017	Mn-54	1.35E+00	3.57E+00	1.21E+01	U
AL	55	424066002	5/16/2017	Nb-95	3.06E+00	4.01E+00	1.36E+01	U
AL	55	424066002	5/16/2017	Ru-103	2.78E-01	5.01E+00	1.27E+01	U
AL	55	424066002	5/16/2017	Ru-106	5.74E+00	3.06E+01	1.04E+02	U
AL	55	424066002	5/16/2017	Sb-124	-3.10E+00	7.08E+00	2.25E+01	U
AL	55	424066002	5/16/2017	Sb-125	9.98E+00	9.42E+00	2.92E+01	U
AL	55	424066002	5/16/2017	Se-75	4.53E+00	4.08E+00	1.30E+01	U
AL	55	424066002	5/16/2017	Th-228	3.01E+01	1.35E+01	1.55E+01	
AL	55	424066002	5/16/2017	Zn-65	8.52E+00	9.28E+00	3.13E+01	U
AL	55	424066002	5/16/2017	Zr-95	-1.74E-01	6.75E+00	2.27E+01	U
AL	55	438693002	11/22/2017	Ac-228	-5.13E+00	3.12E+01	1.03E+02	U
AL	55	438693002	11/22/2017	Ag-108m	5.26E+00	6.22E+00	1.96E+01	U
AL	55	438693002	11/22/2017	Ag-110m	2.58E+00	1.09E+01	3.35E+01	U
AL	55	438693002	11/22/2017	Ba-140	5.62E+01	3.60E+01	1.24E+02	U
AL	55	438693002	11/22/2017	Be-7	0.00E+00	1.13E+02	1.55E+02	U
AL	55	438693002	11/22/2017	Ce-141	-2.33E+00	9.96E+00	3.00E+01	U
AL	55	438693002	11/22/2017	Ce-144	-1.71E+01	3.13E+01	9.90E+01	U
AL	55	438693002	11/22/2017	Co-57	2.98E+00	3.51E+00	1.19E+01	U
AL	55	438693002	11/22/2017	Co-58	-1.19E+00	7.17E+00	2.25E+01	U
AL	55	438693002	11/22/2017	Co-60	8.81E+00	7.07E+00	2.57E+01	U
AL	55	438693002	11/22/2017	Cr-51	1.07E+02	5.82E+01	1.99E+02	U
AL	55	438693002	11/22/2017	Cs-134	2.34E+00	7.91E+00	2.33E+01	U
AL	55	438693002	11/22/2017	Cs-137	1.02E+01	6.70E+00	2.32E+01	U
AL	55	438693002	11/22/2017	Fe-59	-2.22E+01	2.06E+01	6.12E+01	U
AL	55	438693002	11/22/2017	I-131	2.02E+01	1.26E+01	4.36E+01	U
AL	55	438693002	11/22/2017	K-40	8.83E+03	5.94E+02	2.88E+02	
AL	55	438693002	11/22/2017	La-140	-1.01E+01	9.96E+00	2.43E+01	U
AL	55	438693002	11/22/2017	Mn-54	2.98E+00	7.04E+00	2.32E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
AL	55	438693002	11/22/2017	Nb-95	4.74E+00	6.41E+00	2.17E+01	U
AL	55	438693002	11/22/2017	Ru-103	-3.61E+00	6.89E+00	2.19E+01	U
AL	55	438693002	11/22/2017	Ru-106	5.87E+00	5.42E+01	1.79E+02	U
AL	55	438693002	11/22/2017	Sb-124	-1.11E+01	1.30E+01	3.25E+01	U
AL	55	438693002	11/22/2017	Sb-125	-1.14E+01	1.63E+01	5.14E+01	U
AL	55	438693002	11/22/2017	Se-75	4.29E+00	7.03E+00	2.27E+01	U
AL	55	438693002	11/22/2017	Th-228	1.77E+01	1.66E+01	3.83E+01	U
AL	55	438693002	11/22/2017	Zn-65	5.23E+00	1.82E+01	6.18E+01	U
AL	55	438693002	11/22/2017	Zr-95	-2.12E+01	1.32E+01	3.23E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	01	413779001	1/4/2017	BETA	2.18E-02	1.06E-03	6.25E-04	
AP	01	414600001	1/18/2017	BETA	2.00E-02	1.01E-03	6.62E-04	
AP	01	415804001	2/2/2017	BETA	9.45E-03	6.87E-04	6.13E-04	M
AP	01	416909001	2/15/2017	BETA	1.37E-02	8.76E-04	7.08E-04	
AP	01	417723001	3/1/2017	BETA	2.02E-02	1.04E-03	6.43E-04	
AP	01	418884001	3/13/2017	BETA	2.13E-02	1.15E-03	8.17E-04	
AP	01	420834001	3/13/2017	Ac-228	-1.71E-04	6.07E-04	2.10E-03	U
AP	01	420834001	3/13/2017	Ag-108m	1.02E-04	1.05E-04	3.66E-04	U
AP	01	420834001	3/13/2017	Ag-110m	7.58E-05	2.31E-04	8.06E-04	U
AP	01	420834001	3/13/2017	Ba-140	-1.53E-03	4.43E-02	1.44E-01	U
AP	01	420834001	3/13/2017	Be-7	1.06E-01	9.59E-03	7.42E-03	
AP	01	420834001	3/13/2017	Ce-141	-2.51E-04	6.99E-04	2.16E-03	U
AP	01	420834001	3/13/2017	Ce-144	9.39E-04	6.96E-04	2.30E-03	U
AP	01	420834001	3/13/2017	Co-57	1.77E-05	7.81E-05	2.54E-04	U
AP	01	420834001	3/13/2017	Co-58	-1.83E-04	2.79E-04	8.70E-04	U
AP	01	420834001	3/13/2017	Co-60	-9.72E-05	1.74E-04	5.15E-04	U
AP	01	420834001	3/13/2017	Cr-51	-1.04E-02	6.93E-03	1.93E-02	U
AP	01	420834001	3/13/2017	Cs-134	2.93E-05	1.50E-04	4.88E-04	U
AP	01	420834001	3/13/2017	Cs-137	-3.47E-05	1.40E-04	4.37E-04	U
AP	01	420834001	3/13/2017	Fe-59	6.10E-04	9.42E-04	3.35E-03	U
AP	01	420834001	3/13/2017	I-131	-2.70E-01	1.63E-01	0.00E+00	U
AP	01	420834001	3/13/2017	K-40	2.56E-03	2.99E-03	4.10E-03	U
AP	01	420834001	3/13/2017	La-140	2.99E-02	1.43E-02	5.79E-02	U
AP	01	420834001	3/13/2017	Mn-54	1.05E-04	1.44E-04	5.17E-04	U
AP	01	420834001	3/13/2017	Nb-95	2.61E-04	2.90E-04	1.01E-03	U
AP	01	420834001	3/13/2017	Ru-103	1.01E-04	3.90E-04	1.31E-03	U
AP	01	420834001	3/13/2017	Ru-106	2.57E-03	1.15E-03	4.15E-03	U
AP	01	420834001	3/13/2017	Sb-124	5.81E-04	6.50E-04	2.49E-03	U
AP	01	420834001	3/13/2017	Sb-125	3.14E-04	3.65E-04	1.26E-03	U
AP	01	420834001	3/13/2017	Se-75	-3.31E-05	1.91E-04	6.42E-04	U
AP	01	420834001	3/13/2017	Th-228	2.64E-04	2.48E-04	4.95E-04	U
AP	01	420834001	3/13/2017	Zn-65	5.04E-06	2.74E-04	9.12E-04	U
AP	01	420834001	3/13/2017	Zr-95	6.45E-04	4.51E-04	1.65E-03	U
AP	01	419732001	3/29/2017	BETA	1.85E-02	9.41E-04	5.90E-04	
AP	01	420821001	4/12/2017	BETA	1.19E-02	8.11E-04	7.01E-04	
AP	01	421976001	4/26/2017	BETA	1.02E-02	7.11E-04	6.50E-04	
AP	01	423150001	5/10/2017	BETA	8.16E-03	6.37E-04	6.06E-04	M
AP	01	424055001	5/23/2017	BETA	1.33E-02	8.48E-04	7.04E-04	
AP	01	425262001	6/7/2017	BETA	6.23E-03	5.51E-04	6.06E-04	M
AP	01	426373001	6/21/2017	BETA	1.64E-02	9.13E-04	6.63E-04	
AP	01	429353001	6/21/2017	Ac-228	-2.35E-04	4.39E-04	1.35E-03	U
AP	01	429353001	6/21/2017	Ag-108m	-5.58E-05	7.18E-05	2.21E-04	U
AP	01	429353001	6/21/2017	Ag-110m	1.45E-04	1.47E-04	5.12E-04	U
AP	01	429353001	6/21/2017	Ba-140	1.98E-02	4.58E-02	1.34E-01	U
AP	01	429353001	6/21/2017	Be-7	7.58E-02	6.70E-03	5.99E-03	
AP	01	429353001	6/21/2017	Ce-141	-1.89E-04	6.57E-04	2.02E-03	U
AP	01	429353001	6/21/2017	Ce-144	-2.22E-04	4.76E-04	1.45E-03	U
AP	01	429353001	6/21/2017	Co-57	4.65E-05	6.14E-05	1.99E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	01	429353001	6/21/2017	Co-58	-7.15E-05	2.04E-04	6.24E-04	U
AP	01	429353001	6/21/2017	Co-60	3.61E-05	1.04E-04	3.61E-04	U
AP	01	429353001	6/21/2017	Cr-51	-1.19E-03	4.78E-03	1.58E-02	U
AP	01	429353001	6/21/2017	Cs-134	4.62E-05	9.71E-05	3.26E-04	U
AP	01	429353001	6/21/2017	Cs-137	1.68E-05	9.52E-05	2.85E-04	U
AP	01	429353001	6/21/2017	Fe-59	-7.05E-04	5.58E-04	1.41E-03	U
AP	01	429353001	6/21/2017	I-131	-1.39E-03	1.76E-01	0.00E+00	U
AP	01	429353001	6/21/2017	K-40	5.80E-04	1.69E-03	5.89E-03	U
AP	01	429353001	6/21/2017	La-140	-1.48E-02	1.50E-02	3.89E-02	U
AP	01	429353001	6/21/2017	Mn-54	0.00E+00	1.48E-04	3.16E-04	UI
AP	01	429353001	6/21/2017	Nb-95	-2.78E-06	1.94E-04	6.22E-04	U
AP	01	429353001	6/21/2017	Ru-103	-3.12E-06	3.21E-04	1.06E-03	U
AP	01	429353001	6/21/2017	Ru-106	1.89E-03	1.49E-03	2.93E-03	U
AP	01	429353001	6/21/2017	Sb-124	-1.29E-04	3.86E-04	1.14E-03	U
AP	01	429353001	6/21/2017	Sb-125	3.52E-04	2.06E-04	7.16E-04	U
AP	01	429353001	6/21/2017	Se-75	1.98E-04	1.54E-04	5.32E-04	U
AP	01	429353001	6/21/2017	Th-228	0.00E+00	2.06E-04	4.08E-04	UI
AP	01	429353001	6/21/2017	Zn-65	-4.03E-04	2.49E-04	5.88E-04	U
AP	01	429353001	6/21/2017	Zr-95	1.13E-04	3.65E-04	1.21E-03	U
AP	01	427491001	7/6/2017	BETA	2.03E-02	9.91E-04	5.94E-04	
AP	01	428504001	7/18/2017	BETA	2.12E-02	1.12E-03	7.27E-04	
AP	01	429899001	8/3/2017	BETA	1.84E-02	9.13E-04	5.54E-04	
AP	01	430998001	8/16/2017	BETA	2.16E-02	1.10E-03	7.27E-04	
AP	01	431910001	8/29/2017	BETA	2.27E-02	1.13E-03	6.94E-04	
AP	01	433034001	9/13/2017	BETA	2.05E-02	9.92E-04	5.94E-04	
AP	01	433923001	9/27/2017	BETA	2.48E-02	1.15E-03	6.99E-04	
AP	01	436552001	9/27/2017	Ac-228	8.20E-05	6.93E-04	1.79E-03	U
AP	01	436552001	9/27/2017	Ag-108m	6.05E-06	7.58E-05	2.57E-04	U
AP	01	436552001	9/27/2017	Ag-110m	-7.10E-05	1.73E-04	5.51E-04	U
AP	01	436552001	9/27/2017	Ba-140	1.67E-02	5.69E-02	1.92E-01	U
AP	01	436552001	9/27/2017	Be-7	1.44E-01	1.15E-02	8.85E-03	
AP	01	436552001	9/27/2017	Ce-141	6.39E-05	1.01E-03	2.88E-03	U
AP	01	436552001	9/27/2017	Ce-144	8.58E-05	5.33E-04	1.85E-03	U
AP	01	436552001	9/27/2017	Co-57	1.79E-04	8.61E-05	2.73E-04	U
AP	01	436552001	9/27/2017	Co-58	-9.46E-05	2.46E-04	7.96E-04	U
AP	01	436552001	9/27/2017	Co-60	3.78E-05	1.24E-04	4.28E-04	U
AP	01	436552001	9/27/2017	Cr-51	3.74E-03	8.37E-03	2.75E-02	U
AP	01	436552001	9/27/2017	Cs-134	-6.24E-05	1.11E-04	3.50E-04	U
AP	01	436552001	9/27/2017	Cs-137	3.21E-05	1.09E-04	3.61E-04	U
AP	01	436552001	9/27/2017	Fe-59	2.51E-04	7.34E-04	2.50E-03	U
AP	01	436552001	9/27/2017	I-131	-2.19E-01	3.28E-01	0.00E+00	U
AP	01	436552001	9/27/2017	K-40	3.46E-03	1.98E-03	7.09E-03	U
AP	01	436552001	9/27/2017	La-140	1.90E-02	1.74E-02	6.61E-02	U
AP	01	436552001	9/27/2017	Mn-54	1.00E-04	1.32E-04	4.62E-04	U
AP	01	436552001	9/27/2017	Nb-95	-3.70E-04	2.92E-04	8.22E-04	U
AP	01	436552001	9/27/2017	Ru-103	3.98E-04	3.92E-04	1.38E-03	U
AP	01	436552001	9/27/2017	Ru-106	-4.75E-05	1.12E-03	3.65E-03	U
AP	01	436552001	9/27/2017	Sb-124	-2.55E-04	7.59E-04	2.35E-03	U
AP	01	436552001	9/27/2017	Sb-125	3.96E-04	2.91E-04	1.01E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	01	436552001	9/27/2017	Se-75	3.43E-04	1.99E-04	6.64E-04	U
AP	01	436552001	9/27/2017	Th-228	4.58E-04	4.00E-04	6.23E-04	U
AP	01	436552001	9/27/2017	Zn-65	2.44E-05	3.08E-04	1.01E-03	U
AP	01	436552001	9/27/2017	Zr-95	-2.78E-04	5.20E-04	1.56E-03	U
AP	01	435090001	10/11/2017	BETA	2.22E-02	1.08E-03	7.09E-04	
AP	01	436359001	10/25/2017	BETA	2.75E-02	1.20E-03	6.98E-04	
AP	01	437753001	11/8/2017	BETA	1.20E-02	8.09E-04	6.81E-04	
AP	01	438500001	11/21/2017	BETA	2.12E-02	1.09E-03	7.53E-04	
AP	01	439670001	12/5/2017	BETA	2.68E-02	1.19E-03	6.71E-04	
AP	01	440743001	12/20/2017	BETA	2.55E-02	1.01E-03	7.36E-04	
AP	01	441654001	12/20/2017	Ac-228	5.53E-04	7.60E-04	2.19E-03	U
AP	01	441654001	12/20/2017	Ag-108m	1.56E-04	1.04E-04	3.61E-04	U
AP	01	441654001	12/20/2017	Ag-110m	-3.12E-04	1.82E-04	3.91E-04	U
AP	01	441654001	12/20/2017	Ba-140	-8.50E-03	1.84E-02	5.68E-02	U
AP	01	441654001	12/20/2017	Be-7	1.01E-01	8.46E-03	6.34E-03	
AP	01	441654001	12/20/2017	Ce-141	-7.06E-04	5.71E-04	1.55E-03	U
AP	01	441654001	12/20/2017	Ce-144	2.42E-04	5.73E-04	1.88E-03	U
AP	01	441654001	12/20/2017	Co-57	8.22E-06	6.75E-05	2.19E-04	U
AP	01	441654001	12/20/2017	Co-58	-2.79E-04	2.62E-04	7.65E-04	U
AP	01	441654001	12/20/2017	Co-60	5.02E-05	1.72E-04	5.81E-04	U
AP	01	441654001	12/20/2017	Cr-51	1.20E-03	4.26E-03	1.46E-02	U
AP	01	441654001	12/20/2017	Cs-134	-1.02E-04	1.26E-04	3.81E-04	U
AP	01	441654001	12/20/2017	Cs-137	1.13E-04	1.34E-04	4.59E-04	U
AP	01	441654001	12/20/2017	Fe-59	1.66E-04	6.45E-04	2.21E-03	U
AP	01	441654001	12/20/2017	I-131	-2.36E-02	4.39E-02	1.39E-01	U
AP	01	441654001	12/20/2017	K-40	-2.35E-04	1.72E-03	6.60E-03	U
AP	01	441654001	12/20/2017	La-140	-7.03E-03	8.97E-03	2.88E-02	U
AP	01	441654001	12/20/2017	Mn-54	-7.58E-05	1.53E-04	4.87E-04	U
AP	01	441654001	12/20/2017	Nb-95	2.76E-05	2.50E-04	8.04E-04	U
AP	01	441654001	12/20/2017	Ru-103	4.84E-05	3.42E-04	1.08E-03	U
AP	01	441654001	12/20/2017	Ru-106	-4.35E-04	1.16E-03	3.54E-03	U
AP	01	441654001	12/20/2017	Sb-124	3.03E-04	5.58E-04	2.07E-03	U
AP	01	441654001	12/20/2017	Sb-125	5.00E-05	3.02E-04	1.01E-03	U
AP	01	441654001	12/20/2017	Se-75	1.77E-04	1.83E-04	5.97E-04	U
AP	01	441654001	12/20/2017	Th-228	2.59E-04	3.35E-04	7.10E-04	U
AP	01	441654001	12/20/2017	Zn-65	2.18E-04	3.00E-04	1.00E-03	U
AP	01	441654001	12/20/2017	Zr-95	-4.15E-04	3.78E-04	9.26E-04	U
AP	02	413779002	1/4/2017	BETA	1.98E-02	9.92E-04	6.03E-04	
AP	02	414600002	1/18/2017	BETA	1.86E-02	9.57E-04	6.36E-04	
AP	02	415804002	2/2/2017	BETA	1.37E-02	8.04E-04	5.87E-04	
AP	02	416909002	2/15/2017	BETA	1.11E-02	7.76E-04	6.79E-04	
AP	02	417723002	3/1/2017	BETA	2.02E-02	1.02E-03	6.19E-04	
AP	02	418884002	3/13/2017	BETA	2.30E-02	1.16E-03	7.78E-04	
AP	02	420834002	3/13/2017	Ac-228	-9.60E-04	7.68E-04	2.19E-03	U
AP	02	420834002	3/13/2017	Ag-108m	2.52E-05	1.08E-04	3.66E-04	U
AP	02	420834002	3/13/2017	Ag-110m	-2.92E-04	2.72E-04	6.96E-04	U
AP	02	420834002	3/13/2017	Ba-140	5.17E-02	3.42E-02	1.28E-01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	02	420834002	3/13/2017	Be-7	1.29E-01	1.10E-02	8.39E-03	
AP	02	420834002	3/13/2017	Ce-141	2.44E-04	9.16E-04	2.32E-03	U
AP	02	420834002	3/13/2017	Ce-144	4.75E-04	6.20E-04	2.19E-03	U
AP	02	420834002	3/13/2017	Co-57	1.18E-04	9.38E-05	3.31E-04	U
AP	02	420834002	3/13/2017	Co-58	1.18E-05	2.21E-04	7.21E-04	U
AP	02	420834002	3/13/2017	Co-60	-1.09E-04	8.08E-05	0.00E+00	U
AP	02	420834002	3/13/2017	Cr-51	6.16E-03	7.08E-03	2.31E-02	U
AP	02	420834002	3/13/2017	Cs-134	1.74E-04	1.83E-04	6.51E-04	U
AP	02	420834002	3/13/2017	Cs-137	4.65E-05	1.15E-04	3.96E-04	U
AP	02	420834002	3/13/2017	Fe-59	5.60E-04	8.28E-04	2.97E-03	U
AP	02	420834002	3/13/2017	I-131	-1.06E-01	1.55E-01	0.00E+00	U
AP	02	420834002	3/13/2017	K-40	2.32E-03	3.01E-03	3.79E-03	U
AP	02	420834002	3/13/2017	La-140	7.06E-03	1.14E-02	4.38E-02	U
AP	02	420834002	3/13/2017	Mn-54	-1.53E-04	1.52E-04	3.83E-04	U
AP	02	420834002	3/13/2017	Nb-95	4.08E-05	3.88E-04	1.25E-03	U
AP	02	420834002	3/13/2017	Ru-103	2.80E-04	5.78E-04	1.98E-03	U
AP	02	420834002	3/13/2017	Ru-106	1.07E-03	1.63E-03	5.62E-03	U
AP	02	420834002	3/13/2017	Sb-124	-4.71E-04	8.57E-04	2.46E-03	U
AP	02	420834002	3/13/2017	Sb-125	7.62E-05	2.94E-04	1.00E-03	U
AP	02	420834002	3/13/2017	Se-75	2.57E-04	2.55E-04	8.91E-04	U
AP	02	420834002	3/13/2017	Th-228	-1.06E-04	2.29E-04	7.66E-04	U
AP	02	420834002	3/13/2017	Zn-65	-2.36E-04	4.06E-04	1.14E-03	U
AP	02	420834002	3/13/2017	Zr-95	-7.66E-04	5.43E-04	1.19E-03	U
AP	02	419732002	3/29/2017	BETA	2.07E-02	9.96E-04	5.89E-04	
AP	02	420821002	4/12/2017	BETA	1.34E-02	8.41E-04	6.76E-04	
AP	02	421976002	4/26/2017	BETA	1.43E-02	8.96E-04	7.41E-04	
AP	02	423150002	5/10/2017	BETA	7.98E-03	6.79E-04	6.96E-04	M
AP	02	424055002	5/23/2017	BETA	1.34E-02	9.11E-04	8.02E-04	
AP	02	425262002	6/7/2017	BETA	6.96E-03	6.23E-04	6.92E-04	M
AP	02	426373002	6/21/2017	BETA	1.63E-02	9.71E-04	7.51E-04	
AP	02	429353002	6/21/2017	Ac-228	-5.50E-04	6.97E-04	2.07E-03	U
AP	02	429353002	6/21/2017	Ag-108m	6.75E-05	1.02E-04	3.57E-04	U
AP	02	429353002	6/21/2017	Ag-110m	3.08E-05	2.06E-04	6.81E-04	U
AP	02	429353002	6/21/2017	Ba-140	-4.14E-02	7.43E-02	2.27E-01	U
AP	02	429353002	6/21/2017	Be-7	7.53E-02	9.36E-03	1.07E-02	
AP	02	429353002	6/21/2017	Ce-141	-1.27E-03	9.76E-04	2.97E-03	U
AP	02	429353002	6/21/2017	Ce-144	3.54E-05	6.25E-04	2.15E-03	U
AP	02	429353002	6/21/2017	Co-57	-9.90E-06	1.01E-04	3.47E-04	U
AP	02	429353002	6/21/2017	Co-58	-6.55E-05	4.00E-04	1.26E-03	U
AP	02	429353002	6/21/2017	Co-60	1.31E-04	1.80E-04	6.71E-04	U
AP	02	429353002	6/21/2017	Cr-51	-6.33E-03	8.49E-03	2.61E-02	U
AP	02	429353002	6/21/2017	Cs-134	1.18E-04	1.09E-04	4.26E-04	U
AP	02	429353002	6/21/2017	Cs-137	-4.85E-05	1.16E-04	3.49E-04	U
AP	02	429353002	6/21/2017	Fe-59	4.81E-04	1.44E-03	4.80E-03	U
AP	02	429353002	6/21/2017	I-131	0.00E+00	2.52E-01	0.00E+00	UI
AP	02	429353002	6/21/2017	K-40	1.18E-03	2.39E-03	9.39E-03	U
AP	02	429353002	6/21/2017	La-140	4.64E-03	1.67E-02	6.04E-02	U
AP	02	429353002	6/21/2017	Mn-54	-2.64E-04	1.88E-04	4.23E-04	U
AP	02	429353002	6/21/2017	Nb-95	-8.00E-05	2.83E-04	8.62E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	02	429353002	6/21/2017	Ru-103	-6.26E-04	5.01E-04	1.27E-03	U
AP	02	429353002	6/21/2017	Ru-106	7.72E-05	1.05E-03	3.48E-03	U
AP	02	429353002	6/21/2017	Sb-124	-1.06E-04	8.87E-04	2.87E-03	U
AP	02	429353002	6/21/2017	Sb-125	4.37E-04	3.11E-04	1.14E-03	U
AP	02	429353002	6/21/2017	Se-75	0.00E+00	4.96E-04	9.53E-04	UI
AP	02	429353002	6/21/2017	Th-228	2.00E-04	3.70E-04	5.73E-04	U
AP	02	429353002	6/21/2017	Zn-65	7.72E-04	4.85E-04	1.81E-03	U
AP	02	429353002	6/21/2017	Zr-95	9.34E-05	6.13E-04	2.03E-03	U
AP	02	427491002	7/6/2017	BETA	1.92E-02	1.02E-03	6.66E-04	
AP	02	428504002	7/18/2017	BETA	2.08E-02	1.19E-03	8.24E-04	
AP	02	429899002	8/3/2017	BETA	1.96E-02	1.00E-03	6.28E-04	
AP	02	430998002	8/16/2017	BETA	2.58E-02	1.28E-03	8.22E-04	
AP	02	431910002	8/29/2017	BETA	2.32E-02	1.21E-03	7.83E-04	
AP	02	433034002	9/13/2017	BETA	2.35E-02	1.13E-03	6.69E-04	
AP	02	433923002	9/27/2017	BETA	2.05E-02	1.11E-03	7.88E-04	
AP	02	436552002	9/27/2017	Ac-228	-2.68E-05	6.42E-04	2.29E-03	U
AP	02	436552002	9/27/2017	Ag-108m	4.57E-05	9.78E-05	3.13E-04	U
AP	02	436552002	9/27/2017	Ag-110m	-5.46E-05	1.10E-04	3.14E-04	U
AP	02	436552002	9/27/2017	Ba-140	9.88E-02	8.20E-02	2.49E-01	U
AP	02	436552002	9/27/2017	Be-7	1.19E-01	1.14E-02	8.67E-03	
AP	02	436552002	9/27/2017	Ce-141	-7.44E-04	7.94E-04	2.36E-03	U
AP	02	436552002	9/27/2017	Ce-144	-1.43E-04	5.12E-04	1.66E-03	U
AP	02	436552002	9/27/2017	Co-57	-3.88E-05	6.38E-05	2.00E-04	U
AP	02	436552002	9/27/2017	Co-58	1.06E-04	2.91E-04	1.03E-03	U
AP	02	436552002	9/27/2017	Co-60	5.62E-05	1.07E-04	3.95E-04	U
AP	02	436552002	9/27/2017	Cr-51	1.81E-03	8.57E-03	2.99E-02	U
AP	02	436552002	9/27/2017	Cs-134	1.64E-04	1.33E-04	4.96E-04	U
AP	02	436552002	9/27/2017	Cs-137	3.01E-05	1.15E-04	3.85E-04	U
AP	02	436552002	9/27/2017	Fe-59	3.36E-04	8.15E-04	2.92E-03	U
AP	02	436552002	9/27/2017	I-131	0.00E+00	3.34E-01	0.00E+00	UI
AP	02	436552002	9/27/2017	K-40	2.24E-03	2.18E-03	8.40E-03	U
AP	02	436552002	9/27/2017	La-140	-4.52E-02	2.50E-02	0.00E+00	U
AP	02	436552002	9/27/2017	Mn-54	2.05E-04	1.74E-04	6.44E-04	U
AP	02	436552002	9/27/2017	Nb-95	-1.16E-05	2.81E-04	8.88E-04	U
AP	02	436552002	9/27/2017	Ru-103	-1.82E-04	4.95E-04	1.56E-03	U
AP	02	436552002	9/27/2017	Ru-106	-4.31E-04	1.17E-03	3.59E-03	U
AP	02	436552002	9/27/2017	Sb-124	7.08E-04	8.31E-04	3.27E-03	U
AP	02	436552002	9/27/2017	Sb-125	-4.91E-04	3.24E-04	8.34E-04	U
AP	02	436552002	9/27/2017	Se-75	8.52E-05	2.00E-04	6.55E-04	U
AP	02	436552002	9/27/2017	Th-228	0.00E+00	2.44E-04	4.05E-04	U
AP	02	436552002	9/27/2017	Zn-65	-4.93E-04	3.70E-04	8.24E-04	U
AP	02	436552002	9/27/2017	Zr-95	-3.21E-04	6.40E-04	1.87E-03	U
AP	02	435090002	10/11/2017	BETA	2.41E-02	1.19E-03	8.02E-04	
AP	02	436359002	10/25/2017	BETA	2.71E-02	1.26E-03	7.93E-04	
AP	02	437753002	11/8/2017	BETA	1.88E-02	1.05E-03	7.44E-04	
AP	02	438500002	11/21/2017	BETA	2.19E-02	1.17E-03	8.40E-04	
AP	02	439670002	12/5/2017	BETA	2.72E-02	1.26E-03	7.44E-04	
AP	02	440743002	12/20/2017	BETA	2.43E-02	9.87E-04	7.40E-04	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	02	441654002	12/20/2017	Ac-228	1.29E-03	8.61E-04	2.61E-03	U
AP	02	441654002	12/20/2017	Ag-108m	1.02E-04	9.85E-05	3.53E-04	U
AP	02	441654002	12/20/2017	Ag-110m	-1.26E-04	2.35E-04	7.04E-04	U
AP	02	441654002	12/20/2017	Ba-140	4.16E-02	1.93E-02	6.97E-02	U
AP	02	441654002	12/20/2017	Be-7	1.05E-01	9.26E-03	7.93E-03	
AP	02	441654002	12/20/2017	Ce-141	2.64E-04	6.44E-04	2.11E-03	U
AP	02	441654002	12/20/2017	Ce-144	-2.33E-04	6.24E-04	1.92E-03	U
AP	02	441654002	12/20/2017	Co-57	1.60E-04	9.59E-05	3.17E-04	U
AP	02	441654002	12/20/2017	Co-58	1.97E-04	2.32E-04	8.30E-04	U
AP	02	441654002	12/20/2017	Co-60	1.73E-04	1.56E-04	5.97E-04	U
AP	02	441654002	12/20/2017	Cr-51	-1.18E-04	4.63E-03	1.59E-02	U
AP	02	441654002	12/20/2017	Cs-134	2.03E-04	1.13E-04	4.43E-04	U
AP	02	441654002	12/20/2017	Cs-137	-2.71E-05	1.27E-04	4.09E-04	U
AP	02	441654002	12/20/2017	Fe-59	3.97E-04	7.61E-04	2.62E-03	U
AP	02	441654002	12/20/2017	I-131	-4.16E-02	4.99E-02	1.56E-01	U
AP	02	441654002	12/20/2017	K-40	0.00E+00	2.37E-03	4.00E-03	U
AP	02	441654002	12/20/2017	La-140	-6.99E-03	6.60E-03	1.57E-02	U
AP	02	441654002	12/20/2017	Mn-54	-1.51E-04	1.37E-04	3.54E-04	U
AP	02	441654002	12/20/2017	Nb-95	-3.47E-04	2.69E-04	6.87E-04	U
AP	02	441654002	12/20/2017	Ru-103	-2.14E-04	3.86E-04	1.22E-03	U
AP	02	441654002	12/20/2017	Ru-106	-5.58E-04	1.12E-03	3.47E-03	U
AP	02	441654002	12/20/2017	Sb-124	5.68E-04	5.84E-04	2.32E-03	U
AP	02	441654002	12/20/2017	Sb-125	-6.43E-05	2.49E-04	8.17E-04	U
AP	02	441654002	12/20/2017	Se-75	-5.60E-05	2.15E-04	6.54E-04	U
AP	02	441654002	12/20/2017	Th-228	2.27E-04	2.77E-04	7.89E-04	U
AP	02	441654002	12/20/2017	Zn-65	1.49E-04	3.80E-04	1.28E-03	U
AP	02	441654002	12/20/2017	Zr-95	7.56E-04	4.42E-04	1.64E-03	U
AP	03	413779003	1/4/2017	BETA	2.00E-02	1.03E-03	6.40E-04	
AP	03	414600003	1/18/2017	BETA	2.27E-02	1.10E-03	6.82E-04	
AP	03	415804003	2/2/2017	BETA	1.31E-02	8.14E-04	6.28E-04	
AP	03	416909003	2/15/2017	BETA	1.71E-02	9.83E-04	7.18E-04	
AP	03	417723003	3/1/2017	BETA	2.01E-02	1.06E-03	6.68E-04	
AP	03	418884003	3/13/2017	BETA	2.37E-02	1.22E-03	8.39E-04	
AP	03	420834003	3/13/2017	Ac-228	5.30E-04	6.42E-04	2.20E-03	U
AP	03	420834003	3/13/2017	Ag-108m	5.81E-05	1.06E-04	3.59E-04	U
AP	03	420834003	3/13/2017	Ag-110m	-5.58E-04	3.14E-04	6.91E-04	U
AP	03	420834003	3/13/2017	Ba-140	1.80E-02	4.14E-02	1.44E-01	U
AP	03	420834003	3/13/2017	Be-7	1.07E-01	9.81E-03	1.19E-02	
AP	03	420834003	3/13/2017	Ce-141	3.76E-05	8.85E-04	2.82E-03	U
AP	03	420834003	3/13/2017	Ce-144	-1.14E-03	8.00E-04	2.18E-03	U
AP	03	420834003	3/13/2017	Co-57	1.91E-05	1.09E-04	3.54E-04	U
AP	03	420834003	3/13/2017	Co-58	-3.16E-04	3.18E-04	8.65E-04	U
AP	03	420834003	3/13/2017	Co-60	-1.03E-04	1.87E-04	5.50E-04	U
AP	03	420834003	3/13/2017	Cr-51	-3.95E-03	8.52E-03	2.70E-02	U
AP	03	420834003	3/13/2017	Cs-134	1.53E-04	1.59E-04	5.67E-04	U
AP	03	420834003	3/13/2017	Cs-137	-2.80E-05	1.74E-04	5.67E-04	U
AP	03	420834003	3/13/2017	Fe-59	9.06E-04	7.95E-04	3.05E-03	U
AP	03	420834003	3/13/2017	I-131	0.00E+00	1.78E-01	0.00E+00	UI

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	03	420834003	3/13/2017	K-40	2.94E-03	1.94E-03	3.51E-03	U
AP	03	420834003	3/13/2017	La-140	3.53E-02	2.05E-02	7.88E-02	U
AP	03	420834003	3/13/2017	Mn-54	2.73E-04	1.72E-04	6.27E-04	U
AP	03	420834003	3/13/2017	Nb-95	1.40E-04	3.76E-04	1.23E-03	U
AP	03	420834003	3/13/2017	Ru-103	-3.47E-04	5.75E-04	1.83E-03	U
AP	03	420834003	3/13/2017	Ru-106	-1.66E-03	1.58E-03	4.53E-03	U
AP	03	420834003	3/13/2017	Sb-124	7.57E-04	8.97E-04	3.39E-03	U
AP	03	420834003	3/13/2017	Sb-125	1.97E-05	3.59E-04	1.16E-03	U
AP	03	420834003	3/13/2017	Se-75	-1.34E-04	2.75E-04	8.82E-04	U
AP	03	420834003	3/13/2017	Th-228	1.48E-04	4.37E-04	7.56E-04	U
AP	03	420834003	3/13/2017	Zn-65	-3.23E-04	4.69E-04	1.40E-03	U
AP	03	420834003	3/13/2017	Zr-95	7.16E-04	6.36E-04	2.26E-03	U
AP	03	419732003	3/29/2017	BETA	1.48E-02	8.67E-04	6.23E-04	
AP	03	420821003	4/12/2017	BETA	1.34E-02	8.76E-04	7.30E-04	
AP	03	421976003	4/26/2017	BETA	1.29E-02	8.63E-04	7.57E-04	
AP	03	423150003	5/10/2017	BETA	9.13E-03	7.28E-04	7.05E-04	M
AP	03	424055003	5/23/2017	BETA	1.49E-02	9.66E-04	8.14E-04	
AP	03	425262003	6/7/2017	BETA	7.81E-03	6.61E-04	7.02E-04	M
AP	03	426373003	6/21/2017	BETA	1.72E-02	1.01E-03	7.72E-04	
AP	03	429353003	6/21/2017	Ac-228	-3.81E-05	6.57E-04	2.23E-03	U
AP	03	429353003	6/21/2017	Ag-108m	1.28E-05	9.52E-05	3.19E-04	U
AP	03	429353003	6/21/2017	Ag-110m	3.09E-04	2.42E-04	9.06E-04	U
AP	03	429353003	6/21/2017	Ba-140	-2.32E-02	6.62E-02	2.07E-01	U
AP	03	429353003	6/21/2017	Be-7	8.39E-02	9.90E-03	9.72E-03	
AP	03	429353003	6/21/2017	Ce-141	-1.09E-03	8.92E-04	2.48E-03	U
AP	03	429353003	6/21/2017	Ce-144	8.15E-04	6.37E-04	2.15E-03	U
AP	03	429353003	6/21/2017	Co-57	1.55E-04	8.12E-05	2.74E-04	U
AP	03	429353003	6/21/2017	Co-58	9.12E-06	2.95E-04	1.01E-03	U
AP	03	429353003	6/21/2017	Co-60	2.24E-05	1.77E-04	6.36E-04	U
AP	03	429353003	6/21/2017	Cr-51	-7.43E-03	8.28E-03	2.52E-02	U
AP	03	429353003	6/21/2017	Cs-134	2.95E-05	1.73E-04	6.13E-04	U
AP	03	429353003	6/21/2017	Cs-137	1.42E-04	1.39E-04	4.91E-04	U
AP	03	429353003	6/21/2017	Fe-59	1.10E-03	1.08E-03	4.04E-03	U
AP	03	429353003	6/21/2017	I-131	-3.00E-01	2.42E-01	0.00E+00	U
AP	03	429353003	6/21/2017	K-40	-2.13E-03	2.27E-03	8.30E-03	U
AP	03	429353003	6/21/2017	La-140	-3.34E-03	2.09E-02	6.44E-02	U
AP	03	429353003	6/21/2017	Mn-54	-3.00E-05	1.69E-04	5.60E-04	U
AP	03	429353003	6/21/2017	Nb-95	-2.06E-04	3.77E-04	1.09E-03	U
AP	03	429353003	6/21/2017	Ru-103	1.38E-04	4.39E-04	1.50E-03	U
AP	03	429353003	6/21/2017	Ru-106	-1.97E-03	1.62E-03	4.23E-03	U
AP	03	429353003	6/21/2017	Sb-124	1.23E-03	1.02E-03	3.99E-03	U
AP	03	429353003	6/21/2017	Sb-125	2.02E-04	2.46E-04	8.85E-04	U
AP	03	429353003	6/21/2017	Se-75	-5.15E-05	2.06E-04	6.87E-04	U
AP	03	429353003	6/21/2017	Th-228	6.80E-05	2.23E-04	8.05E-04	U
AP	03	429353003	6/21/2017	Zn-65	-4.78E-04	4.42E-04	1.17E-03	U
AP	03	429353003	6/21/2017	Zr-95	2.97E-04	3.43E-04	1.30E-03	U
AP	03	427491003	7/6/2017	BETA	1.93E-02	1.04E-03	6.86E-04	
AP	03	428504003	7/18/2017	BETA	2.19E-02	1.23E-03	8.51E-04	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	03	429899003	8/3/2017	BETA	2.01E-02	1.02E-03	6.39E-04	
AP	03	430998003	8/16/2017	BETA	2.50E-02	1.27E-03	8.39E-04	
AP	03	431910003	8/29/2017	BETA	2.06E-02	1.15E-03	7.97E-04	
AP	03	433034003	9/13/2017	BETA	2.05E-02	1.07E-03	6.92E-04	
AP	03	433923003	9/27/2017	BETA	2.42E-02	1.21E-03	7.99E-04	
AP	03	436552003	9/27/2017	Ac-228	0.00E+00	1.71E-03	4.00E-03	U
AP	03	436552003	9/27/2017	Ag-108m	-2.56E-05	1.46E-04	4.27E-04	U
AP	03	436552003	9/27/2017	Ag-110m	1.43E-04	2.78E-04	1.01E-03	U
AP	03	436552003	9/27/2017	Ba-140	-3.27E-02	1.02E-01	3.24E-01	U
AP	03	436552003	9/27/2017	Be-7	1.27E-01	1.43E-02	1.59E-02	
AP	03	436552003	9/27/2017	Ce-141	-3.73E-04	1.22E-03	3.77E-03	U
AP	03	436552003	9/27/2017	Ce-144	6.50E-04	7.54E-04	2.40E-03	U
AP	03	436552003	9/27/2017	Co-57	-1.59E-04	1.17E-04	2.96E-04	U
AP	03	436552003	9/27/2017	Co-58	-6.19E-06	5.36E-04	1.71E-03	U
AP	03	436552003	9/27/2017	Co-60	1.50E-04	1.89E-04	7.04E-04	U
AP	03	436552003	9/27/2017	Cr-51	-7.63E-03	1.30E-02	4.21E-02	U
AP	03	436552003	9/27/2017	Cs-134	1.57E-04	2.37E-04	8.13E-04	U
AP	03	436552003	9/27/2017	Cs-137	-1.30E-04	2.40E-04	7.30E-04	U
AP	03	436552003	9/27/2017	Fe-59	-7.30E-04	1.72E-03	5.39E-03	U
AP	03	436552003	9/27/2017	I-131	-2.11E-01	4.58E-01	0.00E+00	U
AP	03	436552003	9/27/2017	K-40	4.62E-03	3.39E-03	1.32E-02	U
AP	03	436552003	9/27/2017	La-140	1.04E-01	4.75E-02	1.90E-01	U
AP	03	436552003	9/27/2017	Mn-54	-1.73E-04	2.20E-04	5.97E-04	U
AP	03	436552003	9/27/2017	Nb-95	-5.50E-05	5.74E-04	1.82E-03	U
AP	03	436552003	9/27/2017	Ru-103	4.26E-04	8.01E-04	2.77E-03	U
AP	03	436552003	9/27/2017	Ru-106	9.05E-04	1.84E-03	6.29E-03	U
AP	03	436552003	9/27/2017	Sb-124	-6.91E-05	1.49E-03	4.76E-03	U
AP	03	436552003	9/27/2017	Sb-125	1.11E-04	4.98E-04	1.70E-03	U
AP	03	436552003	9/27/2017	Se-75	-3.57E-04	3.42E-04	9.37E-04	U
AP	03	436552003	9/27/2017	Th-228	5.24E-04	4.39E-04	1.15E-03	U
AP	03	436552003	9/27/2017	Zn-65	1.86E-04	6.00E-04	2.08E-03	U
AP	03	436552003	9/27/2017	Zr-95	-1.13E-03	1.02E-03	2.67E-03	U
AP	03	435090003	10/11/2017	BETA	2.24E-02	1.17E-03	8.23E-04	
AP	03	436359003	10/24/2017	BETA	2.68E-02	1.31E-03	8.65E-04	
AP	03	437753003	11/8/2017	BETA	1.97E-02	1.06E-03	7.19E-04	
AP	03	438500003	11/21/2017	BETA	2.09E-02	1.15E-03	8.47E-04	
AP	03	439670003	12/5/2017	BETA	2.55E-02	1.23E-03	7.54E-04	
AP	03	440743003	12/20/2017	BETA	2.45E-02	1.02E-03	8.00E-04	
AP	03	441654003	12/20/2017	Ac-228	-7.07E-05	5.81E-04	2.20E-03	U
AP	03	441654003	12/20/2017	Ag-108m	3.33E-04	1.30E-04	4.37E-04	U
AP	03	441654003	12/20/2017	Ag-110m	-1.72E-04	1.47E-04	2.73E-04	U
AP	03	441654003	12/20/2017	Ba-140	-8.71E-03	1.72E-02	5.27E-02	U
AP	03	441654003	12/20/2017	Be-7	1.24E-01	1.09E-02	5.92E-03	
AP	03	441654003	12/20/2017	Ce-141	1.15E-03	9.37E-04	1.74E-03	U
AP	03	441654003	12/20/2017	Ce-144	-1.47E-04	7.69E-04	2.40E-03	U
AP	03	441654003	12/20/2017	Co-57	1.09E-04	8.17E-05	2.78E-04	U
AP	03	441654003	12/20/2017	Co-58	3.07E-05	2.52E-04	8.27E-04	U
AP	03	441654003	12/20/2017	Co-60	1.30E-04	1.27E-04	5.08E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	03	441654003	12/20/2017	Cr-51	6.53E-03	5.88E-03	2.08E-02	U
AP	03	441654003	12/20/2017	Cs-134	9.84E-05	1.51E-04	5.31E-04	U
AP	03	441654003	12/20/2017	Cs-137	-5.84E-05	1.05E-04	3.05E-04	U
AP	03	441654003	12/20/2017	Fe-59	-1.42E-04	6.67E-04	2.18E-03	U
AP	03	441654003	12/20/2017	I-131	2.93E-03	5.18E-02	1.76E-01	U
AP	03	441654003	12/20/2017	K-40	2.38E-03	2.42E-03	9.44E-03	U
AP	03	441654003	12/20/2017	La-140	7.97E-05	4.96E-03	1.65E-02	U
AP	03	441654003	12/20/2017	Mn-54	-2.52E-04	1.80E-04	4.16E-04	U
AP	03	441654003	12/20/2017	Nb-95	-1.28E-04	3.37E-04	1.04E-03	U
AP	03	441654003	12/20/2017	Ru-103	1.39E-04	3.80E-04	1.31E-03	U
AP	03	441654003	12/20/2017	Ru-106	3.66E-04	1.09E-03	3.73E-03	U
AP	03	441654003	12/20/2017	Sb-124	1.06E-03	6.59E-04	2.85E-03	U
AP	03	441654003	12/20/2017	Sb-125	-4.00E-04	3.65E-04	1.05E-03	U
AP	03	441654003	12/20/2017	Se-75	1.75E-04	2.17E-04	7.70E-04	U
AP	03	441654003	12/20/2017	Th-228	3.27E-04	4.34E-04	8.76E-04	U
AP	03	441654003	12/20/2017	Zn-65	-3.46E-04	3.78E-04	1.06E-03	U
AP	03	441654003	12/20/2017	Zr-95	4.37E-05	4.54E-04	1.49E-03	U
AP	04	413779004	1/4/2017	BETA	2.04E-02	9.82E-04	5.74E-04	
AP	04	414600004	1/18/2017	BETA	2.08E-02	1.00E-03	6.19E-04	
AP	04	415804004	2/2/2017	BETA	1.17E-02	7.37E-04	5.75E-04	
AP	04	416909004	2/15/2017	BETA	1.25E-02	8.05E-04	6.51E-04	
AP	04	417723004	3/1/2017	BETA	2.09E-02	1.02E-03	6.00E-04	
AP	04	418884004	3/13/2017	BETA	2.31E-02	1.15E-03	7.64E-04	
AP	04	420834004	3/13/2017	Ac-228	-5.05E-04	5.42E-04	1.52E-03	U
AP	04	420834004	3/13/2017	Ag-108m	-8.73E-05	9.78E-05	2.86E-04	U
AP	04	420834004	3/13/2017	Ag-110m	3.79E-05	1.49E-04	5.02E-04	U
AP	04	420834004	3/13/2017	Ba-140	-8.24E-03	4.03E-02	1.29E-01	U
AP	04	420834004	3/13/2017	Be-7	1.06E-01	9.76E-03	6.37E-03	
AP	04	420834004	3/13/2017	Ce-141	9.20E-04	7.83E-04	2.58E-03	U
AP	04	420834004	3/13/2017	Ce-144	-6.62E-04	7.63E-04	2.20E-03	U
AP	04	420834004	3/13/2017	Co-57	-4.63E-05	8.26E-05	2.46E-04	U
AP	04	420834004	3/13/2017	Co-58	3.39E-04	2.94E-04	1.05E-03	U
AP	04	420834004	3/13/2017	Co-60	2.59E-04	1.94E-04	7.32E-04	U
AP	04	420834004	3/13/2017	Cr-51	-5.78E-03	6.34E-03	1.79E-02	U
AP	04	420834004	3/13/2017	Cs-134	-1.02E-04	1.12E-04	2.72E-04	U
AP	04	420834004	3/13/2017	Cs-137	1.83E-04	1.29E-04	4.70E-04	U
AP	04	420834004	3/13/2017	Fe-59	-1.06E-03	7.23E-04	1.39E-03	U
AP	04	420834004	3/13/2017	I-131	0.00E+00	1.13E-01	0.00E+00	UI
AP	04	420834004	3/13/2017	K-40	-2.77E-03	1.85E-03	5.22E-03	U
AP	04	420834004	3/13/2017	La-140	4.63E-03	1.64E-02	5.65E-02	U
AP	04	420834004	3/13/2017	Mn-54	6.24E-05	1.58E-04	5.27E-04	U
AP	04	420834004	3/13/2017	Nb-95	-3.04E-04	3.27E-04	8.85E-04	U
AP	04	420834004	3/13/2017	Ru-103	-5.32E-04	3.13E-04	5.74E-04	U
AP	04	420834004	3/13/2017	Ru-106	-3.62E-04	1.28E-03	4.01E-03	U
AP	04	420834004	3/13/2017	Sb-124	9.75E-04	9.35E-04	3.86E-03	U
AP	04	420834004	3/13/2017	Sb-125	-2.10E-04	3.01E-04	9.09E-04	U
AP	04	420834004	3/13/2017	Se-75	2.46E-04	1.87E-04	6.68E-04	U
AP	04	420834004	3/13/2017	Th-228	1.42E-04	3.54E-04	8.23E-04	U
AP	04	420834004	3/13/2017	Zn-65	-1.36E-04	3.61E-04	1.14E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	04	420834004	3/13/2017	Zr-95	7.74E-04	4.33E-04	1.68E-03	U
AP	04	419732004	3/29/2017	BETA	2.12E-02	1.24E-03	8.90E-04	
AP	04	420821004	4/12/2017	BETA	1.31E-02	8.55E-04	7.14E-04	
AP	04	421976004	4/26/2017	BETA	1.58E-02	9.38E-04	7.39E-04	
AP	04	423150004	5/10/2017	BETA	1.12E-02	7.93E-04	6.90E-04	
AP	04	424055004	5/23/2017	BETA	1.33E-02	9.12E-04	8.13E-04	
AP	04	425262004	6/7/2017	BETA	6.52E-03	5.98E-04	6.77E-04	M
AP	04	426373004	6/21/2017	BETA	2.09E-02	1.11E-03	7.65E-04	
AP	04	429353004	6/21/2017	Ac-228	-1.52E-04	6.43E-04	2.26E-03	U
AP	04	429353004	6/21/2017	Ag-108m	0.00E+00	1.77E-04	3.44E-04	UI
AP	04	429353004	6/21/2017	Ag-110m	2.74E-05	2.29E-04	7.85E-04	U
AP	04	429353004	6/21/2017	Ba-140	7.20E-02	4.37E-02	1.66E-01	U
AP	04	429353004	6/21/2017	Be-7	9.76E-02	1.16E-02	9.25E-03	
AP	04	429353004	6/21/2017	Ce-141	8.67E-05	9.36E-04	3.02E-03	U
AP	04	429353004	6/21/2017	Ce-144	-7.13E-04	6.28E-04	1.74E-03	U
AP	04	429353004	6/21/2017	Co-57	4.22E-05	8.78E-05	2.92E-04	U
AP	04	429353004	6/21/2017	Co-58	4.27E-04	3.42E-04	1.27E-03	U
AP	04	429353004	6/21/2017	Co-60	6.96E-05	1.80E-04	6.22E-04	U
AP	04	429353004	6/21/2017	Cr-51	6.66E-03	9.39E-03	3.28E-02	U
AP	04	429353004	6/21/2017	Cs-134	-1.80E-04	1.09E-04	1.14E-04	U
AP	04	429353004	6/21/2017	Cs-137	7.76E-05	1.11E-04	3.91E-04	U
AP	04	429353004	6/21/2017	Fe-59	6.79E-05	9.41E-04	3.17E-03	U
AP	04	429353004	6/21/2017	I-131	-1.01E-01	2.85E-01	0.00E+00	U
AP	04	429353004	6/21/2017	K-40	3.19E-03	2.71E-03	4.75E-03	U
AP	04	429353004	6/21/2017	La-140	7.78E-03	2.25E-02	7.79E-02	U
AP	04	429353004	6/21/2017	Mn-54	-1.32E-04	1.15E-04	2.91E-04	U
AP	04	429353004	6/21/2017	Nb-95	-7.51E-05	3.16E-04	9.67E-04	U
AP	04	429353004	6/21/2017	Ru-103	-9.94E-05	5.28E-04	1.70E-03	U
AP	04	429353004	6/21/2017	Ru-106	-3.52E-04	1.26E-03	3.90E-03	U
AP	04	429353004	6/21/2017	Sb-124	-8.53E-04	1.13E-03	2.93E-03	U
AP	04	429353004	6/21/2017	Sb-125	3.13E-04	3.38E-04	1.19E-03	U
AP	04	429353004	6/21/2017	Se-75	2.84E-04	2.18E-04	7.77E-04	U
AP	04	429353004	6/21/2017	Th-228	5.13E-04	3.74E-04	7.74E-04	U
AP	04	429353004	6/21/2017	Zn-65	3.39E-04	4.89E-04	1.73E-03	U
AP	04	429353004	6/21/2017	Zr-95	-1.59E-04	6.18E-04	1.89E-03	U
AP	04	427491004	7/6/2017	BETA	1.84E-02	9.96E-04	6.64E-04	
AP	04	428504004	7/18/2017	BETA	2.19E-02	1.22E-03	8.31E-04	
AP	04	429899004	8/3/2017	BETA	2.31E-02	1.09E-03	6.23E-04	
AP	04	430998004	8/16/2017	BETA	2.52E-02	1.26E-03	8.17E-04	
AP	04	431910004	8/29/2017	BETA	2.22E-02	1.26E-03	8.82E-04	
AP	04	433034004	9/13/2017	BETA	2.12E-02	1.07E-03	6.73E-04	
AP	04	433923004	9/27/2017	BETA	3.01E-02	1.33E-03	7.69E-04	
AP	04	436552004	9/27/2017	Ac-228	1.16E-03	7.38E-04	2.60E-03	U
AP	04	436552004	9/27/2017	Ag-108m	-1.25E-04	9.78E-05	2.46E-04	U
AP	04	436552004	9/27/2017	Ag-110m	-7.74E-05	1.21E-04	3.04E-04	U
AP	04	436552004	9/27/2017	Ba-140	1.31E-02	6.65E-02	2.28E-01	U
AP	04	436552004	9/27/2017	Be-7	1.28E-01	1.27E-02	1.01E-02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	04	436552004	9/27/2017	Ce-141	5.99E-04	8.97E-04	2.92E-03	U
AP	04	436552004	9/27/2017	Ce-144	-2.72E-04	6.09E-04	1.83E-03	U
AP	04	436552004	9/27/2017	Co-57	-2.30E-05	7.26E-05	2.22E-04	U
AP	04	436552004	9/27/2017	Co-58	1.95E-04	3.10E-04	1.08E-03	U
AP	04	436552004	9/27/2017	Co-60	-5.40E-05	1.35E-04	3.99E-04	U
AP	04	436552004	9/27/2017	Cr-51	-2.44E-03	8.01E-03	2.54E-02	U
AP	04	436552004	9/27/2017	Cs-134	-1.57E-04	1.44E-04	3.65E-04	U
AP	04	436552004	9/27/2017	Cs-137	2.22E-04	1.25E-04	4.65E-04	U
AP	04	436552004	9/27/2017	Fe-59	2.00E-03	1.38E-03	5.12E-03	U
AP	04	436552004	9/27/2017	I-131	-2.79E-01	3.56E-01	0.00E+00	U
AP	04	436552004	9/27/2017	K-40	5.48E-03	2.72E-03	1.04E-02	U
AP	04	436552004	9/27/2017	La-140	-3.00E-02	3.70E-02	9.77E-02	U
AP	04	436552004	9/27/2017	Mn-54	3.82E-05	1.82E-04	6.05E-04	U
AP	04	436552004	9/27/2017	Nb-95	4.29E-04	2.82E-04	1.07E-03	U
AP	04	436552004	9/27/2017	Ru-103	1.59E-05	4.69E-04	1.48E-03	U
AP	04	436552004	9/27/2017	Ru-106	-1.50E-03	1.18E-03	3.02E-03	U
AP	04	436552004	9/27/2017	Sb-124	3.37E-04	9.09E-04	3.28E-03	U
AP	04	436552004	9/27/2017	Sb-125	7.59E-04	3.14E-04	1.09E-03	U
AP	04	436552004	9/27/2017	Se-75	1.06E-04	2.24E-04	7.64E-04	U
AP	04	436552004	9/27/2017	Th-228	0.00E+00	3.30E-04	7.81E-04	U
AP	04	436552004	9/27/2017	Zn-65	-9.18E-04	4.59E-04	8.01E-04	U
AP	04	436552004	9/27/2017	Zr-95	2.64E-04	6.81E-04	2.32E-03	U
AP	04	435090004	10/11/2017	BETA	2.40E-02	1.19E-03	8.03E-04	
AP	04	436359004	10/24/2017	BETA	2.93E-02	1.36E-03	8.44E-04	
AP	04	437753004	11/8/2017	BETA	1.97E-02	1.01E-03	6.54E-04	
AP	04	438500004	11/21/2017	BETA	2.09E-02	1.12E-03	8.07E-04	
AP	04	439670004	12/5/2017	BETA	2.69E-02	1.24E-03	7.27E-04	
AP	04	440743004	12/20/2017	BETA	2.44E-02	9.67E-04	7.04E-04	
AP	04	441654004	12/20/2017	Ac-228	-1.09E-03	7.01E-04	1.89E-03	U
AP	04	441654004	12/20/2017	Ag-108m	2.91E-04	1.33E-04	3.87E-04	U
AP	04	441654004	12/20/2017	Ag-110m	2.92E-05	2.41E-04	7.87E-04	U
AP	04	441654004	12/20/2017	Ba-140	-5.09E-02	2.56E-02	5.62E-02	U
AP	04	441654004	12/20/2017	Be-7	1.18E-01	1.04E-02	4.90E-03	
AP	04	441654004	12/20/2017	Ce-141	-2.33E-04	4.94E-04	1.43E-03	U
AP	04	441654004	12/20/2017	Ce-144	1.71E-04	6.02E-04	2.03E-03	U
AP	04	441654004	12/20/2017	Co-57	1.24E-04	1.07E-04	1.86E-04	U
AP	04	441654004	12/20/2017	Co-58	6.67E-04	3.17E-04	1.17E-03	U
AP	04	441654004	12/20/2017	Co-60	-1.37E-04	1.78E-04	4.95E-04	U
AP	04	441654004	12/20/2017	Cr-51	3.07E-03	5.28E-03	1.73E-02	U
AP	04	441654004	12/20/2017	Cs-134	-5.93E-06	1.68E-04	5.39E-04	U
AP	04	441654004	12/20/2017	Cs-137	-1.58E-04	1.65E-04	4.65E-04	U
AP	04	441654004	12/20/2017	Fe-59	4.91E-04	8.18E-04	2.98E-03	U
AP	04	441654004	12/20/2017	I-131	4.79E-02	3.78E-02	1.40E-01	U
AP	04	441654004	12/20/2017	K-40	-3.76E-05	2.15E-03	8.23E-03	U
AP	04	441654004	12/20/2017	La-140	8.47E-04	5.65E-03	1.94E-02	U
AP	04	441654004	12/20/2017	Mn-54	1.51E-04	1.49E-04	5.44E-04	U
AP	04	441654004	12/20/2017	Nb-95	-6.97E-05	3.11E-04	9.79E-04	U
AP	04	441654004	12/20/2017	Ru-103	-5.60E-04	4.07E-04	8.60E-04	U
AP	04	441654004	12/20/2017	Ru-106	-9.86E-04	1.36E-03	4.00E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	04	441654004	12/20/2017	Sb-124	-4.18E-04	6.84E-04	1.76E-03	U
AP	04	441654004	12/20/2017	Sb-125	-6.23E-04	3.29E-04	7.57E-04	U
AP	04	441654004	12/20/2017	Se-75	3.79E-04	1.98E-04	6.68E-04	U
AP	04	441654004	12/20/2017	Th-228	2.64E-04	2.91E-04	7.58E-04	U
AP	04	441654004	12/20/2017	Zn-65	5.91E-05	3.82E-04	1.32E-03	U
AP	04	441654004	12/20/2017	Zr-95	3.75E-04	5.18E-04	1.82E-03	U
AP	05	413779005	1/4/2017	BETA	1.92E-02	1.02E-03	6.56E-04	
AP	05	414600005	1/18/2017	BETA	2.11E-02	1.07E-03	7.00E-04	
AP	05	415804005	2/2/2017	BETA	8.46E-03	6.72E-04	6.48E-04	M
AP	05	416909005	2/15/2017	BETA	1.72E-02	1.01E-03	7.50E-04	
AP	05	417723005	3/1/2017	BETA	2.36E-02	1.15E-03	6.81E-04	
AP	05	418884005	3/13/2017	BETA	2.53E-02	1.29E-03	8.72E-04	
AP	05	420834005	3/13/2017	Ac-228	7.10E-05	6.54E-04	2.38E-03	U
AP	05	420834005	3/13/2017	Ag-108m	1.52E-04	1.26E-04	4.42E-04	U
AP	05	420834005	3/13/2017	Ag-110m	-3.84E-04	2.72E-04	5.97E-04	U
AP	05	420834005	3/13/2017	Ba-140	-1.24E-02	3.96E-02	1.24E-01	U
AP	05	420834005	3/13/2017	Be-7	8.68E-02	9.83E-03	9.41E-03	
AP	05	420834005	3/13/2017	Ce-141	-3.50E-04	9.45E-04	3.14E-03	U
AP	05	420834005	3/13/2017	Ce-144	-1.29E-03	9.21E-04	2.41E-03	U
AP	05	420834005	3/13/2017	Co-57	6.31E-05	1.11E-04	3.55E-04	U
AP	05	420834005	3/13/2017	Co-58	-1.11E-05	2.15E-04	6.79E-04	U
AP	05	420834005	3/13/2017	Co-60	4.25E-05	1.31E-04	4.65E-04	U
AP	05	420834005	3/13/2017	Cr-51	3.86E-03	8.18E-03	2.81E-02	U
AP	05	420834005	3/13/2017	Cs-134	-8.01E-06	1.67E-04	5.28E-04	U
AP	05	420834005	3/13/2017	Cs-137	1.46E-04	1.40E-04	4.97E-04	U
AP	05	420834005	3/13/2017	Fe-59	2.66E-04	1.07E-03	3.72E-03	U
AP	05	420834005	3/13/2017	I-131	0.00E+00	3.75E-01	0.00E+00	UI
AP	05	420834005	3/13/2017	K-40	1.87E-03	1.85E-03	5.05E-03	U
AP	05	420834005	3/13/2017	La-140	2.64E-04	1.64E-02	5.42E-02	U
AP	05	420834005	3/13/2017	Mn-54	-3.39E-04	1.98E-04	3.99E-04	U
AP	05	420834005	3/13/2017	Nb-95	1.23E-04	3.75E-04	1.24E-03	U
AP	05	420834005	3/13/2017	Ru-103	7.77E-05	4.12E-04	1.38E-03	U
AP	05	420834005	3/13/2017	Ru-106	8.90E-04	1.54E-03	5.26E-03	U
AP	05	420834005	3/13/2017	Sb-124	-4.15E-04	7.03E-04	1.84E-03	U
AP	05	420834005	3/13/2017	Sb-125	-6.53E-04	4.33E-04	1.14E-03	U
AP	05	420834005	3/13/2017	Se-75	-4.24E-04	2.32E-04	5.85E-04	U
AP	05	420834005	3/13/2017	Th-228	3.14E-04	2.92E-04	8.47E-04	U
AP	05	420834005	3/13/2017	Zn-65	-2.28E-04	4.42E-04	1.37E-03	U
AP	05	420834005	3/13/2017	Zr-95	-8.95E-05	5.02E-04	1.56E-03	U
AP	05	419732005	3/29/2017	BETA	1.75E-02	9.24E-04	6.03E-04	
AP	05	420821005	4/12/2017	BETA	1.18E-02	8.32E-04	7.43E-04	
AP	05	421976005	4/26/2017	BETA	1.35E-02	8.66E-04	7.37E-04	
AP	05	423150005	5/10/2017	BETA	9.45E-03	7.32E-04	6.91E-04	M
AP	05	424055005	5/23/2017	BETA	1.28E-02	8.90E-04	8.00E-04	
AP	05	425262005	6/7/2017	BETA	6.61E-03	6.03E-04	6.80E-04	M
AP	05	426373005	6/21/2017	BETA	2.08E-02	1.10E-03	7.59E-04	
AP	05	429353005	6/21/2017	Ac-228	-3.49E-04	6.26E-04	2.06E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	05	429353005	6/21/2017	Ag-108m	8.43E-05	1.04E-04	3.63E-04	U
AP	05	429353005	6/21/2017	Ag-110m	-1.08E-04	1.76E-04	5.32E-04	U
AP	05	429353005	6/21/2017	Ba-140	-2.88E-03	4.57E-02	1.50E-01	U
AP	05	429353005	6/21/2017	Be-7	8.80E-02	8.73E-03	7.96E-03	
AP	05	429353005	6/21/2017	Ce-141	-1.32E-03	1.05E-03	3.10E-03	U
AP	05	429353005	6/21/2017	Ce-144	8.86E-04	7.21E-04	2.34E-03	U
AP	05	429353005	6/21/2017	Co-57	8.23E-05	1.05E-04	3.40E-04	U
AP	05	429353005	6/21/2017	Co-58	7.30E-05	2.58E-04	8.21E-04	U
AP	05	429353005	6/21/2017	Co-60	8.78E-05	1.62E-04	5.73E-04	U
AP	05	429353005	6/21/2017	Cr-51	-6.71E-03	9.47E-03	2.48E-02	U
AP	05	429353005	6/21/2017	Cs-134	-3.37E-04	2.25E-04	5.01E-04	U
AP	05	429353005	6/21/2017	Cs-137	1.33E-04	1.40E-04	4.80E-04	U
AP	05	429353005	6/21/2017	Fe-59	4.98E-04	9.05E-04	3.15E-03	U
AP	05	429353005	6/21/2017	I-131	-6.68E-02	2.44E-01	0.00E+00	U
AP	05	429353005	6/21/2017	K-40	4.78E-03	2.34E-03	8.39E-03	U
AP	05	429353005	6/21/2017	La-140	-5.12E-03	2.52E-02	8.08E-02	U
AP	05	429353005	6/21/2017	Mn-54	1.66E-04	1.89E-04	6.60E-04	U
AP	05	429353005	6/21/2017	Nb-95	3.73E-04	3.03E-04	1.06E-03	U
AP	05	429353005	6/21/2017	Ru-103	-2.82E-04	4.58E-04	1.42E-03	U
AP	05	429353005	6/21/2017	Ru-106	-9.88E-04	1.23E-03	3.63E-03	U
AP	05	429353005	6/21/2017	Sb-124	3.59E-04	7.52E-04	2.66E-03	U
AP	05	429353005	6/21/2017	Sb-125	4.04E-05	3.32E-04	1.09E-03	U
AP	05	429353005	6/21/2017	Se-75	-2.55E-04	2.39E-04	7.01E-04	U
AP	05	429353005	6/21/2017	Th-228	1.10E-04	2.69E-04	7.27E-04	U
AP	05	429353005	6/21/2017	Zn-65	-4.19E-04	3.69E-04	9.80E-04	U
AP	05	429353005	6/21/2017	Zr-95	-1.38E-03	6.87E-04	1.41E-03	U
AP	05	427491005	7/6/2017	BETA	2.01E-02	1.05E-03	6.73E-04	
AP	05	428504005	7/18/2017	BETA	2.24E-02	1.23E-03	8.27E-04	
AP	05	429899005	8/3/2017	BETA	2.35E-02	1.10E-03	6.29E-04	
AP	05	430998005	8/16/2017	BETA	2.50E-02	1.26E-03	8.22E-04	
AP	05	431910005	8/29/2017	BETA	2.48E-02	1.25E-03	7.86E-04	
AP	05	433034005	9/13/2017	BETA	2.19E-02	1.09E-03	6.70E-04	
AP	05	433923005	9/27/2017	BETA	2.65E-02	1.26E-03	7.81E-04	
AP	05	436552005	9/27/2017	Ac-228	2.11E-04	5.51E-04	2.06E-03	U
AP	05	436552005	9/27/2017	Ag-108m	-8.38E-05	1.02E-04	3.06E-04	U
AP	05	436552005	9/27/2017	Ag-110m	1.46E-04	1.79E-04	6.73E-04	U
AP	05	436552005	9/27/2017	Ba-140	7.45E-02	6.28E-02	2.28E-01	U
AP	05	436552005	9/27/2017	Be-7	1.31E-01	1.25E-02	7.28E-03	
AP	05	436552005	9/27/2017	Ce-141	-9.88E-04	9.29E-04	2.65E-03	U
AP	05	436552005	9/27/2017	Ce-144	1.05E-03	6.19E-04	2.11E-03	U
AP	05	436552005	9/27/2017	Co-57	7.80E-05	8.43E-05	2.87E-04	U
AP	05	436552005	9/27/2017	Co-58	5.41E-04	3.12E-04	1.16E-03	U
AP	05	436552005	9/27/2017	Co-60	2.45E-04	1.33E-04	5.57E-04	U
AP	05	436552005	9/27/2017	Cr-51	-5.57E-03	8.18E-03	2.59E-02	U
AP	05	436552005	9/27/2017	Cs-134	2.08E-04	1.90E-04	6.66E-04	U
AP	05	436552005	9/27/2017	Cs-137	-7.01E-05	1.66E-04	4.45E-04	U
AP	05	436552005	9/27/2017	Fe-59	-4.01E-05	1.08E-03	3.60E-03	U
AP	05	436552005	9/27/2017	I-131	-2.14E-01	3.97E-01	0.00E+00	U
AP	05	436552005	9/27/2017	K-40	0.00E+00	2.18E-03	4.89E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	05	436552005	9/27/2017	La-140	1.30E-02	2.84E-02	1.00E-01	U
AP	05	436552005	9/27/2017	Mn-54	-8.88E-05	1.48E-04	3.47E-04	U
AP	05	436552005	9/27/2017	Nb-95	-1.22E-04	3.92E-04	1.20E-03	U
AP	05	436552005	9/27/2017	Ru-103	-4.42E-04	4.86E-04	1.38E-03	U
AP	05	436552005	9/27/2017	Ru-106	9.03E-05	1.10E-03	3.63E-03	U
AP	05	436552005	9/27/2017	Sb-124	9.18E-04	6.61E-04	2.91E-03	U
AP	05	436552005	9/27/2017	Sb-125	2.41E-04	2.92E-04	1.04E-03	U
AP	05	436552005	9/27/2017	Se-75	2.69E-04	2.46E-04	8.13E-04	U
AP	05	436552005	9/27/2017	Th-228	3.84E-04	2.41E-04	6.57E-04	U
AP	05	436552005	9/27/2017	Zn-65	-2.13E-04	3.38E-04	9.84E-04	U
AP	05	436552005	9/27/2017	Zr-95	-2.68E-04	5.64E-04	1.65E-03	U
AP	05	435090005	10/11/2017	BETA	2.52E-02	1.22E-03	7.98E-04	
AP	05	436359005	10/24/2017	BETA	2.88E-02	1.36E-03	8.68E-04	
AP	05	437753005	11/8/2017	BETA	1.97E-02	1.22E-03	9.42E-04	
AP	05	438500005	11/21/2017	BETA	2.27E-02	1.18E-03	8.26E-04	
AP	05	439670005	12/5/2017	BETA	2.79E-02	1.27E-03	7.32E-04	
AP	05	440743005	12/20/2017	BETA	2.33E-02	9.64E-04	7.37E-04	
AP	05	441654005	12/20/2017	Ac-228	-3.28E-05	5.25E-04	1.66E-03	U
AP	05	441654005	12/20/2017	Ag-108m	-2.06E-05	9.47E-05	3.12E-04	U
AP	05	441654005	12/20/2017	Ag-110m	1.49E-04	1.44E-04	5.34E-04	U
AP	05	441654005	12/20/2017	Ba-140	2.01E-02	1.53E-02	5.56E-02	U
AP	05	441654005	12/20/2017	Be-7	9.79E-02	8.66E-03	7.98E-03	
AP	05	441654005	12/20/2017	Ce-141	1.32E-04	5.06E-04	1.65E-03	U
AP	05	441654005	12/20/2017	Ce-144	8.20E-04	6.02E-04	2.01E-03	U
AP	05	441654005	12/20/2017	Co-57	-5.86E-05	7.45E-05	2.25E-04	U
AP	05	441654005	12/20/2017	Co-58	-1.32E-04	1.88E-04	5.23E-04	U
AP	05	441654005	12/20/2017	Co-60	3.45E-05	1.51E-04	5.20E-04	U
AP	05	441654005	12/20/2017	Cr-51	4.30E-03	4.63E-03	1.64E-02	U
AP	05	441654005	12/20/2017	Cs-134	-1.70E-05	1.21E-04	3.83E-04	U
AP	05	441654005	12/20/2017	Cs-137	-5.33E-05	1.01E-04	3.04E-04	U
AP	05	441654005	12/20/2017	Fe-59	-8.43E-05	6.37E-04	2.11E-03	U
AP	05	441654005	12/20/2017	I-131	-2.80E-02	4.48E-02	1.43E-01	U
AP	05	441654005	12/20/2017	K-40	0.00E+00	1.98E-03	2.77E-03	U
AP	05	441654005	12/20/2017	La-140	4.52E-03	3.63E-03	1.62E-02	U
AP	05	441654005	12/20/2017	Mn-54	1.05E-04	1.36E-04	4.39E-04	U
AP	05	441654005	12/20/2017	Nb-95	-1.30E-04	2.43E-04	6.20E-04	U
AP	05	441654005	12/20/2017	Ru-103	1.40E-04	2.85E-04	9.93E-04	U
AP	05	441654005	12/20/2017	Ru-106	1.39E-03	1.23E-03	4.32E-03	U
AP	05	441654005	12/20/2017	Sb-124	-2.95E-05	6.65E-04	2.15E-03	U
AP	05	441654005	12/20/2017	Sb-125	2.65E-04	3.00E-04	1.06E-03	U
AP	05	441654005	12/20/2017	Se-75	-3.44E-04	2.26E-04	5.73E-04	U
AP	05	441654005	12/20/2017	Th-228	0.00E+00	5.69E-04	6.31E-04	U
AP	05	441654005	12/20/2017	Zn-65	-2.19E-04	2.95E-04	8.68E-04	U
AP	05	441654005	12/20/2017	Zr-95	4.64E-04	4.14E-04	1.48E-03	U
AP	07	413779006	1/4/2017	BETA	2.05E-02	1.04E-03	6.39E-04	
AP	07	414600006	1/18/2017	BETA	2.28E-02	1.10E-03	6.81E-04	
AP	07	415804006	2/2/2017	BETA	1.43E-02	8.50E-04	6.30E-04	
AP	07	416909006	2/15/2017	BETA	1.86E-02	1.03E-03	7.24E-04	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	07	417723006	3/1/2017	BETA	2.31E-02	1.13E-03	6.68E-04	
AP	07	418884006	3/13/2017	BETA	2.44E-02	1.24E-03	8.40E-04	
AP	07	420834006	3/13/2017	Ac-228	7.34E-04	7.32E-04	2.72E-03	U
AP	07	420834006	3/13/2017	Ag-108m	-1.63E-05	1.20E-04	4.02E-04	U
AP	07	420834006	3/13/2017	Ag-110m	-7.30E-05	2.81E-04	8.52E-04	U
AP	07	420834006	3/13/2017	Ba-140	2.81E-02	3.43E-02	1.30E-01	U
AP	07	420834006	3/13/2017	Be-7	1.15E-01	1.29E-02	8.43E-03	
AP	07	420834006	3/13/2017	Ce-141	4.64E-04	8.25E-04	2.84E-03	U
AP	07	420834006	3/13/2017	Ce-144	-8.12E-04	7.67E-04	2.25E-03	U
AP	07	420834006	3/13/2017	Co-57	-3.99E-05	9.69E-05	3.12E-04	U
AP	07	420834006	3/13/2017	Co-58	-4.45E-04	2.55E-04	8.89E-05	U
AP	07	420834006	3/13/2017	Co-60	1.61E-04	1.94E-04	7.61E-04	U
AP	07	420834006	3/13/2017	Cr-51	7.80E-04	9.29E-03	2.95E-02	U
AP	07	420834006	3/13/2017	Cs-134	1.40E-04	1.86E-04	6.87E-04	U
AP	07	420834006	3/13/2017	Cs-137	-5.22E-04	2.59E-04	5.01E-04	U
AP	07	420834006	3/13/2017	Fe-59	-3.99E-04	8.50E-04	2.47E-03	U
AP	07	420834006	3/13/2017	I-131	-1.10E-01	2.14E-01	0.00E+00	U
AP	07	420834006	3/13/2017	K-40	7.97E-04	2.36E-03	9.92E-03	U
AP	07	420834006	3/13/2017	La-140	-2.77E-06	2.27E-02	7.48E-02	U
AP	07	420834006	3/13/2017	Mn-54	8.12E-05	2.33E-04	7.97E-04	U
AP	07	420834006	3/13/2017	Nb-95	-4.24E-04	4.37E-04	1.14E-03	U
AP	07	420834006	3/13/2017	Ru-103	1.52E-04	5.20E-04	1.83E-03	U
AP	07	420834006	3/13/2017	Ru-106	-1.66E-03	1.73E-03	4.68E-03	U
AP	07	420834006	3/13/2017	Sb-124	1.37E-03	1.02E-03	4.51E-03	U
AP	07	420834006	3/13/2017	Sb-125	2.36E-04	3.74E-04	1.36E-03	U
AP	07	420834006	3/13/2017	Se-75	6.72E-05	2.67E-04	8.87E-04	U
AP	07	420834006	3/13/2017	Th-228	3.46E-04	3.53E-04	1.08E-03	U
AP	07	420834006	3/13/2017	Zn-65	3.04E-04	5.98E-04	2.17E-03	U
AP	07	420834006	3/13/2017	Zr-95	1.28E-03	9.87E-04	3.21E-03	U
AP	07	419732006	3/29/2017	BETA	1.89E-02	9.53E-04	5.92E-04	
AP	07	420821006	4/12/2017	BETA	1.19E-02	8.28E-04	7.29E-04	
AP	07	421976006	4/26/2017	BETA	2.01E-02	1.18E-03	9.20E-04	
AP	07	423150006	5/10/2017	BETA	1.30E-02	8.03E-04	6.17E-04	
AP	07	424055006	5/23/2017	BETA	1.87E-02	1.01E-03	7.21E-04	
AP	07	425262006	6/7/2017	BETA	1.11E-02	7.37E-04	6.30E-04	
AP	07	426373006	6/21/2017	BETA	2.47E-02	1.16E-03	7.03E-04	
AP	07	429353006	6/21/2017	Ac-228	-1.92E-04	4.97E-04	1.52E-03	U
AP	07	429353006	6/21/2017	Ag-108m	-1.06E-04	7.34E-05	2.07E-04	U
AP	07	429353006	6/21/2017	Ag-110m	1.73E-04	1.73E-04	5.82E-04	U
AP	07	429353006	6/21/2017	Ba-140	3.00E-03	3.96E-02	1.14E-01	U
AP	07	429353006	6/21/2017	Be-7	1.18E-01	8.89E-03	6.38E-03	
AP	07	429353006	6/21/2017	Ce-141	8.64E-04	5.97E-04	1.92E-03	U
AP	07	429353006	6/21/2017	Ce-144	-8.27E-05	4.13E-04	1.30E-03	U
AP	07	429353006	6/21/2017	Co-57	6.43E-05	5.42E-05	1.77E-04	U
AP	07	429353006	6/21/2017	Co-58	-9.96E-05	1.81E-04	5.38E-04	U
AP	07	429353006	6/21/2017	Co-60	1.97E-04	9.61E-05	3.60E-04	U
AP	07	429353006	6/21/2017	Cr-51	6.32E-03	5.51E-03	1.90E-02	U
AP	07	429353006	6/21/2017	Cs-134	-2.28E-05	1.15E-04	3.50E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	07	429353006	6/21/2017	Cs-137	-5.21E-05	7.91E-05	2.37E-04	U
AP	07	429353006	6/21/2017	Fe-59	7.16E-04	6.51E-04	2.35E-03	U
AP	07	429353006	6/21/2017	I-131	0.00E+00	1.85E-01	0.00E+00	UI
AP	07	429353006	6/21/2017	K-40	0.00E+00	1.87E-03	3.18E-03	UI
AP	07	429353006	6/21/2017	La-140	2.79E-04	1.44E-02	4.72E-02	U
AP	07	429353006	6/21/2017	Mn-54	1.97E-04	1.03E-04	3.56E-04	U
AP	07	429353006	6/21/2017	Nb-95	1.91E-05	2.18E-04	7.04E-04	U
AP	07	429353006	6/21/2017	Ru-103	1.19E-04	3.20E-04	1.08E-03	U
AP	07	429353006	6/21/2017	Ru-106	8.76E-04	9.35E-04	3.17E-03	U
AP	07	429353006	6/21/2017	Sb-124	-8.66E-04	5.24E-04	9.01E-04	U
AP	07	429353006	6/21/2017	Sb-125	-1.24E-04	2.12E-04	6.70E-04	U
AP	07	429353006	6/21/2017	Se-75	-2.55E-05	1.41E-04	4.76E-04	U
AP	07	429353006	6/21/2017	Th-228	2.74E-04	2.10E-04	4.78E-04	U
AP	07	429353006	6/21/2017	Zn-65	4.44E-05	2.21E-04	7.57E-04	U
AP	07	429353006	6/21/2017	Zr-95	2.94E-04	2.92E-04	1.03E-03	U
AP	07	427491006	7/6/2017	BETA	2.81E-02	1.20E-03	6.25E-04	
AP	07	428504006	7/18/2017	BETA	2.29E-02	1.19E-03	7.63E-04	
AP	07	429899006	8/3/2017	BETA	3.24E-02	1.28E-03	6.06E-04	
AP	07	430998006	8/16/2017	BETA	3.57E-02	1.46E-03	7.73E-04	
AP	07	431910006	8/29/2017	BETA	3.24E-02	1.45E-03	8.00E-04	
AP	07	433034006	9/13/2017	BETA	3.08E-02	1.27E-03	6.38E-04	
AP	07	433923006	9/27/2017	BETA	3.74E-02	1.49E-03	7.75E-04	
AP	07	436552006	9/27/2017	Ac-228	4.06E-05	4.59E-04	1.60E-03	U
AP	07	436552006	9/27/2017	Ag-108m	-1.08E-04	9.77E-05	2.70E-04	U
AP	07	436552006	9/27/2017	Ag-110m	2.33E-05	1.61E-04	5.62E-04	U
AP	07	436552006	9/27/2017	Ba-140	6.76E-02	6.12E-02	2.13E-01	U
AP	07	436552006	9/27/2017	Be-7	2.00E-01	1.60E-02	8.83E-03	
AP	07	436552006	9/27/2017	Ce-141	-1.17E-04	1.08E-03	3.42E-03	U
AP	07	436552006	9/27/2017	Ce-144	7.51E-04	7.06E-04	2.38E-03	U
AP	07	436552006	9/27/2017	Co-57	-1.78E-05	8.70E-05	2.74E-04	U
AP	07	436552006	9/27/2017	Co-58	4.26E-04	3.61E-04	1.29E-03	U
AP	07	436552006	9/27/2017	Co-60	1.38E-04	1.57E-04	5.89E-04	U
AP	07	436552006	9/27/2017	Cr-51	5.79E-03	1.00E-02	3.50E-02	U
AP	07	436552006	9/27/2017	Cs-134	3.06E-05	1.89E-04	6.13E-04	U
AP	07	436552006	9/27/2017	Cs-137	4.23E-04	1.60E-04	4.59E-04	U
AP	07	436552006	9/27/2017	Fe-59	2.17E-03	1.37E-03	5.17E-03	U
AP	07	436552006	9/27/2017	I-131	0.00E+00	4.72E-01	0.00E+00	UI
AP	07	436552006	9/27/2017	K-40	7.82E-04	2.30E-03	8.99E-03	U
AP	07	436552006	9/27/2017	La-140	2.52E-02	1.88E-02	8.29E-02	U
AP	07	436552006	9/27/2017	Mn-54	1.20E-04	1.47E-04	5.22E-04	U
AP	07	436552006	9/27/2017	Nb-95	2.66E-04	3.05E-04	1.09E-03	U
AP	07	436552006	9/27/2017	Ru-103	6.24E-04	5.30E-04	1.93E-03	U
AP	07	436552006	9/27/2017	Ru-106	1.04E-03	1.27E-03	4.49E-03	U
AP	07	436552006	9/27/2017	Sb-124	-1.96E-03	1.08E-03	0.00E+00	U
AP	07	436552006	9/27/2017	Sb-125	1.69E-05	3.12E-04	1.04E-03	U
AP	07	436552006	9/27/2017	Se-75	1.96E-05	1.95E-04	6.71E-04	U
AP	07	436552006	9/27/2017	Th-228	4.15E-04	3.14E-04	7.60E-04	U
AP	07	436552006	9/27/2017	Zn-65	-5.06E-05	3.41E-04	1.10E-03	U
AP	07	436552006	9/27/2017	Zr-95	1.59E-04	5.56E-04	1.86E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	07	435090006	10/11/2017	BETA	3.50E-02	1.41E-03	7.65E-04	
AP	07	436359006	10/25/2017	BETA	4.37E-02	1.60E-03	7.72E-04	
AP	07	437753006	11/8/2017	BETA	2.89E-02	1.28E-03	7.14E-04	
AP	07	438500006	11/21/2017	BETA	3.17E-02	1.41E-03	8.40E-04	
AP	07	439670006	12/5/2017	BETA	4.46E-02	1.63E-03	7.40E-04	
AP	07	440743006	12/20/2017	BETA	2.53E-02	8.34E-04	5.29E-04	
AP	07	441654006	12/20/2017	Ac-228	-3.95E-04	3.42E-04	9.14E-04	U
AP	07	441654006	12/20/2017	Ag-108m	-6.25E-05	5.95E-05	1.70E-04	U
AP	07	441654006	12/20/2017	Ag-110m	-1.34E-04	1.31E-04	2.99E-04	U
AP	07	441654006	12/20/2017	Ba-140	-6.97E-03	9.55E-03	3.00E-02	U
AP	07	441654006	12/20/2017	Be-7	1.50E-01	8.70E-03	3.72E-03	
AP	07	441654006	12/20/2017	Ce-141	7.60E-05	3.32E-04	1.05E-03	U
AP	07	441654006	12/20/2017	Ce-144	2.91E-04	3.26E-04	1.05E-03	U
AP	07	441654006	12/20/2017	Co-57	2.52E-05	4.60E-05	1.48E-04	U
AP	07	441654006	12/20/2017	Co-58	-9.83E-05	1.24E-04	3.63E-04	U
AP	07	441654006	12/20/2017	Co-60	4.79E-05	8.76E-05	3.03E-04	U
AP	07	441654006	12/20/2017	Cr-51	-4.32E-03	3.14E-03	9.04E-03	U
AP	07	441654006	12/20/2017	Cs-134	-1.54E-05	8.57E-05	2.74E-04	U
AP	07	441654006	12/20/2017	Cs-137	8.15E-06	6.67E-05	2.23E-04	U
AP	07	441654006	12/20/2017	Fe-59	-3.77E-04	4.51E-04	1.36E-03	U
AP	07	441654006	12/20/2017	I-131	-1.60E-02	2.53E-02	6.78E-02	U
AP	07	441654006	12/20/2017	K-40	0.00E+00	1.69E-03	1.23E-03	U
AP	07	441654006	12/20/2017	La-140	3.02E-03	4.63E-03	1.60E-02	U
AP	07	441654006	12/20/2017	Mn-54	3.56E-05	8.28E-05	2.77E-04	U
AP	07	441654006	12/20/2017	Nb-95	-1.70E-05	1.41E-04	4.56E-04	U
AP	07	441654006	12/20/2017	Ru-103	-7.61E-05	2.00E-04	6.59E-04	U
AP	07	441654006	12/20/2017	Ru-106	1.02E-04	7.15E-04	2.40E-03	U
AP	07	441654006	12/20/2017	Sb-124	-7.58E-05	3.26E-04	1.05E-03	U
AP	07	441654006	12/20/2017	Sb-125	6.42E-05	1.79E-04	5.82E-04	U
AP	07	441654006	12/20/2017	Se-75	-6.93E-06	1.15E-04	3.81E-04	U
AP	07	441654006	12/20/2017	Th-228	3.00E-04	2.24E-04	4.03E-04	U
AP	07	441654006	12/20/2017	Zn-65	8.97E-06	1.93E-04	6.47E-04	U
AP	07	441654006	12/20/2017	Zr-95	4.84E-04	2.98E-04	1.02E-03	U
AP	08	413779007	1/4/2017	BETA	1.82E-02	1.02E-03	6.95E-04	
AP	08	414600007	1/18/2017	BETA	2.20E-02	1.12E-03	7.37E-04	
AP	08	415804007	2/2/2017	BETA	1.30E-02	8.48E-04	6.86E-04	
AP	08	416909007	2/15/2017	BETA	1.49E-02	9.72E-04	7.99E-04	
AP	08	417723007	3/1/2017	BETA	2.11E-02	1.13E-03	7.34E-04	
AP	08	418884007	3/13/2017	BETA	2.72E-02	1.37E-03	9.20E-04	
AP	08	420834007	3/13/2017	Ac-228	-1.93E-03	8.79E-04	2.10E-03	U
AP	08	420834007	3/13/2017	Ag-108m	-2.50E-04	1.47E-04	3.53E-04	U
AP	08	420834007	3/13/2017	Ag-110m	3.73E-04	3.52E-04	1.26E-03	U
AP	08	420834007	3/13/2017	Ba-140	8.90E-03	5.37E-02	1.75E-01	U
AP	08	420834007	3/13/2017	Be-7	1.03E-01	1.05E-02	1.23E-02	
AP	08	420834007	3/13/2017	Ce-141	-1.63E-03	1.28E-03	3.11E-03	U
AP	08	420834007	3/13/2017	Ce-144	2.27E-03	1.08E-03	3.40E-03	U
AP	08	420834007	3/13/2017	Co-57	-1.28E-04	1.20E-04	3.39E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	08	420834007	3/13/2017	Co-58	-5.19E-04	3.89E-04	1.02E-03	U
AP	08	420834007	3/13/2017	Co-60	-3.08E-04	2.91E-04	7.72E-04	U
AP	08	420834007	3/13/2017	Cr-51	5.04E-03	9.15E-03	3.13E-02	U
AP	08	420834007	3/13/2017	Cs-134	3.02E-04	2.08E-04	7.69E-04	U
AP	08	420834007	3/13/2017	Cs-137	2.15E-04	2.40E-04	7.79E-04	U
AP	08	420834007	3/13/2017	Fe-59	-8.14E-04	1.12E-03	3.14E-03	U
AP	08	420834007	3/13/2017	I-131	-7.78E-02	2.02E-01	0.00E+00	U
AP	08	420834007	3/13/2017	K-40	4.49E-03	5.20E-03	7.70E-03	U
AP	08	420834007	3/13/2017	La-140	-1.81E-02	2.34E-02	6.79E-02	U
AP	08	420834007	3/13/2017	Mn-54	-2.09E-04	2.57E-04	7.76E-04	U
AP	08	420834007	3/13/2017	Nb-95	-3.99E-04	4.42E-04	1.20E-03	U
AP	08	420834007	3/13/2017	Ru-103	-7.05E-05	6.65E-04	2.12E-03	U
AP	08	420834007	3/13/2017	Ru-106	-2.33E-03	1.82E-03	4.49E-03	U
AP	08	420834007	3/13/2017	Sb-124	6.94E-04	1.03E-03	3.85E-03	U
AP	08	420834007	3/13/2017	Sb-125	-2.29E-05	4.20E-04	1.36E-03	U
AP	08	420834007	3/13/2017	Se-75	4.67E-04	3.26E-04	1.04E-03	U
AP	08	420834007	3/13/2017	Th-228	3.67E-04	4.25E-04	1.10E-03	U
AP	08	420834007	3/13/2017	Zn-65	1.58E-04	4.65E-04	1.59E-03	U
AP	08	420834007	3/13/2017	Zr-95	7.16E-05	6.96E-04	2.37E-03	U
AP	08	419732007	3/29/2017	BETA	2.21E-02	1.09E-03	6.62E-04	
AP	08	420821007	4/12/2017	BETA	1.28E-02	8.03E-04	6.47E-04	
AP	08	421976007	4/26/2017	BETA	1.41E-02	8.49E-04	6.77E-04	
AP	08	423150007	5/10/2017	BETA	8.43E-03	6.59E-04	6.27E-04	M
AP	08	424055007	5/23/2017	BETA	1.35E-02	8.67E-04	7.26E-04	
AP	08	425262007	6/7/2017	BETA	8.46E-03	6.44E-04	6.23E-04	M
AP	08	426373007	6/21/2017	BETA	1.73E-02	9.51E-04	6.80E-04	
AP	08	429353007	6/21/2017	Ac-228	1.14E-04	5.68E-04	2.05E-03	U
AP	08	429353007	6/21/2017	Ag-108m	1.16E-06	9.50E-05	3.14E-04	U
AP	08	429353007	6/21/2017	Ag-110m	5.59E-05	2.05E-04	6.37E-04	U
AP	08	429353007	6/21/2017	Ba-140	6.72E-02	4.80E-02	1.72E-01	U
AP	08	429353007	6/21/2017	Be-7	9.13E-02	8.78E-03	9.17E-03	
AP	08	429353007	6/21/2017	Ce-141	-2.47E-03	1.14E-03	2.34E-03	U
AP	08	429353007	6/21/2017	Ce-144	1.30E-04	5.44E-04	1.77E-03	U
AP	08	429353007	6/21/2017	Co-57	7.18E-06	6.74E-05	2.18E-04	U
AP	08	429353007	6/21/2017	Co-58	-1.09E-04	2.70E-04	8.70E-04	U
AP	08	429353007	6/21/2017	Co-60	1.33E-04	8.45E-05	3.66E-04	U
AP	08	429353007	6/21/2017	Cr-51	8.97E-03	7.15E-03	2.52E-02	U
AP	08	429353007	6/21/2017	Cs-134	6.48E-05	1.24E-04	4.44E-04	U
AP	08	429353007	6/21/2017	Cs-137	1.26E-04	1.23E-04	4.27E-04	U
AP	08	429353007	6/21/2017	Fe-59	-7.73E-04	9.01E-04	2.51E-03	U
AP	08	429353007	6/21/2017	I-131	0.00E+00	3.01E-01	0.00E+00	UI
AP	08	429353007	6/21/2017	K-40	9.29E-04	2.51E-03	5.56E-03	U
AP	08	429353007	6/21/2017	La-140	3.44E-03	2.90E-02	9.46E-02	U
AP	08	429353007	6/21/2017	Mn-54	7.45E-05	1.49E-04	5.27E-04	U
AP	08	429353007	6/21/2017	Nb-95	7.89E-05	2.52E-04	8.34E-04	U
AP	08	429353007	6/21/2017	Ru-103	-3.75E-04	5.01E-04	1.49E-03	U
AP	08	429353007	6/21/2017	Ru-106	-5.31E-04	1.29E-03	3.96E-03	U
AP	08	429353007	6/21/2017	Sb-124	3.80E-04	6.98E-04	2.59E-03	U
AP	08	429353007	6/21/2017	Sb-125	9.59E-05	2.65E-04	9.02E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	08	429353007	6/21/2017	Se-75	1.30E-04	2.13E-04	6.81E-04	U
AP	08	429353007	6/21/2017	Th-228	5.17E-04	2.47E-04	6.76E-04	U
AP	08	429353007	6/21/2017	Zn-65	-2.40E-04	3.09E-04	9.31E-04	U
AP	08	429353007	6/21/2017	Zr-95	2.84E-04	5.16E-04	1.74E-03	U
AP	08	427491007	7/6/2017	BETA	2.24E-02	1.05E-03	6.10E-04	
AP	08	428504007	7/18/2017	BETA	2.41E-02	1.21E-03	7.45E-04	
AP	08	429899007	8/3/2017	BETA	2.05E-02	9.75E-04	5.68E-04	
AP	08	430998007	8/16/2017	BETA	2.55E-02	1.21E-03	7.45E-04	
AP	08	431910007	8/29/2017	BETA	2.35E-02	1.16E-03	7.13E-04	
AP	08	433034007	9/13/2017	BETA	2.15E-02	1.03E-03	6.13E-04	
AP	08	433923007	9/27/2017	BETA	2.45E-02	1.16E-03	7.18E-04	
AP	08	436552007	9/27/2017	Ac-228	-8.87E-04	4.73E-04	1.10E-03	U
AP	08	436552007	9/27/2017	Ag-108m	-1.41E-04	7.78E-05	1.79E-04	U
AP	08	436552007	9/27/2017	Ag-110m	-1.39E-04	1.56E-04	4.26E-04	U
AP	08	436552007	9/27/2017	Ba-140	3.00E-02	5.85E-02	2.04E-01	U
AP	08	436552007	9/27/2017	Be-7	1.41E-01	1.17E-02	6.65E-03	
AP	08	436552007	9/27/2017	Ce-141	-2.29E-03	1.03E-03	2.14E-03	U
AP	08	436552007	9/27/2017	Ce-144	-2.78E-04	4.86E-04	1.37E-03	U
AP	08	436552007	9/27/2017	Co-57	4.65E-06	5.37E-05	1.77E-04	U
AP	08	436552007	9/27/2017	Co-58	-1.46E-04	2.69E-04	8.37E-04	U
AP	08	436552007	9/27/2017	Co-60	-1.59E-04	1.19E-04	2.19E-04	U
AP	08	436552007	9/27/2017	Cr-51	-2.60E-03	7.47E-03	2.46E-02	U
AP	08	436552007	9/27/2017	Cs-134	-9.70E-05	1.36E-04	4.14E-04	U
AP	08	436552007	9/27/2017	Cs-137	1.89E-05	9.88E-05	3.23E-04	U
AP	08	436552007	9/27/2017	Fe-59	-2.98E-04	6.61E-04	1.92E-03	U
AP	08	436552007	9/27/2017	I-131	0.00E+00	2.90E-01	0.00E+00	UI
AP	08	436552007	9/27/2017	K-40	1.04E-03	2.31E-03	8.49E-03	U
AP	08	436552007	9/27/2017	La-140	1.09E-02	2.14E-02	7.86E-02	U
AP	08	436552007	9/27/2017	Mn-54	1.68E-04	1.33E-04	4.91E-04	U
AP	08	436552007	9/27/2017	Nb-95	6.28E-05	2.68E-04	9.28E-04	U
AP	08	436552007	9/27/2017	Ru-103	1.66E-04	5.01E-04	1.69E-03	U
AP	08	436552007	9/27/2017	Ru-106	-1.61E-03	1.18E-03	2.88E-03	U
AP	08	436552007	9/27/2017	Sb-124	1.08E-03	9.49E-04	3.64E-03	U
AP	08	436552007	9/27/2017	Sb-125	-2.75E-04	2.72E-04	7.88E-04	U
AP	08	436552007	9/27/2017	Se-75	1.78E-04	1.92E-04	6.77E-04	U
AP	08	436552007	9/27/2017	Th-228	3.53E-04	2.95E-04	4.80E-04	U
AP	08	436552007	9/27/2017	Zn-65	1.06E-04	3.33E-04	1.14E-03	U
AP	08	436552007	9/27/2017	Zr-95	9.45E-05	5.08E-04	1.75E-03	U
AP	08	435090007	10/11/2017	BETA	2.33E-02	1.13E-03	7.36E-04	
AP	08	436359007	10/25/2017	BETA	2.67E-02	1.20E-03	7.27E-04	
AP	08	437753007	11/8/2017	BETA	1.76E-02	1.77E-03	2.09E-03	
AP	08	438500007	11/21/2017	BETA	2.44E-02	1.19E-03	7.86E-04	
AP	08	439670007	12/5/2017	BETA	2.66E-02	1.21E-03	7.02E-04	
AP	08	440743007	12/20/2017	BETA	2.49E-02	9.89E-04	7.22E-04	
AP	08	441654007	12/20/2017	Ac-228	-4.59E-04	7.67E-04	2.58E-03	U
AP	08	441654007	12/20/2017	Ag-108m	-2.58E-05	1.22E-04	3.94E-04	U
AP	08	441654007	12/20/2017	Ag-110m	3.14E-04	2.97E-04	1.07E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	08	441654007	12/20/2017	Ba-140	1.64E-02	2.19E-02	7.76E-02	U
AP	08	441654007	12/20/2017	Be-7	1.17E-01	1.17E-02	9.49E-03	
AP	08	441654007	12/20/2017	Ce-141	-1.14E-03	7.78E-04	2.28E-03	U
AP	08	441654007	12/20/2017	Ce-144	-1.43E-03	8.53E-04	2.41E-03	U
AP	08	441654007	12/20/2017	Co-57	7.85E-05	1.12E-04	3.77E-04	U
AP	08	441654007	12/20/2017	Co-58	3.03E-04	3.33E-04	8.94E-04	U
AP	08	441654007	12/20/2017	Co-60	-1.16E-05	1.63E-04	5.42E-04	U
AP	08	441654007	12/20/2017	Cr-51	-1.20E-03	6.19E-03	2.04E-02	U
AP	08	441654007	12/20/2017	Cs-134	5.29E-05	2.02E-04	6.74E-04	U
AP	08	441654007	12/20/2017	Cs-137	5.49E-05	1.45E-04	4.95E-04	U
AP	08	441654007	12/20/2017	Fe-59	1.22E-04	1.01E-03	3.28E-03	U
AP	08	441654007	12/20/2017	I-131	-3.00E-02	5.99E-02	1.90E-01	U
AP	08	441654007	12/20/2017	K-40	2.09E-03	3.06E-03	1.19E-02	U
AP	08	441654007	12/20/2017	La-140	-5.41E-03	8.52E-03	2.37E-02	U
AP	08	441654007	12/20/2017	Mn-54	-2.70E-04	1.99E-04	4.57E-04	U
AP	08	441654007	12/20/2017	Nb-95	-2.04E-04	2.65E-04	7.15E-04	U
AP	08	441654007	12/20/2017	Ru-103	-6.59E-05	4.25E-04	1.37E-03	U
AP	08	441654007	12/20/2017	Ru-106	7.73E-04	1.36E-03	4.76E-03	U
AP	08	441654007	12/20/2017	Sb-124	2.10E-04	1.03E-03	3.55E-03	U
AP	08	441654007	12/20/2017	Sb-125	5.62E-04	4.05E-04	1.45E-03	U
AP	08	441654007	12/20/2017	Se-75	2.04E-04	2.60E-04	9.08E-04	U
AP	08	441654007	12/20/2017	Th-228	7.24E-05	2.61E-04	9.25E-04	U
AP	08	441654007	12/20/2017	Zn-65	6.26E-04	4.05E-04	1.58E-03	U
AP	08	441654007	12/20/2017	Zr-95	7.71E-04	5.19E-04	1.96E-03	U
AP	09	413779008	1/4/2017	BETA	2.21E-02	1.13E-03	7.01E-04	
AP	09	414600008	1/18/2017	BETA	2.08E-02	1.10E-03	7.45E-04	
AP	09	415804008	2/2/2017	BETA	1.27E-02	8.42E-04	6.93E-04	
AP	09	416909008	2/15/2017	BETA	1.82E-02	1.08E-03	8.04E-04	
AP	09	417723008	3/1/2017	BETA	2.22E-02	1.16E-03	7.32E-04	
AP	09	418884008	3/13/2017	BETA	2.02E-02	1.19E-03	9.30E-04	
AP	09	420834008	3/13/2017	Ac-228	-2.92E-04	6.99E-04	2.05E-03	U
AP	09	420834008	3/13/2017	Ag-108m	-2.71E-05	9.16E-05	2.97E-04	U
AP	09	420834008	3/13/2017	Ag-110m	1.87E-06	1.65E-04	5.32E-04	U
AP	09	420834008	3/13/2017	Ba-140	1.12E-02	2.89E-02	9.81E-02	U
AP	09	420834008	3/13/2017	Be-7	9.63E-02	8.99E-03	8.02E-03	
AP	09	420834008	3/13/2017	Ce-141	-2.82E-04	6.20E-04	2.07E-03	U
AP	09	420834008	3/13/2017	Ce-144	1.26E-04	5.77E-04	2.00E-03	U
AP	09	420834008	3/13/2017	Co-57	6.30E-05	8.27E-05	2.63E-04	U
AP	09	420834008	3/13/2017	Co-58	3.19E-05	2.15E-04	7.05E-04	U
AP	09	420834008	3/13/2017	Co-60	-1.60E-04	1.61E-04	4.72E-04	U
AP	09	420834008	3/13/2017	Cr-51	6.22E-03	6.01E-03	2.07E-02	U
AP	09	420834008	3/13/2017	Cs-134	-5.94E-05	1.42E-04	4.36E-04	U
AP	09	420834008	3/13/2017	Cs-137	2.99E-06	1.14E-04	3.71E-04	U
AP	09	420834008	3/13/2017	Fe-59	3.57E-04	7.67E-04	2.58E-03	U
AP	09	420834008	3/13/2017	I-131	-3.11E-02	1.09E-01	0.00E+00	U
AP	09	420834008	3/13/2017	K-40	3.12E-03	2.28E-03	4.18E-03	U
AP	09	420834008	3/13/2017	La-140	3.19E-03	1.13E-02	3.93E-02	U
AP	09	420834008	3/13/2017	Mn-54	-1.52E-04	1.37E-04	3.68E-04	U
AP	09	420834008	3/13/2017	Nb-95	-5.08E-05	2.98E-04	8.91E-04	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	09	420834008	3/13/2017	Ru-103	1.64E-04	4.42E-04	1.49E-03	U
AP	09	420834008	3/13/2017	Ru-106	7.18E-04	9.71E-04	3.37E-03	U
AP	09	420834008	3/13/2017	Sb-124	7.42E-04	6.48E-04	2.49E-03	U
AP	09	420834008	3/13/2017	Sb-125	5.84E-04	3.26E-04	1.11E-03	U
AP	09	420834008	3/13/2017	Se-75	1.79E-05	1.79E-04	6.06E-04	U
AP	09	420834008	3/13/2017	Th-228	6.59E-04	3.29E-04	7.38E-04	U
AP	09	420834008	3/13/2017	Zn-65	8.54E-05	3.16E-04	1.04E-03	U
AP	09	420834008	3/13/2017	Zr-95	-4.43E-04	4.87E-04	1.38E-03	U
AP	09	419732008	3/29/2017	BETA	1.88E-02	1.00E-03	6.55E-04	
AP	09	420821008	4/12/2017	BETA	1.20E-02	7.99E-04	6.76E-04	
AP	09	421976008	4/26/2017	BETA	1.41E-02	8.72E-04	7.17E-04	
AP	09	423150008	5/10/2017	BETA	8.55E-03	6.82E-04	6.61E-04	M
AP	09	424055008	5/23/2017	BETA	1.51E-02	9.39E-04	7.62E-04	
AP	09	425262008	6/7/2017	BETA	7.31E-03	6.20E-04	6.57E-04	M
AP	09	426373008	6/21/2017	BETA	1.82E-02	9.95E-04	7.10E-04	
AP	09	429353008	6/21/2017	Ac-228	6.75E-04	7.99E-04	3.26E-03	U
AP	09	429353008	6/21/2017	Ag-108m	1.46E-04	1.62E-04	5.77E-04	U
AP	09	429353008	6/21/2017	Ag-110m	5.37E-04	4.28E-04	1.59E-03	U
AP	09	429353008	6/21/2017	Ba-140	1.12E-01	1.15E-01	4.04E-01	U
AP	09	429353008	6/21/2017	Be-7	8.41E-02	1.34E-02	1.49E-02	
AP	09	429353008	6/21/2017	Ce-141	2.71E-03	2.50E-03	3.89E-03	U
AP	09	429353008	6/21/2017	Ce-144	-1.20E-03	8.30E-04	2.17E-03	U
AP	09	429353008	6/21/2017	Co-57	-1.65E-05	1.15E-04	3.58E-04	U
AP	09	429353008	6/21/2017	Co-58	1.86E-05	3.91E-04	1.26E-03	U
AP	09	429353008	6/21/2017	Co-60	9.66E-05	2.22E-04	7.93E-04	U
AP	09	429353008	6/21/2017	Cr-51	-4.59E-03	1.34E-02	4.43E-02	U
AP	09	429353008	6/21/2017	Cs-134	2.59E-05	2.58E-04	8.36E-04	U
AP	09	429353008	6/21/2017	Cs-137	-1.95E-04	2.87E-04	8.50E-04	U
AP	09	429353008	6/21/2017	Fe-59	1.52E-03	1.49E-03	5.71E-03	U
AP	09	429353008	6/21/2017	I-131	0.00E+00	4.56E-01	0.00E+00	UI
AP	09	429353008	6/21/2017	K-40	5.84E-03	4.58E-03	6.54E-03	U
AP	09	429353008	6/21/2017	La-140	-9.07E-03	3.28E-02	9.77E-02	U
AP	09	429353008	6/21/2017	Mn-54	5.68E-05	2.68E-04	8.78E-04	U
AP	09	429353008	6/21/2017	Nb-95	3.94E-04	4.73E-04	1.70E-03	U
AP	09	429353008	6/21/2017	Ru-103	7.73E-04	9.67E-04	3.40E-03	U
AP	09	429353008	6/21/2017	Ru-106	-9.96E-04	2.38E-03	7.34E-03	U
AP	09	429353008	6/21/2017	Sb-124	1.42E-03	1.06E-03	4.69E-03	U
AP	09	429353008	6/21/2017	Sb-125	8.47E-05	4.07E-04	1.40E-03	U
AP	09	429353008	6/21/2017	Se-75	-1.68E-04	3.40E-04	9.99E-04	U
AP	09	429353008	6/21/2017	Th-228	4.39E-04	4.72E-04	1.24E-03	U
AP	09	429353008	6/21/2017	Zn-65	-2.93E-04	6.16E-04	2.00E-03	U
AP	09	429353008	6/21/2017	Zr-95	-3.54E-04	8.73E-04	2.59E-03	U
AP	09	427491008	7/6/2017	BETA	2.02E-02	1.03E-03	6.41E-04	
AP	09	428504008	7/18/2017	BETA	2.29E-02	1.21E-03	7.86E-04	
AP	09	429899008	8/3/2017	BETA	2.49E-02	1.10E-03	5.91E-04	
AP	09	430998008	8/16/2017	BETA	2.60E-02	1.25E-03	7.75E-04	
AP	09	431910008	8/29/2017	BETA	2.62E-02	1.25E-03	7.40E-04	
AP	09	433034008	9/13/2017	BETA	2.16E-02	1.05E-03	6.32E-04	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	09	433923008	9/27/2017	BETA	2.52E-02	1.19E-03	7.35E-04	
AP	09	436552008	9/27/2017	Ac-228	1.65E-03	8.51E-04	2.59E-03	U
AP	09	436552008	9/27/2017	Ag-108m	1.56E-04	9.65E-05	3.53E-04	U
AP	09	436552008	9/27/2017	Ag-110m	-3.50E-04	2.14E-04	4.52E-04	U
AP	09	436552008	9/27/2017	Ba-140	1.58E-02	5.19E-02	1.78E-01	U
AP	09	436552008	9/27/2017	Be-7	1.28E-01	1.17E-02	7.35E-03	
AP	09	436552008	9/27/2017	Ce-141	5.62E-06	8.69E-04	2.55E-03	U
AP	09	436552008	9/27/2017	Ce-144	-2.36E-04	6.91E-04	2.14E-03	U
AP	09	436552008	9/27/2017	Co-57	-1.03E-04	9.37E-05	2.63E-04	U
AP	09	436552008	9/27/2017	Co-58	-2.49E-04	2.83E-04	7.17E-04	U
AP	09	436552008	9/27/2017	Co-60	2.29E-04	1.55E-04	6.15E-04	U
AP	09	436552008	9/27/2017	Cr-51	5.85E-03	9.38E-03	3.29E-02	U
AP	09	436552008	9/27/2017	Cs-134	6.18E-05	1.48E-04	5.01E-04	U
AP	09	436552008	9/27/2017	Cs-137	1.54E-04	1.40E-04	5.00E-04	U
AP	09	436552008	9/27/2017	Fe-59	8.20E-04	1.17E-03	4.26E-03	U
AP	09	436552008	9/27/2017	I-131	0.00E+00	3.34E-01	0.00E+00	UI
AP	09	436552008	9/27/2017	K-40	2.55E-03	2.55E-03	1.01E-02	U
AP	09	436552008	9/27/2017	La-140	-1.80E-03	2.57E-02	8.17E-02	U
AP	09	436552008	9/27/2017	Mn-54	-1.22E-05	1.72E-04	5.38E-04	U
AP	09	436552008	9/27/2017	Nb-95	-1.80E-05	3.51E-04	1.11E-03	U
AP	09	436552008	9/27/2017	Ru-103	2.54E-04	5.88E-04	2.02E-03	U
AP	09	436552008	9/27/2017	Ru-106	-3.70E-03	1.75E-03	3.28E-03	U
AP	09	436552008	9/27/2017	Sb-124	-5.24E-04	8.22E-04	2.06E-03	U
AP	09	436552008	9/27/2017	Sb-125	3.67E-04	2.82E-04	1.04E-03	U
AP	09	436552008	9/27/2017	Se-75	5.90E-04	2.95E-04	8.38E-04	U
AP	09	436552008	9/27/2017	Th-228	1.08E-04	3.65E-04	8.79E-04	U
AP	09	436552008	9/27/2017	Zn-65	3.96E-04	3.84E-04	1.44E-03	U
AP	09	436552008	9/27/2017	Zr-95	-1.70E-04	6.70E-04	2.06E-03	U
AP	09	435090008	10/11/2017	BETA	2.33E-02	1.14E-03	7.51E-04	
AP	09	436359008	10/24/2017	BETA	2.68E-02	1.26E-03	7.99E-04	
AP	09	437753008	11/8/2017	BETA	2.04E-02	1.02E-03	6.36E-04	
AP	09	438500008	11/21/2017	BETA	1.87E-02	1.04E-03	7.70E-04	
AP	09	439670008	12/5/2017	BETA	2.76E-02	1.22E-03	6.81E-04	
AP	09	440743008	12/20/2017	BETA	2.69E-02	1.00E-03	6.91E-04	
AP	09	441654008	12/20/2017	Ac-228	-6.65E-04	5.99E-04	1.95E-03	U
AP	09	441654008	12/20/2017	Ag-108m	6.97E-05	1.01E-04	3.51E-04	U
AP	09	441654008	12/20/2017	Ag-110m	1.30E-04	2.02E-04	7.70E-04	U
AP	09	441654008	12/20/2017	Ba-140	1.93E-03	1.70E-02	5.56E-02	U
AP	09	441654008	12/20/2017	Be-7	1.04E-01	9.55E-03	4.84E-03	
AP	09	441654008	12/20/2017	Ce-141	1.40E-03	6.50E-04	2.04E-03	U
AP	09	441654008	12/20/2017	Ce-144	1.48E-04	6.94E-04	2.21E-03	U
AP	09	441654008	12/20/2017	Co-57	7.64E-05	8.21E-05	2.73E-04	U
AP	09	441654008	12/20/2017	Co-58	-2.17E-05	2.44E-04	8.11E-04	U
AP	09	441654008	12/20/2017	Co-60	1.73E-04	1.69E-04	6.32E-04	U
AP	09	441654008	12/20/2017	Cr-51	5.63E-04	4.77E-03	1.60E-02	U
AP	09	441654008	12/20/2017	Cs-134	3.91E-05	1.56E-04	5.39E-04	U
AP	09	441654008	12/20/2017	Cs-137	-1.06E-04	1.29E-04	3.47E-04	U
AP	09	441654008	12/20/2017	Fe-59	5.10E-04	8.31E-04	2.96E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
AP	09	441654008	12/20/2017	I-131	2.42E-02	4.43E-02	1.53E-01	U
AP	09	441654008	12/20/2017	K-40	-8.96E-04	2.75E-03	9.32E-03	U
AP	09	441654008	12/20/2017	La-140	-2.16E-03	9.71E-03	3.15E-02	U
AP	09	441654008	12/20/2017	Mn-54	-3.49E-04	1.74E-04	3.33E-04	U
AP	09	441654008	12/20/2017	Nb-95	-2.17E-04	2.72E-04	8.11E-04	U
AP	09	441654008	12/20/2017	Ru-103	1.07E-04	3.19E-04	1.08E-03	U
AP	09	441654008	12/20/2017	Ru-106	1.65E-03	1.50E-03	5.22E-03	U
AP	09	441654008	12/20/2017	Sb-124	1.17E-03	8.25E-04	3.32E-03	U
AP	09	441654008	12/20/2017	Sb-125	-7.74E-06	3.34E-04	1.09E-03	U
AP	09	441654008	12/20/2017	Se-75	1.66E-04	2.02E-04	7.08E-04	U
AP	09	441654008	12/20/2017	Th-228	4.32E-04	3.84E-04	9.06E-04	U
AP	09	441654008	12/20/2017	Zn-65	-2.07E-05	3.36E-04	1.09E-03	U
AP	09	441654008	12/20/2017	Zr-95	-4.14E-04	4.29E-04	1.20E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
CF	01	413779009	1/4/2017	I-131	9.88E-04	2.84E-03	1.01E-02	U
CF	01	414600009	1/18/2017	I-131	-8.30E-04	2.16E-03	6.64E-03	U
CF	01	415804009	2/2/2017	I-131	3.26E-03	4.36E-03	1.61E-02	U
CF	01	416909009	2/15/2017	I-131	3.57E-03	4.36E-03	1.62E-02	U
CF	01	417723009	3/1/2017	I-131	4.98E-03	3.45E-03	1.35E-02	U
CF	01	418884009	3/13/2017	I-131	-5.17E-04	3.01E-03	9.83E-03	U
CF	01	419732009	3/29/2017	I-131	-1.10E-03	3.64E-03	1.12E-02	U
CF	01	420821009	4/12/2017	I-131	3.73E-04	3.71E-03	1.25E-02	U
CF	01	421976009	4/26/2017	I-131	-2.67E-03	2.81E-03	7.40E-03	U
CF	01	423150009	5/10/2017	I-131	-7.84E-03	5.24E-03	1.10E-02	U
CF	01	424055009	5/23/2017	I-131	3.50E-03	2.77E-03	1.10E-02	U
CF	01	425262009	6/7/2017	I-131	4.40E-03	4.87E-03	1.77E-02	U
CF	01	426373009	6/21/2017	I-131	-1.35E-03	3.81E-03	1.17E-02	U
CF	01	427491009	7/6/2017	I-131	-4.56E-03	4.34E-03	1.11E-02	U
CF	01	428504009	7/18/2017	I-131	1.83E-03	4.14E-03	1.48E-02	U
CF	01	429899009	8/3/2017	I-131	-3.09E-03	2.67E-03	6.40E-03	U
CF	01	430998009	8/16/2017	I-131	3.23E-03	4.54E-03	1.65E-02	U
CF	01	431910009	8/29/2017	I-131	2.70E-03	3.60E-03	1.30E-02	U
CF	01	433034009	9/13/2017	I-131	4.56E-04	3.72E-03	1.15E-02	U
CF	01	433923009	9/27/2017	I-131	5.33E-04	2.36E-03	8.38E-03	U
CF	01	435090009	10/11/2017	I-131	1.01E-03	3.38E-03	1.18E-02	U
CF	01	436359009	10/25/2017	I-131	2.09E-03	2.12E-03	8.36E-03	U
CF	01	437753009	11/8/2017	I-131	-3.35E-03	4.30E-03	1.19E-02	U
CF	01	438500009	11/21/2017	I-131	4.48E-03	5.12E-03	1.86E-02	U
CF	01	439670009	12/5/2017	I-131	-3.95E-03	3.84E-03	9.72E-03	U
CF	01	440743009	12/20/2017	I-131	-2.33E-03	2.31E-03	6.73E-03	U
CF	02	413779010	1/4/2017	I-131	-1.46E-03	3.22E-03	1.02E-02	U
CF	02	414600010	1/18/2017	I-131	6.58E-04	2.07E-03	7.34E-03	U
CF	02	415804010	2/2/2017	I-131	-2.04E-03	1.66E-03	1.89E-03	U
CF	02	416909010	2/15/2017	I-131	-3.55E-03	3.94E-03	1.05E-02	U
CF	02	417723010	3/1/2017	I-131	-3.08E-03	2.87E-03	6.09E-03	U
CF	02	418884010	3/13/2017	I-131	1.24E-02	7.74E-03	2.99E-02	U
CF	02	419732010	3/29/2017	I-131	-3.77E-03	3.30E-03	7.65E-03	U
CF	02	420821010	4/12/2017	I-131	1.72E-03	2.82E-03	9.94E-03	U
CF	02	421976010	4/26/2017	I-131	-1.01E-02	4.42E-03	5.59E-03	U
CF	02	423150010	5/10/2017	I-131	4.83E-04	4.31E-03	1.47E-02	U
CF	02	424055010	5/23/2017	I-131	-4.24E-03	2.86E-03	5.43E-03	U
CF	02	425262010	6/7/2017	I-131	4.50E-03	3.74E-03	1.46E-02	U
CF	02	426373010	6/21/2017	I-131	1.68E-03	3.45E-03	1.26E-02	U
CF	02	427491010	7/6/2017	I-131	4.75E-03	3.61E-03	1.45E-02	U
CF	02	428504010	7/18/2017	I-131	-5.62E-04	3.05E-03	9.58E-03	U
CF	02	429899010	8/3/2017	I-131	1.40E-03	3.68E-03	1.32E-02	U
CF	02	430998010	8/16/2017	I-131	-1.18E-03	3.59E-03	1.10E-02	U
CF	02	431910010	8/29/2017	I-131	-6.28E-05	3.33E-03	1.11E-02	U
CF	02	433034010	9/13/2017	I-131	4.00E-03	3.54E-03	1.36E-02	U
CF	02	433923010	9/27/2017	I-131	4.96E-03	4.38E-03	1.66E-02	U
CF	02	435090010	10/11/2017	I-131	-5.06E-03	3.34E-03	6.02E-03	U
CF	02	436359010	10/25/2017	I-131	-1.09E-04	2.21E-03	6.97E-03	U
CF	02	437753010	11/8/2017	I-131	4.90E-03	5.22E-03	1.92E-02	U
CF	02	438500010	11/21/2017	I-131	-6.90E-03	5.99E-03	1.08E-02	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
CF	02	439670010	12/5/2017	I-131	-3.51E-03	3.83E-03	1.04E-02	U
CF	02	440743010	12/20/2017	I-131	-2.60E-03	2.16E-03	5.97E-03	U
CF	03	413779011	1/4/2017	I-131	-3.61E-03	3.93E-03	1.09E-02	U
CF	03	414600011	1/18/2017	I-131	1.69E-03	2.50E-03	9.33E-03	U
CF	03	415804011	2/2/2017	I-131	4.62E-03	4.21E-03	1.59E-02	U
CF	03	416909011	2/15/2017	I-131	-2.33E-03	3.86E-03	1.08E-02	U
CF	03	417723011	3/1/2017	I-131	-7.28E-04	4.23E-03	1.33E-02	U
CF	03	418884011	3/13/2017	I-131	3.09E-03	4.56E-03	1.70E-02	U
CF	03	419732011	3/29/2017	I-131	-5.23E-03	5.69E-03	1.32E-02	U
CF	03	420821011	4/12/2017	I-131	1.87E-03	2.09E-03	7.37E-03	U
CF	03	421976011	4/26/2017	I-131	-5.39E-03	4.71E-03	1.15E-02	U
CF	03	423150011	5/10/2017	I-131	-9.17E-04	4.84E-03	1.44E-02	U
CF	03	424055011	5/23/2017	I-131	2.63E-03	4.11E-03	1.46E-02	U
CF	03	425262011	6/7/2017	I-131	-2.86E-03	3.64E-03	1.03E-02	U
CF	03	426373011	6/21/2017	I-131	-4.56E-03	5.63E-03	1.53E-02	U
CF	03	427491011	7/6/2017	I-131	1.48E-03	1.52E-03	6.91E-03	U
CF	03	428504011	7/18/2017	I-131	3.06E-03	3.58E-03	1.42E-02	U
CF	03	429899011	8/3/2017	I-131	-6.19E-04	4.45E-03	1.44E-02	U
CF	03	430998011	8/16/2017	I-131	1.88E-04	3.64E-03	1.23E-02	U
CF	03	431910011	8/29/2017	I-131	-6.04E-03	3.69E-03	7.34E-03	U
CF	03	433034011	9/13/2017	I-131	-7.84E-03	7.47E-03	1.96E-02	U
CF	03	433923011	9/27/2017	I-131	3.99E-03	3.80E-03	1.37E-02	U
CF	03	435090011	10/11/2017	I-131	8.96E-04	3.54E-03	1.24E-02	U
CF	03	436359011	10/24/2017	I-131	-9.20E-04	2.64E-03	8.03E-03	U
CF	03	437753011	11/8/2017	I-131	5.55E-04	5.33E-03	1.82E-02	U
CF	03	438500011	11/21/2017	I-131	-1.35E-03	3.52E-03	1.07E-02	U
CF	03	439670011	12/5/2017	I-131	-3.01E-03	2.96E-03	7.37E-03	U
CF	03	440743011	12/20/2017	I-131	-1.20E-03	1.77E-03	4.66E-03	U
CF	04	413779012	1/4/2017	I-131	-1.72E-03	2.06E-03	5.56E-03	U
CF	04	414600012	1/18/2017	I-131	1.23E-03	2.87E-03	1.03E-02	U
CF	04	415804012	2/2/2017	I-131	-6.44E-03	3.98E-03	8.09E-03	U
CF	04	416909012	2/15/2017	I-131	1.10E-03	1.12E-03	5.11E-03	U
CF	04	417723012	3/1/2017	I-131	-7.53E-04	2.81E-03	8.08E-03	U
CF	04	418884012	3/13/2017	I-131	1.84E-03	3.97E-03	1.43E-02	U
CF	04	419732012	3/29/2017	I-131	-2.41E-03	6.04E-03	1.83E-02	U
CF	04	420821012	4/12/2017	I-131	-4.61E-04	2.18E-03	7.03E-03	U
CF	04	421976012	4/26/2017	I-131	-1.05E-02	6.34E-03	1.15E-02	U
CF	04	423150012	5/10/2017	I-131	2.63E-03	3.86E-03	1.42E-02	U
CF	04	424055012	5/23/2017	I-131	3.98E-03	4.53E-03	1.71E-02	U
CF	04	425262012	6/7/2017	I-131	-4.46E-03	2.80E-03	3.72E-03	U
CF	04	426373012	6/21/2017	I-131	5.58E-03	4.27E-03	1.66E-02	U
CF	04	427491012	7/6/2017	I-131	-5.28E-03	4.70E-03	1.11E-02	U
CF	04	428504012	7/18/2017	I-131	5.00E-03	3.98E-03	1.59E-02	U
CF	04	429899012	8/3/2017	I-131	-2.27E-03	5.43E-03	1.72E-02	U
CF	04	430998012	8/16/2017	I-131	1.76E-03	3.73E-03	1.35E-02	U
CF	04	431910012	8/29/2017	I-131	1.28E-03	3.42E-03	1.23E-02	U
CF	04	433034012	9/13/2017	I-131	4.50E-03	2.82E-03	1.22E-02	U
CF	04	433923012	9/27/2017	I-131	-1.46E-03	2.90E-03	8.85E-03	U
CF	04	435090012	10/11/2017	I-131	2.39E-03	3.51E-03	1.28E-02	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)		FLAGS
CF	04	436359012	10/24/2017	I-131	-4.54E-04	5.41E-03	1.81E-02	U	
CF	04	437753012	11/8/2017	I-131	4.32E-05	4.08E-03	1.35E-02	U	
CF	04	438500012	11/21/2017	I-131	1.78E-03	3.96E-03	1.42E-02	U	
CF	04	439670012	12/5/2017	I-131	-1.58E-03	2.56E-03	7.59E-03	U	
CF	04	440743012	12/20/2017	I-131	1.66E-03	1.87E-03	6.84E-03	U	
CF	05	413779013	1/4/2017	I-131	-2.08E-03	2.80E-03	6.29E-03	U	
CF	05	414600013	1/18/2017	I-131	9.83E-04	2.66E-03	9.58E-03	U	
CF	05	415804013	2/2/2017	I-131	2.71E-03	2.68E-03	1.08E-02	U	
CF	05	416909013	2/15/2017	I-131	-4.16E-03	3.81E-03	8.64E-03	U	
CF	05	417723013	3/1/2017	I-131	6.76E-03	4.35E-03	1.65E-02	U	
CF	05	418884013	3/13/2017	I-131	-2.11E-03	4.55E-03	1.38E-02	U	
CF	05	419732013	3/29/2017	I-131	-3.58E-03	3.85E-03	1.01E-02	U	
CF	05	420821013	4/12/2017	I-131	-1.16E-03	3.01E-03	9.68E-03	U	
CF	05	421976013	4/26/2017	I-131	7.08E-03	5.22E-03	1.97E-02	U	
CF	05	423150013	5/10/2017	I-131	2.77E-03	3.23E-03	1.27E-02	U	
CF	05	424055013	5/23/2017	I-131	-4.04E-03	3.10E-03	7.65E-03	U	
CF	05	425262013	6/7/2017	I-131	-2.56E-04	2.02E-03	6.53E-03	U	
CF	05	426373013	6/21/2017	I-131	6.56E-03	4.00E-03	1.52E-02	U	
CF	05	427491013	7/6/2017	I-131	-1.12E-03	2.50E-03	7.24E-03	U	
CF	05	428504013	7/18/2017	I-131	6.17E-04	4.61E-03	1.63E-02	U	
CF	05	429899013	8/3/2017	I-131	3.90E-03	2.56E-03	1.12E-02	U	
CF	05	430998013	8/16/2017	I-131	-6.28E-03	3.34E-03	4.22E-03	U	
CF	05	431910013	8/29/2017	I-131	-5.92E-03	3.53E-03	6.18E-03	U	
CF	05	433034013	9/13/2017	I-131	-2.80E-03	4.04E-03	1.19E-02	U	
CF	05	433923013	9/27/2017	I-131	-2.77E-03	2.06E-03	0.00E+00	U	
CF	05	435090013	10/11/2017	I-131	3.84E-03	3.19E-03	1.16E-02	U	
CF	05	436359013	10/24/2017	I-131	2.26E-03	3.02E-03	1.14E-02	U	
CF	05	437753013	11/8/2017	I-131	-8.28E-03	6.32E-03	1.62E-02	U	
CF	05	438500013	11/21/2017	I-131	-5.55E-03	3.04E-03	5.78E-03	U	
CF	05	439670013	12/5/2017	I-131	-8.15E-03	5.53E-03	1.32E-02	U	
CF	05	440743013	12/20/2017	I-131	-2.22E-04	2.10E-03	6.99E-03	U	
CF	07	413779014	1/4/2017	I-131	5.32E-03	3.24E-03	1.31E-02	U	
CF	07	414600014	1/18/2017	I-131	1.45E-03	2.36E-03	8.79E-03	U	
CF	07	415804014	2/2/2017	I-131	1.06E-03	3.48E-03	1.22E-02	U	
CF	07	416909014	2/15/2017	I-131	2.21E-03	3.94E-03	1.41E-02	U	
CF	07	417723014	3/1/2017	I-131	1.56E-03	3.74E-03	1.33E-02	U	
CF	07	418884014	3/13/2017	I-131	1.31E-03	3.53E-03	1.27E-02	U	
CF	07	419732014	3/29/2017	I-131	-1.83E-03	4.40E-03	1.34E-02	U	
CF	07	420821014	4/12/2017	I-131	1.38E-03	2.50E-03	9.04E-03	U	
CF	07	421976014	4/26/2017	I-131	5.70E-03	6.64E-03	2.40E-02	U	
CF	07	423150014	5/10/2017	I-131	-1.50E-03	7.47E-03	2.31E-02	U	
CF	07	424055014	5/23/2017	I-131	2.24E-03	1.67E-03	7.39E-03	U	
CF	07	425262014	6/7/2017	I-131	6.43E-03	4.67E-03	1.74E-02	U	
CF	07	426373014	6/21/2017	I-131	5.20E-05	3.04E-03	1.01E-02	U	
CF	07	427491014	7/6/2017	I-131	5.77E-04	3.24E-03	1.09E-02	U	
CF	07	428504014	7/18/2017	I-131	1.82E-03	3.59E-03	1.32E-02	U	
CF	07	429899014	8/3/2017	I-131	1.59E-03	3.68E-03	1.33E-02	U	
CF	07	430998014	8/16/2017	I-131	4.21E-04	3.95E-03	1.36E-02	U	
CF	07	431910014	8/29/2017	I-131	0.00E+00	0.00E+00	0.00E+00	UI	M

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
CF	07	433034014	9/13/2017	I-131	-6.84E-03	4.19E-03	8.86E-03	U
CF	07	433923014	9/27/2017	I-131	1.03E-03	4.92E-03	1.75E-02	U
CF	07	435090014	10/11/2017	I-131	1.83E-03	2.58E-03	9.34E-03	U
CF	07	436359014	10/25/2017	I-131	-2.26E-04	3.17E-03	1.04E-02	U
CF	07	437753014	11/8/2017	I-131	2.05E-04	4.20E-03	1.41E-02	U
CF	07	438500014	11/21/2017	I-131	-1.36E-03	3.00E-03	8.53E-03	U
CF	07	439670014	12/5/2017	I-131	-1.17E-03	3.52E-03	1.10E-02	U
CF	07	440743014	12/20/2017	I-131	-4.57E-04	1.32E-03	3.79E-03	U
CF	08	413779015	1/4/2017	I-131	-8.14E-05	4.86E-03	1.61E-02	U
CF	08	414600015	1/18/2017	I-131	6.64E-03	3.63E-03	1.43E-02	U
CF	08	415804015	2/2/2017	I-131	-8.00E-03	5.24E-03	1.21E-02	U
CF	08	416909015	2/15/2017	I-131	-1.85E-03	4.97E-03	1.55E-02	U
CF	08	417723015	3/1/2017	I-131	5.07E-04	3.22E-03	1.12E-02	U
CF	08	418884015	3/13/2017	I-131	2.67E-04	3.03E-03	1.06E-02	U
CF	08	419732015	3/29/2017	I-131	8.82E-03	5.32E-03	2.11E-02	U
CF	08	420821015	4/12/2017	I-131	-4.27E-03	3.31E-03	8.84E-03	U
CF	08	421976015	4/26/2017	I-131	-6.46E-04	2.38E-03	7.35E-03	U
CF	08	423150015	5/10/2017	I-131	-4.35E-03	3.50E-03	7.31E-03	U
CF	08	424055015	5/23/2017	I-131	6.35E-03	3.10E-03	1.27E-02	U
CF	08	425262015	6/7/2017	I-131	-3.25E-03	7.07E-03	2.21E-02	U
CF	08	426373015	6/21/2017	I-131	1.34E-02	5.36E-03	2.04E-02	U
CF	08	427491015	7/6/2017	I-131	3.90E-03	4.38E-03	1.65E-02	U
CF	08	428504015	7/18/2017	I-131	-1.29E-03	4.18E-03	1.28E-02	U
CF	08	429899015	8/3/2017	I-131	-2.09E-05	4.26E-03	1.41E-02	U
CF	08	430998015	8/16/2017	I-131	2.10E-04	4.75E-03	1.69E-02	U
CF	08	431910015	8/29/2017	I-131	-4.54E-04	2.78E-03	8.95E-03	U
CF	08	433034015	9/13/2017	I-131	5.51E-03	4.05E-03	1.57E-02	U
CF	08	433923015	9/27/2017	I-131	-2.16E-03	3.97E-03	1.19E-02	U
CF	08	435090015	10/11/2017	I-131	-5.92E-04	2.13E-03	6.68E-03	U
CF	08	436359015	10/25/2017	I-131	-1.83E-03	2.41E-03	6.40E-03	U
CF	08	437753015	11/8/2017	I-131	4.24E-03	8.22E-03	3.06E-02	U
CF	08	438500015	11/21/2017	I-131	-3.09E-03	4.07E-03	1.14E-02	U
CF	08	439670015	12/5/2017	I-131	1.02E-03	5.53E-03	1.90E-02	U
CF	08	440743015	12/20/2017	I-131	2.19E-03	2.54E-03	8.06E-03	U
CF	09	413779016	1/4/2017	I-131	-6.77E-04	2.32E-03	7.10E-03	U
CF	09	414600016	1/18/2017	I-131	1.41E-03	2.42E-03	9.15E-03	U
CF	09	415804016	2/2/2017	I-131	-1.09E-03	3.75E-03	1.16E-02	U
CF	09	416909016	2/15/2017	I-131	-4.36E-03	3.59E-03	7.79E-03	U
CF	09	417723016	3/1/2017	I-131	-8.94E-03	5.29E-03	1.08E-02	U
CF	09	418884016	3/13/2017	I-131	-3.94E-03	6.43E-03	1.72E-02	U
CF	09	419732016	3/29/2017	I-131	6.23E-05	3.64E-03	1.21E-02	U
CF	09	420821016	4/12/2017	I-131	-3.28E-04	2.28E-03	7.15E-03	U
CF	09	421976016	4/26/2017	I-131	2.88E-03	4.25E-03	1.56E-02	U
CF	09	423150016	5/10/2017	I-131	-2.52E-03	4.43E-03	1.27E-02	U
CF	09	424055016	5/23/2017	I-131	-5.57E-03	3.36E-03	6.06E-03	U
CF	09	425262016	6/7/2017	I-131	2.91E-03	3.20E-03	1.26E-02	U
CF	09	426373016	6/21/2017	I-131	-9.08E-03	4.00E-03	6.03E-03	U
CF	09	427491016	7/6/2017	I-131	3.17E-03	4.30E-03	1.58E-02	U
CF	09	428504016	7/18/2017	I-131	1.42E-03	3.95E-03	1.45E-02	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
CF	09	429899016	8/3/2017	I-131	-8.55E-03	4.01E-03	5.65E-03	U
CF	09	430998016	8/16/2017	I-131	-6.33E-03	4.20E-03	8.48E-03	U
CF	09	431910016	8/29/2017	I-131	-6.19E-04	3.68E-03	1.18E-02	U
CF	09	433034016	9/13/2017	I-131	-1.79E-03	3.12E-03	9.26E-03	U
CF	09	433923016	9/27/2017	I-131	2.70E-03	4.10E-03	1.49E-02	U
CF	09	435090016	10/11/2017	I-131	1.41E-03	2.52E-03	9.33E-03	U
CF	09	436359016	10/24/2017	I-131	2.86E-03	2.83E-03	1.05E-02	U
CF	09	437753016	11/8/2017	I-131	3.69E-04	4.09E-03	1.40E-02	U
CF	09	438500016	11/21/2017	I-131	-4.86E-03	3.42E-03	4.35E-03	U
CF	09	439670016	12/5/2017	I-131	-1.26E-03	3.80E-03	1.21E-02	U
CF	09	440743016	12/20/2017	I-131	8.10E-04	2.67E-03	9.04E-03	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
FH	03	424579001	5/23/2017	Ac-228	-2.05E+01	1.30E+01	3.29E+01	U
FH	03	424579001	5/23/2017	Ag-108m	-1.82E+00	2.02E+00	6.11E+00	U
FH	03	424579001	5/23/2017	Ag-110m	9.55E-01	3.67E+00	1.20E+01	U
FH	03	424579001	5/23/2017	Ba-140	8.92E+00	1.81E+01	6.11E+01	U
FH	03	424579001	5/23/2017	Be-7	5.72E+01	2.75E+01	9.07E+01	U
FH	03	424579001	5/23/2017	Bi-214	7.67E+00	5.82E+00	1.97E+01	U
FH	03	424579001	5/23/2017	Ce-141	-1.08E+00	4.66E+00	1.44E+01	U
FH	03	424579001	5/23/2017	Ce-144	-1.19E+01	1.53E+01	4.53E+01	U
FH	03	424579001	5/23/2017	Co-57	-1.14E+00	2.00E+00	6.07E+00	U
FH	03	424579001	5/23/2017	Co-58	-2.27E+00	3.52E+00	1.05E+01	U
FH	03	424579001	5/23/2017	Co-60	-6.48E+00	3.73E+00	8.86E+00	U
FH	03	424579001	5/23/2017	Cr-51	-8.06E+00	2.45E+01	8.08E+01	U
FH	03	424579001	5/23/2017	Cs-134	-4.86E+00	3.15E+00	7.78E+00	U
FH	03	424579001	5/23/2017	Cs-137	-1.25E+00	2.23E+00	6.72E+00	U
FH	03	424579001	5/23/2017	Fe-59	-7.06E+00	7.13E+00	2.13E+01	U
FH	03	424579001	5/23/2017	I-131	4.12E+00	6.99E+00	2.19E+01	U
FH	03	424579001	5/23/2017	K-40	3.44E+03	2.36E+02	7.64E+01	
FH	03	424579001	5/23/2017	La-140	2.04E+00	5.39E+00	1.87E+01	U
FH	03	424579001	5/23/2017	Mn-54	1.11E+00	2.89E+00	9.50E+00	U
FH	03	424579001	5/23/2017	Nb-95	1.50E-01	2.41E+00	7.77E+00	U
FH	03	424579001	5/23/2017	Pb-212	-6.00E+00	4.97E+00	1.40E+01	U
FH	03	424579001	5/23/2017	Pb-214	3.58E+00	5.12E+00	1.76E+01	U
FH	03	424579001	5/23/2017	Ra-226	7.67E+00	5.82E+00	1.97E+01	U
FH	03	424579001	5/23/2017	Ru-103	-5.23E+00	3.06E+00	7.90E+00	U
FH	03	424579001	5/23/2017	Ru-106	2.13E+00	1.94E+01	6.36E+01	U
FH	03	424579001	5/23/2017	Sb-124	7.07E+00	4.07E+00	1.74E+01	U
FH	03	424579001	5/23/2017	Sb-125	-9.43E-01	5.72E+00	1.87E+01	U
FH	03	424579001	5/23/2017	Se-75	1.07E+00	2.77E+00	9.55E+00	U
FH	03	424579001	5/23/2017	Th-228	-6.00E+00	4.97E+00	1.40E+01	U
FH	03	424579001	5/23/2017	Th-230	7.67E+00	5.82E+00	1.97E+01	U
FH	03	424579001	5/23/2017	Tl-208	-3.91E+00	2.99E+00	8.76E+00	U
FH	03	424579001	5/23/2017	Zn-65	7.35E+00	7.09E+00	2.50E+01	U
FH	03	424579001	5/23/2017	Zr-95	-3.86E+00	5.32E+00	1.57E+01	U
FH	03	438701004	8/28/2017	Ac-228	1.72E+01	2.68E+01	6.62E+01	U
FH	03	438701004	8/28/2017	Ag-108m	-1.94E-01	3.32E+00	1.11E+01	U
FH	03	438701004	8/28/2017	Ag-110m	-5.74E+00	7.59E+00	2.38E+01	U
FH	03	438701004	8/28/2017	Ba-140	-3.73E+03	3.33E+03	9.81E+03	U
FH	03	438701004	8/28/2017	Be-7	7.28E+01	1.11E+02	3.78E+02	U
FH	03	438701004	8/28/2017	Bi-214	1.57E+01	1.67E+01	4.10E+01	U
FH	03	438701004	8/28/2017	Ce-141	0.00E+00	8.60E+01	1.17E+02	U
FH	03	438701004	8/28/2017	Ce-144	-2.16E+01	2.38E+01	7.44E+01	U
FH	03	438701004	8/28/2017	Co-57	4.29E+00	3.21E+00	1.08E+01	U
FH	03	438701004	8/28/2017	Co-58	2.59E+00	9.53E+00	3.30E+01	U
FH	03	438701004	8/28/2017	Co-60	-3.23E+00	5.15E+00	1.55E+01	U
FH	03	438701004	8/28/2017	Cr-51	-4.21E+02	3.65E+02	1.00E+03	U
FH	03	438701004	8/28/2017	Cs-134	-4.85E+00	4.94E+00	1.38E+01	U
FH	03	438701004	8/28/2017	Cs-137	3.30E+00	4.91E+00	1.63E+01	U
FH	03	438701004	8/28/2017	Fe-59	-2.58E+01	3.94E+01	1.22E+02	U
FH	03	438701004	8/28/2017	I-131	-5.32E+04	2.36E+04	0.00E+00	U
FH	03	438701004	8/28/2017	K-40	2.03E+03	2.46E+02	1.61E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
FH	03	438701004	8/28/2017	La-140	-2.15E+03	1.26E+03	3.06E+03	U
FH	03	438701004	8/28/2017	Mn-54	-3.06E+00	5.59E+00	1.82E+01	U
FH	03	438701004	8/28/2017	Nb-95	1.68E+01	1.39E+01	4.59E+01	U
FH	03	438701004	8/28/2017	Pb-212	3.86E+00	9.25E+00	2.34E+01	U
FH	03	438701004	8/28/2017	Pb-214	1.33E+01	1.77E+01	3.74E+01	U
FH	03	438701004	8/28/2017	Ra-226	1.57E+01	1.67E+01	4.10E+01	U
FH	03	438701004	8/28/2017	Ru-103	-4.61E+01	2.33E+01	5.87E+01	U
FH	03	438701004	8/28/2017	Ru-106	4.81E+01	4.60E+01	1.55E+02	U
FH	03	438701004	8/28/2017	Sb-124	-1.00E+00	2.27E+01	7.11E+01	U
FH	03	438701004	8/28/2017	Sb-125	-4.12E+00	1.08E+01	3.52E+01	U
FH	03	438701004	8/28/2017	Se-75	3.04E-01	8.54E+00	2.70E+01	U
FH	03	438701004	8/28/2017	Th-228	3.86E+00	9.25E+00	2.34E+01	U
FH	03	438701004	8/28/2017	Th-230	1.57E+01	1.67E+01	4.10E+01	U
FH	03	438701004	8/28/2017	Tl-208	6.83E-01	5.92E+00	1.66E+01	U
FH	03	438701004	8/28/2017	Zn-65	-3.96E+00	1.51E+01	4.89E+01	U
FH	03	438701004	8/28/2017	Zr-95	2.09E+01	2.26E+01	7.53E+01	U
FH	03	438701001	11/21/2017	Ac-228	1.67E+01	1.13E+01	3.85E+01	U
FH	03	438701001	11/21/2017	Ag-108m	-4.62E-01	1.65E+00	5.48E+00	U
FH	03	438701001	11/21/2017	Ag-110m	4.18E+00	3.80E+00	1.26E+01	U
FH	03	438701001	11/21/2017	Ba-140	5.50E-01	1.31E+01	4.41E+01	U
FH	03	438701001	11/21/2017	Be-7	2.40E+01	2.08E+01	7.26E+01	U
FH	03	438701001	11/21/2017	Bi-214	3.29E+00	8.11E+00	1.92E+01	U
FH	03	438701001	11/21/2017	Ce-141	-6.72E-01	3.71E+00	1.19E+01	U
FH	03	438701001	11/21/2017	Ce-144	-1.71E+00	1.19E+01	3.84E+01	U
FH	03	438701001	11/21/2017	Co-57	-5.77E-01	1.66E+00	5.30E+00	U
FH	03	438701001	11/21/2017	Co-58	1.16E+00	2.10E+00	6.93E+00	U
FH	03	438701001	11/21/2017	Co-60	5.53E+00	3.47E+00	1.15E+01	U
FH	03	438701001	11/21/2017	Cr-51	-7.70E+00	2.16E+01	7.26E+01	U
FH	03	438701001	11/21/2017	Cs-134	1.08E+00	2.60E+00	8.74E+00	U
FH	03	438701001	11/21/2017	Cs-137	5.64E+00	2.63E+00	8.90E+00	U
FH	03	438701001	11/21/2017	Fe-59	-7.53E+00	5.76E+00	1.44E+01	U
FH	03	438701001	11/21/2017	I-131	-4.76E+00	5.89E+00	1.87E+01	U
FH	03	438701001	11/21/2017	K-40	2.87E+03	1.86E+02	7.39E+01	
FH	03	438701001	11/21/2017	La-140	-7.16E+00	5.73E+00	1.46E+01	U
FH	03	438701001	11/21/2017	Mn-54	3.66E+00	2.46E+00	8.50E+00	U
FH	03	438701001	11/21/2017	Nb-95	-1.64E+00	2.42E+00	7.31E+00	U
FH	03	438701001	11/21/2017	Pb-212	7.83E+00	4.78E+00	1.40E+01	U
FH	03	438701001	11/21/2017	Pb-214	-6.11E+00	5.38E+00	1.55E+01	U
FH	03	438701001	11/21/2017	Ra-226	3.29E+00	8.11E+00	1.92E+01	U
FH	03	438701001	11/21/2017	Ru-103	1.60E+00	2.38E+00	8.28E+00	U
FH	03	438701001	11/21/2017	Ru-106	1.02E+01	2.20E+01	7.11E+01	U
FH	03	438701001	11/21/2017	Sb-124	8.54E+00	6.42E+00	2.38E+01	U
FH	03	438701001	11/21/2017	Sb-125	4.71E+00	5.37E+00	1.88E+01	U
FH	03	438701001	11/21/2017	Se-75	-1.07E+00	2.68E+00	8.15E+00	U
FH	03	438701001	11/21/2017	Th-228	7.83E+00	4.78E+00	1.40E+01	U
FH	03	438701001	11/21/2017	Th-230	3.29E+00	8.11E+00	1.92E+01	U
FH	03	438701001	11/21/2017	Tl-208	-1.14E+00	2.46E+00	7.76E+00	U
FH	03	438701001	11/21/2017	Zn-65	-4.53E+00	6.75E+00	1.99E+01	U
FH	03	438701001	11/21/2017	Zr-95	1.71E+00	4.48E+00	1.51E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
FH	03	431882001	8/28/2017	Ac-228	-2.45E+01	1.74E+01	4.73E+01	U
FH	03	431882001	8/28/2017	Ag-108m	4.11E-01	2.31E+00	7.67E+00	U
FH	03	431882001	8/28/2017	Ag-110m	2.45E+00	4.89E+00	1.52E+01	U
FH	03	431882001	8/28/2017	Ba-140	2.56E-01	1.68E+01	5.44E+01	U
FH	03	431882001	8/28/2017	Be-7	2.69E+01	2.79E+01	9.47E+01	U
FH	03	431882001	8/28/2017	Bi-214	2.17E+01	1.83E+01	2.66E+01	U
FH	03	431882001	8/28/2017	Ce-141	-4.46E+00	5.64E+00	1.66E+01	U
FH	03	431882001	8/28/2017	Ce-144	5.19E+00	1.78E+01	5.66E+01	U
FH	03	431882001	8/28/2017	Co-57	-2.52E-01	2.45E+00	7.69E+00	U
FH	03	431882001	8/28/2017	Co-58	-1.57E+00	2.85E+00	9.01E+00	U
FH	03	431882001	8/28/2017	Co-60	-1.67E+00	3.05E+00	9.00E+00	U
FH	03	431882001	8/28/2017	Cr-51	-9.27E+00	2.76E+01	8.99E+01	U
FH	03	431882001	8/28/2017	Cs-134	6.43E+00	4.66E+00	1.16E+01	U
FH	03	431882001	8/28/2017	Cs-137	3.74E+00	3.45E+00	1.16E+01	U
FH	03	431882001	8/28/2017	Fe-59	-2.86E+00	8.95E+00	2.87E+01	U
FH	03	431882001	8/28/2017	I-131	-7.91E+00	6.37E+00	1.82E+01	U
FH	03	431882001	8/28/2017	K-40	3.22E+03	2.55E+02	9.97E+01	
FH	03	431882001	8/28/2017	La-140	9.57E-01	5.59E+00	1.84E+01	U
FH	03	431882001	8/28/2017	Mn-54	-9.15E-01	2.93E+00	9.58E+00	U
FH	03	431882001	8/28/2017	Nb-95	9.57E-01	3.64E+00	1.18E+01	U
FH	03	431882001	8/28/2017	Pb-212	4.03E-01	1.01E+01	2.07E+01	U
FH	03	431882001	8/28/2017	Pb-214	3.62E+00	1.14E+01	2.48E+01	U
FH	03	431882001	8/28/2017	Ra-226	2.17E+01	1.83E+01	2.66E+01	U
FH	03	431882001	8/28/2017	Ru-103	-7.04E+00	3.57E+00	8.31E+00	U
FH	03	431882001	8/28/2017	Ru-106	-3.42E+00	3.16E+01	1.00E+02	U
FH	03	431882001	8/28/2017	Sb-124	4.32E+00	4.53E+00	1.81E+01	U
FH	03	431882001	8/28/2017	Sb-125	-7.48E+00	7.53E+00	2.21E+01	U
FH	03	431882001	8/28/2017	Se-75	1.99E+00	3.77E+00	1.29E+01	U
FH	03	431882001	8/28/2017	Th-228	4.03E-01	1.01E+01	2.07E+01	U
FH	03	431882001	8/28/2017	Th-230	2.17E+01	1.83E+01	2.66E+01	U
FH	03	431882001	8/28/2017	Tl-208	6.10E+00	5.33E+00	7.60E+00	U
FH	03	431882001	8/28/2017	Zn-65	1.29E+01	8.79E+00	3.07E+01	U
FH	03	431882001	8/28/2017	Zr-95	9.48E+00	6.24E+00	2.21E+01	U
FH	06	438701003	11/20/2017	Ac-228	0.00E+00	2.59E+01	4.35E+01	U
FH	06	438701003	11/20/2017	Ag-108m	2.14E+00	1.95E+00	6.86E+00	U
FH	06	438701003	11/20/2017	Ag-110m	-2.96E+00	3.74E+00	1.06E+01	U
FH	06	438701003	11/20/2017	Ba-140	3.95E+01	1.93E+01	6.76E+01	U
FH	06	438701003	11/20/2017	Be-7	3.59E+01	2.28E+01	8.01E+01	U
FH	06	438701003	11/20/2017	Bi-214	7.12E+00	6.97E+00	2.30E+01	U
FH	06	438701003	11/20/2017	Ce-141	4.10E+00	5.16E+00	1.69E+01	U
FH	06	438701003	11/20/2017	Ce-144	2.52E+01	1.51E+01	4.93E+01	U
FH	06	438701003	11/20/2017	Co-57	-5.12E+00	2.22E+00	5.09E+00	U
FH	06	438701003	11/20/2017	Co-58	-3.26E+00	3.10E+00	8.51E+00	U
FH	06	438701003	11/20/2017	Co-60	2.80E+00	2.80E+00	1.02E+01	U
FH	06	438701003	11/20/2017	Cr-51	5.47E+01	4.29E+01	8.21E+01	U
FH	06	438701003	11/20/2017	Cs-134	1.35E+00	3.04E+00	1.02E+01	U
FH	06	438701003	11/20/2017	Cs-137	-9.84E-02	3.18E+00	1.04E+01	U
FH	06	438701003	11/20/2017	Fe-59	5.89E+00	7.03E+00	2.51E+01	U
FH	06	438701003	11/20/2017	I-131	1.84E+00	9.65E+00	3.31E+01	U
FH	06	438701003	11/20/2017	K-40	2.53E+03	1.99E+02	7.83E+01	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
FH	06	438701003	11/20/2017	La-140	5.24E+00	6.52E+00	2.38E+01	U
FH	06	438701003	11/20/2017	Mn-54	-1.76E+00	2.87E+00	8.53E+00	U
FH	06	438701003	11/20/2017	Nb-95	1.67E+00	3.09E+00	1.04E+01	U
FH	06	438701003	11/20/2017	Pb-212	-1.92E+00	4.98E+00	1.49E+01	U
FH	06	438701003	11/20/2017	Pb-214	8.50E+00	1.38E+01	2.24E+01	U
FH	06	438701003	11/20/2017	Ra-226	7.12E+00	6.97E+00	2.30E+01	U
FH	06	438701003	11/20/2017	Ru-103	1.86E+00	3.10E+00	1.07E+01	U
FH	06	438701003	11/20/2017	Ru-106	-8.66E+00	2.64E+01	8.42E+01	U
FH	06	438701003	11/20/2017	Sb-124	4.46E+00	5.71E+00	2.11E+01	U
FH	06	438701003	11/20/2017	Sb-125	-2.30E+00	5.86E+00	1.90E+01	U
FH	06	438701003	11/20/2017	Se-75	2.13E+00	3.74E+00	1.20E+01	U
FH	06	438701003	11/20/2017	Th-228	-1.92E+00	4.98E+00	1.49E+01	U
FH	06	438701003	11/20/2017	Th-230	7.12E+00	6.97E+00	2.30E+01	U
FH	06	438701003	11/20/2017	Tl-208	-2.43E+00	2.69E+00	8.31E+00	U
FH	06	438701003	11/20/2017	Zn-65	-5.03E-01	6.89E+00	2.31E+01	U
FH	06	438701003	11/20/2017	Zr-95	9.21E+00	6.10E+00	2.10E+01	U
FH	53	418670002	2/14/2017	Ac-228	-6.38E-01	1.30E+01	4.34E+01	U
FH	53	418670002	2/14/2017	Ag-108m	-5.13E-01	2.05E+00	6.81E+00	U
FH	53	418670002	2/14/2017	Ag-110m	1.20E+00	3.18E+00	1.07E+01	U
FH	53	418670002	2/14/2017	Ba-140	-1.09E+01	3.95E+01	1.29E+02	U
FH	53	418670002	2/14/2017	Be-7	-2.13E+01	2.24E+01	6.21E+01	U
FH	53	418670002	2/14/2017	Bi-214	7.54E+00	9.81E+00	2.16E+01	U
FH	53	418670002	2/14/2017	Ce-141	-2.38E+00	5.84E+00	1.84E+01	U
FH	53	418670002	2/14/2017	Ce-144	1.69E+00	1.38E+01	4.51E+01	U
FH	53	418670002	2/14/2017	Co-57	2.95E-01	1.69E+00	5.56E+00	U
FH	53	418670002	2/14/2017	Co-58	-2.23E+00	3.20E+00	9.57E+00	U
FH	53	418670002	2/14/2017	Co-60	-3.30E+00	2.92E+00	7.98E+00	U
FH	53	418670002	2/14/2017	Cr-51	-3.10E+01	3.54E+01	1.13E+02	U
FH	53	418670002	2/14/2017	Cs-134	3.52E+00	2.87E+00	9.99E+00	U
FH	53	418670002	2/14/2017	Cs-137	-3.76E+00	2.98E+00	8.44E+00	U
FH	53	418670002	2/14/2017	Fe-59	9.97E+00	9.02E+00	3.08E+01	U
FH	53	418670002	2/14/2017	I-131	-4.16E+01	3.33E+01	9.40E+01	U
FH	53	418670002	2/14/2017	K-40	3.15E+03	2.05E+02	6.50E+01	
FH	53	418670002	2/14/2017	La-140	5.18E+00	1.36E+01	4.77E+01	U
FH	53	418670002	2/14/2017	Mn-54	1.13E+00	2.66E+00	8.93E+00	U
FH	53	418670002	2/14/2017	Nb-95	-4.75E+00	3.76E+00	9.57E+00	U
FH	53	418670002	2/14/2017	Pb-212	4.19E+00	6.07E+00	1.63E+01	U
FH	53	418670002	2/14/2017	Pb-214	-1.35E+00	5.37E+00	1.76E+01	U
FH	53	418670002	2/14/2017	Ra-226	7.54E+00	9.81E+00	2.16E+01	U
FH	53	418670002	2/14/2017	Ru-103	-2.10E-01	3.19E+00	1.07E+01	U
FH	53	418670002	2/14/2017	Ru-106	7.28E+00	2.25E+01	7.61E+01	U
FH	53	418670002	2/14/2017	Sb-124	9.14E+00	8.13E+00	3.00E+01	U
FH	53	418670002	2/14/2017	Sb-125	7.04E-01	6.11E+00	2.09E+01	U
FH	53	418670002	2/14/2017	Se-75	3.27E+00	3.22E+00	1.05E+01	U
FH	53	418670002	2/14/2017	Th-228	4.19E+00	6.07E+00	1.63E+01	U
FH	53	418670002	2/14/2017	Th-230	7.54E+00	9.81E+00	2.16E+01	U
FH	53	418670002	2/14/2017	Tl-208	-1.63E+00	2.82E+00	9.16E+00	U
FH	53	418670002	2/14/2017	Zn-65	-2.74E+00	7.30E+00	2.23E+01	U
FH	53	418670002	2/14/2017	Zr-95	8.64E+00	5.51E+00	1.94E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
FH	53	424579002	5/16/2017	Ac-228	1.82E+01	1.08E+01	3.82E+01	U
FH	53	424579002	5/16/2017	Ag-108m	-3.10E+00	2.48E+00	6.69E+00	U
FH	53	424579002	5/16/2017	Ag-110m	-6.25E+00	3.63E+00	9.36E+00	U
FH	53	424579002	5/16/2017	Ba-140	2.84E+00	2.46E+01	8.16E+01	U
FH	53	424579002	5/16/2017	Be-7	5.09E+01	3.59E+01	7.55E+01	U
FH	53	424579002	5/16/2017	Bi-214	-4.40E-01	5.38E+00	1.74E+01	U
FH	53	424579002	5/16/2017	Ce-141	-6.92E+00	5.47E+00	1.49E+01	U
FH	53	424579002	5/16/2017	Ce-144	3.15E+00	1.35E+01	4.40E+01	U
FH	53	424579002	5/16/2017	Co-57	-2.42E+00	2.06E+00	6.10E+00	U
FH	53	424579002	5/16/2017	Co-58	1.24E+00	3.78E+00	1.23E+01	U
FH	53	424579002	5/16/2017	Co-60	3.42E+00	2.70E+00	9.76E+00	U
FH	53	424579002	5/16/2017	Cr-51	-6.27E+00	2.77E+01	9.30E+01	U
FH	53	424579002	5/16/2017	Cs-134	2.90E+00	3.14E+00	1.06E+01	U
FH	53	424579002	5/16/2017	Cs-137	-1.69E+00	2.93E+00	8.99E+00	U
FH	53	424579002	5/16/2017	Fe-59	2.33E+00	7.90E+00	2.70E+01	U
FH	53	424579002	5/16/2017	I-131	-3.84E+00	1.31E+01	4.35E+01	U
FH	53	424579002	5/16/2017	K-40	2.74E+03	1.56E+02	8.29E+01	
FH	53	424579002	5/16/2017	La-140	-1.17E+00	7.10E+00	2.23E+01	U
FH	53	424579002	5/16/2017	Mn-54	1.96E+00	2.34E+00	7.95E+00	U
FH	53	424579002	5/16/2017	Nb-95	-5.29E-01	3.05E+00	9.61E+00	U
FH	53	424579002	5/16/2017	Pb-212	2.54E+00	4.77E+00	1.33E+01	U
FH	53	424579002	5/16/2017	Pb-214	1.41E+01	6.23E+00	2.02E+01	U
FH	53	424579002	5/16/2017	Ra-226	-4.40E-01	5.38E+00	1.74E+01	U
FH	53	424579002	5/16/2017	Ru-103	1.00E+01	5.25E+00	1.07E+01	U
FH	53	424579002	5/16/2017	Ru-106	1.55E+01	2.46E+01	8.28E+01	U
FH	53	424579002	5/16/2017	Sb-124	-5.35E+00	7.49E+00	2.11E+01	U
FH	53	424579002	5/16/2017	Sb-125	-3.68E-01	6.36E+00	2.12E+01	U
FH	53	424579002	5/16/2017	Se-75	3.90E+00	3.29E+00	8.14E+00	U
FH	53	424579002	5/16/2017	Th-228	2.54E+00	4.77E+00	1.33E+01	U
FH	53	424579002	5/16/2017	Th-230	-4.40E-01	5.38E+00	1.74E+01	U
FH	53	424579002	5/16/2017	Tl-208	3.11E+00	2.97E+00	1.03E+01	U
FH	53	424579002	5/16/2017	Zn-65	-1.32E+01	7.66E+00	1.98E+01	U
FH	53	424579002	5/16/2017	Zr-95	-3.13E+00	5.58E+00	1.68E+01	U
FH	53	431882002	8/14/2017	Ac-228	-7.03E+00	1.82E+01	5.68E+01	U
FH	53	431882002	8/14/2017	Ag-108m	-2.41E+00	3.27E+00	9.00E+00	U
FH	53	431882002	8/14/2017	Ag-110m	-2.04E+00	5.88E+00	1.81E+01	U
FH	53	431882002	8/14/2017	Ba-140	5.70E+01	5.15E+01	1.77E+02	U
FH	53	431882002	8/14/2017	Be-7	-2.22E+01	4.22E+01	1.35E+02	U
FH	53	431882002	8/14/2017	Bi-214	8.16E+00	1.56E+01	2.60E+01	U
FH	53	431882002	8/14/2017	Ce-141	-1.09E+01	9.89E+00	2.79E+01	U
FH	53	431882002	8/14/2017	Ce-144	-2.94E+01	2.48E+01	7.19E+01	U
FH	53	431882002	8/14/2017	Co-57	-1.65E+00	2.98E+00	9.23E+00	U
FH	53	431882002	8/14/2017	Co-58	4.78E+00	4.66E+00	1.60E+01	U
FH	53	431882002	8/14/2017	Co-60	-4.88E-01	4.72E+00	1.56E+01	U
FH	53	431882002	8/14/2017	Cr-51	7.90E+01	5.44E+01	1.87E+02	U
FH	53	431882002	8/14/2017	Cs-134	-1.46E+00	4.09E+00	1.27E+01	U
FH	53	431882002	8/14/2017	Cs-137	8.11E+00	4.39E+00	1.49E+01	U
FH	53	431882002	8/14/2017	Fe-59	-1.57E+01	1.23E+01	3.50E+01	U
FH	53	431882002	8/14/2017	I-131	1.67E-01	2.79E+01	9.42E+01	U
FH	53	431882002	8/14/2017	K-40	3.65E+03	2.82E+02	1.32E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
FH	53	431882002	8/14/2017	La-140	2.61E+01	1.83E+01	6.75E+01	U
FH	53	431882002	8/14/2017	Mn-54	-5.65E+00	4.84E+00	1.25E+01	U
FH	53	431882002	8/14/2017	Nb-95	5.94E+00	5.63E+00	1.91E+01	U
FH	53	431882002	8/14/2017	Pb-212	3.77E+00	1.23E+01	1.94E+01	U
FH	53	431882002	8/14/2017	Pb-214	0.00E+00	1.57E+01	2.61E+01	U
FH	53	431882002	8/14/2017	Ra-226	8.16E+00	1.56E+01	2.60E+01	U
FH	53	431882002	8/14/2017	Ru-103	-9.46E+00	5.06E+00	1.25E+01	U
FH	53	431882002	8/14/2017	Ru-106	-1.13E+01	3.06E+01	9.64E+01	U
FH	53	431882002	8/14/2017	Sb-124	-6.84E+00	6.95E+00	1.56E+01	U
FH	53	431882002	8/14/2017	Sb-125	-6.89E+00	1.18E+01	3.35E+01	U
FH	53	431882002	8/14/2017	Se-75	-2.35E+00	5.23E+00	1.75E+01	U
FH	53	431882002	8/14/2017	Th-228	3.77E+00	1.23E+01	1.94E+01	U
FH	53	431882002	8/14/2017	Th-230	8.16E+00	1.56E+01	2.60E+01	U
FH	53	431882002	8/14/2017	Tl-208	3.87E+00	4.93E+00	1.64E+01	U
FH	53	431882002	8/14/2017	Zn-65	-5.55E+00	9.32E+00	2.95E+01	U
FH	53	431882002	8/14/2017	Zr-95	1.44E+00	6.92E+00	2.29E+01	U
FH	53	438701002	11/22/2017	Ac-228	8.77E+00	9.86E+00	3.16E+01	U
FH	53	438701002	11/22/2017	Ag-108m	1.33E+00	1.50E+00	5.15E+00	U
FH	53	438701002	11/22/2017	Ag-110m	3.27E+00	3.07E+00	1.03E+01	U
FH	53	438701002	11/22/2017	Ba-140	1.63E+01	1.46E+01	4.99E+01	U
FH	53	438701002	11/22/2017	Be-7	-1.30E+01	1.64E+01	5.09E+01	U
FH	53	438701002	11/22/2017	Bi-214	1.23E+01	1.11E+01	1.93E+01	U
FH	53	438701002	11/22/2017	Ce-141	-6.83E+00	4.46E+00	1.11E+01	U
FH	53	438701002	11/22/2017	Ce-144	9.43E+00	1.24E+01	3.98E+01	U
FH	53	438701002	11/22/2017	Co-57	3.43E-02	1.54E+00	4.92E+00	U
FH	53	438701002	11/22/2017	Co-58	-3.47E+00	2.51E+00	6.79E+00	U
FH	53	438701002	11/22/2017	Co-60	7.88E-01	2.56E+00	7.81E+00	U
FH	53	438701002	11/22/2017	Cr-51	-3.93E+01	2.13E+01	5.91E+01	U
FH	53	438701002	11/22/2017	Cs-134	2.09E-01	1.98E+00	6.44E+00	U
FH	53	438701002	11/22/2017	Cs-137	1.91E+00	2.09E+00	7.08E+00	U
FH	53	438701002	11/22/2017	Fe-59	-8.54E-01	4.70E+00	1.57E+01	U
FH	53	438701002	11/22/2017	I-131	3.95E+00	5.61E+00	1.93E+01	U
FH	53	438701002	11/22/2017	K-40	3.31E+03	2.08E+02	5.48E+01	
FH	53	438701002	11/22/2017	La-140	-3.89E+00	4.21E+00	1.18E+01	U
FH	53	438701002	11/22/2017	Mn-54	-1.19E-01	2.30E+00	7.37E+00	U
FH	53	438701002	11/22/2017	Nb-95	-5.03E-01	2.40E+00	7.64E+00	U
FH	53	438701002	11/22/2017	Pb-212	1.38E+00	5.32E+00	1.22E+01	U
FH	53	438701002	11/22/2017	Pb-214	9.79E+00	8.18E+00	1.74E+01	U
FH	53	438701002	11/22/2017	Ra-226	1.23E+01	1.11E+01	1.93E+01	U
FH	53	438701002	11/22/2017	Ru-103	-2.12E+00	2.08E+00	6.24E+00	U
FH	53	438701002	11/22/2017	Ru-106	2.87E+00	1.73E+01	5.72E+01	U
FH	53	438701002	11/22/2017	Sb-124	1.28E+00	4.11E+00	1.41E+01	U
FH	53	438701002	11/22/2017	Sb-125	-4.08E+00	4.73E+00	1.47E+01	U
FH	53	438701002	11/22/2017	Se-75	-1.11E+00	2.42E+00	8.06E+00	U
FH	53	438701002	11/22/2017	Th-228	1.38E+00	5.32E+00	1.22E+01	U
FH	53	438701002	11/22/2017	Th-230	1.23E+01	1.11E+01	1.93E+01	U
FH	53	438701002	11/22/2017	Tl-208	-1.22E+00	2.28E+00	7.25E+00	U
FH	53	438701002	11/22/2017	Zn-65	-4.13E+00	5.15E+00	1.62E+01	U
FH	53	438701002	11/22/2017	Zr-95	-1.54E+00	3.55E+00	1.10E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
HA	04	424567001	5/30/2017	Ac-228	2.66E+00	1.39E+01	4.93E+01	U
HA	04	424567001	5/30/2017	Ag-108m	2.50E+00	2.88E+00	9.53E+00	U
HA	04	424567001	5/30/2017	Ag-110m	-1.10E+01	5.77E+00	1.45E+01	U
HA	04	424567001	5/30/2017	Ba-140	-4.21E+01	2.19E+01	5.23E+01	U
HA	04	424567001	5/30/2017	Be-7	-4.09E+01	2.92E+01	7.88E+01	U
HA	04	424567001	5/30/2017	Bi-214	6.63E+00	6.49E+00	2.26E+01	U
HA	04	424567001	5/30/2017	Ce-141	-9.33E+00	5.37E+00	1.32E+01	U
HA	04	424567001	5/30/2017	Ce-144	-2.61E+01	1.56E+01	4.32E+01	U
HA	04	424567001	5/30/2017	Co-57	-2.39E+00	2.01E+00	6.01E+00	U
HA	04	424567001	5/30/2017	Co-58	6.06E-01	4.11E+00	1.40E+01	U
HA	04	424567001	5/30/2017	Co-60	5.82E+00	4.27E+00	1.53E+01	U
HA	04	424567001	5/30/2017	Cr-51	-2.34E+01	2.92E+01	8.83E+01	U
HA	04	424567001	5/30/2017	Cs-134	2.71E+00	4.68E+00	1.44E+01	U
HA	04	424567001	5/30/2017	Cs-137	2.27E+00	3.83E+00	1.33E+01	U
HA	04	424567001	5/30/2017	Fe-59	-3.87E+00	9.03E+00	2.91E+01	U
HA	04	424567001	5/30/2017	I-131	1.10E+01	1.13E+01	2.09E+01	U
HA	04	424567001	5/30/2017	K-40	3.04E+03	2.11E+02	9.42E+01	
HA	04	424567001	5/30/2017	La-140	2.21E+00	6.20E+00	2.15E+01	U
HA	04	424567001	5/30/2017	Mn-54	-3.46E+00	4.19E+00	1.09E+01	U
HA	04	424567001	5/30/2017	Nb-95	4.65E+00	3.65E+00	1.28E+01	U
HA	04	424567001	5/30/2017	Pb-212	7.41E+00	6.53E+00	1.81E+01	U
HA	04	424567001	5/30/2017	Pb-214	1.93E+01	8.64E+00	2.65E+01	U
HA	04	424567001	5/30/2017	Ra-226	6.63E+00	6.49E+00	2.26E+01	U
HA	04	424567001	5/30/2017	Ru-103	-2.35E-01	3.56E+00	1.14E+01	U
HA	04	424567001	5/30/2017	Ru-106	-2.19E+01	2.76E+01	8.65E+01	U
HA	04	424567001	5/30/2017	Sb-124	7.33E+00	6.52E+00	2.50E+01	U
HA	04	424567001	5/30/2017	Sb-125	3.82E+00	8.21E+00	2.70E+01	U
HA	04	424567001	5/30/2017	Se-75	3.41E+00	3.52E+00	1.16E+01	U
HA	04	424567001	5/30/2017	Th-228	7.41E+00	6.53E+00	1.81E+01	U
HA	04	424567001	5/30/2017	Th-230	6.63E+00	6.49E+00	2.26E+01	U
HA	04	424567001	5/30/2017	Tl-208	-3.44E+00	4.51E+00	1.26E+01	U
HA	04	424567001	5/30/2017	Zn-65	-1.17E+01	1.00E+01	2.56E+01	U
HA	04	424567001	5/30/2017	Zr-95	4.24E+00	6.35E+00	2.21E+01	U
HA	04	438690001	11/22/2017	Ac-228	3.50E+01	2.66E+01	4.91E+01	U
HA	04	438690001	11/22/2017	Ag-108m	8.96E-01	2.69E+00	8.78E+00	U
HA	04	438690001	11/22/2017	Ag-110m	1.49E+00	3.86E+00	1.31E+01	U
HA	04	438690001	11/22/2017	Ba-140	8.06E+00	2.09E+01	6.76E+01	U
HA	04	438690001	11/22/2017	Be-7	-2.33E+01	2.89E+01	8.80E+01	U
HA	04	438690001	11/22/2017	Bi-214	5.79E+00	1.22E+01	2.71E+01	U
HA	04	438690001	11/22/2017	Ce-141	-1.31E+01	7.29E+00	1.78E+01	U
HA	04	438690001	11/22/2017	Ce-144	-2.39E+01	2.02E+01	5.64E+01	U
HA	04	438690001	11/22/2017	Co-57	-1.64E+00	2.52E+00	7.42E+00	U
HA	04	438690001	11/22/2017	Co-58	3.78E+00	2.73E+00	9.36E+00	U
HA	04	438690001	11/22/2017	Co-60	-7.22E-01	3.01E+00	9.62E+00	U
HA	04	438690001	11/22/2017	Cr-51	-5.46E+01	3.38E+01	9.59E+01	U
HA	04	438690001	11/22/2017	Cs-134	2.53E+00	3.58E+00	1.16E+01	U
HA	04	438690001	11/22/2017	Cs-137	3.19E+00	2.92E+00	1.00E+01	U
HA	04	438690001	11/22/2017	Fe-59	-4.32E+00	6.67E+00	2.09E+01	U
HA	04	438690001	11/22/2017	I-131	5.13E+00	9.02E+00	2.98E+01	U
HA	04	438690001	11/22/2017	K-40	2.09E+03	1.49E+02	9.40E+01	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
HA	04	438690001	11/22/2017	La-140	-9.25E+00	6.68E+00	1.75E+01	U
HA	04	438690001	11/22/2017	Mn-54	-1.21E+00	2.83E+00	9.24E+00	U
HA	04	438690001	11/22/2017	Nb-95	5.37E+00	3.41E+00	1.14E+01	U
HA	04	438690001	11/22/2017	Pb-212	1.25E+00	1.27E+01	2.10E+01	U
HA	04	438690001	11/22/2017	Pb-214	4.59E+00	1.11E+01	2.66E+01	U
HA	04	438690001	11/22/2017	Ra-226	5.79E+00	1.22E+01	2.71E+01	U
HA	04	438690001	11/22/2017	Ru-103	-4.29E+00	3.60E+00	1.05E+01	U
HA	04	438690001	11/22/2017	Ru-106	-3.05E+00	2.74E+01	8.62E+01	U
HA	04	438690001	11/22/2017	Sb-124	5.39E+00	6.54E+00	2.22E+01	U
HA	04	438690001	11/22/2017	Sb-125	1.46E+01	8.52E+00	2.72E+01	U
HA	04	438690001	11/22/2017	Se-75	-1.83E+00	3.80E+00	1.23E+01	U
HA	04	438690001	11/22/2017	Th-228	1.25E+00	1.27E+01	2.10E+01	U
HA	04	438690001	11/22/2017	Th-230	5.79E+00	1.22E+01	2.71E+01	U
HA	04	438690001	11/22/2017	Tl-208	-2.38E+00	4.47E+00	1.25E+01	U
HA	04	438690001	11/22/2017	Zn-65	6.84E+00	6.39E+00	2.17E+01	U
HA	04	438690001	11/22/2017	Zr-95	-4.56E-02	5.20E+00	1.75E+01	U
HA	54	424111001	5/18/2017	Ac-228	1.40E+01	2.93E+01	9.57E+01	U
HA	54	424111001	5/18/2017	Ag-108m	7.78E-01	6.16E+00	1.63E+01	U
HA	54	424111001	5/18/2017	Ag-110m	-3.29E+00	7.87E+00	2.37E+01	U
HA	54	424111001	5/18/2017	Ba-140	-7.25E+00	3.76E+01	1.23E+02	U
HA	54	424111001	5/18/2017	Be-7	-6.08E+01	4.10E+01	1.10E+02	U
HA	54	424111001	5/18/2017	Bi-214	1.24E+01	1.62E+01	4.74E+01	U
HA	54	424111001	5/18/2017	Ce-141	-2.37E+00	7.24E+00	2.34E+01	U
HA	54	424111001	5/18/2017	Ce-144	2.35E+00	2.31E+01	7.72E+01	U
HA	54	424111001	5/18/2017	Co-57	-2.31E-01	2.67E+00	8.88E+00	U
HA	54	424111001	5/18/2017	Co-58	-8.22E+00	5.67E+00	1.36E+01	U
HA	54	424111001	5/18/2017	Co-60	3.69E+00	4.03E+00	1.52E+01	U
HA	54	424111001	5/18/2017	Cr-51	-3.91E+01	5.40E+01	1.57E+02	U
HA	54	424111001	5/18/2017	Cs-134	1.47E+01	7.89E+00	2.68E+01	U
HA	54	424111001	5/18/2017	Cs-137	-4.34E-01	5.97E+00	1.73E+01	U
HA	54	424111001	5/18/2017	Fe-59	-1.62E+01	1.14E+01	2.86E+01	U
HA	54	424111001	5/18/2017	I-131	9.79E-01	1.35E+01	4.64E+01	U
HA	54	424111001	5/18/2017	K-40	1.65E+03	2.17E+02	1.96E+02	
HA	54	424111001	5/18/2017	La-140	-7.01E+00	1.12E+01	3.53E+01	U
HA	54	424111001	5/18/2017	Mn-54	-2.96E+00	5.82E+00	1.51E+01	U
HA	54	424111001	5/18/2017	Nb-95	4.05E+00	6.06E+00	2.06E+01	U
HA	54	424111001	5/18/2017	Pb-212	-1.87E+01	1.09E+01	2.96E+01	U
HA	54	424111001	5/18/2017	Pb-214	2.05E+00	1.21E+01	4.12E+01	U
HA	54	424111001	5/18/2017	Ra-226	1.24E+01	1.62E+01	4.74E+01	U
HA	54	424111001	5/18/2017	Ru-103	-1.30E+00	6.05E+00	1.77E+01	U
HA	54	424111001	5/18/2017	Ru-106	3.24E+01	4.82E+01	1.66E+02	U
HA	54	424111001	5/18/2017	Sb-124	3.38E+01	1.62E+01	6.20E+01	U
HA	54	424111001	5/18/2017	Sb-125	-1.40E+01	1.37E+01	4.17E+01	U
HA	54	424111001	5/18/2017	Se-75	-4.65E+00	6.89E+00	1.87E+01	U
HA	54	424111001	5/18/2017	Th-228	-1.87E+01	1.09E+01	2.96E+01	U
HA	54	424111001	5/18/2017	Th-230	1.24E+01	1.62E+01	4.74E+01	U
HA	54	424111001	5/18/2017	Tl-208	-1.21E+01	7.04E+00	1.78E+01	U
HA	54	424111001	5/18/2017	Zn-65	-8.30E+00	1.41E+01	4.43E+01	U
HA	54	424111001	5/18/2017	Zr-95	-1.76E+01	1.22E+01	3.12E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
HA	54	438690002	11/14/2017	Ac-228	1.85E+01	1.48E+01	4.11E+01	U
HA	54	438690002	11/14/2017	Ag-108m	-4.82E-01	1.63E+00	5.40E+00	U
HA	54	438690002	11/14/2017	Ag-110m	2.88E+00	3.20E+00	1.10E+01	U
HA	54	438690002	11/14/2017	Ba-140	3.87E+01	4.50E+01	6.34E+01	U
HA	54	438690002	11/14/2017	Be-7	-4.36E-01	2.02E+01	6.81E+01	U
HA	54	438690002	11/14/2017	Bi-214	2.22E+00	5.44E+00	1.82E+01	U
HA	54	438690002	11/14/2017	Ce-141	-4.02E+00	4.59E+00	1.38E+01	U
HA	54	438690002	11/14/2017	Ce-144	-6.87E+00	1.28E+01	3.98E+01	U
HA	54	438690002	11/14/2017	Co-57	2.24E+00	1.70E+00	5.53E+00	U
HA	54	438690002	11/14/2017	Co-58	-1.62E+00	2.21E+00	6.62E+00	U
HA	54	438690002	11/14/2017	Co-60	-4.45E-01	2.60E+00	8.70E+00	U
HA	54	438690002	11/14/2017	Cr-51	-4.83E+01	2.60E+01	7.16E+01	U
HA	54	438690002	11/14/2017	Cs-134	2.57E+00	2.40E+00	8.30E+00	U
HA	54	438690002	11/14/2017	Cs-137	0.00E+00	2.18E+00	4.89E+00	U
HA	54	438690002	11/14/2017	Fe-59	6.45E-01	5.65E+00	1.83E+01	U
HA	54	438690002	11/14/2017	I-131	-1.36E+00	1.26E+01	4.29E+01	U
HA	54	438690002	11/14/2017	K-40	2.16E+03	1.50E+02	6.23E+01	
HA	54	438690002	11/14/2017	La-140	5.08E+00	5.71E+00	2.14E+01	U
HA	54	438690002	11/14/2017	Mn-54	1.75E+00	2.26E+00	7.69E+00	U
HA	54	438690002	11/14/2017	Nb-95	-5.59E+00	3.99E+00	8.83E+00	U
HA	54	438690002	11/14/2017	Pb-212	8.04E+00	6.92E+00	8.73E+00	U
HA	54	438690002	11/14/2017	Pb-214	7.45E+00	7.81E+00	1.79E+01	U
HA	54	438690002	11/14/2017	Ra-226	2.22E+00	5.44E+00	1.82E+01	U
HA	54	438690002	11/14/2017	Ru-103	-1.94E+00	2.40E+00	7.45E+00	U
HA	54	438690002	11/14/2017	Ru-106	-3.45E+01	2.08E+01	5.54E+01	U
HA	54	438690002	11/14/2017	Sb-124	-8.83E+00	4.72E+00	7.41E+00	U
HA	54	438690002	11/14/2017	Sb-125	-4.24E+00	4.79E+00	1.49E+01	U
HA	54	438690002	11/14/2017	Se-75	-1.49E+00	2.82E+00	8.46E+00	U
HA	54	438690002	11/14/2017	Th-228	8.04E+00	6.92E+00	8.73E+00	U
HA	54	438690002	11/14/2017	Th-230	2.22E+00	5.44E+00	1.82E+01	U
HA	54	438690002	11/14/2017	Tl-208	-3.85E+00	2.67E+00	7.30E+00	U
HA	54	438690002	11/14/2017	Zn-65	-3.00E+00	5.74E+00	1.64E+01	U
HA	54	438690002	11/14/2017	Zr-95	-1.09E+01	5.05E+00	1.10E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
MU	06	424571001	5/16/2017	Ac-228	1.92E+01	1.30E+01	3.40E+01	U
MU	06	424571001	5/16/2017	Ag-108m	2.54E+00	1.82E+00	6.25E+00	U
MU	06	424571001	5/16/2017	Ag-110m	2.04E-01	2.43E+00	8.25E+00	U
MU	06	424571001	5/16/2017	Ba-140	-8.86E+00	2.04E+01	6.34E+01	U
MU	06	424571001	5/16/2017	Be-7	3.86E+01	2.89E+01	6.23E+01	U
MU	06	424571001	5/16/2017	Bi-214	5.26E+00	8.16E+00	1.73E+01	U
MU	06	424571001	5/16/2017	Ce-141	-5.46E-01	3.75E+00	1.18E+01	U
MU	06	424571001	5/16/2017	Ce-144	2.77E+00	1.11E+01	3.57E+01	U
MU	06	424571001	5/16/2017	Co-57	-1.70E-01	1.35E+00	4.29E+00	U
MU	06	424571001	5/16/2017	Co-58	3.39E-01	2.17E+00	7.45E+00	U
MU	06	424571001	5/16/2017	Co-60	-6.58E-01	1.94E+00	6.02E+00	U
MU	06	424571001	5/16/2017	Cr-51	3.85E+01	2.82E+01	8.94E+01	U
MU	06	424571001	5/16/2017	Cs-134	-3.60E-01	2.02E+00	6.75E+00	U
MU	06	424571001	5/16/2017	Cs-137	-1.10E+00	2.15E+00	6.50E+00	U
MU	06	424571001	5/16/2017	Fe-59	-5.64E+00	5.87E+00	1.71E+01	U
MU	06	424571001	5/16/2017	I-131	4.63E+00	1.21E+01	4.11E+01	U
MU	06	424571001	5/16/2017	K-40	9.94E+02	8.36E+01	5.11E+01	
MU	06	424571001	5/16/2017	La-140	-8.24E+00	8.09E+00	2.08E+01	U
MU	06	424571001	5/16/2017	Mn-54	1.29E+00	1.80E+00	6.40E+00	U
MU	06	424571001	5/16/2017	Nb-95	-2.94E+00	2.66E+00	7.19E+00	U
MU	06	424571001	5/16/2017	Pb-212	-1.06E+01	4.73E+00	1.14E+01	U
MU	06	424571001	5/16/2017	Pb-214	2.18E+00	4.58E+00	1.48E+01	U
MU	06	424571001	5/16/2017	Ra-226	5.26E+00	8.16E+00	1.73E+01	U
MU	06	424571001	5/16/2017	Ru-103	-6.58E-01	2.41E+00	7.69E+00	U
MU	06	424571001	5/16/2017	Ru-106	2.22E+01	1.54E+01	5.41E+01	U
MU	06	424571001	5/16/2017	Sb-124	-4.40E+00	4.79E+00	1.16E+01	U
MU	06	424571001	5/16/2017	Sb-125	-3.94E-01	4.67E+00	1.54E+01	U
MU	06	424571001	5/16/2017	Se-75	1.88E+00	2.37E+00	8.26E+00	U
MU	06	424571001	5/16/2017	Th-228	-1.06E+01	4.73E+00	1.14E+01	U
MU	06	424571001	5/16/2017	Th-230	5.26E+00	8.16E+00	1.73E+01	U
MU	06	424571001	5/16/2017	Tl-208	1.02E+00	2.58E+00	8.10E+00	U
MU	06	424571001	5/16/2017	Zn-65	-4.77E+00	6.35E+00	1.65E+01	U
MU	06	424571001	5/16/2017	Zr-95	6.73E+00	4.28E+00	1.49E+01	U
MU	06	438729001	11/22/2017	Ac-228	1.55E+01	1.48E+01	4.32E+01	U
MU	06	438729001	11/22/2017	Ag-108m	-1.48E+00	1.85E+00	5.53E+00	U
MU	06	438729001	11/22/2017	Ag-110m	3.57E-01	3.49E+00	1.04E+01	U
MU	06	438729001	11/22/2017	Ba-140	2.21E+01	2.18E+01	6.05E+01	U
MU	06	438729001	11/22/2017	Be-7	6.90E+00	2.40E+01	7.92E+01	U
MU	06	438729001	11/22/2017	Bi-214	5.23E-01	5.53E+00	1.74E+01	U
MU	06	438729001	11/22/2017	Ce-141	1.76E+00	6.46E+00	1.20E+01	U
MU	06	438729001	11/22/2017	Ce-144	-1.30E+01	1.48E+01	4.29E+01	U
MU	06	438729001	11/22/2017	Co-57	-8.74E-01	1.79E+00	5.44E+00	U
MU	06	438729001	11/22/2017	Co-58	-8.91E-02	1.86E+00	6.23E+00	U
MU	06	438729001	11/22/2017	Co-60	-1.71E+00	2.51E+00	7.14E+00	U
MU	06	438729001	11/22/2017	Cr-51	-3.96E+01	2.61E+01	7.26E+01	U
MU	06	438729001	11/22/2017	Cs-134	2.46E+00	2.27E+00	8.21E+00	U
MU	06	438729001	11/22/2017	Cs-137	-1.48E+00	2.51E+00	7.40E+00	U
MU	06	438729001	11/22/2017	Fe-59	6.16E+00	5.42E+00	1.95E+01	U
MU	06	438729001	11/22/2017	I-131	-5.73E+00	6.74E+00	2.04E+01	U
MU	06	438729001	11/22/2017	K-40	7.75E+02	9.57E+01	5.82E+01	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
MU	06	438729001	11/22/2017	La-140	-1.20E+01	7.07E+00	1.62E+01	U
MU	06	438729001	11/22/2017	Mn-54	-2.13E+00	2.04E+00	5.82E+00	U
MU	06	438729001	11/22/2017	Nb-95	0.00E+00	3.34E+00	0.00E+00	UI
MU	06	438729001	11/22/2017	Pb-212	2.24E+00	6.82E+00	1.06E+01	U
MU	06	438729001	11/22/2017	Pb-214	1.58E+00	6.11E+00	1.93E+01	U
MU	06	438729001	11/22/2017	Ra-226	5.23E-01	5.53E+00	1.74E+01	U
MU	06	438729001	11/22/2017	Ru-103	1.28E+00	2.55E+00	8.56E+00	U
MU	06	438729001	11/22/2017	Ru-106	-1.44E+01	2.13E+01	6.24E+01	U
MU	06	438729001	11/22/2017	Sb-124	9.97E+00	6.25E+00	2.42E+01	U
MU	06	438729001	11/22/2017	Sb-125	-5.01E-01	6.10E+00	1.98E+01	U
MU	06	438729001	11/22/2017	Se-75	4.12E+00	2.88E+00	9.90E+00	U
MU	06	438729001	11/22/2017	Th-228	2.24E+00	6.82E+00	1.06E+01	U
MU	06	438729001	11/22/2017	Th-230	5.23E-01	5.53E+00	1.74E+01	U
MU	06	438729001	11/22/2017	Tl-208	-6.89E+00	3.39E+00	8.44E+00	U
MU	06	438729001	11/22/2017	Zn-65	-2.94E+00	5.12E+00	1.55E+01	U
MU	06	438729001	11/22/2017	Zr-95	4.35E+00	3.99E+00	1.42E+01	U
MU	09	424068001	5/15/2017	Ac-228	6.44E+00	1.02E+01	3.61E+01	U
MU	09	424068001	5/15/2017	Ag-108m	-1.13E-01	1.57E+00	5.17E+00	U
MU	09	424068001	5/15/2017	Ag-110m	-1.32E+00	2.64E+00	8.41E+00	U
MU	09	424068001	5/15/2017	Ba-140	-9.10E+00	1.43E+01	4.33E+01	U
MU	09	424068001	5/15/2017	Be-7	1.07E+02	4.38E+01	4.93E+01	
MU	09	424068001	5/15/2017	Bi-214	3.69E+00	5.17E+00	1.59E+01	U
MU	09	424068001	5/15/2017	Ce-141	-2.11E+00	3.54E+00	1.08E+01	U
MU	09	424068001	5/15/2017	Ce-144	-7.14E-01	8.94E+00	2.84E+01	U
MU	09	424068001	5/15/2017	Co-57	-8.73E-01	1.39E+00	4.26E+00	U
MU	09	424068001	5/15/2017	Co-58	-1.73E+00	1.92E+00	5.79E+00	U
MU	09	424068001	5/15/2017	Co-60	3.63E-02	2.29E+00	7.51E+00	U
MU	09	424068001	5/15/2017	Cr-51	-1.64E+01	2.00E+01	6.28E+01	U
MU	09	424068001	5/15/2017	Cs-134	-4.97E+00	2.70E+00	6.28E+00	U
MU	09	424068001	5/15/2017	Cs-137	2.34E+00	2.75E+00	5.59E+00	U
MU	09	424068001	5/15/2017	Fe-59	3.86E-01	4.90E+00	1.64E+01	U
MU	09	424068001	5/15/2017	I-131	2.12E+01	8.35E+00	2.67E+01	U
MU	09	424068001	5/15/2017	K-40	1.27E+03	9.26E+01	4.43E+01	
MU	09	424068001	5/15/2017	La-140	5.46E+00	5.12E+00	1.87E+01	U
MU	09	424068001	5/15/2017	Mn-54	5.88E-01	2.54E+00	7.77E+00	U
MU	09	424068001	5/15/2017	Nb-95	0.00E+00	3.65E+00	6.01E+00	U
MU	09	424068001	5/15/2017	Pb-212	0.00E+00	7.81E+00	1.28E+01	U
MU	09	424068001	5/15/2017	Pb-214	1.71E+01	8.86E+00	1.76E+01	U
MU	09	424068001	5/15/2017	Ra-226	3.69E+00	5.17E+00	1.59E+01	U
MU	09	424068001	5/15/2017	Ru-103	1.67E+00	2.34E+00	7.95E+00	U
MU	09	424068001	5/15/2017	Ru-106	-1.87E+01	1.95E+01	5.60E+01	U
MU	09	424068001	5/15/2017	Sb-124	-7.52E+00	4.74E+00	7.60E+00	U
MU	09	424068001	5/15/2017	Sb-125	3.20E+00	4.55E+00	1.57E+01	U
MU	09	424068001	5/15/2017	Se-75	3.89E-01	2.23E+00	7.67E+00	U
MU	09	424068001	5/15/2017	Th-228	0.00E+00	7.81E+00	1.28E+01	U
MU	09	424068001	5/15/2017	Th-230	3.69E+00	5.17E+00	1.59E+01	U
MU	09	424068001	5/15/2017	Tl-208	-1.32E+00	2.53E+00	8.03E+00	U
MU	09	424068001	5/15/2017	Zn-65	-2.72E+00	4.81E+00	1.49E+01	U
MU	09	424068001	5/15/2017	Zr-95	1.62E+00	4.94E+00	1.50E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
MU	09	438688001	11/13/2017	Ac-228	1.28E+01	2.64E+01	7.62E+01	U
MU	09	438688001	11/13/2017	Ag-108m	-5.50E+00	3.33E+00	8.91E+00	U
MU	09	438688001	11/13/2017	Ag-110m	-9.02E+00	6.47E+00	1.57E+01	U
MU	09	438688001	11/13/2017	Ba-140	4.10E+01	4.99E+01	1.75E+02	U
MU	09	438688001	11/13/2017	Be-7	-1.16E+01	4.40E+01	1.46E+02	U
MU	09	438688001	11/13/2017	Bi-214	3.32E+00	1.16E+01	3.86E+01	U
MU	09	438688001	11/13/2017	Ce-141	-1.00E+01	8.56E+00	2.43E+01	U
MU	09	438688001	11/13/2017	Ce-144	1.41E+01	2.15E+01	7.34E+01	U
MU	09	438688001	11/13/2017	Co-57	2.19E+00	2.68E+00	9.19E+00	U
MU	09	438688001	11/13/2017	Co-58	3.82E+00	5.67E+00	1.93E+01	U
MU	09	438688001	11/13/2017	Co-60	2.77E+00	4.43E+00	1.58E+01	U
MU	09	438688001	11/13/2017	Cr-51	-1.21E+02	6.31E+01	1.47E+02	U
MU	09	438688001	11/13/2017	Cs-134	-1.17E+00	4.96E+00	1.56E+01	U
MU	09	438688001	11/13/2017	Cs-137	-2.85E+00	4.76E+00	1.47E+01	U
MU	09	438688001	11/13/2017	Fe-59	9.50E+00	1.27E+01	4.53E+01	U
MU	09	438688001	11/13/2017	I-131	2.14E+01	2.45E+01	8.09E+01	U
MU	09	438688001	11/13/2017	K-40	1.14E+03	1.57E+02	1.85E+02	
MU	09	438688001	11/13/2017	La-140	1.54E+01	1.67E+01	6.13E+01	U
MU	09	438688001	11/13/2017	Mn-54	-1.35E+00	4.17E+00	1.29E+01	U
MU	09	438688001	11/13/2017	Nb-95	-5.15E+00	6.90E+00	1.78E+01	U
MU	09	438688001	11/13/2017	Pb-212	1.48E+01	1.10E+01	2.95E+01	U
MU	09	438688001	11/13/2017	Pb-214	1.65E+01	1.36E+01	3.64E+01	U
MU	09	438688001	11/13/2017	Ra-226	3.32E+00	1.16E+01	3.86E+01	U
MU	09	438688001	11/13/2017	Ru-103	-1.08E+01	6.38E+00	1.51E+01	U
MU	09	438688001	11/13/2017	Ru-106	-3.43E+01	3.79E+01	1.11E+02	U
MU	09	438688001	11/13/2017	Sb-124	2.32E+01	1.67E+01	6.09E+01	U
MU	09	438688001	11/13/2017	Sb-125	-4.25E+00	1.06E+01	3.51E+01	U
MU	09	438688001	11/13/2017	Se-75	-2.82E+00	5.42E+00	1.66E+01	U
MU	09	438688001	11/13/2017	Th-228	1.48E+01	1.10E+01	2.95E+01	U
MU	09	438688001	11/13/2017	Th-230	3.32E+00	1.16E+01	3.86E+01	U
MU	09	438688001	11/13/2017	Tl-208	4.02E+00	6.46E+00	1.49E+01	U
MU	09	438688001	11/13/2017	Zn-65	-1.22E+01	1.18E+01	3.44E+01	U
MU	09	438688001	11/13/2017	Zr-95	-8.08E+00	1.04E+01	3.06E+01	U
MU	56	424088002	5/16/2017	Ac-228	1.48E+00	1.02E+01	1.10E+01	U
MU	56	424088002	5/16/2017	Ag-108m	-4.08E-01	7.31E-01	2.35E+00	U
MU	56	424088002	5/16/2017	Ag-110m	2.99E+00	2.40E+00	4.40E+00	U
MU	56	424088002	5/16/2017	Ba-140	2.10E+01	8.01E+00	2.36E+01	U
MU	56	424088002	5/16/2017	Be-7	3.06E+01	1.26E+01	2.56E+01	
MU	56	424088002	5/16/2017	Bi-214	3.74E+00	4.49E+00	7.65E+00	U
MU	56	424088002	5/16/2017	Ce-141	2.09E+00	1.75E+00	5.03E+00	U
MU	56	424088002	5/16/2017	Ce-144	-4.98E+00	5.49E+00	1.64E+01	U
MU	56	424088002	5/16/2017	Co-57	-6.64E-01	7.56E-01	2.08E+00	U
MU	56	424088002	5/16/2017	Co-58	3.28E-01	9.58E-01	3.11E+00	U
MU	56	424088002	5/16/2017	Co-60	2.16E+00	1.19E+00	3.94E+00	U
MU	56	424088002	5/16/2017	Cr-51	-1.17E+01	9.71E+00	3.02E+01	U
MU	56	424088002	5/16/2017	Cs-134	-5.72E-01	1.08E+00	3.33E+00	U
MU	56	424088002	5/16/2017	Cs-137	7.42E-01	9.53E-01	3.14E+00	U
MU	56	424088002	5/16/2017	Fe-59	-2.24E+00	2.22E+00	6.92E+00	U
MU	56	424088002	5/16/2017	I-131	2.69E+00	2.82E+00	9.45E+00	U
MU	56	424088002	5/16/2017	K-40	1.29E+03	5.60E+01	2.86E+01	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
MU	56	424088002	5/16/2017	La-140	-1.32E+00	2.16E+00	6.71E+00	U
MU	56	424088002	5/16/2017	Mn-54	3.26E-01	8.99E-01	2.91E+00	U
MU	56	424088002	5/16/2017	Nb-95	1.13E+00	1.13E+00	3.67E+00	U
MU	56	424088002	5/16/2017	Pb-212	4.43E+00	2.51E+00	4.66E+00	U
MU	56	424088002	5/16/2017	Pb-214	4.02E+00	3.78E+00	6.97E+00	U
MU	56	424088002	5/16/2017	Ra-226	3.74E+00	4.49E+00	7.65E+00	U
MU	56	424088002	5/16/2017	Ru-103	3.13E-01	1.03E+00	3.40E+00	U
MU	56	424088002	5/16/2017	Ru-106	3.59E+00	7.79E+00	2.57E+01	U
MU	56	424088002	5/16/2017	Sb-124	5.84E-01	2.37E+00	7.90E+00	U
MU	56	424088002	5/16/2017	Sb-125	4.56E+00	2.50E+00	8.03E+00	U
MU	56	424088002	5/16/2017	Se-75	2.46E-01	1.10E+00	3.73E+00	U
MU	56	424088002	5/16/2017	Th-228	4.43E+00	2.51E+00	4.66E+00	U
MU	56	424088002	5/16/2017	Th-230	3.74E+00	4.49E+00	7.65E+00	U
MU	56	424088002	5/16/2017	Tl-208	5.36E+00	2.03E+00	2.74E+00	
MU	56	424088002	5/16/2017	Zn-65	1.24E+00	2.10E+00	7.19E+00	U
MU	56	424088002	5/16/2017	Zr-95	-1.33E+00	1.84E+00	5.61E+00	U
MU	56	438729002	11/22/2017	Ac-228	5.84E+00	1.18E+01	3.01E+01	U
MU	56	438729002	11/22/2017	Ag-108m	-1.41E+00	2.39E+00	7.20E+00	U
MU	56	438729002	11/22/2017	Ag-110m	4.98E+00	4.07E+00	1.41E+01	U
MU	56	438729002	11/22/2017	Ba-140	4.38E+01	4.59E+01	6.75E+01	U
MU	56	438729002	11/22/2017	Be-7	-2.14E+01	2.63E+01	8.10E+01	U
MU	56	438729002	11/22/2017	Bi-214	-7.90E+00	6.85E+00	2.19E+01	U
MU	56	438729002	11/22/2017	Ce-141	2.50E+00	5.16E+00	1.67E+01	U
MU	56	438729002	11/22/2017	Ce-144	2.84E+00	1.63E+01	5.27E+01	U
MU	56	438729002	11/22/2017	Co-57	2.04E+00	2.26E+00	7.40E+00	U
MU	56	438729002	11/22/2017	Co-58	2.90E-01	1.99E+00	6.55E+00	U
MU	56	438729002	11/22/2017	Co-60	-9.89E-01	3.13E+00	1.00E+01	U
MU	56	438729002	11/22/2017	Cr-51	-1.02E+01	2.81E+01	9.35E+01	U
MU	56	438729002	11/22/2017	Cs-134	3.35E+00	3.20E+00	1.11E+01	U
MU	56	438729002	11/22/2017	Cs-137	-2.29E-01	2.65E+00	8.57E+00	U
MU	56	438729002	11/22/2017	Fe-59	1.10E+00	5.21E+00	1.81E+01	U
MU	56	438729002	11/22/2017	I-131	0.00E+00	1.82E+01	2.43E+01	U
MU	56	438729002	11/22/2017	K-40	1.41E+03	1.44E+02	8.24E+01	
MU	56	438729002	11/22/2017	La-140	3.27E+00	7.58E+00	2.63E+01	U
MU	56	438729002	11/22/2017	Mn-54	4.18E+00	2.53E+00	9.02E+00	U
MU	56	438729002	11/22/2017	Nb-95	-1.01E+00	3.12E+00	9.75E+00	U
MU	56	438729002	11/22/2017	Pb-212	2.08E+00	1.11E+01	2.05E+01	U
MU	56	438729002	11/22/2017	Pb-214	1.09E+01	1.07E+01	2.50E+01	U
MU	56	438729002	11/22/2017	Ra-226	-7.90E+00	6.85E+00	2.19E+01	U
MU	56	438729002	11/22/2017	Ru-103	6.33E+00	4.33E+00	8.71E+00	U
MU	56	438729002	11/22/2017	Ru-106	1.38E+01	2.35E+01	8.02E+01	U
MU	56	438729002	11/22/2017	Sb-124	-2.03E+00	5.36E+00	1.60E+01	U
MU	56	438729002	11/22/2017	Sb-125	3.43E+00	6.39E+00	2.21E+01	U
MU	56	438729002	11/22/2017	Se-75	-1.68E+00	3.51E+00	1.17E+01	U
MU	56	438729002	11/22/2017	Th-228	2.08E+00	1.11E+01	2.05E+01	U
MU	56	438729002	11/22/2017	Th-230	-7.90E+00	6.85E+00	2.19E+01	U
MU	56	438729002	11/22/2017	Tl-208	7.88E+00	5.50E+00	8.39E+00	U
MU	56	438729002	11/22/2017	Zn-65	-7.45E+00	6.31E+00	1.40E+01	U
MU	56	438729002	11/22/2017	Zr-95	-1.75E+00	4.80E+00	1.48E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
MU	59	424068002	5/15/2017	Ac-228	3.72E+00	1.08E+01	3.09E+01	U
MU	59	424068002	5/15/2017	Ag-108m	1.32E+00	2.09E+00	6.39E+00	U
MU	59	424068002	5/15/2017	Ag-110m	1.16E+00	3.81E+00	1.15E+01	U
MU	59	424068002	5/15/2017	Ba-140	1.03E+01	1.69E+01	5.68E+01	U
MU	59	424068002	5/15/2017	Be-7	2.56E+01	4.72E+01	7.22E+01	U
MU	59	424068002	5/15/2017	Bi-214	-3.35E+00	6.20E+00	1.79E+01	U
MU	59	424068002	5/15/2017	Ce-141	-5.68E+00	4.86E+00	1.31E+01	U
MU	59	424068002	5/15/2017	Ce-144	-6.23E+00	1.33E+01	4.06E+01	U
MU	59	424068002	5/15/2017	Co-57	-8.04E-02	1.81E+00	5.73E+00	U
MU	59	424068002	5/15/2017	Co-58	3.92E+00	2.69E+00	9.58E+00	U
MU	59	424068002	5/15/2017	Co-60	-2.89E+00	2.81E+00	7.57E+00	U
MU	59	424068002	5/15/2017	Cr-51	-1.37E+01	2.53E+01	8.11E+01	U
MU	59	424068002	5/15/2017	Cs-134	-1.59E+00	2.66E+00	8.51E+00	U
MU	59	424068002	5/15/2017	Cs-137	6.20E+00	3.05E+00	1.05E+01	U
MU	59	424068002	5/15/2017	Fe-59	5.32E+00	7.30E+00	2.50E+01	U
MU	59	424068002	5/15/2017	I-131	-6.60E+00	8.46E+00	2.61E+01	U
MU	59	424068002	5/15/2017	K-40	1.62E+03	1.16E+02	7.59E+01	
MU	59	424068002	5/15/2017	La-140	4.36E-01	6.24E+00	2.11E+01	U
MU	59	424068002	5/15/2017	Mn-54	-3.01E+00	2.38E+00	6.64E+00	U
MU	59	424068002	5/15/2017	Nb-95	-2.94E+00	2.93E+00	8.81E+00	U
MU	59	424068002	5/15/2017	Pb-212	0.00E+00	9.87E+00	1.54E+01	U
MU	59	424068002	5/15/2017	Pb-214	-3.02E+00	5.79E+00	1.70E+01	U
MU	59	424068002	5/15/2017	Ra-226	-3.35E+00	6.20E+00	1.79E+01	U
MU	59	424068002	5/15/2017	Ru-103	5.49E-01	2.31E+00	7.63E+00	U
MU	59	424068002	5/15/2017	Ru-106	-4.10E+01	2.61E+01	6.56E+01	U
MU	59	424068002	5/15/2017	Sb-124	-2.75E+00	5.20E+00	1.56E+01	U
MU	59	424068002	5/15/2017	Sb-125	-3.76E+00	7.00E+00	1.83E+01	U
MU	59	424068002	5/15/2017	Se-75	1.93E+00	2.60E+00	8.97E+00	U
MU	59	424068002	5/15/2017	Th-228	0.00E+00	9.87E+00	1.54E+01	U
MU	59	424068002	5/15/2017	Th-230	-3.35E+00	6.20E+00	1.79E+01	U
MU	59	424068002	5/15/2017	Tl-208	-8.49E-01	2.84E+00	8.70E+00	U
MU	59	424068002	5/15/2017	Zn-65	-6.24E+00	5.43E+00	1.48E+01	U
MU	59	424068002	5/15/2017	Zr-95	-1.13E+00	3.75E+00	1.22E+01	U
MU	59	438688002	11/13/2017	Ac-228	4.72E+00	2.42E+01	8.06E+01	U
MU	59	438688002	11/13/2017	Ag-108m	1.76E+00	4.47E+00	1.36E+01	U
MU	59	438688002	11/13/2017	Ag-110m	-7.05E+00	6.49E+00	1.90E+01	U
MU	59	438688002	11/13/2017	Ba-140	6.92E+01	1.02E+02	2.10E+02	U
MU	59	438688002	11/13/2017	Be-7	3.38E+01	5.49E+01	1.85E+02	U
MU	59	438688002	11/13/2017	Bi-214	-2.62E+01	1.31E+01	3.41E+01	U
MU	59	438688002	11/13/2017	Ce-141	1.59E+01	1.66E+01	2.46E+01	U
MU	59	438688002	11/13/2017	Ce-144	3.10E+00	2.55E+01	8.19E+01	U
MU	59	438688002	11/13/2017	Co-57	1.92E-01	2.94E+00	9.48E+00	U
MU	59	438688002	11/13/2017	Co-58	-1.43E+00	4.78E+00	1.37E+01	U
MU	59	438688002	11/13/2017	Co-60	-8.23E-02	4.85E+00	1.58E+01	U
MU	59	438688002	11/13/2017	Cr-51	2.73E+01	5.96E+01	2.04E+02	U
MU	59	438688002	11/13/2017	Cs-134	-4.40E-01	4.02E+00	1.35E+01	U
MU	59	438688002	11/13/2017	Cs-137	-2.09E+00	4.85E+00	1.49E+01	U
MU	59	438688002	11/13/2017	Fe-59	1.29E+01	1.23E+01	4.34E+01	U
MU	59	438688002	11/13/2017	I-131	-9.15E+00	2.98E+01	9.76E+01	U
MU	59	438688002	11/13/2017	K-40	1.17E+03	1.48E+02	1.51E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/m^3)	STD.DEV. (pCi/m^3)	MDC (pCi/m^3)	FLAGS
MU	59	438688002	11/13/2017	La-140	-2.45E+01	2.03E+01	5.12E+01	U
MU	59	438688002	11/13/2017	Mn-54	-3.00E+00	5.24E+00	1.69E+01	U
MU	59	438688002	11/13/2017	Nb-95	1.36E+00	5.90E+00	1.91E+01	U
MU	59	438688002	11/13/2017	Pb-212	0.00E+00	2.26E+01	3.47E+01	U
MU	59	438688002	11/13/2017	Pb-214	1.93E+01	1.41E+01	3.74E+01	U
MU	59	438688002	11/13/2017	Ra-226	-2.62E+01	1.31E+01	3.41E+01	U
MU	59	438688002	11/13/2017	Ru-103	-2.36E+00	5.64E+00	1.78E+01	U
MU	59	438688002	11/13/2017	Ru-106	4.30E+01	4.81E+01	1.61E+02	U
MU	59	438688002	11/13/2017	Sb-124	1.30E+01	1.38E+01	5.03E+01	U
MU	59	438688002	11/13/2017	Sb-125	1.14E+01	1.22E+01	3.82E+01	U
MU	59	438688002	11/13/2017	Se-75	-5.46E+00	6.82E+00	1.95E+01	U
MU	59	438688002	11/13/2017	Th-228	0.00E+00	2.26E+01	3.47E+01	U
MU	59	438688002	11/13/2017	Th-230	-2.62E+01	1.31E+01	3.41E+01	U
MU	59	438688002	11/13/2017	Tl-208	4.19E+00	7.86E+00	1.49E+01	U
MU	59	438688002	11/13/2017	Zn-65	1.90E+01	1.21E+01	3.34E+01	U
MU	59	438688002	11/13/2017	Zr-95	1.93E+01	1.04E+01	3.53E+01	U
MS	06	424088004	5/16/2017	Sr-89	-4.57E+02	8.79E+01	2.66E+02	U
MS	06	424088004	5/16/2017	Sr-90	-1.49E+02	6.68E+01	2.54E+02	U
MS	06	438729004	11/22/2017	Sr-89	4.58E+01	8.99E+01	1.86E+02	U
MS	06	438729004	11/22/2017	Sr-90	3.21E+01	8.22E+01	2.62E+02	U
MS	56	424088005	5/16/2017	Sr-89	-2.99E+02	1.04E+02	2.27E+02	U
MS	56	424088005	5/16/2017	Sr-90	1.17E+02	8.65E+01	2.58E+02	U
MS	56	438729005	11/22/2017	Sr-89	-3.11E+02	6.26E+01	1.48E+02	U
MS	56	438729005	11/22/2017	Sr-90	-1.57E+02	5.97E+01	2.52E+02	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	02	424060001	5/16/2017	Ac-228	4.53E+02	1.24E+02	1.30E+02	
SE	02	424060001	5/16/2017	Ag-108m	7.61E+00	1.05E+01	3.72E+01	U
SE	02	424060001	5/16/2017	Ag-110m	4.16E+01	3.15E+01	7.20E+01	U
SE	02	424060001	5/16/2017	Ba-140	-1.92E+02	2.39E+02	7.37E+02	U
SE	02	424060001	5/16/2017	Be-7	-1.86E+02	1.24E+02	3.35E+02	U
SE	02	424060001	5/16/2017	Bi-214	4.95E+02	6.34E+01	7.89E+01	
SE	02	424060001	5/16/2017	Ce-141	1.22E+01	2.77E+01	9.65E+01	U
SE	02	424060001	5/16/2017	Ce-144	3.53E+01	7.31E+01	2.37E+02	U
SE	02	424060001	5/16/2017	Co-57	1.26E+01	8.33E+00	2.92E+01	U
SE	02	424060001	5/16/2017	Co-58	-7.18E+00	1.36E+01	4.05E+01	U
SE	02	424060001	5/16/2017	Co-60	-4.49E-01	1.39E+01	4.58E+01	U
SE	02	424060001	5/16/2017	Cr-51	-3.68E+01	1.98E+02	6.94E+02	U
SE	02	424060001	5/16/2017	Cs-134	5.44E+01	2.13E+01	7.11E+01	U
SE	02	424060001	5/16/2017	Cs-137	-1.19E+00	1.16E+01	3.80E+01	U
SE	02	424060001	5/16/2017	Fe-59	-5.59E+01	3.67E+01	9.18E+01	U
SE	02	424060001	5/16/2017	I-131	-2.06E+02	1.82E+02	5.65E+02	U
SE	02	424060001	5/16/2017	K-40	1.20E+04	7.15E+02	3.83E+02	
SE	02	424060001	5/16/2017	La-140	-9.84E+01	8.31E+01	2.25E+02	U
SE	02	424060001	5/16/2017	Mn-54	-9.24E+00	1.14E+01	3.58E+01	U
SE	02	424060001	5/16/2017	Nb-95	-6.77E+00	2.02E+01	6.39E+01	U
SE	02	424060001	5/16/2017	Pb-212	7.09E+02	5.27E+01	6.44E+01	
SE	02	424060001	5/16/2017	Pb-214	0.00E+00	8.47E+01	2.21E+02	U
SE	02	424060001	5/16/2017	Ra-226	4.95E+02	6.34E+01	7.89E+01	
SE	02	424060001	5/16/2017	Ru-103	-5.88E+00	1.89E+01	6.26E+01	U
SE	02	424060001	5/16/2017	Ru-106	-6.24E+01	1.10E+02	3.45E+02	U
SE	02	424060001	5/16/2017	Sb-124	1.99E+01	3.64E+01	1.27E+02	U
SE	02	424060001	5/16/2017	Sb-125	1.23E+01	3.30E+01	1.16E+02	U
SE	02	424060001	5/16/2017	Se-75	-1.31E+01	1.73E+01	5.25E+01	U
SE	02	424060001	5/16/2017	Th-228	7.09E+02	5.27E+01	6.44E+01	
SE	02	424060001	5/16/2017	Th-230	4.95E+02	6.34E+01	7.89E+01	
SE	02	424060001	5/16/2017	Tl-208	2.45E+02	3.23E+01	3.70E+01	
SE	02	424060001	5/16/2017	Zn-65	3.49E+01	3.55E+01	1.15E+02	U
SE	02	424060001	5/16/2017	Zr-95	4.50E+01	2.97E+01	9.99E+01	U
SE	02	438689001	11/22/2017	Ac-228	1.03E+03	1.40E+02	1.76E+02	
SE	02	438689001	11/22/2017	Ag-108m	4.89E+00	8.86E+00	3.26E+01	U
SE	02	438689001	11/22/2017	Ag-110m	3.55E+01	2.19E+01	7.54E+01	U
SE	02	438689001	11/22/2017	Ba-140	-3.18E+02	1.87E+02	5.42E+02	U
SE	02	438689001	11/22/2017	Be-7	2.44E+01	1.24E+02	4.47E+02	U
SE	02	438689001	11/22/2017	Bi-214	9.31E+02	8.71E+01	8.68E+01	
SE	02	438689001	11/22/2017	Ce-141	-2.52E+01	2.09E+01	7.20E+01	U
SE	02	438689001	11/22/2017	Ce-144	-9.05E+01	5.28E+01	1.71E+02	U
SE	02	438689001	11/22/2017	Co-57	8.51E-01	5.76E+00	2.18E+01	U
SE	02	438689001	11/22/2017	Co-58	2.82E+01	1.76E+01	5.73E+01	U
SE	02	438689001	11/22/2017	Co-60	1.08E+01	1.45E+01	5.29E+01	U
SE	02	438689001	11/22/2017	Cr-51	-2.30E+02	1.66E+02	4.95E+02	U
SE	02	438689001	11/22/2017	Cs-134	4.91E+01	2.12E+01	6.53E+01	U
SE	02	438689001	11/22/2017	Cs-137	-4.68E+00	1.51E+01	4.57E+01	U
SE	02	438689001	11/22/2017	Fe-59	-6.53E+01	4.34E+01	1.22E+02	U
SE	02	438689001	11/22/2017	I-131	-9.02E+01	1.09E+02	3.41E+02	U
SE	02	438689001	11/22/2017	K-40	1.37E+04	9.07E+02	3.61E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	02	438689001	11/22/2017	La-140	-1.28E+01	7.21E+01	2.31E+02	U
SE	02	438689001	11/22/2017	Mn-54	1.22E+01	1.55E+01	4.86E+01	U
SE	02	438689001	11/22/2017	Nb-95	-6.36E+01	2.50E+01	5.35E+01	U
SE	02	438689001	11/22/2017	Pb-212	1.67E+03	9.49E+01	5.02E+01	
SE	02	438689001	11/22/2017	Pb-214	1.39E+03	9.85E+01	2.48E+02	
SE	02	438689001	11/22/2017	Ra-226	9.31E+02	8.71E+01	8.68E+01	
SE	02	438689001	11/22/2017	Ru-103	1.32E+01	1.43E+01	5.22E+01	U
SE	02	438689001	11/22/2017	Ru-106	3.75E+01	1.02E+02	3.59E+02	U
SE	02	438689001	11/22/2017	Sb-124	3.62E+01	4.02E+01	1.37E+02	U
SE	02	438689001	11/22/2017	Sb-125	3.71E+01	3.16E+01	1.06E+02	U
SE	02	438689001	11/22/2017	Se-75	2.11E+01	1.41E+01	4.90E+01	U
SE	02	438689001	11/22/2017	Th-228	1.67E+03	9.49E+01	5.02E+01	
SE	02	438689001	11/22/2017	Th-230	9.31E+02	8.71E+01	8.68E+01	
SE	02	438689001	11/22/2017	Tl-208	4.37E+02	4.78E+01	4.37E+01	
SE	02	438689001	11/22/2017	Zn-65	2.28E+01	3.54E+01	1.11E+02	U
SE	02	438689001	11/22/2017	Zr-95	-2.99E+00	2.99E+01	9.98E+01	U
SE	07	424061001	5/15/2017	Ac-228	2.96E+02	7.98E+01	1.13E+02	
SE	07	424061001	5/15/2017	Ag-108m	-1.79E+01	7.93E+00	1.84E+01	U
SE	07	424061001	5/15/2017	Ag-110m	-2.12E+01	1.67E+01	4.45E+01	U
SE	07	424061001	5/15/2017	Ba-140	-8.10E+01	2.14E+02	7.21E+02	U
SE	07	424061001	5/15/2017	Be-7	3.38E+01	9.62E+01	3.49E+02	U
SE	07	424061001	5/15/2017	Bi-214	2.47E+02	4.41E+01	7.42E+01	
SE	07	424061001	5/15/2017	Ce-141	-1.86E+01	1.97E+01	6.55E+01	U
SE	07	424061001	5/15/2017	Ce-144	1.07E+01	4.40E+01	1.62E+02	U
SE	07	424061001	5/15/2017	Co-57	-7.24E+00	5.89E+00	1.94E+01	U
SE	07	424061001	5/15/2017	Co-58	-1.14E+01	1.39E+01	4.11E+01	U
SE	07	424061001	5/15/2017	Co-60	-3.65E+00	1.26E+01	4.09E+01	U
SE	07	424061001	5/15/2017	Cr-51	-1.87E+01	1.59E+02	5.24E+02	U
SE	07	424061001	5/15/2017	Cs-134	1.79E+01	1.24E+01	4.44E+01	U
SE	07	424061001	5/15/2017	Cs-137	-3.79E+00	9.87E+00	3.22E+01	U
SE	07	424061001	5/15/2017	Fe-59	-1.04E+01	3.17E+01	1.05E+02	U
SE	07	424061001	5/15/2017	I-131	-6.69E+01	1.54E+02	5.40E+02	U
SE	07	424061001	5/15/2017	K-40	1.58E+04	7.99E+02	2.33E+02	
SE	07	424061001	5/15/2017	La-140	-5.39E+01	7.61E+01	2.16E+02	U
SE	07	424061001	5/15/2017	Mn-54	1.65E+01	1.02E+01	3.74E+01	U
SE	07	424061001	5/15/2017	Nb-95	2.51E+00	1.72E+01	5.83E+01	U
SE	07	424061001	5/15/2017	Pb-212	3.38E+02	3.58E+01	5.83E+01	
SE	07	424061001	5/15/2017	Pb-214	0.00E+00	5.27E+01	1.49E+02	U
SE	07	424061001	5/15/2017	Ra-226	2.47E+02	4.41E+01	7.42E+01	
SE	07	424061001	5/15/2017	Ru-103	-4.01E+00	1.44E+01	4.92E+01	U
SE	07	424061001	5/15/2017	Ru-106	4.15E+01	8.25E+01	2.95E+02	U
SE	07	424061001	5/15/2017	Sb-124	8.80E+00	3.42E+01	1.16E+02	U
SE	07	424061001	5/15/2017	Sb-125	-1.94E+01	2.36E+01	7.79E+01	U
SE	07	424061001	5/15/2017	Se-75	-1.54E+01	1.20E+01	3.48E+01	U
SE	07	424061001	5/15/2017	Th-228	3.38E+02	3.58E+01	5.83E+01	
SE	07	424061001	5/15/2017	Th-230	2.47E+02	4.41E+01	7.42E+01	
SE	07	424061001	5/15/2017	Tl-208	9.94E+01	2.48E+01	3.46E+01	
SE	07	424061001	5/15/2017	Zn-65	1.15E+01	3.38E+01	1.06E+02	U
SE	07	424061001	5/15/2017	Zr-95	8.46E+01	4.38E+01	9.57E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	07	438692001	11/13/2017	Ac-228	2.38E+02	9.65E+01	2.71E+02	U
SE	07	438692001	11/13/2017	Ag-108m	-1.46E+01	8.34E+00	2.33E+01	U
SE	07	438692001	11/13/2017	Ag-110m	-1.53E+01	1.85E+01	5.46E+01	U
SE	07	438692001	11/13/2017	Ba-140	1.67E+02	2.97E+02	1.07E+03	U
SE	07	438692001	11/13/2017	Be-7	5.18E+01	1.33E+02	4.79E+02	U
SE	07	438692001	11/13/2017	Bi-214	2.23E+02	5.15E+01	6.86E+01	
SE	07	438692001	11/13/2017	Ce-141	-2.65E+01	2.43E+01	8.06E+01	U
SE	07	438692001	11/13/2017	Ce-144	1.30E+01	5.23E+01	1.91E+02	U
SE	07	438692001	11/13/2017	Co-57	-5.50E+00	6.77E+00	2.15E+01	U
SE	07	438692001	11/13/2017	Co-58	1.92E+01	1.87E+01	6.56E+01	U
SE	07	438692001	11/13/2017	Co-60	2.14E+01	1.62E+01	5.88E+01	U
SE	07	438692001	11/13/2017	Cr-51	-1.20E+02	1.87E+02	5.89E+02	U
SE	07	438692001	11/13/2017	Cs-134	2.94E+01	2.46E+01	5.43E+01	U
SE	07	438692001	11/13/2017	Cs-137	2.35E-02	1.14E+01	3.91E+01	U
SE	07	438692001	11/13/2017	Fe-59	-8.50E+01	5.25E+01	1.44E+02	U
SE	07	438692001	11/13/2017	I-131	1.11E+02	2.05E+02	6.94E+02	U
SE	07	438692001	11/13/2017	K-40	1.61E+04	1.02E+03	3.35E+02	
SE	07	438692001	11/13/2017	La-140	-2.88E+01	4.83E+01	1.27E+02	U
SE	07	438692001	11/13/2017	Mn-54	-3.76E+00	1.55E+01	5.04E+01	U
SE	07	438692001	11/13/2017	Nb-95	-1.60E+01	1.95E+01	5.98E+01	U
SE	07	438692001	11/13/2017	Pb-212	3.98E+02	4.00E+01	4.42E+01	
SE	07	438692001	11/13/2017	Pb-214	3.51E+02	6.41E+01	1.42E+02	
SE	07	438692001	11/13/2017	Ra-226	2.23E+02	5.15E+01	6.86E+01	
SE	07	438692001	11/13/2017	Ru-103	0.00E+00	3.97E+01	4.86E+01	U
SE	07	438692001	11/13/2017	Ru-106	1.17E+02	1.20E+02	4.29E+02	U
SE	07	438692001	11/13/2017	Sb-124	4.49E+01	2.58E+01	1.11E+02	U
SE	07	438692001	11/13/2017	Sb-125	-2.30E+00	2.85E+01	1.02E+02	U
SE	07	438692001	11/13/2017	Se-75	6.88E+00	1.34E+01	4.66E+01	U
SE	07	438692001	11/13/2017	Th-228	3.98E+02	4.00E+01	4.42E+01	
SE	07	438692001	11/13/2017	Th-230	2.23E+02	5.15E+01	6.86E+01	
SE	07	438692001	11/13/2017	Tl-208	1.05E+02	3.03E+01	4.44E+01	
SE	07	438692001	11/13/2017	Zn-65	-1.26E+01	4.31E+01	1.27E+02	U
SE	07	438692001	11/13/2017	Zr-95	2.06E+01	3.36E+01	1.18E+02	U
SE	08	424061002	5/15/2017	Ac-228	0.00E+00	1.39E+02	3.19E+02	U
SE	08	424061002	5/15/2017	Ag-108m	1.54E+00	7.75E+00	2.79E+01	U
SE	08	424061002	5/15/2017	Ag-110m	-2.58E+01	1.89E+01	5.35E+01	U
SE	08	424061002	5/15/2017	Ba-140	1.32E+02	2.49E+02	8.94E+02	U
SE	08	424061002	5/15/2017	Be-7	-2.30E+02	1.41E+02	3.87E+02	U
SE	08	424061002	5/15/2017	Bi-214	0.00E+00	9.55E+01	1.80E+02	U
SE	08	424061002	5/15/2017	Ce-141	-4.32E+00	2.76E+01	9.89E+01	U
SE	08	424061002	5/15/2017	Ce-144	1.43E+01	5.06E+01	1.87E+02	U
SE	08	424061002	5/15/2017	Co-57	-1.16E+01	7.83E+00	2.48E+01	U
SE	08	424061002	5/15/2017	Co-58	-8.97E+00	2.02E+01	5.96E+01	U
SE	08	424061002	5/15/2017	Co-60	1.29E+01	1.50E+01	5.37E+01	U
SE	08	424061002	5/15/2017	Cr-51	2.39E+02	1.80E+02	6.79E+02	U
SE	08	424061002	5/15/2017	Cs-134	0.00E+00	2.03E+01	4.80E+01	U
SE	08	424061002	5/15/2017	Cs-137	-1.05E+01	1.48E+01	4.64E+01	U
SE	08	424061002	5/15/2017	Fe-59	4.92E+01	5.07E+01	1.67E+02	U
SE	08	424061002	5/15/2017	I-131	1.59E+01	1.88E+02	6.84E+02	U
SE	08	424061002	5/15/2017	K-40	2.01E+04	1.32E+03	4.36E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	08	424061002	5/15/2017	La-140	-1.26E+02	8.56E+01	1.92E+02	U
SE	08	424061002	5/15/2017	Mn-54	3.31E+01	1.60E+01	5.73E+01	U
SE	08	424061002	5/15/2017	Nb-95	-1.55E+01	1.96E+01	5.89E+01	U
SE	08	424061002	5/15/2017	Pb-212	3.31E+02	4.49E+01	6.63E+01	
SE	08	424061002	5/15/2017	Pb-214	0.00E+00	4.97E+01	1.52E+02	U
SE	08	424061002	5/15/2017	Ra-226	0.00E+00	9.55E+01	1.80E+02	U
SE	08	424061002	5/15/2017	Ru-103	-1.33E+01	1.83E+01	5.89E+01	U
SE	08	424061002	5/15/2017	Ru-106	-1.45E+02	1.08E+02	2.97E+02	U
SE	08	424061002	5/15/2017	Sb-124	-2.50E+01	1.86E+01	0.00E+00	U
SE	08	424061002	5/15/2017	Sb-125	1.84E+01	2.81E+01	1.03E+02	U
SE	08	424061002	5/15/2017	Se-75	1.55E+01	1.58E+01	5.57E+01	U
SE	08	424061002	5/15/2017	Th-228	3.31E+02	4.49E+01	6.63E+01	
SE	08	424061002	5/15/2017	Th-230	0.00E+00	9.55E+01	1.80E+02	U
SE	08	424061002	5/15/2017	Tl-208	7.38E+01	3.46E+01	3.38E+01	
SE	08	424061002	5/15/2017	Zn-65	-1.75E+01	3.54E+01	1.14E+02	U
SE	08	424061002	5/15/2017	Zr-95	2.85E+01	3.35E+01	1.18E+02	U
SE	08	438692002	11/13/2017	Ac-228	4.72E+02	7.41E+01	1.06E+02	
SE	08	438692002	11/13/2017	Ag-108m	-2.89E+00	7.60E+00	2.32E+01	U
SE	08	438692002	11/13/2017	Ag-110m	5.36E+00	1.31E+01	4.45E+01	U
SE	08	438692002	11/13/2017	Ba-140	1.81E+02	2.36E+02	6.33E+02	U
SE	08	438692002	11/13/2017	Be-7	-8.28E+01	1.09E+02	3.14E+02	U
SE	08	438692002	11/13/2017	Bi-214	2.12E+02	4.31E+01	6.46E+01	
SE	08	438692002	11/13/2017	Ce-141	7.99E+00	2.43E+01	8.42E+01	U
SE	08	438692002	11/13/2017	Ce-144	1.31E+01	4.82E+01	1.68E+02	U
SE	08	438692002	11/13/2017	Co-57	2.56E+00	6.96E+00	2.41E+01	U
SE	08	438692002	11/13/2017	Co-58	-1.02E+01	1.41E+01	4.38E+01	U
SE	08	438692002	11/13/2017	Co-60	-5.92E+00	8.92E+00	2.79E+01	U
SE	08	438692002	11/13/2017	Cr-51	4.22E+02	2.81E+02	5.59E+02	U
SE	08	438692002	11/13/2017	Cs-134	1.21E+01	1.07E+01	3.73E+01	U
SE	08	438692002	11/13/2017	Cs-137	-4.75E+00	1.03E+01	3.38E+01	U
SE	08	438692002	11/13/2017	Fe-59	2.35E+01	3.68E+01	1.31E+02	U
SE	08	438692002	11/13/2017	I-131	-3.80E+02	2.15E+02	5.23E+02	U
SE	08	438692002	11/13/2017	K-40	1.84E+04	1.19E+03	2.54E+02	
SE	08	438692002	11/13/2017	La-140	-2.33E+01	4.71E+01	1.42E+02	U
SE	08	438692002	11/13/2017	Mn-54	-3.97E+00	1.04E+01	3.34E+01	U
SE	08	438692002	11/13/2017	Nb-95	-1.65E+01	1.34E+01	3.87E+01	U
SE	08	438692002	11/13/2017	Pb-212	3.67E+02	3.83E+01	4.69E+01	
SE	08	438692002	11/13/2017	Pb-214	2.99E+02	5.55E+01	5.82E+01	
SE	08	438692002	11/13/2017	Ra-226	2.12E+02	4.31E+01	6.46E+01	
SE	08	438692002	11/13/2017	Ru-103	-7.02E-01	1.32E+01	4.56E+01	U
SE	08	438692002	11/13/2017	Ru-106	-1.31E+00	7.42E+01	2.53E+02	U
SE	08	438692002	11/13/2017	Sb-124	3.67E+01	2.35E+01	9.07E+01	U
SE	08	438692002	11/13/2017	Sb-125	1.95E+00	2.05E+01	7.23E+01	U
SE	08	438692002	11/13/2017	Se-75	-7.64E+00	1.17E+01	4.11E+01	U
SE	08	438692002	11/13/2017	Th-228	3.67E+02	3.83E+01	4.69E+01	
SE	08	438692002	11/13/2017	Th-230	2.12E+02	4.31E+01	6.46E+01	
SE	08	438692002	11/13/2017	Tl-208	1.08E+02	2.13E+01	3.54E+01	
SE	08	438692002	11/13/2017	Zn-65	6.67E+01	2.97E+01	9.55E+01	U
SE	08	438692002	11/13/2017	Zr-95	-3.71E+01	2.39E+01	6.47E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	52	424060002	5/16/2017	Ac-228	2.01E+03	2.12E+02	2.15E+02	
SE	52	424060002	5/16/2017	Ag-108m	-9.52E-01	1.23E+01	4.28E+01	U
SE	52	424060002	5/16/2017	Ag-110m	1.54E+01	2.18E+01	7.85E+01	U
SE	52	424060002	5/16/2017	Ba-140	-7.26E+01	3.41E+02	1.15E+03	U
SE	52	424060002	5/16/2017	Be-7	-5.82E+00	1.73E+02	5.98E+02	U
SE	52	424060002	5/16/2017	Bi-214	1.17E+03	1.10E+02	1.20E+02	
SE	52	424060002	5/16/2017	Ce-141	-2.93E+01	4.14E+01	1.41E+02	U
SE	52	424060002	5/16/2017	Ce-144	9.06E+01	8.74E+01	3.15E+02	U
SE	52	424060002	5/16/2017	Co-57	-1.39E+01	1.13E+01	3.71E+01	U
SE	52	424060002	5/16/2017	Co-58	4.53E+00	1.86E+01	6.62E+01	U
SE	52	424060002	5/16/2017	Co-60	-2.12E+01	1.81E+01	4.88E+01	U
SE	52	424060002	5/16/2017	Cr-51	-3.03E+02	2.91E+02	8.63E+02	U
SE	52	424060002	5/16/2017	Cs-134	0.00E+00	5.40E+01	9.16E+01	U
SE	52	424060002	5/16/2017	Cs-137	-3.16E+01	2.16E+01	6.12E+01	U
SE	52	424060002	5/16/2017	Fe-59	7.82E+01	5.88E+01	2.08E+02	U
SE	52	424060002	5/16/2017	I-131	-9.16E+01	2.77E+02	8.69E+02	U
SE	52	424060002	5/16/2017	K-40	1.11E+04	8.57E+02	4.79E+02	
SE	52	424060002	5/16/2017	La-140	1.26E+02	1.14E+02	3.90E+02	U
SE	52	424060002	5/16/2017	Mn-54	4.78E+00	2.11E+01	7.44E+01	U
SE	52	424060002	5/16/2017	Nb-95	1.97E+01	3.07E+01	9.31E+01	U
SE	52	424060002	5/16/2017	Pb-212	2.46E+03	1.38E+02	9.54E+01	
SE	52	424060002	5/16/2017	Pb-214	0.00E+00	1.34E+02	3.59E+02	U
SE	52	424060002	5/16/2017	Ra-226	1.17E+03	1.10E+02	1.20E+02	
SE	52	424060002	5/16/2017	Ru-103	7.26E+00	2.41E+01	8.43E+01	U
SE	52	424060002	5/16/2017	Ru-106	9.55E+01	1.33E+02	4.66E+02	U
SE	52	424060002	5/16/2017	Sb-124	-5.68E+01	4.14E+01	9.65E+01	U
SE	52	424060002	5/16/2017	Sb-125	3.41E+00	3.65E+01	1.29E+02	U
SE	52	424060002	5/16/2017	Se-75	5.52E+00	2.27E+01	7.64E+01	U
SE	52	424060002	5/16/2017	Th-228	2.46E+03	1.38E+02	9.54E+01	
SE	52	424060002	5/16/2017	Th-230	1.17E+03	1.10E+02	1.20E+02	
SE	52	424060002	5/16/2017	Tl-208	7.26E+02	6.12E+01	5.22E+01	
SE	52	424060002	5/16/2017	Zn-65	-4.04E+00	4.24E+01	1.24E+02	U
SE	52	424060002	5/16/2017	Zr-95	-1.38E+01	3.86E+01	1.22E+02	U
SE	52	438689002	11/22/2017	Ac-228	2.33E+03	1.96E+02	1.51E+02	
SE	52	438689002	11/22/2017	Ag-108m	2.09E+01	1.56E+01	3.56E+01	U
SE	52	438689002	11/22/2017	Ag-110m	1.77E+01	1.77E+01	5.94E+01	U
SE	52	438689002	11/22/2017	Ba-140	1.82E+02	1.73E+02	6.02E+02	U
SE	52	438689002	11/22/2017	Be-7	-4.30E+01	1.23E+02	4.17E+02	U
SE	52	438689002	11/22/2017	Bi-214	1.42E+03	9.98E+01	7.86E+01	
SE	52	438689002	11/22/2017	Ce-141	1.77E+01	4.83E+01	9.45E+01	U
SE	52	438689002	11/22/2017	Ce-144	-4.65E+00	8.09E+01	2.58E+02	U
SE	52	438689002	11/22/2017	Co-57	1.39E+01	9.69E+00	3.31E+01	U
SE	52	438689002	11/22/2017	Co-58	-3.55E+01	1.65E+01	3.72E+01	U
SE	52	438689002	11/22/2017	Co-60	-1.32E+00	1.16E+01	3.84E+01	U
SE	52	438689002	11/22/2017	Cr-51	8.95E+01	1.68E+02	6.06E+02	U
SE	52	438689002	11/22/2017	Cs-134	0.00E+00	3.49E+01	6.64E+01	U
SE	52	438689002	11/22/2017	Cs-137	-5.01E+00	1.26E+01	4.11E+01	U
SE	52	438689002	11/22/2017	Fe-59	-2.23E+01	3.26E+01	1.06E+02	U
SE	52	438689002	11/22/2017	I-131	1.89E+02	1.19E+02	4.11E+02	U
SE	52	438689002	11/22/2017	K-40	1.33E+04	8.91E+02	3.06E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	52	438689002	11/22/2017	La-140	-2.32E+01	5.90E+01	1.87E+02	U
SE	52	438689002	11/22/2017	Mn-54	2.77E+01	1.55E+01	4.68E+01	U
SE	52	438689002	11/22/2017	Nb-95	3.18E+00	1.81E+01	5.39E+01	U
SE	52	438689002	11/22/2017	Pb-212	2.40E+03	1.23E+02	7.14E+01	
SE	52	438689002	11/22/2017	Pb-214	1.62E+03	1.01E+02	9.36E+01	
SE	52	438689002	11/22/2017	Ra-226	1.42E+03	9.98E+01	7.86E+01	
SE	52	438689002	11/22/2017	Ru-103	-2.93E+01	1.83E+01	5.10E+01	U
SE	52	438689002	11/22/2017	Ru-106	0.00E+00	2.11E+02	3.76E+02	U
SE	52	438689002	11/22/2017	Sb-124	-1.35E+01	2.64E+01	7.98E+01	U
SE	52	438689002	11/22/2017	Sb-125	8.73E+00	3.35E+01	1.06E+02	U
SE	52	438689002	11/22/2017	Se-75	-1.64E+00	1.45E+01	5.24E+01	U
SE	52	438689002	11/22/2017	Th-228	2.40E+03	1.23E+02	7.14E+01	
SE	52	438689002	11/22/2017	Th-230	1.42E+03	9.98E+01	7.86E+01	
SE	52	438689002	11/22/2017	Tl-208	6.72E+02	4.62E+01	4.33E+01	
SE	52	438689002	11/22/2017	Zn-65	-3.29E+01	3.14E+01	8.52E+01	U
SE	52	438689002	11/22/2017	Zr-95	0.00E+00	5.95E+01	1.03E+02	U
SE	57	424061003	5/15/2017	Ac-228	0.00E+00	9.84E+01	2.47E+02	U
SE	57	424061003	5/15/2017	Ag-108m	2.80E+00	6.90E+00	2.52E+01	U
SE	57	424061003	5/15/2017	Ag-110m	-9.61E+00	1.42E+01	4.33E+01	U
SE	57	424061003	5/15/2017	Ba-140	2.46E+02	2.33E+02	8.50E+02	U
SE	57	424061003	5/15/2017	Be-7	3.30E+01	1.17E+02	4.20E+02	U
SE	57	424061003	5/15/2017	Bi-214	0.00E+00	7.18E+01	1.30E+02	U
SE	57	424061003	5/15/2017	Ce-141	-4.70E+01	2.75E+01	7.95E+01	U
SE	57	424061003	5/15/2017	Ce-144	-8.23E+01	5.89E+01	1.80E+02	U
SE	57	424061003	5/15/2017	Co-57	5.43E+00	6.92E+00	2.49E+01	U
SE	57	424061003	5/15/2017	Co-58	-8.95E-01	1.23E+01	4.11E+01	U
SE	57	424061003	5/15/2017	Co-60	1.75E+01	9.87E+00	3.73E+01	U
SE	57	424061003	5/15/2017	Cr-51	2.61E+02	1.65E+02	6.09E+02	U
SE	57	424061003	5/15/2017	Cs-134	-6.78E+00	1.22E+01	3.89E+01	U
SE	57	424061003	5/15/2017	Cs-137	7.08E+00	1.11E+01	3.97E+01	U
SE	57	424061003	5/15/2017	Fe-59	-7.56E+01	4.01E+01	8.88E+01	U
SE	57	424061003	5/15/2017	I-131	-5.38E+02	2.04E+02	4.46E+02	U
SE	57	424061003	5/15/2017	K-40	1.37E+04	7.24E+02	3.72E+02	
SE	57	424061003	5/15/2017	La-140	-1.40E+01	6.14E+01	2.00E+02	U
SE	57	424061003	5/15/2017	Mn-54	1.17E+01	9.43E+00	3.25E+01	U
SE	57	424061003	5/15/2017	Nb-95	1.73E+01	1.40E+01	4.73E+01	U
SE	57	424061003	5/15/2017	Pb-212	1.93E+02	5.07E+01	6.30E+01	
SE	57	424061003	5/15/2017	Pb-214	0.00E+00	5.58E+01	1.39E+02	U
SE	57	424061003	5/15/2017	Ra-226	0.00E+00	7.18E+01	1.30E+02	U
SE	57	424061003	5/15/2017	Ru-103	1.29E+00	1.61E+01	5.69E+01	U
SE	57	424061003	5/15/2017	Ru-106	-8.55E+01	8.45E+01	2.56E+02	U
SE	57	424061003	5/15/2017	Sb-124	-3.73E+01	2.51E+01	4.75E+01	U
SE	57	424061003	5/15/2017	Sb-125	-1.11E+01	2.27E+01	7.75E+01	U
SE	57	424061003	5/15/2017	Se-75	1.67E+01	1.35E+01	4.69E+01	U
SE	57	424061003	5/15/2017	Th-228	1.93E+02	5.07E+01	6.30E+01	
SE	57	424061003	5/15/2017	Th-230	0.00E+00	7.18E+01	1.30E+02	U
SE	57	424061003	5/15/2017	Tl-208	4.33E+01	2.11E+01	3.71E+01	
SE	57	424061003	5/15/2017	Zn-65	-2.30E+01	2.65E+01	7.66E+01	U
SE	57	424061003	5/15/2017	Zr-95	3.72E+01	2.61E+01	9.45E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
SE	57	438692003	11/13/2017	Ac-228	2.72E+02	6.79E+01	1.44E+02	
SE	57	438692003	11/13/2017	Ag-108m	-8.85E-01	9.16E+00	3.11E+01	U
SE	57	438692003	11/13/2017	Ag-110m	-1.17E+01	1.78E+01	5.66E+01	U
SE	57	438692003	11/13/2017	Ba-140	4.66E+02	2.74E+02	9.26E+02	U
SE	57	438692003	11/13/2017	Be-7	7.76E+00	1.11E+02	3.75E+02	U
SE	57	438692003	11/13/2017	Bi-214	2.74E+02	4.26E+01	6.61E+01	
SE	57	438692003	11/13/2017	Ce-141	-1.18E+01	2.69E+01	9.17E+01	U
SE	57	438692003	11/13/2017	Ce-144	-1.30E+01	5.80E+01	2.01E+02	U
SE	57	438692003	11/13/2017	Co-57	-5.63E+00	7.61E+00	2.57E+01	U
SE	57	438692003	11/13/2017	Co-58	5.72E+00	1.35E+01	4.70E+01	U
SE	57	438692003	11/13/2017	Co-60	-1.08E+01	1.36E+01	4.31E+01	U
SE	57	438692003	11/13/2017	Cr-51	3.18E+01	1.88E+02	6.62E+02	U
SE	57	438692003	11/13/2017	Cs-134	8.97E+00	1.48E+01	5.13E+01	U
SE	57	438692003	11/13/2017	Cs-137	-3.42E+00	1.12E+01	3.80E+01	U
SE	57	438692003	11/13/2017	Fe-59	-1.88E+00	4.59E+01	1.50E+02	U
SE	57	438692003	11/13/2017	I-131	6.54E+01	1.95E+02	6.85E+02	U
SE	57	438692003	11/13/2017	K-40	1.68E+04	1.13E+03	3.91E+02	
SE	57	438692003	11/13/2017	La-140	-1.34E+02	9.07E+01	2.06E+02	U
SE	57	438692003	11/13/2017	Mn-54	2.49E+01	1.47E+01	4.99E+01	U
SE	57	438692003	11/13/2017	Nb-95	1.67E+01	1.77E+01	6.18E+01	U
SE	57	438692003	11/13/2017	Pb-212	3.61E+02	3.70E+01	5.16E+01	
SE	57	438692003	11/13/2017	Pb-214	2.61E+02	4.33E+01	1.24E+02	
SE	57	438692003	11/13/2017	Ra-226	2.74E+02	4.26E+01	6.61E+01	
SE	57	438692003	11/13/2017	Ru-103	1.26E+01	1.63E+01	5.64E+01	U
SE	57	438692003	11/13/2017	Ru-106	-1.47E+01	9.73E+01	3.36E+02	U
SE	57	438692003	11/13/2017	Sb-124	-7.64E+00	3.01E+01	9.52E+01	U
SE	57	438692003	11/13/2017	Sb-125	3.02E+01	2.89E+01	1.01E+02	U
SE	57	438692003	11/13/2017	Se-75	3.47E+01	1.64E+01	5.49E+01	U
SE	57	438692003	11/13/2017	Th-228	3.61E+02	3.70E+01	5.16E+01	
SE	57	438692003	11/13/2017	Th-230	2.74E+02	4.26E+01	6.61E+01	
SE	57	438692003	11/13/2017	Tl-208	9.31E+01	2.71E+01	3.13E+01	
SE	57	438692003	11/13/2017	Zn-65	-6.52E+01	4.34E+01	9.73E+01	U
SE	57	438692003	11/13/2017	Zr-95	-2.34E+01	2.63E+01	8.27E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TF	02	426365001	6/22/2017	Ac-228	4.33E+01	2.06E+01	4.98E+01	U
TF	02	426365001	6/22/2017	Ag-108m	-1.96E+00	2.29E+00	6.92E+00	U
TF	02	426365001	6/22/2017	Ag-110m	1.02E+00	3.72E+00	1.26E+01	U
TF	02	426365001	6/22/2017	Ba-140	-5.48E+00	1.05E+01	3.21E+01	U
TF	02	426365001	6/22/2017	Be-7	0.00E+00	3.93E+01	6.55E+01	U
TF	02	426365001	6/22/2017	Ce-141	4.40E+00	4.03E+00	1.19E+01	U
TF	02	426365001	6/22/2017	Ce-144	-1.47E+01	1.50E+01	4.36E+01	U
TF	02	426365001	6/22/2017	Co-57	2.58E+00	2.15E+00	5.58E+00	U
TF	02	426365001	6/22/2017	Co-58	-1.85E+00	2.39E+00	7.35E+00	U
TF	02	426365001	6/22/2017	Co-60	1.04E+01	3.43E+00	1.09E+01	U
TF	02	426365001	6/22/2017	Cr-51	3.83E+00	2.05E+01	6.84E+01	U
TF	02	426365001	6/22/2017	Cs-134	2.62E+00	2.84E+00	9.94E+00	U
TF	02	426365001	6/22/2017	Cs-137	-1.58E+00	2.59E+00	7.78E+00	U
TF	02	426365001	6/22/2017	Fe-59	-8.57E-01	4.76E+00	1.53E+01	U
TF	02	426365001	6/22/2017	I-131	-5.90E+00	3.42E+00	9.14E+00	U
TF	02	426365001	6/22/2017	K-40	1.52E+03	1.38E+02	7.77E+01	
TF	02	426365001	6/22/2017	La-140	-5.09E+00	4.37E+00	9.60E+00	U
TF	02	426365001	6/22/2017	Mn-54	1.07E+00	2.58E+00	8.85E+00	U
TF	02	426365001	6/22/2017	Nb-95	1.06E+00	2.46E+00	8.50E+00	U
TF	02	426365001	6/22/2017	Ru-103	-2.51E+00	2.70E+00	7.95E+00	U
TF	02	426365001	6/22/2017	Ru-106	-2.36E+01	2.32E+01	6.53E+01	U
TF	02	426365001	6/22/2017	Sb-124	-7.18E-01	6.31E+00	2.08E+01	U
TF	02	426365001	6/22/2017	Sb-125	-7.46E+00	6.06E+00	1.71E+01	U
TF	02	426365001	6/22/2017	Se-75	-3.92E-01	2.76E+00	9.19E+00	U
TF	02	426365001	6/22/2017	Th-228	3.02E+00	6.16E+00	1.53E+01	U
TF	02	426365001	6/22/2017	Zn-65	-1.71E+00	5.37E+00	1.46E+01	U
TF	02	426365001	6/22/2017	Zr-95	3.46E+00	4.50E+00	1.53E+01	U
TF	02	428521001	7/18/2017	Ac-228	2.01E+01	1.32E+01	4.66E+01	U
TF	02	428521001	7/18/2017	Ag-108m	-1.62E+00	2.30E+00	7.14E+00	U
TF	02	428521001	7/18/2017	Ag-110m	-1.57E+00	4.13E+00	1.17E+01	U
TF	02	428521001	7/18/2017	Ba-140	1.58E+01	1.23E+01	4.34E+01	U
TF	02	428521001	7/18/2017	Be-7	1.53E+01	2.48E+01	8.51E+01	U
TF	02	428521001	7/18/2017	Ce-141	-6.16E+00	4.27E+00	1.19E+01	U
TF	02	428521001	7/18/2017	Ce-144	9.99E+00	1.69E+01	5.60E+01	U
TF	02	428521001	7/18/2017	Co-57	-5.14E-01	1.98E+00	6.35E+00	U
TF	02	428521001	7/18/2017	Co-58	-9.33E-01	2.66E+00	8.06E+00	U
TF	02	428521001	7/18/2017	Co-60	-1.22E+00	3.11E+00	9.65E+00	U
TF	02	428521001	7/18/2017	Cr-51	-2.88E+01	2.10E+01	6.10E+01	U
TF	02	428521001	7/18/2017	Cs-134	5.98E+00	3.67E+00	1.27E+01	U
TF	02	428521001	7/18/2017	Cs-137	-2.67E-01	2.92E+00	9.37E+00	U
TF	02	428521001	7/18/2017	Fe-59	8.13E-01	5.63E+00	1.91E+01	U
TF	02	428521001	7/18/2017	I-131	2.69E-01	4.01E+00	1.36E+01	U
TF	02	428521001	7/18/2017	K-40	5.63E+02	8.51E+01	7.76E+01	
TF	02	428521001	7/18/2017	La-140	5.05E+00	4.69E+00	1.72E+01	U
TF	02	428521001	7/18/2017	Mn-54	-4.56E+00	2.70E+00	5.69E+00	U
TF	02	428521001	7/18/2017	Nb-95	3.47E+00	3.44E+00	1.17E+01	U
TF	02	428521001	7/18/2017	Ru-103	-1.30E+00	3.00E+00	9.55E+00	U
TF	02	428521001	7/18/2017	Ru-106	6.77E+00	2.65E+01	7.94E+01	U
TF	02	428521001	7/18/2017	Sb-124	-2.27E+00	4.27E+00	1.14E+01	U
TF	02	428521001	7/18/2017	Sb-125	4.33E+00	7.44E+00	2.57E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TF	02	428521001	7/18/2017	Se-75	-9.29E-01	3.49E+00	9.69E+00	U
TF	02	428521001	7/18/2017	Th-228	-2.68E+00	5.75E+00	1.66E+01	U
TF	02	428521001	7/18/2017	Zn-65	-4.90E+00	5.58E+00	1.61E+01	U
TF	02	428521001	7/18/2017	Zr-95	1.82E+00	5.18E+00	1.72E+01	U
TF	02	431061001	8/15/2017	Ac-228	3.93E-01	1.15E+01	3.96E+01	U
TF	02	431061001	8/15/2017	Ag-108m	-5.43E-01	1.87E+00	5.92E+00	U
TF	02	431061001	8/15/2017	Ag-110m	-1.28E+00	2.71E+00	8.68E+00	U
TF	02	431061001	8/15/2017	Ba-140	-6.17E+00	1.24E+01	3.31E+01	U
TF	02	431061001	8/15/2017	Be-7	3.48E+00	1.97E+01	6.46E+01	U
TF	02	431061001	8/15/2017	Ce-141	4.60E+00	3.57E+00	1.21E+01	U
TF	02	431061001	8/15/2017	Ce-144	1.80E+01	1.29E+01	4.38E+01	U
TF	02	431061001	8/15/2017	Co-57	7.80E-01	1.57E+00	5.40E+00	U
TF	02	431061001	8/15/2017	Co-58	-1.08E+00	2.45E+00	8.00E+00	U
TF	02	431061001	8/15/2017	Co-60	-1.38E+00	2.73E+00	8.51E+00	U
TF	02	431061001	8/15/2017	Cr-51	7.96E+00	1.91E+01	6.41E+01	U
TF	02	431061001	8/15/2017	Cs-134	4.76E+00	3.26E+00	9.51E+00	U
TF	02	431061001	8/15/2017	Cs-137	-5.58E-01	2.73E+00	8.56E+00	U
TF	02	431061001	8/15/2017	Fe-59	-7.80E+00	7.25E+00	1.81E+01	U
TF	02	431061001	8/15/2017	I-131	-2.45E+00	3.77E+00	1.16E+01	U
TF	02	431061001	8/15/2017	K-40	2.05E+03	1.36E+02	7.57E+01	
TF	02	431061001	8/15/2017	La-140	-2.06E+00	3.10E+00	8.78E+00	U
TF	02	431061001	8/15/2017	Mn-54	7.56E-01	2.55E+00	8.82E+00	U
TF	02	431061001	8/15/2017	Nb-95	-3.29E+00	3.10E+00	7.90E+00	U
TF	02	431061001	8/15/2017	Ru-103	-4.48E+00	2.61E+00	6.58E+00	U
TF	02	431061001	8/15/2017	Ru-106	-1.00E+01	2.10E+01	6.39E+01	U
TF	02	431061001	8/15/2017	Sb-124	6.06E+00	6.64E+00	2.36E+01	U
TF	02	431061001	8/15/2017	Sb-125	-8.24E+00	5.94E+00	1.62E+01	U
TF	02	431061001	8/15/2017	Se-75	-2.14E+00	3.06E+00	8.49E+00	U
TF	02	431061001	8/15/2017	Th-228	3.99E-01	4.48E+00	1.48E+01	U
TF	02	431061001	8/15/2017	Zn-65	-4.26E+00	6.15E+00	1.62E+01	U
TF	02	431061001	8/15/2017	Zr-95	-4.06E+00	4.41E+00	1.23E+01	U
TF	03	426365002	6/21/2017	Ac-228	7.09E+00	2.07E+01	5.37E+01	U
TF	03	426365002	6/21/2017	Ag-108m	-3.80E+00	2.55E+00	6.92E+00	U
TF	03	426365002	6/21/2017	Ag-110m	-2.58E+00	3.65E+00	1.11E+01	U
TF	03	426365002	6/21/2017	Ba-140	1.10E+01	1.25E+01	4.23E+01	U
TF	03	426365002	6/21/2017	Be-7	3.77E+01	4.13E+01	7.21E+01	U
TF	03	426365002	6/21/2017	Ce-141	-4.73E+00	4.22E+00	1.18E+01	U
TF	03	426365002	6/21/2017	Ce-144	9.35E+00	1.48E+01	4.77E+01	U
TF	03	426365002	6/21/2017	Co-57	-1.14E+00	1.97E+00	5.98E+00	U
TF	03	426365002	6/21/2017	Co-58	-1.63E+00	2.37E+00	7.28E+00	U
TF	03	426365002	6/21/2017	Co-60	-2.19E-01	3.12E+00	9.94E+00	U
TF	03	426365002	6/21/2017	Cr-51	1.13E+01	2.20E+01	7.49E+01	U
TF	03	426365002	6/21/2017	Cs-134	-5.70E-01	2.86E+00	9.40E+00	U
TF	03	426365002	6/21/2017	Cs-137	1.67E+00	2.93E+00	1.03E+01	U
TF	03	426365002	6/21/2017	Fe-59	2.83E+00	6.51E+00	2.20E+01	U
TF	03	426365002	6/21/2017	I-131	8.90E+00	4.59E+00	1.52E+01	U
TF	03	426365002	6/21/2017	K-40	1.33E+03	1.14E+02	7.56E+01	
TF	03	426365002	6/21/2017	La-140	-2.91E-01	2.64E+00	8.64E+00	U
TF	03	426365002	6/21/2017	Mn-54	1.71E+00	2.69E+00	8.48E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TF	03	426365002	6/21/2017	Nb-95	7.74E-01	2.32E+00	7.53E+00	U
TF	03	426365002	6/21/2017	Ru-103	-4.58E+00	3.09E+00	8.23E+00	U
TF	03	426365002	6/21/2017	Ru-106	-5.67E+00	2.07E+01	6.35E+01	U
TF	03	426365002	6/21/2017	Sb-124	3.50E-01	5.23E+00	1.76E+01	U
TF	03	426365002	6/21/2017	Sb-125	-1.55E+01	8.39E+00	2.12E+01	U
TF	03	426365002	6/21/2017	Se-75	2.44E+00	2.86E+00	9.87E+00	U
TF	03	426365002	6/21/2017	Th-228	7.12E+00	7.19E+00	1.40E+01	U
TF	03	426365002	6/21/2017	Zn-65	1.98E-01	6.55E+00	2.14E+01	U
TF	03	426365002	6/21/2017	Zr-95	1.49E+00	4.32E+00	1.50E+01	U
TF	03	428521002	7/18/2017	Ac-228	5.41E+00	1.95E+01	6.24E+01	U
TF	03	428521002	7/18/2017	Ag-108m	2.97E+00	3.48E+00	1.19E+01	U
TF	03	428521002	7/18/2017	Ag-110m	9.00E+00	5.89E+00	2.11E+01	U
TF	03	428521002	7/18/2017	Ba-140	2.74E+01	2.08E+01	7.09E+01	U
TF	03	428521002	7/18/2017	Be-7	-2.81E+01	3.31E+01	9.78E+01	U
TF	03	428521002	7/18/2017	Ce-141	1.50E+00	8.71E+00	2.08E+01	U
TF	03	428521002	7/18/2017	Ce-144	-1.81E+01	2.24E+01	6.55E+01	U
TF	03	428521002	7/18/2017	Co-57	2.69E+00	3.29E+00	1.06E+01	U
TF	03	428521002	7/18/2017	Co-58	-2.22E+00	4.29E+00	1.35E+01	U
TF	03	428521002	7/18/2017	Co-60	1.35E+00	5.57E+00	1.86E+01	U
TF	03	428521002	7/18/2017	Cr-51	0.00E+00	5.41E+01	1.02E+02	U
TF	03	428521002	7/18/2017	Cs-134	4.39E+00	4.57E+00	1.63E+01	U
TF	03	428521002	7/18/2017	Cs-137	2.90E+00	5.18E+00	1.63E+01	U
TF	03	428521002	7/18/2017	Fe-59	5.59E+00	8.56E+00	2.73E+01	U
TF	03	428521002	7/18/2017	I-131	3.38E-01	6.88E+00	2.28E+01	U
TF	03	428521002	7/18/2017	K-40	2.16E+03	2.23E+02	1.27E+02	
TF	03	428521002	7/18/2017	La-140	-7.47E+00	6.78E+00	1.63E+01	U
TF	03	428521002	7/18/2017	Mn-54	0.00E+00	4.85E+00	1.28E+01	U
TF	03	428521002	7/18/2017	Nb-95	1.49E+00	4.45E+00	1.39E+01	U
TF	03	428521002	7/18/2017	Ru-103	-1.58E+00	3.94E+00	1.23E+01	U
TF	03	428521002	7/18/2017	Ru-106	-2.15E+01	3.78E+01	1.13E+02	U
TF	03	428521002	7/18/2017	Sb-124	-5.71E-01	1.16E+01	3.88E+01	U
TF	03	428521002	7/18/2017	Sb-125	-7.66E+00	9.66E+00	2.90E+01	U
TF	03	428521002	7/18/2017	Se-75	4.77E+00	4.73E+00	1.63E+01	U
TF	03	428521002	7/18/2017	Th-228	8.35E+00	1.26E+01	2.71E+01	U
TF	03	428521002	7/18/2017	Zn-65	5.97E+00	7.83E+00	2.78E+01	U
TF	03	428521002	7/18/2017	Zr-95	-5.54E+00	7.12E+00	2.20E+01	U
TF	03	431061002	8/15/2017	Ac-228	1.19E-01	9.95E+00	3.33E+01	U
TF	03	431061002	8/15/2017	Ag-108m	5.81E-01	1.69E+00	5.71E+00	U
TF	03	431061002	8/15/2017	Ag-110m	-3.22E+00	3.13E+00	9.34E+00	U
TF	03	431061002	8/15/2017	Ba-140	8.18E+00	1.09E+01	3.73E+01	U
TF	03	431061002	8/15/2017	Be-7	-3.85E+00	1.89E+01	6.13E+01	U
TF	03	431061002	8/15/2017	Ce-141	-3.24E+00	3.63E+00	9.90E+00	U
TF	03	431061002	8/15/2017	Ce-144	-1.16E+01	1.30E+01	3.90E+01	U
TF	03	431061002	8/15/2017	Co-57	1.59E+00	1.58E+00	5.20E+00	U
TF	03	431061002	8/15/2017	Co-58	3.14E+00	2.40E+00	8.55E+00	U
TF	03	431061002	8/15/2017	Co-60	-1.61E+00	2.20E+00	6.39E+00	U
TF	03	431061002	8/15/2017	Cr-51	-3.16E+01	2.03E+01	5.84E+01	U
TF	03	431061002	8/15/2017	Cs-134	-2.07E+00	2.41E+00	6.75E+00	U
TF	03	431061002	8/15/2017	Cs-137	-9.77E-01	2.19E+00	6.69E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TF	03	431061002	8/15/2017	Fe-59	1.23E+01	1.02E+01	2.04E+01	U
TF	03	431061002	8/15/2017	I-131	4.39E+00	3.72E+00	1.29E+01	U
TF	03	431061002	8/15/2017	K-40	1.69E+03	1.18E+02	7.00E+01	
TF	03	431061002	8/15/2017	La-140	-3.55E+00	3.48E+00	6.32E+00	U
TF	03	431061002	8/15/2017	Mn-54	-1.54E+00	2.22E+00	7.03E+00	U
TF	03	431061002	8/15/2017	Nb-95	3.93E+00	2.45E+00	8.36E+00	U
TF	03	431061002	8/15/2017	Ru-103	1.72E+00	2.32E+00	7.24E+00	U
TF	03	431061002	8/15/2017	Ru-106	1.66E+01	2.26E+01	7.60E+01	U
TF	03	431061002	8/15/2017	Sb-124	1.47E-01	5.31E+00	1.71E+01	U
TF	03	431061002	8/15/2017	Sb-125	-6.95E+00	5.80E+00	1.69E+01	U
TF	03	431061002	8/15/2017	Se-75	1.77E+00	2.30E+00	8.04E+00	U
TF	03	431061002	8/15/2017	Th-228	1.62E+00	4.07E+00	1.38E+01	U
TF	03	431061002	8/15/2017	Zn-65	4.75E+00	4.76E+00	1.65E+01	U
TF	03	431061002	8/15/2017	Zr-95	5.39E+00	4.44E+00	1.51E+01	U
TF	06	426365003	6/22/2017	Ac-228	-5.91E-01	8.97E+00	2.91E+01	U
TF	06	426365003	6/22/2017	Ag-108m	-3.66E-01	1.59E+00	5.08E+00	U
TF	06	426365003	6/22/2017	Ag-110m	1.29E+00	3.08E+00	9.27E+00	U
TF	06	426365003	6/22/2017	Ba-140	7.23E+00	7.82E+00	2.75E+01	U
TF	06	426365003	6/22/2017	Be-7	0.00E+00	2.49E+01	4.12E+01	U
TF	06	426365003	6/22/2017	Ce-141	7.88E-01	2.45E+00	8.27E+00	U
TF	06	426365003	6/22/2017	Ce-144	-4.89E+00	9.24E+00	2.97E+01	U
TF	06	426365003	6/22/2017	Co-57	-7.14E-01	1.40E+00	4.28E+00	U
TF	06	426365003	6/22/2017	Co-58	-4.74E-01	2.03E+00	6.41E+00	U
TF	06	426365003	6/22/2017	Co-60	-6.32E-01	1.93E+00	6.10E+00	U
TF	06	426365003	6/22/2017	Cr-51	-8.61E+00	1.46E+01	4.31E+01	U
TF	06	426365003	6/22/2017	Cs-134	1.16E+00	2.13E+00	7.23E+00	U
TF	06	426365003	6/22/2017	Cs-137	1.66E-02	1.96E+00	6.47E+00	U
TF	06	426365003	6/22/2017	Fe-59	4.13E+00	4.41E+00	1.58E+01	U
TF	06	426365003	6/22/2017	I-131	-6.10E-01	2.54E+00	7.73E+00	U
TF	06	426365003	6/22/2017	K-40	1.09E+03	9.72E+01	5.18E+01	
TF	06	426365003	6/22/2017	La-140	-2.61E+00	2.44E+00	5.90E+00	U
TF	06	426365003	6/22/2017	Mn-54	1.88E+00	1.81E+00	6.33E+00	U
TF	06	426365003	6/22/2017	Nb-95	9.74E-01	1.90E+00	6.46E+00	U
TF	06	426365003	6/22/2017	Ru-103	5.39E-01	1.59E+00	5.48E+00	U
TF	06	426365003	6/22/2017	Ru-106	-4.12E+00	1.45E+01	4.65E+01	U
TF	06	426365003	6/22/2017	Sb-124	-1.60E+00	2.63E+00	6.77E+00	U
TF	06	426365003	6/22/2017	Sb-125	1.70E+00	4.91E+00	1.55E+01	U
TF	06	426365003	6/22/2017	Se-75	1.24E-01	2.28E+00	7.31E+00	U
TF	06	426365003	6/22/2017	Th-228	3.13E+00	4.92E+00	1.18E+01	U
TF	06	426365003	6/22/2017	Zn-65	1.17E+00	3.71E+00	1.17E+01	U
TF	06	426365003	6/22/2017	Zr-95	-3.04E+00	3.02E+00	8.37E+00	U
TF	06	428521003	7/18/2017	Ac-228	8.29E+00	1.95E+01	3.94E+01	U
TF	06	428521003	7/18/2017	Ag-108m	2.14E-01	2.05E+00	6.92E+00	U
TF	06	428521003	7/18/2017	Ag-110m	4.55E+00	3.49E+00	1.24E+01	U
TF	06	428521003	7/18/2017	Ba-140	-1.34E+01	1.60E+01	4.12E+01	U
TF	06	428521003	7/18/2017	Be-7	9.79E+00	2.35E+01	7.29E+01	U
TF	06	428521003	7/18/2017	Ce-141	-3.88E+00	4.81E+00	1.25E+01	U
TF	06	428521003	7/18/2017	Ce-144	3.26E+01	2.05E+01	3.74E+01	U
TF	06	428521003	7/18/2017	Co-57	-5.25E-01	1.72E+00	5.47E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TF	06	428521003	7/18/2017	Co-58	-2.96E+00	2.34E+00	5.71E+00	U
TF	06	428521003	7/18/2017	Co-60	2.45E+00	2.83E+00	1.03E+01	U
TF	06	428521003	7/18/2017	Cr-51	-2.30E+01	2.35E+01	7.34E+01	U
TF	06	428521003	7/18/2017	Cs-134	-3.18E+00	3.26E+00	9.06E+00	U
TF	06	428521003	7/18/2017	Cs-137	1.19E+00	3.10E+00	1.04E+01	U
TF	06	428521003	7/18/2017	Fe-59	-2.48E+00	4.89E+00	1.53E+01	U
TF	06	428521003	7/18/2017	I-131	-1.22E+01	5.67E+00	1.23E+01	U
TF	06	428521003	7/18/2017	K-40	6.91E+02	8.46E+01	5.18E+01	
TF	06	428521003	7/18/2017	La-140	3.50E+00	3.08E+00	1.21E+01	U
TF	06	428521003	7/18/2017	Mn-54	1.89E+00	2.75E+00	9.34E+00	U
TF	06	428521003	7/18/2017	Nb-95	-2.21E+00	2.79E+00	8.02E+00	U
TF	06	428521003	7/18/2017	Ru-103	-1.96E+00	2.83E+00	8.76E+00	U
TF	06	428521003	7/18/2017	Ru-106	5.40E+01	1.93E+01	7.14E+01	U
TF	06	428521003	7/18/2017	Sb-124	6.06E-02	5.52E+00	1.80E+01	U
TF	06	428521003	7/18/2017	Sb-125	0.00E+00	1.55E+01	1.78E+01	U
TF	06	428521003	7/18/2017	Se-75	-3.75E-01	3.40E+00	1.05E+01	U
TF	06	428521003	7/18/2017	Th-228	2.97E+00	5.67E+00	1.80E+01	U
TF	06	428521003	7/18/2017	Zn-65	5.22E+00	5.27E+00	1.93E+01	U
TF	06	428521003	7/18/2017	Zr-95	-3.55E+00	4.38E+00	1.24E+01	U
TF	06	431061003	8/15/2017	Ac-228	1.77E+01	1.26E+01	4.20E+01	U
TF	06	431061003	8/15/2017	Ag-108m	8.05E-02	2.68E+00	8.21E+00	U
TF	06	431061003	8/15/2017	Ag-110m	-3.02E+00	3.54E+00	1.08E+01	U
TF	06	431061003	8/15/2017	Ba-140	9.20E+00	1.37E+01	4.52E+01	U
TF	06	431061003	8/15/2017	Be-7	-2.09E+00	2.09E+01	6.68E+01	U
TF	06	431061003	8/15/2017	Ce-141	-6.36E+00	4.69E+00	1.26E+01	U
TF	06	431061003	8/15/2017	Ce-144	-1.13E+01	1.38E+01	4.48E+01	U
TF	06	431061003	8/15/2017	Co-57	-1.29E+00	1.69E+00	5.55E+00	U
TF	06	431061003	8/15/2017	Co-58	1.57E+00	2.84E+00	8.82E+00	U
TF	06	431061003	8/15/2017	Co-60	-7.43E-01	2.48E+00	7.72E+00	U
TF	06	431061003	8/15/2017	Cr-51	-2.33E+01	2.28E+01	6.88E+01	U
TF	06	431061003	8/15/2017	Cs-134	-2.85E+00	2.81E+00	8.45E+00	U
TF	06	431061003	8/15/2017	Cs-137	1.31E+00	2.55E+00	8.88E+00	U
TF	06	431061003	8/15/2017	Fe-59	2.77E+00	5.49E+00	1.87E+01	U
TF	06	431061003	8/15/2017	I-131	-6.55E+00	4.84E+00	1.38E+01	U
TF	06	431061003	8/15/2017	K-40	2.55E+03	1.78E+02	6.90E+01	
TF	06	431061003	8/15/2017	La-140	-5.43E+00	3.80E+00	8.08E+00	U
TF	06	431061003	8/15/2017	Mn-54	3.86E-01	2.33E+00	7.88E+00	U
TF	06	431061003	8/15/2017	Nb-95	1.18E-01	2.73E+00	9.22E+00	U
TF	06	431061003	8/15/2017	Ru-103	1.36E-01	2.42E+00	7.80E+00	U
TF	06	431061003	8/15/2017	Ru-106	5.05E+01	2.54E+01	8.30E+01	U
TF	06	431061003	8/15/2017	Sb-124	5.45E+00	5.22E+00	1.95E+01	U
TF	06	431061003	8/15/2017	Sb-125	1.00E+01	6.76E+00	2.25E+01	U
TF	06	431061003	8/15/2017	Se-75	7.52E+00	3.65E+00	1.17E+01	U
TF	06	431061003	8/15/2017	Th-228	-1.90E+00	5.31E+00	1.63E+01	U
TF	06	431061003	8/15/2017	Zn-65	-2.58E+00	6.52E+00	2.06E+01	U
TF	06	431061003	8/15/2017	Zr-95	1.81E+00	4.99E+00	1.72E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	08	424110001	5/23/2017	Ac-228	0.00E+00	4.91E+01	1.03E+02	U
TG	08	424110001	5/23/2017	Ag-108m	6.28E+00	4.43E+00	1.51E+01	U
TG	08	424110001	5/23/2017	Ag-110m	-7.02E+00	7.30E+00	2.26E+01	U
TG	08	424110001	5/23/2017	Ba-140	1.30E+01	2.69E+01	9.04E+01	U
TG	08	424110001	5/23/2017	Be-7	1.21E+03	1.24E+02	1.69E+02	
TG	08	424110001	5/23/2017	Ce-141	-2.59E+00	7.79E+00	2.27E+01	U
TG	08	424110001	5/23/2017	Ce-144	-3.43E+01	3.17E+01	9.54E+01	U
TG	08	424110001	5/23/2017	Co-57	1.58E+00	4.42E+00	1.28E+01	U
TG	08	424110001	5/23/2017	Co-58	-5.52E+00	6.36E+00	1.86E+01	U
TG	08	424110001	5/23/2017	Co-60	1.92E-01	7.35E+00	2.13E+01	U
TG	08	424110001	5/23/2017	Cr-51	1.63E+01	4.54E+01	1.56E+02	U
TG	08	424110001	5/23/2017	Cs-134	2.07E+01	1.16E+01	2.58E+01	U
TG	08	424110001	5/23/2017	Cs-137	4.15E+00	5.66E+00	1.90E+01	U
TG	08	424110001	5/23/2017	Fe-59	-2.18E+01	1.16E+01	2.84E+01	U
TG	08	424110001	5/23/2017	I-131	7.19E+00	8.81E+00	3.03E+01	U
TG	08	424110001	5/23/2017	K-40	3.85E+03	2.77E+02	1.49E+02	
TG	08	424110001	5/23/2017	La-140	4.07E+00	8.87E+00	3.00E+01	U
TG	08	424110001	5/23/2017	Mn-54	4.25E-01	6.38E+00	2.04E+01	U
TG	08	424110001	5/23/2017	Nb-95	-8.32E+00	5.70E+00	1.50E+01	U
TG	08	424110001	5/23/2017	Ru-103	-1.56E+00	5.73E+00	1.87E+01	U
TG	08	424110001	5/23/2017	Ru-106	3.53E+01	5.08E+01	1.70E+02	U
TG	08	424110001	5/23/2017	Sb-124	1.41E+01	1.36E+01	4.76E+01	U
TG	08	424110001	5/23/2017	Sb-125	-5.59E+00	1.37E+01	4.47E+01	U
TG	08	424110001	5/23/2017	Se-75	1.10E+01	7.08E+00	2.21E+01	U
TG	08	424110001	5/23/2017	Th-228	1.76E+01	1.58E+01	2.53E+01	U
TG	08	424110001	5/23/2017	Zn-65	1.81E+01	1.58E+01	4.92E+01	U
TG	08	424110001	5/23/2017	Zr-95	5.88E+00	1.16E+01	3.43E+01	U
TG	08	426365004	6/22/2017	Ac-228	3.37E+01	5.57E+01	1.02E+02	U
TG	08	426365004	6/22/2017	Ag-108m	-2.73E+00	4.41E+00	1.43E+01	U
TG	08	426365004	6/22/2017	Ag-110m	-1.13E+00	7.65E+00	2.43E+01	U
TG	08	426365004	6/22/2017	Ba-140	-1.42E+01	2.43E+01	7.78E+01	U
TG	08	426365004	6/22/2017	Be-7	6.11E+02	9.54E+01	1.53E+02	
TG	08	426365004	6/22/2017	Ce-141	-4.39E+01	1.40E+01	2.65E+01	U
TG	08	426365004	6/22/2017	Ce-144	6.10E+00	3.33E+01	1.06E+02	U
TG	08	426365004	6/22/2017	Co-57	-6.00E+00	4.68E+00	1.37E+01	U
TG	08	426365004	6/22/2017	Co-58	-1.23E+00	5.48E+00	1.75E+01	U
TG	08	426365004	6/22/2017	Co-60	5.31E+00	6.18E+00	2.14E+01	U
TG	08	426365004	6/22/2017	Cr-51	1.15E+01	4.45E+01	1.52E+02	U
TG	08	426365004	6/22/2017	Cs-134	2.56E+00	6.79E+00	2.23E+01	U
TG	08	426365004	6/22/2017	Cs-137	3.05E+00	5.73E+00	1.90E+01	U
TG	08	426365004	6/22/2017	Fe-59	1.79E+00	1.21E+01	4.15E+01	U
TG	08	426365004	6/22/2017	I-131	-9.64E+00	7.73E+00	2.39E+01	U
TG	08	426365004	6/22/2017	K-40	4.65E+03	3.40E+02	1.83E+02	
TG	08	426365004	6/22/2017	La-140	8.59E-02	7.54E+00	2.50E+01	U
TG	08	426365004	6/22/2017	Mn-54	-8.80E+00	6.51E+00	1.85E+01	U
TG	08	426365004	6/22/2017	Nb-95	1.02E+01	6.47E+00	2.10E+01	U
TG	08	426365004	6/22/2017	Ru-103	9.41E+00	5.64E+00	1.84E+01	U
TG	08	426365004	6/22/2017	Ru-106	-2.34E+01	5.27E+01	1.49E+02	U
TG	08	426365004	6/22/2017	Sb-124	-9.96E+00	1.38E+01	3.55E+01	U
TG	08	426365004	6/22/2017	Sb-125	1.36E+01	1.47E+01	4.96E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	08	426365004	6/22/2017	Se-75	3.76E+00	6.93E+00	2.39E+01	U
TG	08	426365004	6/22/2017	Th-228	-4.10E+01	2.15E+01	4.17E+01	U
TG	08	426365004	6/22/2017	Zn-65	-1.26E+01	1.23E+01	3.82E+01	U
TG	08	426365004	6/22/2017	Zr-95	-9.22E+00	1.01E+01	3.03E+01	U
TG	08	428521004	7/18/2017	Ac-228	-5.02E+00	4.26E+01	1.36E+02	U
TG	08	428521004	7/18/2017	Ag-108m	-1.11E+01	7.56E+00	1.91E+01	U
TG	08	428521004	7/18/2017	Ag-110m	2.26E+01	1.18E+01	3.79E+01	U
TG	08	428521004	7/18/2017	Ba-140	-5.11E+01	3.88E+01	1.03E+02	U
TG	08	428521004	7/18/2017	Be-7	2.67E+03	2.53E+02	2.32E+02	
TG	08	428521004	7/18/2017	Ce-141	2.09E+01	2.49E+01	4.00E+01	U
TG	08	428521004	7/18/2017	Ce-144	3.55E+01	4.63E+01	1.61E+02	U
TG	08	428521004	7/18/2017	Co-57	-4.61E+00	5.98E+00	1.74E+01	U
TG	08	428521004	7/18/2017	Co-58	1.28E+01	8.53E+00	2.89E+01	U
TG	08	428521004	7/18/2017	Co-60	-1.35E+01	8.47E+00	1.85E+01	U
TG	08	428521004	7/18/2017	Cr-51	-5.33E+00	7.86E+01	2.32E+02	U
TG	08	428521004	7/18/2017	Cs-134	7.20E+00	8.50E+00	2.68E+01	U
TG	08	428521004	7/18/2017	Cs-137	1.82E+01	9.54E+00	3.25E+01	U
TG	08	428521004	7/18/2017	Fe-59	-8.37E+00	1.71E+01	5.39E+01	U
TG	08	428521004	7/18/2017	I-131	-7.48E+00	1.33E+01	4.18E+01	U
TG	08	428521004	7/18/2017	K-40	3.38E+03	3.79E+02	2.64E+02	
TG	08	428521004	7/18/2017	La-140	-9.89E+00	1.42E+01	4.07E+01	U
TG	08	428521004	7/18/2017	Mn-54	8.50E+00	9.22E+00	3.27E+01	U
TG	08	428521004	7/18/2017	Nb-95	-3.38E-01	9.62E+00	2.88E+01	U
TG	08	428521004	7/18/2017	Ru-103	-6.66E+00	9.24E+00	2.57E+01	U
TG	08	428521004	7/18/2017	Ru-106	-7.10E+01	8.12E+01	2.35E+02	U
TG	08	428521004	7/18/2017	Sb-124	1.62E+00	1.60E+01	5.32E+01	U
TG	08	428521004	7/18/2017	Sb-125	-4.18E+00	1.95E+01	6.27E+01	U
TG	08	428521004	7/18/2017	Se-75	5.79E+00	1.04E+01	3.55E+01	U
TG	08	428521004	7/18/2017	Th-228	2.73E+01	2.88E+01	5.05E+01	U
TG	08	428521004	7/18/2017	Zn-65	-3.55E+00	2.31E+01	7.63E+01	U
TG	08	428521004	7/18/2017	Zr-95	-1.78E+00	1.50E+01	4.70E+01	U
TG	08	431061004	8/15/2017	Ac-228	7.15E+00	2.75E+01	8.54E+01	U
TG	08	431061004	8/15/2017	Ag-108m	-2.46E+00	4.30E+00	1.38E+01	U
TG	08	431061004	8/15/2017	Ag-110m	-2.35E+00	7.97E+00	2.49E+01	U
TG	08	431061004	8/15/2017	Ba-140	-2.43E+00	2.70E+01	8.87E+01	U
TG	08	431061004	8/15/2017	Be-7	1.50E+03	1.33E+02	1.42E+02	
TG	08	431061004	8/15/2017	Ce-141	-2.97E-01	1.04E+01	3.03E+01	U
TG	08	431061004	8/15/2017	Ce-144	-1.85E+01	3.15E+01	9.68E+01	U
TG	08	431061004	8/15/2017	Co-57	-3.87E+00	4.43E+00	1.34E+01	U
TG	08	431061004	8/15/2017	Co-58	1.69E+00	4.53E+00	1.50E+01	U
TG	08	431061004	8/15/2017	Co-60	-2.00E+00	5.13E+00	1.65E+01	U
TG	08	431061004	8/15/2017	Cr-51	-1.26E+01	5.17E+01	1.73E+02	U
TG	08	431061004	8/15/2017	Cs-134	2.93E-01	5.95E+00	1.93E+01	U
TG	08	431061004	8/15/2017	Cs-137	3.81E+00	5.31E+00	1.79E+01	U
TG	08	431061004	8/15/2017	Fe-59	-3.46E+00	1.05E+01	3.47E+01	U
TG	08	431061004	8/15/2017	I-131	-9.95E+00	1.07E+01	3.36E+01	U
TG	08	431061004	8/15/2017	K-40	5.59E+03	3.89E+02	1.54E+02	
TG	08	431061004	8/15/2017	La-140	-9.00E+00	8.34E+00	2.27E+01	U
TG	08	431061004	8/15/2017	Mn-54	9.81E+00	5.82E+00	1.88E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	08	431061004	8/15/2017	Nb-95	2.97E+00	5.26E+00	1.76E+01	U
TG	08	431061004	8/15/2017	Ru-103	-4.80E+00	5.71E+00	1.78E+01	U
TG	08	431061004	8/15/2017	Ru-106	2.22E+01	4.70E+01	1.57E+02	U
TG	08	431061004	8/15/2017	Sb-124	-5.87E+00	1.02E+01	3.03E+01	U
TG	08	431061004	8/15/2017	Sb-125	-1.17E+01	1.39E+01	4.35E+01	U
TG	08	431061004	8/15/2017	Se-75	-6.37E+00	8.19E+00	2.25E+01	U
TG	08	431061004	8/15/2017	Th-228	5.19E+00	1.89E+01	3.38E+01	U
TG	08	431061004	8/15/2017	Zn-65	-1.70E+01	1.58E+01	4.14E+01	U
TG	08	431061004	8/15/2017	Zr-95	7.41E+00	1.05E+01	3.51E+01	U
TG	08	433033001	9/13/2017	Ac-228	5.97E+01	4.19E+01	1.24E+02	U
TG	08	433033001	9/13/2017	Ag-108m	3.57E-01	5.64E+00	1.89E+01	U
TG	08	433033001	9/13/2017	Ag-110m	7.67E+00	9.44E+00	3.21E+01	U
TG	08	433033001	9/13/2017	Ba-140	-7.91E+00	3.02E+01	9.73E+01	U
TG	08	433033001	9/13/2017	Be-7	1.25E+03	1.32E+02	1.42E+02	
TG	08	433033001	9/13/2017	Ce-141	9.86E+00	1.75E+01	3.71E+01	U
TG	08	433033001	9/13/2017	Ce-144	1.36E+01	3.92E+01	1.28E+02	U
TG	08	433033001	9/13/2017	Co-57	3.34E-01	5.29E+00	1.72E+01	U
TG	08	433033001	9/13/2017	Co-58	5.81E+00	7.22E+00	2.45E+01	U
TG	08	433033001	9/13/2017	Co-60	2.49E+00	7.12E+00	2.46E+01	U
TG	08	433033001	9/13/2017	Cr-51	-7.81E+01	6.12E+01	1.84E+02	U
TG	08	433033001	9/13/2017	Cs-134	-6.59E+00	7.77E+00	2.22E+01	U
TG	08	433033001	9/13/2017	Cs-137	9.00E+00	8.34E+00	2.84E+01	U
TG	08	433033001	9/13/2017	Fe-59	3.13E+00	1.69E+01	5.14E+01	U
TG	08	433033001	9/13/2017	I-131	2.33E+00	1.23E+01	4.18E+01	U
TG	08	433033001	9/13/2017	K-40	4.08E+03	3.64E+02	2.29E+02	
TG	08	433033001	9/13/2017	La-140	1.12E+01	1.04E+01	3.86E+01	U
TG	08	433033001	9/13/2017	Mn-54	1.18E+01	7.09E+00	2.33E+01	U
TG	08	433033001	9/13/2017	Nb-95	1.09E+01	8.06E+00	2.75E+01	U
TG	08	433033001	9/13/2017	Ru-103	7.23E-01	7.00E+00	2.14E+01	U
TG	08	433033001	9/13/2017	Ru-106	2.30E+01	5.54E+01	1.87E+02	U
TG	08	433033001	9/13/2017	Sb-124	-6.63E+00	1.53E+01	4.55E+01	U
TG	08	433033001	9/13/2017	Sb-125	-1.18E+01	1.41E+01	4.28E+01	U
TG	08	433033001	9/13/2017	Se-75	2.25E+01	9.96E+00	3.25E+01	U
TG	08	433033001	9/13/2017	Th-228	-1.98E+01	1.50E+01	4.29E+01	U
TG	08	433033001	9/13/2017	Zn-65	6.04E+00	1.86E+01	6.39E+01	U
TG	08	433033001	9/13/2017	Zr-95	-1.15E+01	1.19E+01	3.32E+01	U
TG	08	435141001	9/13/2017	Ac-228	1.41E+01	3.12E+01	4.40E+01	U
TG	08	435141001	9/13/2017	Ag-108m	-1.85E+00	2.96E+00	9.53E+00	U
TG	08	435141001	9/13/2017	Ag-110m	-4.81E+00	5.38E+00	1.60E+01	U
TG	08	435141001	9/13/2017	Ba-140	1.34E+02	9.42E+01	2.61E+02	U
TG	08	435141001	9/13/2017	Be-7	8.22E+02	9.13E+01	1.24E+02	
TG	08	435141001	9/13/2017	Ce-141	-1.87E+01	1.88E+01	3.18E+01	U
TG	08	435141001	9/13/2017	Ce-144	2.85E+00	2.17E+01	6.85E+01	U
TG	08	435141001	9/13/2017	Co-57	-3.96E+00	3.14E+00	9.21E+00	U
TG	08	435141001	9/13/2017	Co-58	1.51E+00	4.60E+00	1.49E+01	U
TG	08	435141001	9/13/2017	Co-60	-1.53E+00	4.03E+00	1.31E+01	U
TG	08	435141001	9/13/2017	Cr-51	-3.45E+01	6.21E+01	2.04E+02	U
TG	08	435141001	9/13/2017	Cs-134	6.48E+00	5.22E+00	1.36E+01	U
TG	08	435141001	9/13/2017	Cs-137	-9.14E+00	4.15E+00	1.04E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)		FLAGS
TG	08	435141001	9/13/2017	Fe-59	-1.47E+00	1.16E+01	3.88E+01	U	
TG	08	435141001	9/13/2017	I-131	4.32E+01	6.76E+01	2.27E+02	U	DL
TG	08	435141001	9/13/2017	K-40	4.09E+03	2.70E+02	1.33E+02		
TG	08	435141001	9/13/2017	La-140	7.34E+00	2.47E+01	8.26E+01	U	
TG	08	435141001	9/13/2017	Mn-54	4.50E+00	3.99E+00	1.28E+01	U	
TG	08	435141001	9/13/2017	Nb-95	-1.89E+00	5.13E+00	1.62E+01	U	
TG	08	435141001	9/13/2017	Ru-103	2.61E-01	5.68E+00	1.87E+01	U	
TG	08	435141001	9/13/2017	Ru-106	8.42E+00	3.29E+01	1.08E+02	U	
TG	08	435141001	9/13/2017	Sb-124	1.41E+01	1.20E+01	4.06E+01	U	
TG	08	435141001	9/13/2017	Sb-125	6.91E+00	9.03E+00	3.01E+01	U	
TG	08	435141001	9/13/2017	Se-75	-3.10E+00	5.23E+00	1.66E+01	U	
TG	08	435141001	9/13/2017	Th-228	1.20E+00	1.18E+01	1.98E+01	U	
TG	08	435141001	9/13/2017	Zn-65	-1.56E+01	9.64E+00	2.80E+01	U	
TG	08	435141001	9/13/2017	Zr-95	-6.47E-01	9.15E+00	2.93E+01	U	
TG	09	424110002	5/23/2017	Ac-228	-1.25E+01	3.12E+01	9.47E+01	U	
TG	09	424110002	5/23/2017	Ag-108m	-6.62E+00	5.27E+00	1.29E+01	U	
TG	09	424110002	5/23/2017	Ag-110m	5.39E+00	7.11E+00	2.44E+01	U	
TG	09	424110002	5/23/2017	Ba-140	-1.01E+01	2.58E+01	8.17E+01	U	
TG	09	424110002	5/23/2017	Be-7	3.91E+02	1.25E+02	1.78E+02		
TG	09	424110002	5/23/2017	Ce-141	6.86E+00	1.15E+01	2.73E+01	U	
TG	09	424110002	5/23/2017	Ce-144	-6.05E+00	2.79E+01	8.89E+01	U	
TG	09	424110002	5/23/2017	Co-57	-1.07E+00	3.97E+00	1.27E+01	U	
TG	09	424110002	5/23/2017	Co-58	-3.62E+00	5.09E+00	1.46E+01	U	
TG	09	424110002	5/23/2017	Co-60	-1.62E+00	4.93E+00	1.55E+01	U	
TG	09	424110002	5/23/2017	Cr-51	-2.33E+01	4.86E+01	1.60E+02	U	
TG	09	424110002	5/23/2017	Cs-134	-1.22E+00	6.19E+00	1.95E+01	U	
TG	09	424110002	5/23/2017	Cs-137	-8.74E-01	6.19E+00	2.03E+01	U	
TG	09	424110002	5/23/2017	Fe-59	9.06E+00	1.21E+01	4.32E+01	U	
TG	09	424110002	5/23/2017	I-131	-8.52E-01	8.53E+00	2.87E+01	U	
TG	09	424110002	5/23/2017	K-40	3.74E+03	2.95E+02	1.90E+02		
TG	09	424110002	5/23/2017	La-140	1.22E+01	9.74E+00	3.63E+01	U	
TG	09	424110002	5/23/2017	Mn-54	1.70E+00	5.80E+00	1.88E+01	U	
TG	09	424110002	5/23/2017	Nb-95	-7.66E+00	6.95E+00	1.89E+01	U	
TG	09	424110002	5/23/2017	Ru-103	2.01E+00	5.67E+00	1.93E+01	U	
TG	09	424110002	5/23/2017	Ru-106	4.23E+00	4.67E+01	1.54E+02	U	
TG	09	424110002	5/23/2017	Sb-124	1.78E+01	1.16E+01	4.57E+01	U	
TG	09	424110002	5/23/2017	Sb-125	-1.13E+01	1.44E+01	4.46E+01	U	
TG	09	424110002	5/23/2017	Se-75	-1.13E+00	6.44E+00	1.97E+01	U	
TG	09	424110002	5/23/2017	Th-228	3.25E+00	1.55E+01	3.32E+01	U	
TG	09	424110002	5/23/2017	Zn-65	-6.01E+00	1.38E+01	3.82E+01	U	
TG	09	424110002	5/23/2017	Zr-95	-6.37E+00	1.09E+01	3.29E+01	U	
TG	09	426365005	6/22/2017	Ac-228	1.15E+02	4.34E+01	1.37E+02	U	
TG	09	426365005	6/22/2017	Ag-108m	3.14E+00	6.41E+00	2.20E+01	U	
TG	09	426365005	6/22/2017	Ag-110m	-1.77E+01	1.48E+01	3.69E+01	U	
TG	09	426365005	6/22/2017	Ba-140	-1.39E+01	3.68E+01	1.18E+02	U	
TG	09	426365005	6/22/2017	Be-7	9.84E+02	1.26E+02	1.94E+02		
TG	09	426365005	6/22/2017	Ce-141	-7.92E+00	1.04E+01	3.16E+01	U	
TG	09	426365005	6/22/2017	Ce-144	-8.21E+01	4.51E+01	1.18E+02	U	
TG	09	426365005	6/22/2017	Co-57	-4.20E+00	5.56E+00	1.71E+01	U	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	09	426365005	6/22/2017	Co-58	-8.03E+00	7.10E+00	1.87E+01	U
TG	09	426365005	6/22/2017	Co-60	-1.17E+01	9.22E+00	2.46E+01	U
TG	09	426365005	6/22/2017	Cr-51	3.43E+01	5.90E+01	2.06E+02	U
TG	09	426365005	6/22/2017	Cs-134	-5.31E+00	8.97E+00	2.68E+01	U
TG	09	426365005	6/22/2017	Cs-137	3.68E+00	1.18E+01	2.66E+01	U
TG	09	426365005	6/22/2017	Fe-59	-9.32E+00	1.61E+01	5.07E+01	U
TG	09	426365005	6/22/2017	I-131	-1.22E+01	1.06E+01	3.20E+01	U
TG	09	426365005	6/22/2017	K-40	4.64E+03	3.67E+02	2.68E+02	
TG	09	426365005	6/22/2017	La-140	5.11E+00	1.24E+01	3.84E+01	U
TG	09	426365005	6/22/2017	Mn-54	1.25E+00	7.97E+00	2.59E+01	U
TG	09	426365005	6/22/2017	Nb-95	-1.16E+01	8.87E+00	2.37E+01	U
TG	09	426365005	6/22/2017	Ru-103	3.06E+00	7.06E+00	2.41E+01	U
TG	09	426365005	6/22/2017	Ru-106	1.27E+01	7.43E+01	2.46E+02	U
TG	09	426365005	6/22/2017	Sb-124	-1.74E+01	1.08E+01	0.00E+00	U
TG	09	426365005	6/22/2017	Sb-125	-1.99E+01	2.21E+01	6.84E+01	U
TG	09	426365005	6/22/2017	Se-75	6.98E+00	1.01E+01	3.24E+01	U
TG	09	426365005	6/22/2017	Th-228	2.05E+01	1.76E+01	5.59E+01	U
TG	09	426365005	6/22/2017	Zn-65	2.75E+01	1.69E+01	6.15E+01	U
TG	09	426365005	6/22/2017	Zr-95	-1.96E+01	1.37E+01	3.42E+01	U
TG	09	428521005	7/18/2017	Ac-228	-2.53E+01	3.43E+01	1.09E+02	U
TG	09	428521005	7/18/2017	Ag-108m	6.49E+00	6.21E+00	2.15E+01	U
TG	09	428521005	7/18/2017	Ag-110m	-1.43E+01	1.04E+01	2.60E+01	U
TG	09	428521005	7/18/2017	Ba-140	3.78E+01	3.13E+01	1.02E+02	U
TG	09	428521005	7/18/2017	Be-7	1.45E+03	1.64E+02	1.87E+02	
TG	09	428521005	7/18/2017	Ce-141	-1.78E-01	1.07E+01	3.42E+01	U
TG	09	428521005	7/18/2017	Ce-144	-5.60E+01	4.12E+01	1.16E+02	U
TG	09	428521005	7/18/2017	Co-57	-1.80E+00	5.16E+00	1.63E+01	U
TG	09	428521005	7/18/2017	Co-58	2.45E+00	5.60E+00	1.88E+01	U
TG	09	428521005	7/18/2017	Co-60	-5.31E-01	5.70E+00	1.86E+01	U
TG	09	428521005	7/18/2017	Cr-51	5.59E+01	5.91E+01	2.06E+02	U
TG	09	428521005	7/18/2017	Cs-134	8.86E+00	7.90E+00	2.72E+01	U
TG	09	428521005	7/18/2017	Cs-137	-1.71E+01	7.78E+00	1.56E+01	U
TG	09	428521005	7/18/2017	Fe-59	1.34E+01	1.37E+01	4.96E+01	U
TG	09	428521005	7/18/2017	I-131	8.56E+00	1.29E+01	4.13E+01	U
TG	09	428521005	7/18/2017	K-40	4.75E+03	3.83E+02	1.75E+02	
TG	09	428521005	7/18/2017	La-140	-2.83E+00	1.01E+01	3.14E+01	U
TG	09	428521005	7/18/2017	Mn-54	4.44E+00	6.38E+00	2.16E+01	U
TG	09	428521005	7/18/2017	Nb-95	-8.57E+00	9.19E+00	2.62E+01	U
TG	09	428521005	7/18/2017	Ru-103	-3.08E+00	7.80E+00	2.22E+01	U
TG	09	428521005	7/18/2017	Ru-106	-7.48E+01	7.76E+01	2.17E+02	U
TG	09	428521005	7/18/2017	Sb-124	-2.02E+01	2.01E+01	5.41E+01	U
TG	09	428521005	7/18/2017	Sb-125	-8.41E+00	1.76E+01	5.66E+01	U
TG	09	428521005	7/18/2017	Se-75	-1.56E+01	9.30E+00	2.68E+01	U
TG	09	428521005	7/18/2017	Th-228	1.05E+01	1.56E+01	4.52E+01	U
TG	09	428521005	7/18/2017	Zn-65	-5.77E+00	1.55E+01	5.01E+01	U
TG	09	428521005	7/18/2017	Zr-95	7.88E+00	1.31E+01	4.42E+01	U
TG	09	431061005	8/15/2017	Ac-228	3.19E+01	5.12E+01	8.89E+01	U
TG	09	431061005	8/15/2017	Ag-108m	1.23E+01	1.03E+01	1.75E+01	U
TG	09	431061005	8/15/2017	Ag-110m	1.83E+01	9.96E+00	2.41E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	09	431061005	8/15/2017	Ba-140	2.25E+01	2.89E+01	9.30E+01	U
TG	09	431061005	8/15/2017	Be-7	1.29E+03	1.08E+02	1.56E+02	
TG	09	431061005	8/15/2017	Ce-141	-4.49E+01	1.68E+01	2.66E+01	U
TG	09	431061005	8/15/2017	Ce-144	-6.37E+01	3.17E+01	9.20E+01	U
TG	09	431061005	8/15/2017	Co-57	-4.44E+00	3.74E+00	1.21E+01	U
TG	09	431061005	8/15/2017	Co-58	-1.74E+00	5.88E+00	1.95E+01	U
TG	09	431061005	8/15/2017	Co-60	8.55E+00	6.15E+00	2.02E+01	U
TG	09	431061005	8/15/2017	Cr-51	-1.85E+01	4.93E+01	1.61E+02	U
TG	09	431061005	8/15/2017	Cs-134	-1.37E+01	7.36E+00	2.00E+01	U
TG	09	431061005	8/15/2017	Cs-137	7.35E+00	7.42E+00	1.87E+01	U
TG	09	431061005	8/15/2017	Fe-59	-2.55E+01	1.22E+01	3.12E+01	U
TG	09	431061005	8/15/2017	I-131	7.50E+00	1.00E+01	3.28E+01	U
TG	09	431061005	8/15/2017	K-40	5.37E+03	3.44E+02	1.31E+02	
TG	09	431061005	8/15/2017	La-140	-1.84E+01	8.99E+00	2.08E+01	U
TG	09	431061005	8/15/2017	Mn-54	3.74E+00	5.92E+00	2.00E+01	U
TG	09	431061005	8/15/2017	Nb-95	9.31E+00	5.93E+00	1.95E+01	U
TG	09	431061005	8/15/2017	Ru-103	-2.49E-01	6.00E+00	1.93E+01	U
TG	09	431061005	8/15/2017	Ru-106	6.44E+01	5.48E+01	1.73E+02	U
TG	09	431061005	8/15/2017	Sb-124	-2.62E-01	1.03E+01	3.48E+01	U
TG	09	431061005	8/15/2017	Sb-125	-5.86E+00	1.47E+01	4.69E+01	U
TG	09	431061005	8/15/2017	Se-75	6.65E+00	7.67E+00	2.29E+01	U
TG	09	431061005	8/15/2017	Th-228	-4.92E+00	1.78E+01	3.56E+01	U
TG	09	431061005	8/15/2017	Zn-65	-5.70E-01	1.13E+01	3.69E+01	U
TG	09	431061005	8/15/2017	Zr-95	-9.37E+00	1.05E+01	3.35E+01	U
TG	09	433033002	9/13/2017	Ac-228	-1.36E+01	3.92E+01	1.27E+02	U
TG	09	433033002	9/13/2017	Ag-108m	1.78E+00	6.40E+00	2.15E+01	U
TG	09	433033002	9/13/2017	Ag-110m	2.29E+01	1.40E+01	4.88E+01	U
TG	09	433033002	9/13/2017	Ba-140	2.45E+01	4.42E+01	1.34E+02	U
TG	09	433033002	9/13/2017	Be-7	9.43E+02	1.45E+02	2.37E+02	
TG	09	433033002	9/13/2017	Ce-141	4.96E+00	1.00E+01	3.07E+01	U
TG	09	433033002	9/13/2017	Ce-144	5.35E+01	3.83E+01	1.25E+02	U
TG	09	433033002	9/13/2017	Co-57	8.23E-02	4.37E+00	1.43E+01	U
TG	09	433033002	9/13/2017	Co-58	-6.85E+00	9.02E+00	2.81E+01	U
TG	09	433033002	9/13/2017	Co-60	1.79E+01	1.10E+01	3.66E+01	U
TG	09	433033002	9/13/2017	Cr-51	-9.13E+01	7.00E+01	2.10E+02	U
TG	09	433033002	9/13/2017	Cs-134	-2.54E+00	9.35E+00	2.68E+01	U
TG	09	433033002	9/13/2017	Cs-137	-6.15E+00	8.06E+00	2.33E+01	U
TG	09	433033002	9/13/2017	Fe-59	-2.59E+01	2.04E+01	5.52E+01	U
TG	09	433033002	9/13/2017	I-131	6.50E+00	1.25E+01	4.27E+01	U
TG	09	433033002	9/13/2017	K-40	4.66E+03	3.88E+02	2.52E+02	
TG	09	433033002	9/13/2017	La-140	-3.07E+01	1.40E+01	2.02E+01	U
TG	09	433033002	9/13/2017	Mn-54	1.95E+01	8.08E+00	2.41E+01	U
TG	09	433033002	9/13/2017	Nb-95	-7.93E+00	9.20E+00	2.85E+01	U
TG	09	433033002	9/13/2017	Ru-103	-1.10E+01	8.19E+00	2.26E+01	U
TG	09	433033002	9/13/2017	Ru-106	3.33E+01	6.92E+01	2.30E+02	U
TG	09	433033002	9/13/2017	Sb-124	-1.01E+01	1.64E+01	4.79E+01	U
TG	09	433033002	9/13/2017	Sb-125	1.89E+01	1.92E+01	6.61E+01	U
TG	09	433033002	9/13/2017	Se-75	-1.28E+00	8.54E+00	2.91E+01	U
TG	09	433033002	9/13/2017	Th-228	-4.40E+00	1.49E+01	4.35E+01	U
TG	09	433033002	9/13/2017	Zn-65	-2.93E+01	2.11E+01	5.54E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)		FLAGS
TG	09	433033002	9/13/2017	Zr-95	4.45E+00	1.39E+01	4.80E+01	U	
TG	09	435141002	9/13/2017	Ac-228	2.48E+01	4.27E+01	6.52E+01	U	
TG	09	435141002	9/13/2017	Ag-108m	2.59E+00	3.12E+00	1.03E+01	U	
TG	09	435141002	9/13/2017	Ag-110m	-3.96E+00	5.51E+00	1.79E+01	U	
TG	09	435141002	9/13/2017	Ba-140	5.40E+01	8.28E+01	2.72E+02	U	
TG	09	435141002	9/13/2017	Be-7	6.10E+02	1.04E+02	1.48E+02		
TG	09	435141002	9/13/2017	Ce-141	1.50E+01	1.13E+01	3.26E+01	U	
TG	09	435141002	9/13/2017	Ce-144	2.73E+00	2.17E+01	6.92E+01	U	
TG	09	435141002	9/13/2017	Co-57	1.39E+00	2.82E+00	9.06E+00	U	
TG	09	435141002	9/13/2017	Co-58	1.13E+01	5.91E+00	1.74E+01	U	
TG	09	435141002	9/13/2017	Co-60	7.38E+00	5.08E+00	1.66E+01	U	
TG	09	435141002	9/13/2017	Cr-51	-6.39E+01	1.48E+02	2.09E+02	U	
TG	09	435141002	9/13/2017	Cs-134	4.30E+00	4.52E+00	1.50E+01	U	
TG	09	435141002	9/13/2017	Cs-137	6.95E+00	7.36E+00	1.25E+01	U	
TG	09	435141002	9/13/2017	Fe-59	-6.03E+00	1.35E+01	4.37E+01	U	
TG	09	435141002	9/13/2017	I-131	-9.56E+01	7.01E+01	2.14E+02	U	DL
TG	09	435141002	9/13/2017	K-40	4.75E+03	2.92E+02	1.26E+02		
TG	09	435141002	9/13/2017	La-140	-2.20E+01	3.06E+01	9.28E+01	U	
TG	09	435141002	9/13/2017	Mn-54	-1.54E+00	3.87E+00	1.29E+01	U	
TG	09	435141002	9/13/2017	Nb-95	-1.88E+00	5.78E+00	1.81E+01	U	
TG	09	435141002	9/13/2017	Ru-103	5.06E+00	6.35E+00	2.09E+01	U	
TG	09	435141002	9/13/2017	Ru-106	-2.32E+01	3.81E+01	1.19E+02	U	
TG	09	435141002	9/13/2017	Sb-124	4.81E+00	1.07E+01	3.51E+01	U	
TG	09	435141002	9/13/2017	Sb-125	-4.70E+00	9.38E+00	3.04E+01	U	
TG	09	435141002	9/13/2017	Se-75	-5.55E+00	1.08E+01	1.70E+01	U	
TG	09	435141002	9/13/2017	Th-228	1.25E+01	1.50E+01	2.58E+01	U	
TG	09	435141002	9/13/2017	Zn-65	-3.94E+00	1.12E+01	3.19E+01	U	
TG	09	435141002	9/13/2017	Zr-95	1.84E+00	9.67E+00	3.09E+01	U	
TG	10	424110003	5/23/2017	Ac-228	8.13E+01	5.01E+01	1.73E+02	U	
TG	10	424110003	5/23/2017	Ag-108m	-5.15E-01	8.55E+00	2.52E+01	U	
TG	10	424110003	5/23/2017	Ag-110m	-1.63E+01	1.89E+01	4.94E+01	U	
TG	10	424110003	5/23/2017	Ba-140	5.04E-01	5.17E+01	1.66E+02	U	
TG	10	424110003	5/23/2017	Be-7	6.73E+02	1.56E+02	2.62E+02		
TG	10	424110003	5/23/2017	Ce-141	2.01E+01	1.18E+01	3.79E+01	U	
TG	10	424110003	5/23/2017	Ce-144	-1.73E+01	3.95E+01	1.25E+02	U	
TG	10	424110003	5/23/2017	Co-57	5.77E-03	5.22E+00	1.70E+01	U	
TG	10	424110003	5/23/2017	Co-58	-1.61E+01	1.10E+01	2.48E+01	U	
TG	10	424110003	5/23/2017	Co-60	-9.66E+00	1.20E+01	3.62E+01	U	
TG	10	424110003	5/23/2017	Cr-51	8.23E+01	8.47E+01	2.79E+02	U	
TG	10	424110003	5/23/2017	Cs-134	-2.26E+01	1.07E+01	2.36E+01	U	
TG	10	424110003	5/23/2017	Cs-137	2.68E+01	1.35E+01	3.95E+01	U	
TG	10	424110003	5/23/2017	Fe-59	9.14E+00	1.85E+01	6.46E+01	U	
TG	10	424110003	5/23/2017	I-131	6.82E+00	1.69E+01	4.88E+01	U	
TG	10	424110003	5/23/2017	K-40	3.42E+03	3.73E+02	3.54E+02		
TG	10	424110003	5/23/2017	La-140	4.72E+00	7.89E+00	3.01E+01	U	
TG	10	424110003	5/23/2017	Mn-54	1.09E+01	1.11E+01	3.50E+01	U	
TG	10	424110003	5/23/2017	Nb-95	1.84E+01	1.10E+01	3.83E+01	U	
TG	10	424110003	5/23/2017	Ru-103	-6.25E+00	1.04E+01	2.93E+01	U	
TG	10	424110003	5/23/2017	Ru-106	1.09E+02	8.03E+01	2.82E+02	U	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	10	424110003	5/23/2017	Sb-124	4.82E+01	2.52E+01	9.55E+01	U
TG	10	424110003	5/23/2017	Sb-125	-1.45E+01	2.43E+01	7.44E+01	U
TG	10	424110003	5/23/2017	Se-75	-1.37E+01	1.08E+01	3.12E+01	U
TG	10	424110003	5/23/2017	Th-228	-4.04E+01	1.99E+01	5.02E+01	U
TG	10	424110003	5/23/2017	Zn-65	1.56E+01	2.21E+01	7.73E+01	U
TG	10	424110003	5/23/2017	Zr-95	-2.02E+01	1.87E+01	5.58E+01	U
TG	10	426365006	6/22/2017	Ac-228	-6.76E+01	4.69E+01	9.66E+01	U
TG	10	426365006	6/22/2017	Ag-108m	-6.75E+00	5.48E+00	1.66E+01	U
TG	10	426365006	6/22/2017	Ag-110m	2.42E+01	2.72E+01	2.62E+01	U
TG	10	426365006	6/22/2017	Ba-140	4.72E+00	2.46E+01	8.11E+01	U
TG	10	426365006	6/22/2017	Be-7	1.28E+03	1.23E+02	1.55E+02	
TG	10	426365006	6/22/2017	Ce-141	-7.91E+00	1.03E+01	2.84E+01	U
TG	10	426365006	6/22/2017	Ce-144	2.11E+01	3.64E+01	1.15E+02	U
TG	10	426365006	6/22/2017	Co-57	4.22E+00	4.81E+00	1.52E+01	U
TG	10	426365006	6/22/2017	Co-58	-1.29E+00	6.99E+00	1.96E+01	U
TG	10	426365006	6/22/2017	Co-60	9.49E+00	7.01E+00	2.41E+01	U
TG	10	426365006	6/22/2017	Cr-51	-2.85E+00	5.04E+01	1.69E+02	U
TG	10	426365006	6/22/2017	Cs-134	-3.70E+00	6.94E+00	2.14E+01	U
TG	10	426365006	6/22/2017	Cs-137	1.34E+00	5.76E+00	1.88E+01	U
TG	10	426365006	6/22/2017	Fe-59	8.31E+00	1.35E+01	4.64E+01	U
TG	10	426365006	6/22/2017	I-131	5.74E-01	7.76E+00	2.60E+01	U
TG	10	426365006	6/22/2017	K-40	5.39E+03	3.79E+02	1.78E+02	
TG	10	426365006	6/22/2017	La-140	7.09E+00	7.27E+00	2.55E+01	U
TG	10	426365006	6/22/2017	Mn-54	9.87E+00	6.31E+00	2.05E+01	U
TG	10	426365006	6/22/2017	Nb-95	3.58E+00	6.16E+00	2.02E+01	U
TG	10	426365006	6/22/2017	Ru-103	3.61E-01	5.73E+00	1.89E+01	U
TG	10	426365006	6/22/2017	Ru-106	2.90E+01	5.42E+01	1.79E+02	U
TG	10	426365006	6/22/2017	Sb-124	-2.98E+01	2.41E+01	4.21E+01	U
TG	10	426365006	6/22/2017	Sb-125	7.13E+00	1.56E+01	5.22E+01	U
TG	10	426365006	6/22/2017	Se-75	4.25E+00	7.67E+00	2.61E+01	U
TG	10	426365006	6/22/2017	Th-228	2.32E+00	2.40E+01	4.00E+01	U
TG	10	426365006	6/22/2017	Zn-65	-1.73E+00	1.52E+01	4.46E+01	U
TG	10	426365006	6/22/2017	Zr-95	4.02E+00	1.10E+01	3.58E+01	U
TG	10	428521006	7/18/2017	Ac-228	3.07E+02	7.38E+01	1.13E+02	
TG	10	428521006	7/18/2017	Ag-108m	3.58E-01	7.02E+00	2.30E+01	U
TG	10	428521006	7/18/2017	Ag-110m	-1.93E+01	1.27E+01	3.24E+01	U
TG	10	428521006	7/18/2017	Ba-140	1.79E+01	4.56E+01	1.51E+02	U
TG	10	428521006	7/18/2017	Be-7	7.86E+02	1.89E+02	2.59E+02	
TG	10	428521006	7/18/2017	Ce-141	1.19E+01	1.59E+01	5.00E+01	U
TG	10	428521006	7/18/2017	Ce-144	-2.95E+01	5.70E+01	1.58E+02	U
TG	10	428521006	7/18/2017	Co-57	1.10E+01	7.36E+00	2.36E+01	U
TG	10	428521006	7/18/2017	Co-58	5.58E+00	8.64E+00	3.04E+01	U
TG	10	428521006	7/18/2017	Co-60	-1.01E+01	9.35E+00	2.35E+01	U
TG	10	428521006	7/18/2017	Cr-51	-7.07E+01	8.23E+01	2.54E+02	U
TG	10	428521006	7/18/2017	Cs-134	8.67E+00	9.30E+00	3.32E+01	U
TG	10	428521006	7/18/2017	Cs-137	1.01E+01	1.00E+01	3.56E+01	U
TG	10	428521006	7/18/2017	Fe-59	2.41E+00	2.18E+01	7.20E+01	U
TG	10	428521006	7/18/2017	I-131	-1.05E+01	1.57E+01	4.88E+01	U
TG	10	428521006	7/18/2017	K-40	2.49E+03	3.42E+02	3.46E+02	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TG	10	428521006	7/18/2017	La-140	-3.04E+00	1.31E+01	4.21E+01	U
TG	10	428521006	7/18/2017	Mn-54	1.08E+01	9.79E+00	3.46E+01	U
TG	10	428521006	7/18/2017	Nb-95	1.98E+00	9.74E+00	3.33E+01	U
TG	10	428521006	7/18/2017	Ru-103	6.11E+00	8.33E+00	2.82E+01	U
TG	10	428521006	7/18/2017	Ru-106	2.41E+01	8.91E+01	2.89E+02	U
TG	10	428521006	7/18/2017	Sb-124	1.17E+01	1.89E+01	6.90E+01	U
TG	10	428521006	7/18/2017	Sb-125	-2.68E+01	2.72E+01	6.91E+01	U
TG	10	428521006	7/18/2017	Se-75	2.01E+01	1.24E+01	4.19E+01	U
TG	10	428521006	7/18/2017	Th-228	1.26E+01	3.57E+01	4.23E+01	U
TG	10	428521006	7/18/2017	Zn-65	-4.23E+01	2.40E+01	5.51E+01	U
TG	10	428521006	7/18/2017	Zr-95	1.22E+01	1.81E+01	6.34E+01	U
TG	10	431061006	8/15/2017	Ac-228	8.02E+01	6.63E+01	1.28E+02	U
TG	10	431061006	8/15/2017	Ag-108m	-1.44E+01	6.99E+00	1.85E+01	U
TG	10	431061006	8/15/2017	Ag-110m	6.83E+00	1.06E+01	3.59E+01	U
TG	10	431061006	8/15/2017	Ba-140	-4.98E+00	4.18E+01	1.35E+02	U
TG	10	431061006	8/15/2017	Be-7	2.37E+03	1.91E+02	1.95E+02	
TG	10	431061006	8/15/2017	Ce-141	-2.40E+01	1.38E+01	3.77E+01	U
TG	10	431061006	8/15/2017	Ce-144	-5.76E+01	4.31E+01	1.24E+02	U
TG	10	431061006	8/15/2017	Co-57	-5.85E+00	5.70E+00	1.70E+01	U
TG	10	431061006	8/15/2017	Co-58	1.38E+01	8.30E+00	2.74E+01	U
TG	10	431061006	8/15/2017	Co-60	1.49E+01	8.30E+00	2.73E+01	U
TG	10	431061006	8/15/2017	Cr-51	5.32E+01	7.07E+01	2.37E+02	U
TG	10	431061006	8/15/2017	Cs-134	0.00E+00	1.32E+01	2.58E+01	U
TG	10	431061006	8/15/2017	Cs-137	2.23E+01	1.71E+01	2.37E+01	U
TG	10	431061006	8/15/2017	Fe-59	-5.44E+00	1.50E+01	4.83E+01	U
TG	10	431061006	8/15/2017	I-131	-2.47E+01	1.68E+01	4.96E+01	U
TG	10	431061006	8/15/2017	K-40	2.89E+03	2.83E+02	2.07E+02	
TG	10	431061006	8/15/2017	La-140	4.96E+00	1.57E+01	5.13E+01	U
TG	10	431061006	8/15/2017	Mn-54	-6.48E+00	7.11E+00	2.25E+01	U
TG	10	431061006	8/15/2017	Nb-95	1.59E+01	9.27E+00	2.77E+01	U
TG	10	431061006	8/15/2017	Ru-103	1.67E+00	7.60E+00	2.48E+01	U
TG	10	431061006	8/15/2017	Ru-106	8.37E+01	6.87E+01	2.21E+02	U
TG	10	431061006	8/15/2017	Sb-124	3.45E+01	2.86E+01	5.79E+01	U
TG	10	431061006	8/15/2017	Sb-125	-3.91E+00	1.91E+01	6.21E+01	U
TG	10	431061006	8/15/2017	Se-75	-1.06E+01	9.26E+00	2.92E+01	U
TG	10	431061006	8/15/2017	Th-228	4.68E+00	2.13E+01	5.20E+01	U
TG	10	431061006	8/15/2017	Zn-65	1.32E+01	1.68E+01	5.64E+01	U
TG	10	431061006	8/15/2017	Zr-95	-5.36E+00	2.46E+01	4.35E+01	U
TG	10	433033003	9/13/2017	Ac-228	1.74E+02	4.96E+01	8.40E+01	
TG	10	433033003	9/13/2017	Ag-108m	-6.53E+00	7.33E+00	2.25E+01	U
TG	10	433033003	9/13/2017	Ag-110m	-5.80E+00	1.10E+01	3.29E+01	U
TG	10	433033003	9/13/2017	Ba-140	-1.13E+01	4.05E+01	1.31E+02	U
TG	10	433033003	9/13/2017	Be-7	1.65E+03	2.07E+02	2.58E+02	
TG	10	433033003	9/13/2017	Ce-141	5.87E+00	1.35E+01	4.35E+01	U
TG	10	433033003	9/13/2017	Ce-144	4.01E-01	4.71E+01	1.50E+02	U
TG	10	433033003	9/13/2017	Co-57	-3.91E+00	6.41E+00	1.95E+01	U
TG	10	433033003	9/13/2017	Co-58	8.82E+00	9.14E+00	3.14E+01	U
TG	10	433033003	9/13/2017	Co-60	8.67E+00	7.97E+00	2.97E+01	U
TG	10	433033003	9/13/2017	Cr-51	-3.12E+01	8.62E+01	2.56E+02	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)		FLAGS
TG	10	433033003	9/13/2017	Cs-134	-1.08E+01	9.09E+00	2.42E+01	U	
TG	10	433033003	9/13/2017	Cs-137	5.73E-01	8.39E+00	2.76E+01	U	
TG	10	433033003	9/13/2017	Fe-59	1.48E+01	1.79E+01	6.44E+01	U	
TG	10	433033003	9/13/2017	I-131	-3.87E+00	1.18E+01	3.87E+01	U	
TG	10	433033003	9/13/2017	K-40	5.57E+03	4.64E+02	3.38E+02		
TG	10	433033003	9/13/2017	La-140	-1.26E+01	1.09E+01	2.58E+01	U	
TG	10	433033003	9/13/2017	Mn-54	-9.02E+00	6.81E+00	1.66E+01	U	
TG	10	433033003	9/13/2017	Nb-95	7.19E+00	8.17E+00	2.82E+01	U	
TG	10	433033003	9/13/2017	Ru-103	-3.15E+00	7.14E+00	2.27E+01	U	
TG	10	433033003	9/13/2017	Ru-106	-3.66E+01	6.98E+01	2.16E+02	U	
TG	10	433033003	9/13/2017	Sb-124	6.40E+00	1.67E+01	5.86E+01	U	
TG	10	433033003	9/13/2017	Sb-125	4.90E+01	2.81E+01	6.50E+01	U	
TG	10	433033003	9/13/2017	Se-75	7.09E+00	1.00E+01	3.50E+01	U	
TG	10	433033003	9/13/2017	Th-228	1.14E+01	1.78E+01	5.15E+01	U	
TG	10	433033003	9/13/2017	Zn-65	-9.39E+00	2.19E+01	7.13E+01	U	
TG	10	433033003	9/13/2017	Zr-95	-1.89E+00	1.36E+01	4.34E+01	U	
TG	10	435141003	9/13/2017	Ac-228	8.63E+01	2.70E+01	4.51E+01		
TG	10	435141003	9/13/2017	Ag-108m	-4.99E+00	3.27E+00	9.83E+00	U	
TG	10	435141003	9/13/2017	Ag-110m	-4.27E+00	5.47E+00	1.67E+01	U	
TG	10	435141003	9/13/2017	Ba-140	-6.93E+01	7.83E+01	2.47E+02	U	
TG	10	435141003	9/13/2017	Be-7	2.81E+03	1.75E+02	1.34E+02		
TG	10	435141003	9/13/2017	Ce-141	-6.18E+00	1.69E+01	3.48E+01	U	
TG	10	435141003	9/13/2017	Ce-144	1.02E+00	2.30E+01	7.37E+01	U	
TG	10	435141003	9/13/2017	Co-57	-6.59E+00	3.27E+00	8.85E+00	U	
TG	10	435141003	9/13/2017	Co-58	2.67E+00	5.99E+00	1.41E+01	U	
TG	10	435141003	9/13/2017	Co-60	-4.45E-01	3.64E+00	1.21E+01	U	
TG	10	435141003	9/13/2017	Cr-51	-5.76E+01	6.77E+01	2.22E+02	U	
TG	10	435141003	9/13/2017	Cs-134	3.84E+00	9.21E+00	1.44E+01	U	
TG	10	435141003	9/13/2017	Cs-137	1.25E+01	4.59E+00	1.28E+01	U	
TG	10	435141003	9/13/2017	Fe-59	9.15E+00	1.16E+01	3.97E+01	U	
TG	10	435141003	9/13/2017	I-131	-1.87E+01	6.74E+01	2.26E+02	U	DL
TG	10	435141003	9/13/2017	K-40	3.72E+03	2.63E+02	1.03E+02		
TG	10	435141003	9/13/2017	La-140	2.48E+01	2.85E+01	9.60E+01	U	
TG	10	435141003	9/13/2017	Mn-54	6.13E-01	3.97E+00	1.22E+01	U	
TG	10	435141003	9/13/2017	Nb-95	7.10E+00	5.22E+00	1.67E+01	U	
TG	10	435141003	9/13/2017	Ru-103	4.54E+00	5.86E+00	1.95E+01	U	
TG	10	435141003	9/13/2017	Ru-106	-2.47E+01	3.27E+01	1.03E+02	U	
TG	10	435141003	9/13/2017	Sb-124	-1.12E+00	1.02E+01	3.32E+01	U	
TG	10	435141003	9/13/2017	Sb-125	2.19E-01	9.39E+00	3.15E+01	U	
TG	10	435141003	9/13/2017	Se-75	-1.08E+00	5.31E+00	1.82E+01	U	
TG	10	435141003	9/13/2017	Th-228	0.00E+00	1.53E+01	2.08E+01	U	
TG	10	435141003	9/13/2017	Zn-65	9.42E+00	8.79E+00	2.69E+01	U	
TG	10	435141003	9/13/2017	Zr-95	4.88E+00	9.02E+00	2.95E+01	U	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	413776001	1/4/2017	Ac-228	1.80E+00	3.52E+00	7.28E+00	U
TM	15	413776001	1/4/2017	Ag-108m	-6.37E-01	4.62E-01	1.24E+00	U
TM	15	413776001	1/4/2017	Ag-110m	4.23E-01	6.63E-01	2.14E+00	U
TM	15	413776001	1/4/2017	Ba-140	4.12E-01	2.43E+00	8.03E+00	U
TM	15	413776001	1/4/2017	Be-7	5.86E+00	4.16E+00	1.36E+01	U
TM	15	413776001	1/4/2017	Ce-141	-2.43E+00	1.52E+00	2.60E+00	U
TM	15	413776001	1/4/2017	Ce-144	4.34E+00	3.19E+00	9.88E+00	U
TM	15	413776001	1/4/2017	Co-57	2.95E-01	4.09E-01	1.31E+00	U
TM	15	413776001	1/4/2017	Co-58	4.85E-01	5.04E-01	1.63E+00	U
TM	15	413776001	1/4/2017	Co-60	5.58E-01	5.63E-01	1.69E+00	U
TM	15	413776001	1/4/2017	Cr-51	3.49E+00	4.33E+00	1.47E+01	U
TM	15	413776001	1/4/2017	Cs-134	5.41E-01	5.35E-01	1.73E+00	U
TM	15	413776001	1/4/2017	Cs-137	4.36E+00	1.19E+00	1.68E+00	M
TM	15	413776001	1/4/2017	Fe-59	-2.16E+00	1.35E+00	3.43E+00	U
TM	15	413776001	1/4/2017	I-131	1.30E-01	1.43E-01	4.89E-01	U
TM	15	413776001	1/4/2017	K-40	1.42E+03	4.66E+01	1.40E+01	
TM	15	413776001	1/4/2017	La-140	-4.78E-01	7.07E-01	2.20E+00	U
TM	15	413776001	1/4/2017	Mn-54	-3.78E-01	4.56E-01	1.38E+00	U
TM	15	413776001	1/4/2017	Nb-95	5.32E-01	5.09E-01	1.64E+00	U
TM	15	413776001	1/4/2017	Ru-103	5.08E-01	4.94E-01	1.63E+00	U
TM	15	413776001	1/4/2017	Ru-106	-2.65E+00	4.28E+00	1.35E+01	U
TM	15	413776001	1/4/2017	Sb-124	9.39E-02	9.46E-01	3.10E+00	U
TM	15	413776001	1/4/2017	Sb-125	7.54E-01	1.31E+00	3.97E+00	U
TM	15	413776001	1/4/2017	Se-75	1.18E+00	6.46E-01	2.07E+00	U
TM	15	413776001	1/4/2017	Th-228	8.63E-01	1.53E+00	3.03E+00	U
TM	15	413776001	1/4/2017	Zn-65	-5.61E-01	1.14E+00	3.77E+00	U
TM	15	413776001	1/4/2017	Zr-95	-5.64E-01	8.46E-01	2.62E+00	U
TM	15	415774001	2/2/2017	Ac-228	-9.21E+00	4.23E+00	8.52E+00	U
TM	15	415774001	2/2/2017	Ag-108m	-3.48E-01	4.94E-01	1.55E+00	U
TM	15	415774001	2/2/2017	Ag-110m	3.69E-02	8.40E-01	2.75E+00	U
TM	15	415774001	2/2/2017	Ba-140	7.58E+00	4.01E+00	1.24E+01	U
TM	15	415774001	2/2/2017	Be-7	-1.47E+00	7.92E+00	1.69E+01	U
TM	15	415774001	2/2/2017	Ce-141	0.00E+00	1.69E+00	3.35E+00	U
TM	15	415774001	2/2/2017	Ce-144	2.30E+00	3.83E+00	1.29E+01	U
TM	15	415774001	2/2/2017	Co-57	-6.23E-01	5.82E-01	1.68E+00	U
TM	15	415774001	2/2/2017	Co-58	-2.96E-01	5.81E-01	1.93E+00	U
TM	15	415774001	2/2/2017	Co-60	-3.71E-02	6.05E-01	1.99E+00	U
TM	15	415774001	2/2/2017	Cr-51	-4.71E+00	5.83E+00	1.85E+01	U
TM	15	415774001	2/2/2017	Cs-134	4.49E-01	7.30E-01	2.22E+00	U
TM	15	415774001	2/2/2017	Cs-137	5.42E+00	1.39E+00	1.90E+00	M
TM	15	415774001	2/2/2017	Fe-59	-1.52E-01	1.41E+00	4.68E+00	U
TM	15	415774001	2/2/2017	I-131	2.85E-02	1.58E-01	4.62E-01	U
TM	15	415774001	2/2/2017	K-40	1.47E+03	5.03E+01	1.66E+01	
TM	15	415774001	2/2/2017	La-140	1.19E+00	1.01E+00	3.42E+00	U
TM	15	415774001	2/2/2017	Mn-54	5.91E-01	5.89E-01	2.00E+00	U
TM	15	415774001	2/2/2017	Nb-95	5.10E-01	6.17E-01	2.11E+00	U
TM	15	415774001	2/2/2017	Ru-103	-8.54E-02	7.29E-01	2.09E+00	U
TM	15	415774001	2/2/2017	Ru-106	-1.84E+00	5.15E+00	1.62E+01	U
TM	15	415774001	2/2/2017	Sb-124	-1.68E+00	1.48E+00	3.63E+00	U
TM	15	415774001	2/2/2017	Sb-125	2.58E-01	1.55E+00	5.07E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	415774001	2/2/2017	Se-75	-5.42E-02	7.54E-01	2.50E+00	U
TM	15	415774001	2/2/2017	Th-228	2.21E+00	2.12E+00	3.92E+00	U
TM	15	415774001	2/2/2017	Zn-65	1.59E+00	1.49E+00	4.97E+00	U
TM	15	415774001	2/2/2017	Zr-95	-1.87E+00	1.26E+00	3.55E+00	U
TM	15	417730001	3/1/2017	Ac-228	1.17E+00	5.50E+00	8.80E+00	U
TM	15	417730001	3/1/2017	Ag-108m	-6.42E-02	4.90E-01	1.60E+00	U
TM	15	417730001	3/1/2017	Ag-110m	-1.18E+00	8.22E-01	2.46E+00	U
TM	15	417730001	3/1/2017	Ba-140	6.70E+00	4.38E+00	9.73E+00	U
TM	15	417730001	3/1/2017	Be-7	9.77E-01	4.69E+00	1.53E+01	U
TM	15	417730001	3/1/2017	Ce-141	1.30E+00	1.78E+00	3.08E+00	U
TM	15	417730001	3/1/2017	Ce-144	-7.38E+00	4.34E+00	1.21E+01	U
TM	15	417730001	3/1/2017	Co-57	2.02E-01	5.22E-01	1.65E+00	U
TM	15	417730001	3/1/2017	Co-58	-1.28E+00	6.30E-01	1.73E+00	U
TM	15	417730001	3/1/2017	Co-60	-1.34E-01	7.66E-01	2.16E+00	U
TM	15	417730001	3/1/2017	Cr-51	-8.55E+00	5.52E+00	1.65E+01	U
TM	15	417730001	3/1/2017	Cs-134	-7.09E-02	6.16E-01	2.07E+00	U
TM	15	417730001	3/1/2017	Cs-137	8.00E+00	1.17E+00	1.83E+00	M
TM	15	417730001	3/1/2017	Fe-59	-8.66E-02	1.38E+00	4.55E+00	U
TM	15	417730001	3/1/2017	I-131	1.28E-01	1.28E-01	4.12E-01	U
TM	15	417730001	3/1/2017	K-40	1.42E+03	7.94E+01	1.76E+01	
TM	15	417730001	3/1/2017	La-140	-2.23E+00	1.14E+00	2.81E+00	U
TM	15	417730001	3/1/2017	Mn-54	-5.74E-01	5.47E-01	1.72E+00	U
TM	15	417730001	3/1/2017	Nb-95	-7.31E-01	8.00E-01	1.96E+00	U
TM	15	417730001	3/1/2017	Ru-103	-5.40E-01	6.65E-01	1.83E+00	U
TM	15	417730001	3/1/2017	Ru-106	-1.72E+00	4.68E+00	1.47E+01	U
TM	15	417730001	3/1/2017	Sb-124	-1.24E+00	1.22E+00	3.76E+00	U
TM	15	417730001	3/1/2017	Sb-125	-1.33E+00	1.46E+00	4.54E+00	U
TM	15	417730001	3/1/2017	Se-75	6.09E-02	7.23E-01	2.44E+00	U
TM	15	417730001	3/1/2017	Th-228	5.14E-01	2.24E+00	3.45E+00	U
TM	15	417730001	3/1/2017	Zn-65	1.37E+00	1.46E+00	4.84E+00	U
TM	15	417730001	3/1/2017	Zr-95	1.20E-01	9.44E-01	3.21E+00	U
TM	15	420817001	4/12/2017	Ac-228	-3.19E+00	3.39E+00	8.81E+00	U
TM	15	420817001	4/12/2017	Ag-108m	-9.05E-01	5.38E-01	1.57E+00	U
TM	15	420817001	4/12/2017	Ag-110m	9.53E-01	8.55E-01	2.91E+00	U
TM	15	420817001	4/12/2017	Ba-140	-1.90E+00	3.02E+00	9.62E+00	U
TM	15	420817001	4/12/2017	Be-7	-1.71E+00	5.59E+00	1.64E+01	U
TM	15	420817001	4/12/2017	Ce-141	1.57E-01	1.03E+00	3.31E+00	U
TM	15	420817001	4/12/2017	Ce-144	2.40E-01	3.83E+00	1.24E+01	U
TM	15	420817001	4/12/2017	Co-57	-1.85E-01	5.09E-01	1.64E+00	U
TM	15	420817001	4/12/2017	Co-58	7.23E-01	6.51E-01	2.09E+00	U
TM	15	420817001	4/12/2017	Co-60	8.18E-01	6.87E-01	2.29E+00	U
TM	15	420817001	4/12/2017	Cr-51	8.28E-01	4.90E+00	1.67E+01	U
TM	15	420817001	4/12/2017	Cs-134	4.89E-02	6.57E-01	2.10E+00	U
TM	15	420817001	4/12/2017	Cs-137	7.70E+00	1.04E+00	2.04E+00	M
TM	15	420817001	4/12/2017	Fe-59	3.65E+00	1.79E+00	5.05E+00	U
TM	15	420817001	4/12/2017	I-131	2.15E-02	1.37E-01	4.47E-01	U
TM	15	420817001	4/12/2017	K-40	1.58E+03	5.35E+01	1.89E+01	
TM	15	420817001	4/12/2017	La-140	9.06E-01	9.87E-01	3.29E+00	U
TM	15	420817001	4/12/2017	Mn-54	-1.26E-01	6.56E-01	2.07E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	420817001	4/12/2017	Nb-95	9.18E-01	7.49E-01	1.94E+00	U
TM	15	420817001	4/12/2017	Ru-103	2.93E-01	6.70E-01	2.01E+00	U
TM	15	420817001	4/12/2017	Ru-106	1.99E+01	7.26E+00	2.01E+01	U
TM	15	420817001	4/12/2017	Sb-124	-1.85E+00	1.44E+00	3.29E+00	U
TM	15	420817001	4/12/2017	Sb-125	5.81E-01	1.52E+00	5.11E+00	U
TM	15	420817001	4/12/2017	Se-75	-1.65E+00	8.64E-01	2.28E+00	U
TM	15	420817001	4/12/2017	Th-228	0.00E+00	1.85E+00	3.00E+00	U
TM	15	420817001	4/12/2017	Zn-65	7.41E-01	1.53E+00	5.14E+00	U
TM	15	420817001	4/12/2017	Zr-95	-1.38E+00	1.17E+00	3.44E+00	U
TM	15	421965001	4/26/2017	Ac-228	3.68E+00	4.26E+00	7.57E+00	U
TM	15	421965001	4/26/2017	Ag-108m	2.11E-01	4.52E-01	1.41E+00	U
TM	15	421965001	4/26/2017	Ag-110m	3.11E-01	7.14E-01	2.34E+00	U
TM	15	421965001	4/26/2017	Ba-140	5.80E-01	3.10E+00	1.05E+01	U
TM	15	421965001	4/26/2017	Be-7	1.84E+00	4.31E+00	1.48E+01	U
TM	15	421965001	4/26/2017	Ce-141	-3.34E+00	1.67E+00	2.80E+00	U
TM	15	421965001	4/26/2017	Ce-144	-1.10E+00	3.08E+00	1.02E+01	U
TM	15	421965001	4/26/2017	Co-57	-3.83E-01	4.18E-01	1.35E+00	U
TM	15	421965001	4/26/2017	Co-58	-7.14E-01	5.55E-01	1.64E+00	U
TM	15	421965001	4/26/2017	Co-60	-9.99E-01	6.08E-01	1.75E+00	U
TM	15	421965001	4/26/2017	Cr-51	-5.31E+00	5.39E+00	1.61E+01	U
TM	15	421965001	4/26/2017	Cs-134	-1.79E-01	5.62E-01	1.81E+00	U
TM	15	421965001	4/26/2017	Cs-137	5.23E+00	9.68E-01	1.71E+00	M
TM	15	421965001	4/26/2017	Fe-59	1.01E+00	1.24E+00	4.01E+00	U
TM	15	421965001	4/26/2017	I-131	2.89E-01	1.98E-01	6.24E-01	U
TM	15	421965001	4/26/2017	K-40	1.52E+03	5.04E+01	1.57E+01	
TM	15	421965001	4/26/2017	La-140	9.57E-01	8.91E-01	3.06E+00	U
TM	15	421965001	4/26/2017	Mn-54	-2.78E-01	5.20E-01	1.65E+00	U
TM	15	421965001	4/26/2017	Nb-95	-1.50E+00	8.50E-01	1.88E+00	U
TM	15	421965001	4/26/2017	Ru-103	-3.99E-01	5.86E-01	1.72E+00	U
TM	15	421965001	4/26/2017	Ru-106	6.42E+00	4.51E+00	1.49E+01	U
TM	15	421965001	4/26/2017	Sb-124	-2.04E+00	1.22E+00	3.24E+00	U
TM	15	421965001	4/26/2017	Sb-125	0.00E+00	3.33E+00	4.38E+00	U
TM	15	421965001	4/26/2017	Se-75	-6.07E-01	6.85E-01	2.09E+00	U
TM	15	421965001	4/26/2017	Th-228	6.19E-02	1.29E+00	3.14E+00	U
TM	15	421965001	4/26/2017	Zn-65	-1.37E+00	1.74E+00	3.77E+00	U
TM	15	421965001	4/26/2017	Zr-95	-1.06E+00	9.63E-01	2.92E+00	U
TM	15	423149001	5/10/2017	Ac-228	-4.44E+00	3.29E+00	7.74E+00	U
TM	15	423149001	5/10/2017	Ag-108m	1.06E-01	4.23E-01	1.41E+00	U
TM	15	423149001	5/10/2017	Ag-110m	9.86E-01	8.29E-01	2.51E+00	U
TM	15	423149001	5/10/2017	Ba-140	-7.76E-01	3.88E+00	1.25E+01	U
TM	15	423149001	5/10/2017	Be-7	-3.92E+00	4.78E+00	1.50E+01	U
TM	15	423149001	5/10/2017	Ce-141	-1.10E-01	1.03E+00	3.27E+00	U
TM	15	423149001	5/10/2017	Ce-144	1.19E-01	3.27E+00	1.04E+01	U
TM	15	423149001	5/10/2017	Co-57	6.66E-01	8.07E-01	1.33E+00	U
TM	15	423149001	5/10/2017	Co-58	5.85E-03	5.97E-01	2.03E+00	U
TM	15	423149001	5/10/2017	Co-60	6.74E-01	6.08E-01	2.02E+00	U
TM	15	423149001	5/10/2017	Cr-51	1.08E+01	5.97E+00	1.91E+01	U
TM	15	423149001	5/10/2017	Cs-134	0.00E+00	1.28E+00	2.12E+00	U
TM	15	423149001	5/10/2017	Cs-137	5.52E+00	9.42E-01	1.83E+00	M

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	423149001	5/10/2017	Fe-59	1.32E+00	2.57E+00	4.76E+00	U
TM	15	423149001	5/10/2017	I-131	5.43E-02	1.99E-01	6.51E-01	U
TM	15	423149001	5/10/2017	K-40	1.55E+03	5.27E+01	1.62E+01	
TM	15	423149001	5/10/2017	La-140	-1.98E-01	1.11E+00	3.52E+00	U
TM	15	423149001	5/10/2017	Mn-54	-1.15E-01	5.55E-01	1.87E+00	U
TM	15	423149001	5/10/2017	Nb-95	1.18E+00	6.44E-01	1.99E+00	U
TM	15	423149001	5/10/2017	Ru-103	-1.28E+00	6.99E-01	1.95E+00	U
TM	15	423149001	5/10/2017	Ru-106	6.49E+00	4.98E+00	1.60E+01	U
TM	15	423149001	5/10/2017	Sb-124	7.08E-01	1.37E+00	4.48E+00	U
TM	15	423149001	5/10/2017	Sb-125	-4.49E-02	1.33E+00	4.39E+00	U
TM	15	423149001	5/10/2017	Se-75	7.69E-01	6.83E-01	2.30E+00	U
TM	15	423149001	5/10/2017	Th-228	2.09E+00	2.05E+00	3.66E+00	U
TM	15	423149001	5/10/2017	Zn-65	4.05E-02	1.37E+00	4.53E+00	U
TM	15	423149001	5/10/2017	Zr-95	9.08E-01	1.11E+00	3.55E+00	U
TM	15	424067001	5/23/2017	Ac-228	-2.48E+00	4.05E+00	1.01E+01	U
TM	15	424067001	5/23/2017	Ag-108m	3.75E-01	5.36E-01	1.79E+00	U
TM	15	424067001	5/23/2017	Ag-110m	-8.62E-01	8.70E-01	2.61E+00	U
TM	15	424067001	5/23/2017	Ba-140	-1.67E+00	3.34E+00	1.07E+01	U
TM	15	424067001	5/23/2017	Be-7	2.59E+00	5.39E+00	1.79E+01	U
TM	15	424067001	5/23/2017	Ce-141	-7.73E-01	1.12E+00	3.74E+00	U
TM	15	424067001	5/23/2017	Ce-144	5.65E+00	4.26E+00	1.42E+01	U
TM	15	424067001	5/23/2017	Co-57	-6.50E-01	5.44E-01	1.77E+00	U
TM	15	424067001	5/23/2017	Co-58	8.09E-01	6.33E-01	2.05E+00	U
TM	15	424067001	5/23/2017	Co-60	0.00E+00	1.10E+00	2.47E+00	U
TM	15	424067001	5/23/2017	Cr-51	-4.69E+00	5.79E+00	1.87E+01	U
TM	15	424067001	5/23/2017	Cs-134	9.20E-01	7.64E-01	2.34E+00	U
TM	15	424067001	5/23/2017	Cs-137	7.46E+00	1.23E+00	2.16E+00	M
TM	15	424067001	5/23/2017	Fe-59	-2.01E-01	1.50E+00	4.74E+00	U
TM	15	424067001	5/23/2017	I-131	-7.65E-02	1.34E-01	4.26E-01	U
TM	15	424067001	5/23/2017	K-40	1.59E+03	5.47E+01	1.74E+01	
TM	15	424067001	5/23/2017	La-140	-1.60E+00	1.11E+00	3.19E+00	U
TM	15	424067001	5/23/2017	Mn-54	-3.16E-01	5.90E-01	1.84E+00	U
TM	15	424067001	5/23/2017	Nb-95	-5.65E-01	6.79E-01	2.09E+00	U
TM	15	424067001	5/23/2017	Ru-103	-1.46E-01	9.09E-01	2.10E+00	U
TM	15	424067001	5/23/2017	Ru-106	6.75E+00	7.04E+00	1.63E+01	U
TM	15	424067001	5/23/2017	Sb-124	-5.51E-01	1.41E+00	4.58E+00	U
TM	15	424067001	5/23/2017	Sb-125	4.64E-01	1.55E+00	5.16E+00	U
TM	15	424067001	5/23/2017	Se-75	4.76E-02	7.94E-01	2.68E+00	U
TM	15	424067001	5/23/2017	Th-228	9.45E-01	2.20E+00	3.45E+00	U
TM	15	424067001	5/23/2017	Zn-65	8.38E-01	1.56E+00	5.02E+00	U
TM	15	424067001	5/23/2017	Zr-95	-1.25E+00	1.17E+00	3.52E+00	U
TM	15	425261001	6/7/2017	Ac-228	-3.62E+00	3.10E+00	6.85E+00	U
TM	15	425261001	6/7/2017	Ag-108m	-1.62E-01	4.01E-01	1.30E+00	U
TM	15	425261001	6/7/2017	Ag-110m	1.96E-01	6.68E-01	2.13E+00	U
TM	15	425261001	6/7/2017	Ba-140	1.26E+00	2.65E+00	8.71E+00	U
TM	15	425261001	6/7/2017	Be-7	-8.34E-01	4.03E+00	1.31E+01	U
TM	15	425261001	6/7/2017	Ce-141	2.05E+00	1.22E+00	2.77E+00	U
TM	15	425261001	6/7/2017	Ce-144	-3.16E+00	4.84E+00	1.08E+01	U
TM	15	425261001	6/7/2017	Co-57	-9.13E-01	7.14E-01	1.43E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	425261001	6/7/2017	Co-58	1.65E-03	4.87E-01	1.55E+00	U
TM	15	425261001	6/7/2017	Co-60	-1.18E-02	4.72E-01	1.57E+00	U
TM	15	425261001	6/7/2017	Cr-51	-1.66E+00	4.46E+00	1.47E+01	U
TM	15	425261001	6/7/2017	Cs-134	6.41E-01	5.55E-01	1.77E+00	U
TM	15	425261001	6/7/2017	Cs-137	5.39E+00	9.97E-01	1.52E+00	M
TM	15	425261001	6/7/2017	Fe-59	-1.21E-01	1.24E+00	3.67E+00	U
TM	15	425261001	6/7/2017	I-131	-9.37E-02	1.72E-01	5.77E-01	U
TM	15	425261001	6/7/2017	K-40	1.58E+03	4.97E+01	1.30E+01	
TM	15	425261001	6/7/2017	La-140	-1.08E+00	8.32E-01	2.44E+00	U
TM	15	425261001	6/7/2017	Mn-54	4.62E-01	4.81E-01	1.54E+00	U
TM	15	425261001	6/7/2017	Nb-95	1.20E+00	5.31E-01	1.68E+00	U
TM	15	425261001	6/7/2017	Ru-103	-5.43E-01	5.77E-01	1.60E+00	U
TM	15	425261001	6/7/2017	Ru-106	5.45E+00	4.15E+00	1.33E+01	U
TM	15	425261001	6/7/2017	Sb-124	8.09E-01	9.45E-01	3.18E+00	U
TM	15	425261001	6/7/2017	Sb-125	-3.50E-01	1.24E+00	4.05E+00	U
TM	15	425261001	6/7/2017	Se-75	-9.60E-02	6.09E-01	2.04E+00	U
TM	15	425261001	6/7/2017	Th-228	-6.51E-01	1.34E+00	3.06E+00	U
TM	15	425261001	6/7/2017	Zn-65	-2.17E+00	1.17E+00	3.34E+00	U
TM	15	425261001	6/7/2017	Zr-95	1.28E+00	8.67E-01	2.75E+00	U
TM	15	426368001	6/21/2017	Ac-228	5.94E+00	6.14E+00	7.93E+00	U
TM	15	426368001	6/21/2017	Ag-108m	-3.26E-01	5.65E-01	1.80E+00	U
TM	15	426368001	6/21/2017	Ag-110m	-1.09E+00	8.94E-01	2.74E+00	U
TM	15	426368001	6/21/2017	Ba-140	2.72E+00	3.83E+00	1.24E+01	U
TM	15	426368001	6/21/2017	Be-7	1.27E-01	5.46E+00	1.77E+01	U
TM	15	426368001	6/21/2017	Ce-141	-5.11E+00	1.71E+00	3.62E+00	U
TM	15	426368001	6/21/2017	Ce-144	0.00E+00	5.67E+00	1.31E+01	U
TM	15	426368001	6/21/2017	Co-57	4.57E-01	8.01E-01	1.85E+00	U
TM	15	426368001	6/21/2017	Co-58	1.73E-01	6.27E-01	2.11E+00	U
TM	15	426368001	6/21/2017	Co-60	-4.24E-01	6.99E-01	2.17E+00	U
TM	15	426368001	6/21/2017	Cr-51	-1.03E+01	6.32E+00	1.88E+01	U
TM	15	426368001	6/21/2017	Cs-134	1.57E-01	7.02E-01	2.37E+00	U
TM	15	426368001	6/21/2017	Cs-137	3.38E+00	1.37E+00	2.20E+00	M
TM	15	426368001	6/21/2017	Fe-59	-3.09E+00	1.68E+00	4.66E+00	U
TM	15	426368001	6/21/2017	I-131	-1.70E-01	1.67E-01	5.35E-01	U
TM	15	426368001	6/21/2017	K-40	1.55E+03	5.32E+01	1.74E+01	
TM	15	426368001	6/21/2017	La-140	-5.74E+00	2.91E+00	3.33E+00	U
TM	15	426368001	6/21/2017	Mn-54	1.95E-01	6.23E-01	2.03E+00	U
TM	15	426368001	6/21/2017	Nb-95	0.00E+00	1.11E+00	2.02E+00	U
TM	15	426368001	6/21/2017	Ru-103	-7.89E-01	7.17E-01	2.17E+00	U
TM	15	426368001	6/21/2017	Ru-106	-4.86E+00	5.92E+00	1.80E+01	U
TM	15	426368001	6/21/2017	Sb-124	1.78E-01	1.12E+00	3.77E+00	U
TM	15	426368001	6/21/2017	Sb-125	-2.28E+00	1.74E+00	5.22E+00	U
TM	15	426368001	6/21/2017	Se-75	-2.35E-01	8.00E-01	2.67E+00	U
TM	15	426368001	6/21/2017	Th-228	-1.50E+00	1.87E+00	4.02E+00	U
TM	15	426368001	6/21/2017	Zn-65	-1.17E+00	1.80E+00	4.94E+00	U
TM	15	426368001	6/21/2017	Zr-95	8.88E-02	1.13E+00	3.83E+00	U
TM	15	427505001	7/6/2017	Ac-228	2.42E+00	4.69E+00	8.59E+00	U
TM	15	427505001	7/6/2017	Ag-108m	3.13E-01	4.55E-01	1.51E+00	U
TM	15	427505001	7/6/2017	Ag-110m	-6.53E-01	7.71E-01	2.48E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	427505001	7/6/2017	Ba-140	3.64E+00	3.90E+00	1.28E+01	U
TM	15	427505001	7/6/2017	Be-7	1.29E+00	4.88E+00	1.61E+01	U
TM	15	427505001	7/6/2017	Ce-141	-1.56E+00	1.06E+00	3.06E+00	U
TM	15	427505001	7/6/2017	Ce-144	5.05E+00	3.51E+00	1.09E+01	U
TM	15	427505001	7/6/2017	Co-57	3.26E-02	4.25E-01	1.37E+00	U
TM	15	427505001	7/6/2017	Co-58	1.28E-01	5.83E-01	1.99E+00	U
TM	15	427505001	7/6/2017	Co-60	-3.04E-01	6.49E-01	2.07E+00	U
TM	15	427505001	7/6/2017	Cr-51	6.37E+00	7.27E+00	1.79E+01	U
TM	15	427505001	7/6/2017	Cs-134	0.00E+00	1.37E+00	2.15E+00	U
TM	15	427505001	7/6/2017	Cs-137	4.77E+00	1.19E+00	1.78E+00	M
TM	15	427505001	7/6/2017	Fe-59	3.41E-01	1.43E+00	4.77E+00	U
TM	15	427505001	7/6/2017	I-131	-1.74E-01	1.45E-01	4.60E-01	U
TM	15	427505001	7/6/2017	K-40	1.68E+03	5.52E+01	1.57E+01	
TM	15	427505001	7/6/2017	La-140	-3.95E-01	1.25E+00	3.93E+00	U
TM	15	427505001	7/6/2017	Mn-54	-3.07E-01	5.24E-01	1.72E+00	U
TM	15	427505001	7/6/2017	Nb-95	5.38E-01	6.35E-01	2.04E+00	U
TM	15	427505001	7/6/2017	Ru-103	-1.58E-02	6.42E-01	2.10E+00	U
TM	15	427505001	7/6/2017	Ru-106	-7.29E+00	7.27E+00	1.62E+01	U
TM	15	427505001	7/6/2017	Sb-124	-2.42E-02	1.21E+00	3.85E+00	U
TM	15	427505001	7/6/2017	Sb-125	-3.42E-01	1.87E+00	4.48E+00	U
TM	15	427505001	7/6/2017	Se-75	-4.45E-01	6.76E-01	2.25E+00	U
TM	15	427505001	7/6/2017	Th-228	1.29E+00	1.93E+00	2.96E+00	U
TM	15	427505001	7/6/2017	Zn-65	-1.13E+00	1.40E+00	4.43E+00	U
TM	15	427505001	7/6/2017	Zr-95	4.96E-01	1.09E+00	3.50E+00	U
TM	15	428512001	7/19/2017	Ac-228	-1.50E+00	3.32E+00	8.10E+00	U
TM	15	428512001	7/19/2017	Ag-108m	-1.90E-01	4.19E-01	1.36E+00	U
TM	15	428512001	7/19/2017	Ag-110m	2.64E-01	6.59E-01	2.24E+00	U
TM	15	428512001	7/19/2017	Ba-140	-3.34E+00	3.75E+00	1.16E+01	U
TM	15	428512001	7/19/2017	Be-7	4.75E+00	4.76E+00	1.56E+01	U
TM	15	428512001	7/19/2017	Ce-141	-2.19E-01	9.70E-01	3.07E+00	U
TM	15	428512001	7/19/2017	Ce-144	1.07E+00	3.24E+00	1.04E+01	U
TM	15	428512001	7/19/2017	Co-57	-5.62E-02	3.94E-01	1.26E+00	U
TM	15	428512001	7/19/2017	Co-58	-7.84E-02	5.29E-01	1.79E+00	U
TM	15	428512001	7/19/2017	Co-60	3.63E-01	5.57E-01	1.84E+00	U
TM	15	428512001	7/19/2017	Cr-51	-8.86E+00	5.41E+00	1.63E+01	U
TM	15	428512001	7/19/2017	Cs-134	3.33E-01	5.21E-01	1.78E+00	U
TM	15	428512001	7/19/2017	Cs-137	5.00E+00	1.03E+00	1.74E+00	M
TM	15	428512001	7/19/2017	Fe-59	-7.41E-01	1.40E+00	4.54E+00	U
TM	15	428512001	7/19/2017	I-131	7.41E-03	2.27E-01	7.41E-01	U
TM	15	428512001	7/19/2017	K-40	1.63E+03	5.20E+01	1.35E+01	
TM	15	428512001	7/19/2017	La-140	-1.64E+00	1.13E+00	3.10E+00	U
TM	15	428512001	7/19/2017	Mn-54	-6.40E-01	5.12E-01	1.60E+00	U
TM	15	428512001	7/19/2017	Nb-95	1.60E+00	9.75E-01	1.89E+00	U
TM	15	428512001	7/19/2017	Ru-103	-7.89E-01	6.73E-01	1.82E+00	U
TM	15	428512001	7/19/2017	Ru-106	-2.35E-01	4.54E+00	1.46E+01	U
TM	15	428512001	7/19/2017	Sb-124	6.15E-01	1.05E+00	3.62E+00	U
TM	15	428512001	7/19/2017	Sb-125	-3.76E-01	1.30E+00	4.26E+00	U
TM	15	428512001	7/19/2017	Se-75	-1.83E-01	6.11E-01	2.07E+00	U
TM	15	428512001	7/19/2017	Th-228	2.64E-02	1.79E+00	2.73E+00	U
TM	15	428512001	7/19/2017	Zn-65	5.61E-02	1.25E+00	4.15E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	428512001	7/19/2017	Zr-95	3.90E-01	1.00E+00	3.20E+00	U
TM	15	429896001	8/3/2017	Ac-228	-4.98E+00	3.68E+00	8.73E+00	U
TM	15	429896001	8/3/2017	Ag-108m	-7.49E-01	5.45E-01	1.61E+00	U
TM	15	429896001	8/3/2017	Ag-110m	9.68E-02	8.36E-01	2.79E+00	U
TM	15	429896001	8/3/2017	Ba-140	-1.07E+01	6.04E+00	1.31E+01	U
TM	15	429896001	8/3/2017	Be-7	-3.53E+00	5.68E+00	1.79E+01	U
TM	15	429896001	8/3/2017	Ce-141	-7.28E+00	2.64E+00	3.94E+00	U
TM	15	429896001	8/3/2017	Ce-144	3.95E+00	4.19E+00	1.31E+01	U
TM	15	429896001	8/3/2017	Co-57	-6.56E-01	5.63E-01	1.68E+00	U
TM	15	429896001	8/3/2017	Co-58	-4.82E-02	6.44E-01	2.15E+00	U
TM	15	429896001	8/3/2017	Co-60	-5.76E-01	9.16E-01	2.34E+00	U
TM	15	429896001	8/3/2017	Cr-51	-2.84E+00	6.38E+00	2.09E+01	U
TM	15	429896001	8/3/2017	Cs-134	-4.47E-02	6.24E-01	2.09E+00	U
TM	15	429896001	8/3/2017	Cs-137	7.61E+00	1.42E+00	1.82E+00	M
TM	15	429896001	8/3/2017	Fe-59	-1.83E+00	2.71E+00	5.18E+00	U
TM	15	429896001	8/3/2017	I-131	4.52E-01	2.64E-01	8.60E-01	U
TM	15	429896001	8/3/2017	K-40	1.65E+03	8.65E+01	1.90E+01	
TM	15	429896001	8/3/2017	La-140	-1.76E+00	1.47E+00	3.69E+00	U
TM	15	429896001	8/3/2017	Mn-54	5.35E-01	6.04E-01	2.03E+00	U
TM	15	429896001	8/3/2017	Nb-95	0.00E+00	1.51E+00	1.93E+00	U
TM	15	429896001	8/3/2017	Ru-103	-6.54E-01	7.19E-01	1.94E+00	U
TM	15	429896001	8/3/2017	Ru-106	-3.78E-01	5.24E+00	1.66E+01	U
TM	15	429896001	8/3/2017	Sb-124	-5.42E-01	1.37E+00	4.45E+00	U
TM	15	429896001	8/3/2017	Sb-125	-4.79E+00	2.78E+00	4.65E+00	U
TM	15	429896001	8/3/2017	Se-75	-1.21E-01	7.67E-01	2.57E+00	U
TM	15	429896001	8/3/2017	Th-228	2.25E+00	2.28E+00	4.51E+00	U
TM	15	429896001	8/3/2017	Zn-65	-2.62E-01	1.65E+00	5.35E+00	U
TM	15	429896001	8/3/2017	Zr-95	1.18E+00	1.12E+00	3.69E+00	U
TM	15	431135001	8/16/2017	Ac-228	-1.04E+01	4.95E+00	8.35E+00	U
TM	15	431135001	8/16/2017	Ag-108m	5.87E-01	5.10E-01	1.66E+00	U
TM	15	431135001	8/16/2017	Ag-110m	1.72E-01	8.24E-01	2.78E+00	U
TM	15	431135001	8/16/2017	Ba-140	-1.30E+00	3.68E+00	1.17E+01	U
TM	15	431135001	8/16/2017	Be-7	-3.59E+00	5.00E+00	1.57E+01	U
TM	15	431135001	8/16/2017	Ce-141	-3.59E+00	2.06E+00	3.66E+00	U
TM	15	431135001	8/16/2017	Ce-144	-1.41E+00	4.11E+00	1.28E+01	U
TM	15	431135001	8/16/2017	Co-57	-3.64E-01	5.17E-01	1.59E+00	U
TM	15	431135001	8/16/2017	Co-58	-9.81E-01	6.08E-01	1.78E+00	U
TM	15	431135001	8/16/2017	Co-60	-2.13E-01	7.07E-01	2.27E+00	U
TM	15	431135001	8/16/2017	Cr-51	1.38E+01	6.66E+00	2.03E+01	U
TM	15	431135001	8/16/2017	Cs-134	8.45E-01	6.67E-01	2.24E+00	U
TM	15	431135001	8/16/2017	Cs-137	1.03E+01	1.51E+00	1.81E+00	M
TM	15	431135001	8/16/2017	Fe-59	-7.54E-01	1.54E+00	4.96E+00	U
TM	15	431135001	8/16/2017	I-131	-1.30E-01	1.57E-01	4.80E-01	U
TM	15	431135001	8/16/2017	K-40	1.66E+03	9.11E+01	1.86E+01	
TM	15	431135001	8/16/2017	La-140	-4.03E-01	1.18E+00	3.68E+00	U
TM	15	431135001	8/16/2017	Mn-54	-1.03E-01	5.77E-01	1.93E+00	U
TM	15	431135001	8/16/2017	Nb-95	7.81E-02	5.88E-01	2.00E+00	U
TM	15	431135001	8/16/2017	Ru-103	-1.98E+00	7.97E-01	1.92E+00	U
TM	15	431135001	8/16/2017	Ru-106	4.45E+00	5.22E+00	1.68E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	431135001	8/16/2017	Sb-124	-1.91E+00	1.24E+00	3.49E+00	U
TM	15	431135001	8/16/2017	Sb-125	-1.73E+00	1.50E+00	4.58E+00	U
TM	15	431135001	8/16/2017	Se-75	-5.39E-01	7.49E-01	2.45E+00	U
TM	15	431135001	8/16/2017	Th-228	3.63E-01	2.11E+00	3.41E+00	U
TM	15	431135001	8/16/2017	Zn-65	3.22E+00	3.47E+00	5.01E+00	U
TM	15	431135001	8/16/2017	Zr-95	-1.22E+00	1.08E+00	3.39E+00	U
TM	15	433032001	9/13/2017	Ac-228	1.65E+00	4.33E+00	7.95E+00	U
TM	15	433032001	9/13/2017	Ag-108m	-3.46E-01	4.62E-01	1.33E+00	U
TM	15	433032001	9/13/2017	Ag-110m	-9.30E-01	6.97E-01	1.98E+00	U
TM	15	433032001	9/13/2017	Ba-140	-1.32E+00	2.79E+00	9.03E+00	U
TM	15	433032001	9/13/2017	Be-7	2.35E+00	4.24E+00	1.42E+01	U
TM	15	433032001	9/13/2017	Ce-141	-1.90E+00	1.03E+00	2.88E+00	U
TM	15	433032001	9/13/2017	Ce-144	9.22E+00	3.85E+00	1.09E+01	U
TM	15	433032001	9/13/2017	Co-57	-6.38E-01	4.54E-01	1.36E+00	U
TM	15	433032001	9/13/2017	Co-58	5.94E-02	5.26E-01	1.69E+00	U
TM	15	433032001	9/13/2017	Co-60	2.39E-01	5.61E-01	1.88E+00	U
TM	15	433032001	9/13/2017	Cr-51	1.00E+00	4.62E+00	1.58E+01	U
TM	15	433032001	9/13/2017	Cs-134	6.70E-01	5.69E-01	1.83E+00	U
TM	15	433032001	9/13/2017	Cs-137	5.37E+00	1.42E+00	1.83E+00	M
TM	15	433032001	9/13/2017	Fe-59	9.78E-01	1.28E+00	4.35E+00	U
TM	15	433032001	9/13/2017	I-131	4.54E-01	2.40E-01	7.16E-01	U
TM	15	433032001	9/13/2017	K-40	1.54E+03	7.96E+01	1.46E+01	
TM	15	433032001	9/13/2017	La-140	-3.05E+00	1.87E+00	2.64E+00	U
TM	15	433032001	9/13/2017	Mn-54	-2.29E-01	6.17E-01	1.72E+00	U
TM	15	433032001	9/13/2017	Nb-95	0.00E+00	9.87E-01	1.64E+00	U
TM	15	433032001	9/13/2017	Ru-103	-1.39E-01	5.64E-01	1.66E+00	U
TM	15	433032001	9/13/2017	Ru-106	9.46E+00	4.84E+00	1.50E+01	U
TM	15	433032001	9/13/2017	Sb-124	1.34E-02	1.14E+00	3.42E+00	U
TM	15	433032001	9/13/2017	Sb-125	2.67E+00	1.47E+00	4.68E+00	U
TM	15	433032001	9/13/2017	Se-75	5.86E-01	7.20E-01	2.25E+00	U
TM	15	433032001	9/13/2017	Th-228	-2.08E+00	1.58E+00	3.50E+00	U
TM	15	433032001	9/13/2017	Zn-65	-7.24E-02	1.17E+00	3.93E+00	U
TM	15	433032001	9/13/2017	Zr-95	3.42E-01	9.71E-01	3.16E+00	U
TM	15	433922001	9/27/2017	Ac-228	0.00E+00	5.08E+00	9.14E+00	U
TM	15	433922001	9/27/2017	Ag-108m	1.05E-01	4.74E-01	1.56E+00	U
TM	15	433922001	9/27/2017	Ag-110m	1.49E+00	8.92E-01	2.90E+00	U
TM	15	433922001	9/27/2017	Ba-140	-1.01E+00	2.70E+00	8.57E+00	U
TM	15	433922001	9/27/2017	Be-7	-2.41E+00	4.53E+00	1.44E+01	U
TM	15	433922001	9/27/2017	Ce-141	9.07E-01	1.11E+00	3.19E+00	U
TM	15	433922001	9/27/2017	Ce-144	2.68E-02	3.93E+00	1.23E+01	U
TM	15	433922001	9/27/2017	Co-57	-2.97E-01	5.28E-01	1.63E+00	U
TM	15	433922001	9/27/2017	Co-58	2.28E-01	5.44E-01	1.85E+00	U
TM	15	433922001	9/27/2017	Co-60	-3.61E-01	6.14E-01	1.92E+00	U
TM	15	433922001	9/27/2017	Cr-51	1.00E+01	5.61E+00	1.77E+01	U
TM	15	433922001	9/27/2017	Cs-134	-7.28E-01	9.84E-01	2.08E+00	U
TM	15	433922001	9/27/2017	Cs-137	6.65E+00	1.09E+00	2.01E+00	M
TM	15	433922001	9/27/2017	Fe-59	-1.90E-01	1.60E+00	4.62E+00	U
TM	15	433922001	9/27/2017	I-131	-1.20E-01	1.81E-01	6.01E-01	U
TM	15	433922001	9/27/2017	K-40	1.64E+03	8.96E+01	1.72E+01	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	433922001	9/27/2017	La-140	-7.80E-01	8.89E-01	2.63E+00	U
TM	15	433922001	9/27/2017	Mn-54	2.18E-01	5.70E-01	1.94E+00	U
TM	15	433922001	9/27/2017	Nb-95	8.43E-01	6.11E-01	2.04E+00	U
TM	15	433922001	9/27/2017	Ru-103	-5.58E-01	5.77E-01	1.77E+00	U
TM	15	433922001	9/27/2017	Ru-106	-7.11E+00	5.19E+00	1.49E+01	U
TM	15	433922001	9/27/2017	Sb-124	-5.24E-02	1.19E+00	4.00E+00	U
TM	15	433922001	9/27/2017	Sb-125	5.53E-01	1.47E+00	4.83E+00	U
TM	15	433922001	9/27/2017	Se-75	1.07E+00	7.72E-01	2.52E+00	U
TM	15	433922001	9/27/2017	Th-228	8.07E-01	2.22E+00	4.11E+00	U
TM	15	433922001	9/27/2017	Zn-65	2.07E+00	1.70E+00	4.99E+00	U
TM	15	433922001	9/27/2017	Zr-95	-6.62E-01	9.94E-01	3.26E+00	U
TM	15	435092001	10/11/2017	Ac-228	2.22E+00	4.17E+00	6.92E+00	U
TM	15	435092001	10/11/2017	Ag-108m	-7.06E-01	4.76E-01	1.42E+00	U
TM	15	435092001	10/11/2017	Ag-110m	1.03E+00	8.02E-01	2.69E+00	U
TM	15	435092001	10/11/2017	Ba-140	2.08E+00	3.55E+00	1.17E+01	U
TM	15	435092001	10/11/2017	Be-7	2.07E+00	4.72E+00	1.57E+01	U
TM	15	435092001	10/11/2017	Ce-141	-2.99E+00	1.66E+00	3.54E+00	U
TM	15	435092001	10/11/2017	Ce-144	-9.98E-01	3.59E+00	1.15E+01	U
TM	15	435092001	10/11/2017	Co-57	3.54E-01	4.70E-01	1.52E+00	U
TM	15	435092001	10/11/2017	Co-58	-3.01E-01	5.59E-01	1.86E+00	U
TM	15	435092001	10/11/2017	Co-60	4.06E-01	5.94E-01	1.98E+00	U
TM	15	435092001	10/11/2017	Cr-51	-7.45E+00	5.70E+00	1.79E+01	U
TM	15	435092001	10/11/2017	Cs-134	5.27E-01	9.44E-01	2.02E+00	U
TM	15	435092001	10/11/2017	Cs-137	5.07E+00	1.23E+00	1.76E+00	M
TM	15	435092001	10/11/2017	Fe-59	8.01E-01	1.34E+00	4.49E+00	U
TM	15	435092001	10/11/2017	I-131	3.73E-02	3.07E-01	9.97E-01	U
TM	15	435092001	10/11/2017	K-40	1.63E+03	8.71E+01	1.80E+01	
TM	15	435092001	10/11/2017	La-140	1.48E+00	1.20E+00	3.95E+00	U
TM	15	435092001	10/11/2017	Mn-54	-3.97E-01	5.16E-01	1.68E+00	U
TM	15	435092001	10/11/2017	Nb-95	3.57E-01	5.74E-01	1.85E+00	U
TM	15	435092001	10/11/2017	Ru-103	8.04E-01	6.75E-01	1.99E+00	U
TM	15	435092001	10/11/2017	Ru-106	2.56E+00	4.80E+00	1.56E+01	U
TM	15	435092001	10/11/2017	Sb-124	1.81E+00	1.19E+00	3.62E+00	U
TM	15	435092001	10/11/2017	Sb-125	1.66E+00	1.39E+00	4.59E+00	U
TM	15	435092001	10/11/2017	Se-75	1.62E+00	8.01E-01	2.51E+00	U
TM	15	435092001	10/11/2017	Th-228	-3.48E-01	1.52E+00	3.67E+00	U
TM	15	435092001	10/11/2017	Zn-65	-1.51E+00	1.39E+00	4.31E+00	U
TM	15	435092001	10/11/2017	Zr-95	-8.07E-01	1.01E+00	3.06E+00	U
TM	15	437755001	11/8/2017	Ac-228	-7.96E+00	3.93E+00	7.47E+00	U
TM	15	437755001	11/8/2017	Ag-108m	1.79E-01	5.06E-01	1.52E+00	U
TM	15	437755001	11/8/2017	Ag-110m	-6.05E-01	7.02E-01	2.26E+00	U
TM	15	437755001	11/8/2017	Ba-140	-2.04E+00	3.33E+00	1.06E+01	U
TM	15	437755001	11/8/2017	Be-7	-2.91E+00	4.76E+00	1.53E+01	U
TM	15	437755001	11/8/2017	Ce-141	-4.92E+00	1.86E+00	3.32E+00	U
TM	15	437755001	11/8/2017	Ce-144	-4.22E+00	3.62E+00	1.10E+01	U
TM	15	437755001	11/8/2017	Co-57	8.23E-02	4.58E-01	1.49E+00	U
TM	15	437755001	11/8/2017	Co-58	1.30E-01	5.20E-01	1.78E+00	U
TM	15	437755001	11/8/2017	Co-60	4.53E-01	6.02E-01	2.00E+00	U
TM	15	437755001	11/8/2017	Cr-51	-3.46E+00	5.38E+00	1.78E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
TM	15	437755001	11/8/2017	Cs-134	1.01E+00	6.44E-01	2.01E+00	U
TM	15	437755001	11/8/2017	Cs-137	3.00E+00	1.11E+00	1.72E+00	M
TM	15	437755001	11/8/2017	Fe-59	6.54E-01	1.39E+00	4.67E+00	U
TM	15	437755001	11/8/2017	I-131	-8.69E-02	2.04E-01	6.39E-01	U
TM	15	437755001	11/8/2017	K-40	1.48E+03	8.00E+01	1.55E+01	
TM	15	437755001	11/8/2017	La-140	-6.40E-01	1.07E+00	3.27E+00	U
TM	15	437755001	11/8/2017	Mn-54	1.19E+00	6.08E-01	1.95E+00	U
TM	15	437755001	11/8/2017	Nb-95	5.92E-01	5.94E-01	1.90E+00	U
TM	15	437755001	11/8/2017	Ru-103	1.24E-02	6.20E-01	1.82E+00	U
TM	15	437755001	11/8/2017	Ru-106	9.18E-01	4.69E+00	1.52E+01	U
TM	15	437755001	11/8/2017	Sb-124	3.27E+00	3.15E+00	3.86E+00	U
TM	15	437755001	11/8/2017	Sb-125	8.68E-01	1.44E+00	4.82E+00	U
TM	15	437755001	11/8/2017	Se-75	3.14E-01	6.85E-01	2.35E+00	U
TM	15	437755001	11/8/2017	Th-228	2.52E+00	2.06E+00	3.76E+00	U
TM	15	437755001	11/8/2017	Zn-65	-5.95E-01	1.31E+00	4.25E+00	U
TM	15	437755001	11/8/2017	Zr-95	4.94E-01	1.05E+00	3.38E+00	U
TM	15	439679001	12/5/2017	Ac-228	4.81E+00	4.44E+00	8.48E+00	U
TM	15	439679001	12/5/2017	Ag-108m	-2.17E-01	4.81E-01	1.59E+00	U
TM	15	439679001	12/5/2017	Ag-110m	1.89E+00	9.00E-01	2.75E+00	U
TM	15	439679001	12/5/2017	Ba-140	1.08E+00	2.70E+00	9.02E+00	U
TM	15	439679001	12/5/2017	Be-7	2.89E+00	4.60E+00	1.55E+01	U
TM	15	439679001	12/5/2017	Ce-141	-9.88E-01	1.14E+00	3.25E+00	U
TM	15	439679001	12/5/2017	Ce-144	1.89E+00	3.80E+00	1.23E+01	U
TM	15	439679001	12/5/2017	Co-57	1.66E-01	4.97E-01	1.62E+00	U
TM	15	439679001	12/5/2017	Co-58	8.24E-01	6.19E-01	1.99E+00	U
TM	15	439679001	12/5/2017	Co-60	-1.46E+00	8.90E-01	1.66E+00	U
TM	15	439679001	12/5/2017	Cr-51	2.34E+00	5.12E+00	1.75E+01	U
TM	15	439679001	12/5/2017	Cs-134	2.86E-01	6.22E-01	2.03E+00	U
TM	15	439679001	12/5/2017	Cs-137	6.00E+00	1.22E+00	1.86E+00	M
TM	15	439679001	12/5/2017	Fe-59	2.77E-01	1.28E+00	4.36E+00	U
TM	15	439679001	12/5/2017	I-131	-1.24E-02	1.75E-01	5.97E-01	U
TM	15	439679001	12/5/2017	K-40	1.47E+03	8.01E+01	2.00E+01	
TM	15	439679001	12/5/2017	La-140	1.12E+00	8.51E-01	2.89E+00	U
TM	15	439679001	12/5/2017	Mn-54	5.88E-01	6.01E-01	1.95E+00	U
TM	15	439679001	12/5/2017	Nb-95	-2.91E-01	5.88E-01	1.85E+00	U
TM	15	439679001	12/5/2017	Ru-103	-3.08E-01	6.08E-01	1.98E+00	U
TM	15	439679001	12/5/2017	Ru-106	-5.79E-02	4.82E+00	1.58E+01	U
TM	15	439679001	12/5/2017	Sb-124	9.41E-01	1.16E+00	3.94E+00	U
TM	15	439679001	12/5/2017	Sb-125	-1.46E-01	1.47E+00	4.93E+00	U
TM	15	439679001	12/5/2017	Se-75	9.20E-01	7.93E-01	2.45E+00	U
TM	15	439679001	12/5/2017	Th-228	1.28E+00	2.09E+00	3.23E+00	U
TM	15	439679001	12/5/2017	Zn-65	1.06E+00	1.42E+00	4.34E+00	U
TM	15	439679001	12/5/2017	Zr-95	2.03E-01	1.02E+00	3.33E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	01	419741001	3/29/2017	Ac-228	2.99E+00	3.90E+00	7.20E+00	U
WG	01	419741001	3/29/2017	Ag-108m	7.06E-01	4.90E-01	1.30E+00	U
WG	01	419741001	3/29/2017	Ag-110m	4.87E-01	6.75E-01	2.18E+00	U
WG	01	419741001	3/29/2017	Ba-140	-5.83E-01	2.45E+00	7.92E+00	U
WG	01	419741001	3/29/2017	Be-7	3.20E+00	4.07E+00	1.35E+01	U
WG	01	419741001	3/29/2017	BETA	2.70E+00	9.60E-01	2.35E+00	M
WG	01	419741001	3/29/2017	Bi-214	8.15E+00	2.76E+00	2.99E+00	
WG	01	419741001	3/29/2017	Ce-141	-3.09E+00	1.51E+00	2.97E+00	U
WG	01	419741001	3/29/2017	Ce-144	1.91E+00	3.64E+00	1.13E+01	U
WG	01	419741001	3/29/2017	Co-57	8.95E-03	4.91E-01	1.53E+00	U
WG	01	419741001	3/29/2017	Co-58	-4.40E-01	4.84E-01	1.44E+00	U
WG	01	419741001	3/29/2017	Co-60	-4.19E-02	4.21E-01	1.39E+00	U
WG	01	419741001	3/29/2017	Cr-51	-2.07E+00	4.46E+00	1.46E+01	U
WG	01	419741001	3/29/2017	Cs-134	-5.08E-02	5.28E-01	1.68E+00	U
WG	01	419741001	3/29/2017	Cs-137	-3.38E-01	4.93E-01	1.52E+00	U
WG	01	419741001	3/29/2017	Fe-59	-5.78E-01	8.75E-01	2.82E+00	U
WG	01	419741001	3/29/2017	H-3	2.01E+02	1.61E+02	4.92E+02	U
WG	01	419741001	3/29/2017	I-131	-2.90E-01	8.37E-01	2.75E+00	U
WG	01	419741001	3/29/2017	K-40	-9.32E+00	8.10E+00	2.19E+01	U
WG	01	419741001	3/29/2017	La-140	-6.76E-01	7.68E-01	2.33E+00	U
WG	01	419741001	3/29/2017	Mn-54	-9.25E-01	4.92E-01	1.27E+00	U
WG	01	419741001	3/29/2017	Nb-95	2.47E-01	4.98E-01	1.62E+00	U
WG	01	419741001	3/29/2017	Pb-212	1.98E+00	1.90E+00	3.32E+00	U
WG	01	419741001	3/29/2017	Pb-214	6.00E-01	2.55E+00	4.41E+00	U
WG	01	419741001	3/29/2017	Ru-103	-4.94E-01	5.66E-01	1.56E+00	U
WG	01	419741001	3/29/2017	Ru-106	-6.15E-01	4.61E+00	1.32E+01	U
WG	01	419741001	3/29/2017	Sb-124	1.19E+00	1.12E+00	3.80E+00	U
WG	01	419741001	3/29/2017	Sb-125	4.35E-01	1.37E+00	4.08E+00	U
WG	01	419741001	3/29/2017	Se-75	-3.23E-01	6.39E-01	2.11E+00	U
WG	01	419741001	3/29/2017	Th-228	1.98E+00	1.90E+00	3.32E+00	U
WG	01	419741001	3/29/2017	Zn-65	1.61E+00	1.04E+00	3.18E+00	U
WG	01	419741001	3/29/2017	Zr-95	5.12E-01	8.18E-01	2.66E+00	U
WG	01	425260001	6/7/2017	Ac-228	1.80E+00	2.93E+00	5.81E+00	U
WG	01	425260001	6/7/2017	Ag-108m	-4.72E-01	3.38E-01	1.03E+00	U
WG	01	425260001	6/7/2017	Ag-110m	8.93E-03	4.64E-01	1.48E+00	U
WG	01	425260001	6/7/2017	Ba-140	-2.42E+00	2.21E+00	6.80E+00	U
WG	01	425260001	6/7/2017	Be-7	5.40E+00	3.58E+00	1.17E+01	U
WG	01	425260001	6/7/2017	BETA	4.70E+00	1.08E+00	2.11E+00	
WG	01	425260001	6/7/2017	Bi-214	1.25E+00	1.83E+00	2.60E+00	U
WG	01	425260001	6/7/2017	Ce-141	-3.57E+00	1.43E+00	2.19E+00	U
WG	01	425260001	6/7/2017	Ce-144	-6.86E-01	2.42E+00	7.76E+00	U
WG	01	425260001	6/7/2017	Co-57	-4.20E-01	3.48E-01	1.06E+00	U
WG	01	425260001	6/7/2017	Co-58	3.43E-01	3.67E-01	1.20E+00	U
WG	01	425260001	6/7/2017	Co-60	6.18E-01	3.76E-01	1.26E+00	U
WG	01	425260001	6/7/2017	Cr-51	-1.56E+00	3.64E+00	1.23E+01	U
WG	01	425260001	6/7/2017	Cs-134	8.38E-01	4.37E-01	1.37E+00	U
WG	01	425260001	6/7/2017	Cs-137	-1.50E-01	3.95E-01	1.27E+00	U
WG	01	425260001	6/7/2017	Fe-59	-3.41E-01	9.36E-01	2.72E+00	U
WG	01	425260001	6/7/2017	H-3	1.29E+02	1.78E+02	5.65E+02	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	01	425260001	6/7/2017	I-131	6.20E-01	8.67E-01	2.94E+00	U
WG	01	425260001	6/7/2017	K-40	3.46E+01	1.04E+01	9.38E+00	
WG	01	425260001	6/7/2017	La-140	-1.22E-01	7.17E-01	2.32E+00	U
WG	01	425260001	6/7/2017	Mn-54	2.60E-01	3.67E-01	1.19E+00	U
WG	01	425260001	6/7/2017	Nb-95	-5.34E-01	5.37E-01	1.24E+00	U
WG	01	425260001	6/7/2017	Pb-212	1.10E-01	1.65E+00	2.11E+00	U
WG	01	425260001	6/7/2017	Pb-214	3.58E+00	1.98E+00	3.46E+00	X (1)
WG	01	425260001	6/7/2017	Ru-103	3.21E-04	4.37E-01	1.30E+00	U
WG	01	425260001	6/7/2017	Ru-106	1.91E+00	3.39E+00	1.12E+01	U
WG	01	425260001	6/7/2017	Sb-124	-7.86E-01	9.86E-01	3.01E+00	U
WG	01	425260001	6/7/2017	Sb-125	2.01E-01	9.71E-01	3.27E+00	U
WG	01	425260001	6/7/2017	Se-75	6.09E-01	5.23E-01	1.61E+00	U
WG	01	425260001	6/7/2017	Th-228	1.10E-01	1.65E+00	2.11E+00	U
WG	01	425260001	6/7/2017	Zn-65	-6.47E-01	7.58E-01	2.42E+00	U
WG	01	425260001	6/7/2017	Zr-95	-1.31E+00	8.00E-01	2.23E+00	U
WG	01	433030001	9/14/2017	Ac-228	7.32E+00	4.37E+00	8.02E+00	U
WG	01	433030001	9/14/2017	Ag-108m	-3.50E-02	4.24E-01	1.39E+00	U
WG	01	433030001	9/14/2017	Ag-110m	-4.28E-01	6.50E-01	2.10E+00	U
WG	01	433030001	9/14/2017	Ba-140	-4.26E-01	2.60E+00	8.33E+00	U
WG	01	433030001	9/14/2017	Be-7	-2.61E+00	4.29E+00	1.35E+01	U
WG	01	433030001	9/14/2017	BETA	7.66E+00	1.35E+00	2.19E+00	
WG	01	433030001	9/14/2017	Bi-214	0.00E+00	3.69E+00	5.23E+00	U
WG	01	433030001	9/14/2017	Ce-141	-2.52E+00	1.55E+00	3.05E+00	U
WG	01	433030001	9/14/2017	Ce-144	4.45E+00	3.71E+00	1.15E+01	U
WG	01	433030001	9/14/2017	Co-57	6.26E-01	5.57E-01	1.45E+00	U
WG	01	433030001	9/14/2017	Co-58	1.01E-01	4.64E-01	1.58E+00	U
WG	01	433030001	9/14/2017	Co-60	-4.98E-01	5.26E-01	1.57E+00	U
WG	01	433030001	9/14/2017	Cr-51	-2.09E+00	4.88E+00	1.53E+01	U
WG	01	433030001	9/14/2017	Cs-134	-2.57E-01	5.24E-01	1.73E+00	U
WG	01	433030001	9/14/2017	Cs-137	5.65E-01	5.08E-01	1.64E+00	U
WG	01	433030001	9/14/2017	Fe-59	-3.22E+00	1.26E+00	2.76E+00	U
WG	01	433030001	9/14/2017	H-3	-4.11E+01	1.39E+02	4.63E+02	U
WG	01	433030001	9/14/2017	I-131	4.67E-02	9.98E-01	3.31E+00	U
WG	01	433030001	9/14/2017	K-40	-8.11E+00	9.68E+00	2.53E+01	U
WG	01	433030001	9/14/2017	La-140	-1.73E+00	1.02E+00	2.64E+00	U
WG	01	433030001	9/14/2017	Mn-54	-2.60E-02	4.99E-01	1.68E+00	U
WG	01	433030001	9/14/2017	Nb-95	1.17E+00	5.84E-01	1.87E+00	U
WG	01	433030001	9/14/2017	Pb-212	-4.57E-01	1.51E+00	3.93E+00	U
WG	01	433030001	9/14/2017	Pb-214	0.00E+00	3.41E+00	5.09E+00	U
WG	01	433030001	9/14/2017	Ru-103	-1.05E-01	6.18E-01	1.77E+00	U
WG	01	433030001	9/14/2017	Ru-106	-1.03E+01	6.05E+00	1.44E+01	U
WG	01	433030001	9/14/2017	Sb-124	2.54E-01	1.25E+00	4.27E+00	U
WG	01	433030001	9/14/2017	Sb-125	-2.62E+00	1.39E+00	3.82E+00	U
WG	01	433030001	9/14/2017	Se-75	2.97E-01	6.40E-01	2.16E+00	U
WG	01	433030001	9/14/2017	Th-228	-4.57E-01	1.51E+00	3.93E+00	U
WG	01	433030001	9/14/2017	Zn-65	1.35E-01	1.50E+00	3.50E+00	U
WG	01	433030001	9/14/2017	Zr-95	-5.48E-01	8.35E-01	2.73E+00	U
WG	01	439677001	12/5/2017	Ac-228	4.35E+00	3.50E+00	5.54E+00	U
WG	01	439677001	12/5/2017	Ag-108m	-4.29E-01	3.99E-01	1.26E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	01	439677001	12/5/2017	Ag-110m	2.75E-01	5.96E-01	1.92E+00	U
WG	01	439677001	12/5/2017	Ba-140	-2.47E+00	2.16E+00	6.59E+00	U
WG	01	439677001	12/5/2017	Be-7	-9.53E+00	4.36E+00	1.15E+01	U
WG	01	439677001	12/5/2017	BETA	6.36E+00	1.44E+00	3.46E+00	
WG	01	439677001	12/5/2017	Bi-214	4.58E+01	3.20E+00	2.81E+00	X (1)
WG	01	439677001	12/5/2017	Ce-141	-3.30E+00	1.48E+00	2.79E+00	U
WG	01	439677001	12/5/2017	Ce-144	-2.75E+00	3.29E+00	1.02E+01	U
WG	01	439677001	12/5/2017	Co-57	2.66E-01	4.13E-01	1.34E+00	U
WG	01	439677001	12/5/2017	Co-58	-1.57E-01	4.49E-01	1.41E+00	U
WG	01	439677001	12/5/2017	Co-60	-6.63E-01	4.71E-01	1.36E+00	U
WG	01	439677001	12/5/2017	Cr-51	5.94E-01	4.15E+00	1.42E+01	U
WG	01	439677001	12/5/2017	Cs-134	2.23E-01	4.72E-01	1.53E+00	U
WG	01	439677001	12/5/2017	Cs-137	3.20E-01	4.70E-01	1.54E+00	U
WG	01	439677001	12/5/2017	Fe-59	-4.33E-01	9.80E-01	3.23E+00	U
WG	01	439677001	12/5/2017	H-3	6.26E+01	1.45E+02	4.66E+02	U
WG	01	439677001	12/5/2017	I-131	-6.46E-01	7.92E-01	2.58E+00	U
WG	01	439677001	12/5/2017	K-40	1.70E+00	1.05E+01	1.50E+01	U
WG	01	439677001	12/5/2017	La-140	7.44E-02	7.96E-01	2.61E+00	U
WG	01	439677001	12/5/2017	Mn-54	-2.66E-01	4.26E-01	1.31E+00	U
WG	01	439677001	12/5/2017	Nb-95	4.64E-01	4.72E-01	1.39E+00	U
WG	01	439677001	12/5/2017	Pb-212	4.69E+00	1.58E+00	2.60E+00	
WG	01	439677001	12/5/2017	Pb-214	4.74E+01	3.41E+00	3.41E+00	X (1)
WG	01	439677001	12/5/2017	Ru-103	7.26E-02	5.22E-01	1.56E+00	U
WG	01	439677001	12/5/2017	Ru-106	-2.08E-01	3.74E+00	1.22E+01	U
WG	01	439677001	12/5/2017	Sb-124	-9.13E-01	9.96E-01	2.97E+00	U
WG	01	439677001	12/5/2017	Sb-125	-4.23E-01	1.26E+00	4.17E+00	U
WG	01	439677001	12/5/2017	Se-75	1.31E-01	5.74E-01	1.98E+00	U
WG	01	439677001	12/5/2017	Th-228	4.69E+00	1.58E+00	2.60E+00	
WG	01	439677001	12/5/2017	Zn-65	-1.28E-01	1.06E+00	3.12E+00	U
WG	01	439677001	12/5/2017	Zr-95	5.68E-01	7.83E-01	2.56E+00	U
WG	13	419741002	3/31/2017	Ac-228	0.00E+00	4.43E+00	7.77E+00	U
WG	13	419741002	3/31/2017	Ag-108m	-5.30E-01	4.45E-01	1.39E+00	U
WG	13	419741002	3/31/2017	Ag-110m	-2.13E-01	7.11E-01	2.25E+00	U
WG	13	419741002	3/31/2017	Ba-140	-1.45E+00	2.13E+00	6.82E+00	U
WG	13	419741002	3/31/2017	Be-7	-1.28E+00	4.20E+00	1.39E+01	U
WG	13	419741002	3/31/2017	BETA	1.96E+00	1.05E+00	2.99E+00	U
WG	13	419741002	3/31/2017	Bi-214	5.90E+01	3.37E+00	3.21E+00	
WG	13	419741002	3/31/2017	Ce-141	-1.38E+00	1.02E+00	3.02E+00	U
WG	13	419741002	3/31/2017	Ce-144	2.42E+00	3.58E+00	1.15E+01	U
WG	13	419741002	3/31/2017	Co-57	-1.95E-01	4.65E-01	1.49E+00	U
WG	13	419741002	3/31/2017	Co-58	-4.24E-01	4.46E-01	1.34E+00	U
WG	13	419741002	3/31/2017	Co-60	-1.44E-01	4.93E-01	1.62E+00	U
WG	13	419741002	3/31/2017	Cr-51	-5.04E+00	4.52E+00	1.46E+01	U
WG	13	419741002	3/31/2017	Cs-134	1.06E+00	5.60E-01	1.77E+00	U
WG	13	419741002	3/31/2017	Cs-137	-3.18E-02	5.21E-01	1.70E+00	U
WG	13	419741002	3/31/2017	Fe-59	-3.93E-01	9.00E-01	2.98E+00	U
WG	13	419741002	3/31/2017	H-3	3.10E+02	1.67E+02	4.91E+02	U
WG	13	419741002	3/31/2017	I-131	-5.36E-01	7.46E-01	2.45E+00	U
WG	13	419741002	3/31/2017	K-40	-4.02E+00	1.08E+01	2.33E+01	U
WG	13	419741002	3/31/2017	La-140	7.64E-02	6.80E-01	2.26E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	13	419741002	3/31/2017	Mn-54	-7.45E-01	4.95E-01	1.39E+00	U
WG	13	419741002	3/31/2017	Nb-95	0.00E+00	7.25E-01	1.95E+00	U
WG	13	419741002	3/31/2017	Pb-212	2.77E+00	2.06E+00	2.96E+00	U
WG	13	419741002	3/31/2017	Pb-214	6.93E+01	3.54E+00	3.58E+00	
WG	13	419741002	3/31/2017	Ru-103	-5.83E-01	5.14E-01	1.60E+00	U
WG	13	419741002	3/31/2017	Ru-106	-5.18E+00	4.52E+00	1.37E+01	U
WG	13	419741002	3/31/2017	Sb-124	1.20E+00	1.15E+00	3.90E+00	U
WG	13	419741002	3/31/2017	Sb-125	1.18E+00	1.37E+00	4.61E+00	U
WG	13	419741002	3/31/2017	Se-75	-6.28E-01	7.32E-01	2.19E+00	U
WG	13	419741002	3/31/2017	Th-228	2.77E+00	2.06E+00	2.96E+00	U
WG	13	419741002	3/31/2017	Zn-65	1.21E+00	1.05E+00	3.25E+00	U
WG	13	419741002	3/31/2017	Zr-95	-1.85E-01	1.02E+00	2.91E+00	U
WG	13	425260002	6/7/2017	Ac-228	-4.64E+00	3.56E+00	6.48E+00	U
WG	13	425260002	6/7/2017	Ag-108m	3.13E-03	3.80E-01	1.27E+00	U
WG	13	425260002	6/7/2017	Ag-110m	-1.04E-01	5.55E-01	1.85E+00	U
WG	13	425260002	6/7/2017	Ba-140	3.71E-02	2.68E+00	8.78E+00	U
WG	13	425260002	6/7/2017	Be-7	2.04E+00	3.89E+00	1.30E+01	U
WG	13	425260002	6/7/2017	BETA	2.30E+00	1.31E+00	3.87E+00	U
WG	13	425260002	6/7/2017	Bi-214	7.37E+00	2.65E+00	2.80E+00	X (1)
WG	13	425260002	6/7/2017	Ce-141	-6.15E-01	7.35E-01	2.18E+00	U
WG	13	425260002	6/7/2017	Ce-144	8.84E-01	2.29E+00	7.64E+00	U
WG	13	425260002	6/7/2017	Co-57	5.39E-01	3.21E-01	1.02E+00	U
WG	13	425260002	6/7/2017	Co-58	-2.68E-01	4.54E-01	1.50E+00	U
WG	13	425260002	6/7/2017	Co-60	-4.23E-01	4.74E-01	1.44E+00	U
WG	13	425260002	6/7/2017	Cr-51	-2.83E+00	4.14E+00	1.39E+01	U
WG	13	425260002	6/7/2017	Cs-134	4.25E-01	4.79E-01	1.63E+00	U
WG	13	425260002	6/7/2017	Cs-137	-9.83E-01	5.26E-01	1.42E+00	U
WG	13	425260002	6/7/2017	Fe-59	-1.72E+00	1.20E+00	3.00E+00	U
WG	13	425260002	6/7/2017	H-3	-2.01E+01	1.69E+02	5.58E+02	U
WG	13	425260002	6/7/2017	I-131	6.99E-02	9.65E-01	3.28E+00	U
WG	13	425260002	6/7/2017	K-40	7.30E+00	1.32E+01	1.46E+01	U
WG	13	425260002	6/7/2017	La-140	-4.78E-01	8.19E-01	2.64E+00	U
WG	13	425260002	6/7/2017	Mn-54	-6.70E-01	4.42E-01	1.33E+00	U
WG	13	425260002	6/7/2017	Nb-95	7.19E-02	4.80E-01	1.53E+00	U
WG	13	425260002	6/7/2017	Pb-212	1.73E-01	1.63E+00	2.27E+00	U
WG	13	425260002	6/7/2017	Pb-214	4.90E+00	2.43E+00	3.95E+00	X (1)
WG	13	425260002	6/7/2017	Ru-103	-3.59E-02	5.07E-01	1.50E+00	U
WG	13	425260002	6/7/2017	Ru-106	-5.08E-01	4.10E+00	1.32E+01	U
WG	13	425260002	6/7/2017	Sb-124	-1.70E+00	1.36E+00	3.40E+00	U
WG	13	425260002	6/7/2017	Sb-125	5.05E-02	1.14E+00	3.83E+00	U
WG	13	425260002	6/7/2017	Se-75	-3.00E-01	5.65E-01	1.75E+00	U
WG	13	425260002	6/7/2017	Th-228	1.73E-01	1.63E+00	2.27E+00	U
WG	13	425260002	6/7/2017	Zn-65	-1.06E+00	1.50E+00	3.20E+00	U
WG	13	425260002	6/7/2017	Zr-95	-6.88E-01	8.79E-01	2.67E+00	U
WG	13	433030002	9/14/2017	Ac-228	1.40E+00	4.00E+00	8.75E+00	U
WG	13	433030002	9/14/2017	Ag-108m	-4.85E-01	5.14E-01	1.63E+00	U
WG	13	433030002	9/14/2017	Ag-110m	-5.19E-01	7.82E-01	2.39E+00	U
WG	13	433030002	9/14/2017	Ba-140	-2.77E+00	2.91E+00	9.04E+00	U
WG	13	433030002	9/14/2017	Be-7	-6.98E-01	4.87E+00	1.61E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	13	433030002	9/14/2017	BETA	-1.76E+00	1.02E+00	3.68E+00	U
WG	13	433030002	9/14/2017	Bi-214	3.61E-01	2.69E+00	4.88E+00	U
WG	13	433030002	9/14/2017	Ce-141	-2.27E-01	1.18E+00	3.46E+00	U
WG	13	433030002	9/14/2017	Ce-144	-3.66E+00	4.29E+00	1.32E+01	U
WG	13	433030002	9/14/2017	Co-57	-7.56E-01	7.37E-01	1.81E+00	U
WG	13	433030002	9/14/2017	Co-58	-8.95E-01	5.69E-01	1.56E+00	U
WG	13	433030002	9/14/2017	Co-60	3.17E-01	5.53E-01	1.89E+00	U
WG	13	433030002	9/14/2017	Cr-51	1.28E+01	6.49E+00	2.05E+01	U
WG	13	433030002	9/14/2017	Cs-134	1.07E-01	6.83E-01	1.98E+00	U
WG	13	433030002	9/14/2017	Cs-137	3.00E-02	6.38E-01	1.86E+00	U
WG	13	433030002	9/14/2017	Fe-59	-3.52E-01	1.14E+00	3.80E+00	U
WG	13	433030002	9/14/2017	H-3	4.40E+01	1.43E+02	4.62E+02	U
WG	13	433030002	9/14/2017	I-131	5.65E-01	1.15E+00	3.89E+00	U
WG	13	433030002	9/14/2017	K-40	-2.82E+01	1.50E+01	2.98E+01	U
WG	13	433030002	9/14/2017	La-140	-9.92E-01	1.13E+00	2.96E+00	U
WG	13	433030002	9/14/2017	Mn-54	3.45E-01	5.52E-01	1.80E+00	U
WG	13	433030002	9/14/2017	Nb-95	-9.46E-01	6.37E-01	1.81E+00	U
WG	13	433030002	9/14/2017	Pb-212	1.03E+00	2.29E+00	3.84E+00	U
WG	13	433030002	9/14/2017	Pb-214	1.64E+00	3.61E+00	5.05E+00	U
WG	13	433030002	9/14/2017	Ru-103	-4.16E-02	6.56E-01	1.95E+00	U
WG	13	433030002	9/14/2017	Ru-106	1.23E+01	5.60E+00	1.71E+01	U
WG	13	433030002	9/14/2017	Sb-124	-5.43E-01	1.20E+00	3.78E+00	U
WG	13	433030002	9/14/2017	Sb-125	-3.26E-01	1.44E+00	4.79E+00	U
WG	13	433030002	9/14/2017	Se-75	2.22E-02	7.74E-01	2.66E+00	U
WG	13	433030002	9/14/2017	Th-228	1.03E+00	2.29E+00	3.84E+00	U
WG	13	433030002	9/14/2017	Zn-65	5.29E-01	1.01E+00	3.49E+00	U
WG	13	433030002	9/14/2017	Zr-95	5.67E-01	9.70E-01	3.19E+00	U
WG	13	439677002	12/5/2017	Ac-228	-1.54E+00	3.36E+00	6.74E+00	U
WG	13	439677002	12/5/2017	Ag-108m	-3.48E-01	3.86E-01	1.23E+00	U
WG	13	439677002	12/5/2017	Ag-110m	-7.23E-01	6.49E-01	1.90E+00	U
WG	13	439677002	12/5/2017	Ba-140	2.10E+00	2.31E+00	7.69E+00	U
WG	13	439677002	12/5/2017	Be-7	5.20E+00	3.96E+00	1.31E+01	U
WG	13	439677002	12/5/2017	BETA	2.06E+00	8.82E-01	2.28E+00	U
WG	13	439677002	12/5/2017	Bi-214	6.61E+00	2.66E+00	3.07E+00	X (1)
WG	13	439677002	12/5/2017	Ce-141	1.92E+00	1.69E+00	2.75E+00	U
WG	13	439677002	12/5/2017	Ce-144	7.87E+00	3.78E+00	1.10E+01	U
WG	13	439677002	12/5/2017	Co-57	-5.06E-01	4.76E-01	1.44E+00	U
WG	13	439677002	12/5/2017	Co-58	8.79E-03	4.53E-01	1.46E+00	U
WG	13	439677002	12/5/2017	Co-60	9.19E-01	5.09E-01	1.70E+00	U
WG	13	439677002	12/5/2017	Cr-51	1.49E+00	4.29E+00	1.46E+01	U
WG	13	439677002	12/5/2017	Cs-134	5.18E-02	4.93E-01	1.60E+00	U
WG	13	439677002	12/5/2017	Cs-137	2.40E-01	4.61E-01	1.52E+00	U
WG	13	439677002	12/5/2017	Fe-59	-8.90E-02	8.62E-01	2.91E+00	U
WG	13	439677002	12/5/2017	H-3	-8.22E+01	1.39E+02	4.72E+02	U
WG	13	439677002	12/5/2017	I-131	-1.00E-01	8.68E-01	2.92E+00	U
WG	13	439677002	12/5/2017	K-40	1.43E+00	1.12E+01	1.64E+01	U
WG	13	439677002	12/5/2017	La-140	4.06E-01	8.04E-01	2.72E+00	U
WG	13	439677002	12/5/2017	Mn-54	1.90E-01	4.31E-01	1.41E+00	U
WG	13	439677002	12/5/2017	Nb-95	2.87E-01	4.95E-01	1.62E+00	U
WG	13	439677002	12/5/2017	Pb-212	-2.39E-01	1.45E+00	3.34E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	13	439677002	12/5/2017	Pb-214	-3.62E+00	1.86E+00	3.74E+00	U
WG	13	439677002	12/5/2017	Ru-103	-3.34E-01	5.03E-01	1.43E+00	U
WG	13	439677002	12/5/2017	Ru-106	3.59E+00	6.32E+00	1.31E+01	U
WG	13	439677002	12/5/2017	Sb-124	-2.21E+00	1.14E+00	2.81E+00	U
WG	13	439677002	12/5/2017	Sb-125	4.49E-01	1.20E+00	4.03E+00	U
WG	13	439677002	12/5/2017	Se-75	-8.72E-01	6.15E-01	1.92E+00	U
WG	13	439677002	12/5/2017	Th-228	-2.39E-01	1.45E+00	3.34E+00	U
WG	13	439677002	12/5/2017	Zn-65	6.22E-01	8.89E-01	3.07E+00	U
WG	13	439677002	12/5/2017	Zr-95	-8.04E-01	7.92E-01	2.37E+00	U
WG	14	419741003	3/29/2017	Ac-228	3.99E+00	2.81E+00	8.86E+00	U
WG	14	419741003	3/29/2017	Ag-108m	-7.31E-01	6.60E-01	2.06E+00	U
WG	14	419741003	3/29/2017	Ag-110m	-2.07E-01	9.31E-01	2.93E+00	U
WG	14	419741003	3/29/2017	Ba-140	3.01E+00	3.52E+00	1.16E+01	U
WG	14	419741003	3/29/2017	Be-7	1.69E+00	6.68E+00	1.98E+01	U
WG	14	419741003	3/29/2017	BETA	3.69E+00	1.29E+00	3.46E+00	M
WG	14	419741003	3/29/2017	Bi-214	2.98E+02	1.37E+01	4.45E+00	
WG	14	419741003	3/29/2017	Ce-141	-3.78E+00	1.80E+00	4.76E+00	U
WG	14	419741003	3/29/2017	Ce-144	4.30E+00	5.87E+00	1.84E+01	U
WG	14	419741003	3/29/2017	Co-57	1.92E+00	1.15E+00	2.36E+00	U
WG	14	419741003	3/29/2017	Co-58	-5.13E-01	7.64E-01	2.08E+00	U
WG	14	419741003	3/29/2017	Co-60	-5.43E-01	8.55E-01	2.24E+00	U
WG	14	419741003	3/29/2017	Cr-51	-1.14E+01	7.68E+00	2.25E+01	U
WG	14	419741003	3/29/2017	Cs-134	0.00E+00	9.84E-01	2.37E+00	U
WG	14	419741003	3/29/2017	Cs-137	-3.35E-01	7.75E-01	2.19E+00	U
WG	14	419741003	3/29/2017	Fe-59	-4.31E-01	1.38E+00	4.59E+00	U
WG	14	419741003	3/29/2017	H-3	-1.04E+02	1.72E+02	5.82E+02	U
WG	14	419741003	3/29/2017	I-131	-3.78E+00	1.54E+00	3.98E+00	U
WG	14	419741003	3/29/2017	K-40	-2.41E+01	1.34E+01	2.69E+01	U
WG	14	419741003	3/29/2017	La-140	-1.70E-01	1.06E+00	3.44E+00	U
WG	14	419741003	3/29/2017	Mn-54	3.96E-01	7.51E-01	2.16E+00	U
WG	14	419741003	3/29/2017	Nb-95	0.00E+00	9.58E-01	2.42E+00	U
WG	14	419741003	3/29/2017	Pb-212	2.80E+00	2.36E+00	4.52E+00	U
WG	14	419741003	3/29/2017	Pb-214	3.31E+02	1.44E+01	2.13E+01	
WG	14	419741003	3/29/2017	Ru-103	3.16E-01	7.17E-01	2.37E+00	U
WG	14	419741003	3/29/2017	Ru-106	1.59E+00	5.67E+00	1.85E+01	U
WG	14	419741003	3/29/2017	Sb-124	-6.26E-01	1.48E+00	4.69E+00	U
WG	14	419741003	3/29/2017	Sb-125	2.52E-01	2.14E+00	6.38E+00	U
WG	14	419741003	3/29/2017	Se-75	2.07E-01	9.92E-01	3.37E+00	U
WG	14	419741003	3/29/2017	Th-228	2.80E+00	2.36E+00	4.52E+00	U
WG	14	419741003	3/29/2017	Zn-65	3.46E-01	1.53E+00	4.59E+00	U
WG	14	419741003	3/29/2017	Zr-95	6.03E-01	1.22E+00	3.96E+00	U
WG	14	425260003	6/7/2017	Ac-228	3.47E+00	4.31E+00	5.37E+00	U
WG	14	425260003	6/7/2017	Ag-108m	-3.87E-01	3.97E-01	1.22E+00	U
WG	14	425260003	6/7/2017	Ag-110m	-1.02E-01	5.67E-01	1.86E+00	U
WG	14	425260003	6/7/2017	Ba-140	-3.76E+00	4.34E+00	8.24E+00	U
WG	14	425260003	6/7/2017	Be-7	-2.98E+00	4.27E+00	1.33E+01	U
WG	14	425260003	6/7/2017	BETA	2.76E+00	1.16E+00	3.18E+00	U
WG	14	425260003	6/7/2017	Bi-214	1.05E+02	5.54E+00	2.84E+00	X (1)
WG	14	425260003	6/7/2017	Ce-141	1.34E+00	1.65E+00	3.08E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	14	425260003	6/7/2017	Ce-144	-4.82E-01	3.17E+00	1.08E+01	U
WG	14	425260003	6/7/2017	Co-57	-1.93E-01	4.06E-01	1.38E+00	U
WG	14	425260003	6/7/2017	Co-58	4.91E-01	4.92E-01	1.46E+00	U
WG	14	425260003	6/7/2017	Co-60	0.00E+00	1.03E+00	1.44E+00	U
WG	14	425260003	6/7/2017	Cr-51	4.64E+00	4.76E+00	1.55E+01	U
WG	14	425260003	6/7/2017	Cs-134	-8.03E-01	4.91E-01	1.44E+00	U
WG	14	425260003	6/7/2017	Cs-137	4.77E-01	4.90E-01	1.47E+00	U
WG	14	425260003	6/7/2017	Fe-59	-2.41E+00	1.58E+00	3.06E+00	U
WG	14	425260003	6/7/2017	H-3	1.31E+02	1.79E+02	5.66E+02	U
WG	14	425260003	6/7/2017	I-131	1.07E+00	1.05E+00	3.40E+00	U
WG	14	425260003	6/7/2017	K-40	-1.40E+01	8.93E+00	1.90E+01	U
WG	14	425260003	6/7/2017	La-140	4.88E-01	9.03E-01	3.05E+00	U
WG	14	425260003	6/7/2017	Mn-54	-4.64E-01	4.98E-01	1.37E+00	U
WG	14	425260003	6/7/2017	Nb-95	8.87E-01	5.26E-01	1.51E+00	U
WG	14	425260003	6/7/2017	Pb-212	2.03E+00	1.77E+00	2.70E+00	U
WG	14	425260003	6/7/2017	Pb-214	1.18E+02	5.87E+00	3.39E+00	X (1)
WG	14	425260003	6/7/2017	Ru-103	6.50E-01	6.52E-01	1.12E+00	U
WG	14	425260003	6/7/2017	Ru-106	-2.54E+00	3.68E+00	1.21E+01	U
WG	14	425260003	6/7/2017	Sb-124	-1.35E+00	1.16E+00	3.53E+00	U
WG	14	425260003	6/7/2017	Sb-125	5.27E-01	1.26E+00	4.07E+00	U
WG	14	425260003	6/7/2017	Se-75	-1.33E-01	6.46E-01	2.14E+00	U
WG	14	425260003	6/7/2017	Th-228	2.03E+00	1.77E+00	2.70E+00	U
WG	14	425260003	6/7/2017	Zn-65	-1.56E+00	1.75E+00	3.00E+00	U
WG	14	425260003	6/7/2017	Zr-95	-1.55E+00	1.06E+00	2.55E+00	U
WG	14	433030003	9/14/2017	Ac-228	-8.85E+00	4.72E+00	8.39E+00	U
WG	14	433030003	9/14/2017	Ag-108m	1.24E-01	4.85E-01	1.59E+00	U
WG	14	433030003	9/14/2017	Ag-110m	1.06E-03	1.02E+00	2.36E+00	U
WG	14	433030003	9/14/2017	Ba-140	6.58E-01	2.91E+00	9.42E+00	U
WG	14	433030003	9/14/2017	Be-7	-4.24E+00	4.69E+00	1.44E+01	U
WG	14	433030003	9/14/2017	BETA	6.60E+00	1.29E+00	2.37E+00	
WG	14	433030003	9/14/2017	Bi-214	2.68E+01	3.34E+00	3.67E+00	X (1)
WG	14	433030003	9/14/2017	Ce-141	-2.41E+00	1.72E+00	3.33E+00	U
WG	14	433030003	9/14/2017	Ce-144	4.53E+00	3.97E+00	1.24E+01	U
WG	14	433030003	9/14/2017	Co-57	2.47E-01	5.03E-01	1.60E+00	U
WG	14	433030003	9/14/2017	Co-58	1.28E-01	5.67E-01	1.69E+00	U
WG	14	433030003	9/14/2017	Co-60	9.94E-01	1.02E+00	1.87E+00	U
WG	14	433030003	9/14/2017	Cr-51	3.12E+00	4.90E+00	1.64E+01	U
WG	14	433030003	9/14/2017	Cs-134	3.43E-01	5.72E-01	1.88E+00	U
WG	14	433030003	9/14/2017	Cs-137	3.77E-01	5.68E-01	1.95E+00	U
WG	14	433030003	9/14/2017	Fe-59	2.41E-01	1.13E+00	3.72E+00	U
WG	14	433030003	9/14/2017	H-3	4.32E+01	1.42E+02	4.61E+02	U
WG	14	433030003	9/14/2017	I-131	1.76E-01	1.09E+00	3.59E+00	U
WG	14	433030003	9/14/2017	K-40	-7.93E+00	9.94E+00	2.63E+01	U
WG	14	433030003	9/14/2017	La-140	8.58E-01	9.51E-01	2.93E+00	U
WG	14	433030003	9/14/2017	Mn-54	1.22E-01	5.10E-01	1.72E+00	U
WG	14	433030003	9/14/2017	Nb-95	8.93E-01	6.20E-01	2.06E+00	U
WG	14	433030003	9/14/2017	Pb-212	0.00E+00	2.22E+00	3.10E+00	U
WG	14	433030003	9/14/2017	Pb-214	2.86E+01	3.51E+00	7.72E+00	X (1)
WG	14	433030003	9/14/2017	Ru-103	-6.57E-01	6.48E-01	1.72E+00	U
WG	14	433030003	9/14/2017	Ru-106	-4.62E+00	4.79E+00	1.42E+01	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WG	14	433030003	9/14/2017	Sb-124	-2.96E-01	1.31E+00	4.29E+00	U
WG	14	433030003	9/14/2017	Sb-125	-2.44E+00	1.57E+00	4.53E+00	U
WG	14	433030003	9/14/2017	Se-75	7.25E-01	7.19E-01	2.40E+00	U
WG	14	433030003	9/14/2017	Th-228	0.00E+00	2.22E+00	3.10E+00	U
WG	14	433030003	9/14/2017	Zn-65	9.80E-03	1.18E+00	3.39E+00	U
WG	14	433030003	9/14/2017	Zr-95	-7.11E-01	9.97E-01	3.23E+00	U
WG	14	439677003	12/5/2017	Ac-228	-3.80E+00	5.78E+00	1.20E+01	U
WG	14	439677003	12/5/2017	Ag-108m	-1.81E-01	7.13E-01	2.40E+00	U
WG	14	439677003	12/5/2017	Ag-110m	6.53E-01	1.11E+00	3.63E+00	U
WG	14	439677003	12/5/2017	Ba-140	1.98E+00	4.25E+00	1.29E+01	U
WG	14	439677003	12/5/2017	Be-7	-8.99E+00	7.32E+00	2.28E+01	U
WG	14	439677003	12/5/2017	BETA	2.88E+00	9.32E-01	2.19E+00	M
WG	14	439677003	12/5/2017	Bi-214	1.68E+02	9.79E+00	5.54E+00	X (1)
WG	14	439677003	12/5/2017	Ce-141	-1.88E+00	1.51E+00	4.66E+00	U
WG	14	439677003	12/5/2017	Ce-144	-3.14E+00	5.13E+00	1.67E+01	U
WG	14	439677003	12/5/2017	Co-57	1.97E-01	6.74E-01	2.25E+00	U
WG	14	439677003	12/5/2017	Co-58	5.76E-01	8.77E-01	2.76E+00	U
WG	14	439677003	12/5/2017	Co-60	2.12E-01	1.00E+00	2.97E+00	U
WG	14	439677003	12/5/2017	Cr-51	-3.92E-01	7.75E+00	2.42E+01	U
WG	14	439677003	12/5/2017	Cs-134	2.58E-01	9.32E-01	3.04E+00	U
WG	14	439677003	12/5/2017	Cs-137	7.10E-01	9.02E-01	2.71E+00	U
WG	14	439677003	12/5/2017	Fe-59	-2.16E+00	1.76E+00	5.34E+00	U
WG	14	439677003	12/5/2017	H-3	-5.32E+01	1.39E+02	4.67E+02	U
WG	14	439677003	12/5/2017	I-131	-1.67E+00	1.43E+00	4.60E+00	U
WG	14	439677003	12/5/2017	K-40	1.27E+01	2.07E+01	2.77E+01	U
WG	14	439677003	12/5/2017	La-140	1.01E+00	1.52E+00	5.11E+00	U
WG	14	439677003	12/5/2017	Mn-54	-1.85E+00	9.59E-01	2.49E+00	U
WG	14	439677003	12/5/2017	Nb-95	2.12E+00	1.17E+00	3.35E+00	U
WG	14	439677003	12/5/2017	Pb-212	2.82E+00	2.70E+00	4.71E+00	U
WG	14	439677003	12/5/2017	Pb-214	1.78E+02	9.43E+00	5.94E+00	X (1)
WG	14	439677003	12/5/2017	Ru-103	-4.47E-01	8.07E-01	2.64E+00	U
WG	14	439677003	12/5/2017	Ru-106	-3.60E+00	6.90E+00	2.21E+01	U
WG	14	439677003	12/5/2017	Sb-124	-3.03E-02	1.71E+00	5.55E+00	U
WG	14	439677003	12/5/2017	Sb-125	-1.48E-01	1.95E+00	6.61E+00	U
WG	14	439677003	12/5/2017	Se-75	1.93E-01	1.12E+00	3.56E+00	U
WG	14	439677003	12/5/2017	Th-228	2.82E+00	2.70E+00	4.71E+00	U
WG	14	439677003	12/5/2017	Zn-65	-7.12E-01	1.75E+00	5.04E+00	U
WG	14	439677003	12/5/2017	Zr-95	8.78E-02	1.45E+00	4.74E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	414893001	1/18/2017	Ac-228	2.31E-01	4.25E+00	7.15E+00	U
WS	01	414893001	1/18/2017	Ag-108m	-7.13E-01	4.44E-01	1.30E+00	U
WS	01	414893001	1/18/2017	Ag-110m	2.16E-01	6.05E-01	2.07E+00	U
WS	01	414893001	1/18/2017	Ba-140	-1.12E+00	2.72E+00	8.70E+00	U
WS	01	414893001	1/18/2017	Be-7	6.10E+00	4.79E+00	1.42E+01	U
WS	01	414893001	1/18/2017	Bi-214	1.27E+00	2.25E+00	3.74E+00	U
WS	01	414893001	1/18/2017	Ce-141	-1.88E-01	8.57E-01	2.71E+00	U
WS	01	414893001	1/18/2017	Ce-144	2.33E+00	3.07E+00	9.81E+00	U
WS	01	414893001	1/18/2017	Co-57	-6.58E-02	4.02E-01	1.28E+00	U
WS	01	414893001	1/18/2017	Co-58	-2.26E-01	5.09E-01	1.57E+00	U
WS	01	414893001	1/18/2017	Co-60	2.88E-01	5.11E-01	1.71E+00	U
WS	01	414893001	1/18/2017	Cr-51	-3.67E+00	4.39E+00	1.42E+01	U
WS	01	414893001	1/18/2017	Cs-134	1.36E+00	6.35E-01	1.87E+00	U
WS	01	414893001	1/18/2017	Cs-137	-9.93E-01	7.68E-01	1.63E+00	U
WS	01	414893001	1/18/2017	Fe-59	-1.08E-01	1.12E+00	3.71E+00	U
WS	01	414893001	1/18/2017	I-131	9.46E-02	9.67E-01	3.25E+00	U
WS	01	414893001	1/18/2017	K-40	3.53E+02	2.24E+01	1.51E+01	
WS	01	414893001	1/18/2017	La-140	3.04E-01	9.23E-01	3.03E+00	U
WS	01	414893001	1/18/2017	Mn-54	3.11E-01	4.60E-01	1.58E+00	U
WS	01	414893001	1/18/2017	Nb-95	3.56E-01	5.35E-01	1.73E+00	U
WS	01	414893001	1/18/2017	Pb-212	2.74E+00	1.80E+00	3.39E+00	U
WS	01	414893001	1/18/2017	Pb-214	-3.19E+00	1.83E+00	3.64E+00	U
WS	01	414893001	1/18/2017	Ru-103	-2.65E-01	5.20E-01	1.67E+00	U
WS	01	414893001	1/18/2017	Ru-106	8.94E+00	4.79E+00	1.50E+01	U
WS	01	414893001	1/18/2017	Sb-124	3.79E-01	1.21E+00	3.97E+00	U
WS	01	414893001	1/18/2017	Sb-125	-5.25E-01	1.27E+00	4.14E+00	U
WS	01	414893001	1/18/2017	Se-75	-3.93E-01	6.17E-01	2.06E+00	U
WS	01	414893001	1/18/2017	Th-228	2.74E+00	1.80E+00	3.39E+00	U
WS	01	414893001	1/18/2017	Zn-65	-5.16E-01	1.07E+00	3.02E+00	U
WS	01	414893001	1/18/2017	Zr-95	-2.05E-01	8.11E-01	2.55E+00	U
WS	01	416970001	2/14/2017	Ac-228	-4.64E+00	3.40E+00	6.53E+00	U
WS	01	416970001	2/14/2017	Ag-108m	4.89E-01	4.12E-01	1.36E+00	U
WS	01	416970001	2/14/2017	Ag-110m	-1.30E-01	5.97E-01	2.00E+00	U
WS	01	416970001	2/14/2017	Ba-140	-3.67E+00	2.52E+00	7.36E+00	U
WS	01	416970001	2/14/2017	Be-7	-9.39E-01	3.88E+00	1.27E+01	U
WS	01	416970001	2/14/2017	Bi-214	1.99E+00	2.52E+00	4.06E+00	U
WS	01	416970001	2/14/2017	Ce-141	1.55E-01	9.01E-01	2.67E+00	U
WS	01	416970001	2/14/2017	Ce-144	3.21E+00	3.33E+00	1.06E+01	U
WS	01	416970001	2/14/2017	Co-57	-2.98E-01	4.74E-01	1.38E+00	U
WS	01	416970001	2/14/2017	Co-58	-6.95E-01	4.62E-01	1.38E+00	U
WS	01	416970001	2/14/2017	Co-60	-3.48E-01	4.72E-01	1.46E+00	U
WS	01	416970001	2/14/2017	Cr-51	-2.87E+00	4.35E+00	1.43E+01	U
WS	01	416970001	2/14/2017	Cs-134	5.76E-01	5.09E-01	1.64E+00	U
WS	01	416970001	2/14/2017	Cs-137	-7.26E-02	4.84E-01	1.55E+00	U
WS	01	416970001	2/14/2017	Fe-59	5.90E-01	8.91E-01	3.01E+00	U
WS	01	416970001	2/14/2017	I-131	-2.29E-01	8.39E-01	2.79E+00	U
WS	01	416970001	2/14/2017	K-40	3.23E+02	1.91E+01	1.42E+01	
WS	01	416970001	2/14/2017	La-140	-1.29E+00	9.24E-01	2.59E+00	U
WS	01	416970001	2/14/2017	Mn-54	2.12E-01	4.43E-01	1.52E+00	U
WS	01	416970001	2/14/2017	Nb-95	5.10E-01	4.87E-01	1.57E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	416970001	2/14/2017	Pb-212	-5.72E-01	1.51E+00	3.31E+00	U
WS	01	416970001	2/14/2017	Pb-214	2.48E+00	2.11E+00	3.86E+00	U
WS	01	416970001	2/14/2017	Ru-103	-1.63E-02	5.47E-01	1.60E+00	U
WS	01	416970001	2/14/2017	Ru-106	8.37E+00	4.42E+00	1.41E+01	U
WS	01	416970001	2/14/2017	Sb-124	-1.55E+00	1.18E+00	3.28E+00	U
WS	01	416970001	2/14/2017	Sb-125	4.45E-01	1.25E+00	4.19E+00	U
WS	01	416970001	2/14/2017	Se-75	2.54E-01	6.25E-01	2.14E+00	U
WS	01	416970001	2/14/2017	Th-228	-5.72E-01	1.51E+00	3.31E+00	U
WS	01	416970001	2/14/2017	Zn-65	-9.59E-01	1.02E+00	3.16E+00	U
WS	01	416970001	2/14/2017	Zr-95	9.17E-01	8.49E-01	2.74E+00	U
WS	01	419055001	3/13/2017	Ac-228	-1.86E+00	3.25E+00	6.75E+00	U
WS	01	419055001	3/13/2017	Ag-108m	-5.25E-02	4.02E-01	1.32E+00	U
WS	01	419055001	3/13/2017	Ag-110m	-4.56E-02	5.94E-01	1.88E+00	U
WS	01	419055001	3/13/2017	Ba-140	-5.13E-01	2.86E+00	9.27E+00	U
WS	01	419055001	3/13/2017	Be-7	-4.45E+00	4.20E+00	1.30E+01	U
WS	01	419055001	3/13/2017	Bi-214	2.19E+00	2.22E+00	3.67E+00	U
WS	01	419055001	3/13/2017	Ce-141	-3.49E+00	1.78E+00	3.08E+00	U
WS	01	419055001	3/13/2017	Ce-144	2.04E+00	3.65E+00	1.05E+01	U
WS	01	419055001	3/13/2017	Co-57	1.64E-01	4.45E-01	1.39E+00	U
WS	01	419055001	3/13/2017	Co-58	2.58E-02	4.59E-01	1.47E+00	U
WS	01	419055001	3/13/2017	Co-60	7.24E-01	4.49E-01	1.50E+00	U
WS	01	419055001	3/13/2017	Cr-51	-4.77E+00	4.68E+00	1.48E+01	U
WS	01	419055001	3/13/2017	Cs-134	7.84E-01	5.03E-01	1.60E+00	U
WS	01	419055001	3/13/2017	Cs-137	2.38E-01	4.81E-01	1.57E+00	U
WS	01	419055001	3/13/2017	Fe-59	2.13E+00	1.06E+00	3.40E+00	U
WS	01	419055001	3/13/2017	I-131	1.12E+00	1.14E+00	3.78E+00	U
WS	01	419055001	3/13/2017	K-40	3.69E+02	2.11E+01	1.24E+01	
WS	01	419055001	3/13/2017	La-140	-7.22E-01	8.82E-01	2.72E+00	U
WS	01	419055001	3/13/2017	Mn-54	4.25E-01	4.31E-01	1.39E+00	U
WS	01	419055001	3/13/2017	Nb-95	1.45E-01	4.66E-01	1.50E+00	U
WS	01	419055001	3/13/2017	Pb-212	-2.24E+00	1.50E+00	2.97E+00	U
WS	01	419055001	3/13/2017	Pb-214	4.82E-01	1.94E+00	3.68E+00	U
WS	01	419055001	3/13/2017	Ru-103	-4.16E-01	5.30E-01	1.67E+00	U
WS	01	419055001	3/13/2017	Ru-106	-3.90E+00	4.21E+00	1.29E+01	U
WS	01	419055001	3/13/2017	Sb-124	-8.88E-02	9.46E-01	3.08E+00	U
WS	01	419055001	3/13/2017	Sb-125	-1.19E+00	1.19E+00	3.71E+00	U
WS	01	419055001	3/13/2017	Se-75	-2.57E-01	5.82E-01	1.93E+00	U
WS	01	419055001	3/13/2017	Th-228	-2.24E+00	1.50E+00	2.97E+00	U
WS	01	419055001	3/13/2017	Zn-65	2.80E-01	8.97E-01	3.05E+00	U
WS	01	419055001	3/13/2017	Zr-95	2.10E-01	8.38E-01	2.70E+00	U
WS	01	423130001	3/13/2017	H-3	-2.24E+02	1.50E+02	5.28E+02	U
WS	01	420752001	4/10/2017	Ac-228	-1.71E+00	5.11E+00	1.11E+01	U
WS	01	420752001	4/10/2017	Ag-108m	-9.15E-01	7.14E-01	1.93E+00	U
WS	01	420752001	4/10/2017	Ag-110m	1.25E+00	9.93E-01	3.33E+00	U
WS	01	420752001	4/10/2017	Ba-140	-9.74E+00	5.97E+00	1.13E+01	U
WS	01	420752001	4/10/2017	Be-7	5.11E+00	6.59E+00	2.12E+01	U
WS	01	420752001	4/10/2017	Bi-214	-3.03E-01	2.87E+00	5.33E+00	U
WS	01	420752001	4/10/2017	Ce-141	-1.50E+00	1.01E+00	3.02E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	420752001	4/10/2017	Ce-144	-4.16E+00	3.54E+00	1.09E+01	U
WS	01	420752001	4/10/2017	Co-57	-1.75E-01	4.58E-01	1.48E+00	U
WS	01	420752001	4/10/2017	Co-58	-6.59E-01	6.99E-01	2.22E+00	U
WS	01	420752001	4/10/2017	Co-60	6.52E-01	7.15E-01	2.43E+00	U
WS	01	420752001	4/10/2017	Cr-51	-5.01E+00	6.21E+00	1.93E+01	U
WS	01	420752001	4/10/2017	Cs-134	1.87E-01	7.90E-01	2.67E+00	U
WS	01	420752001	4/10/2017	Cs-137	2.76E-01	6.87E-01	2.34E+00	U
WS	01	420752001	4/10/2017	Fe-59	-1.29E+00	1.42E+00	4.47E+00	U
WS	01	420752001	4/10/2017	I-131	-1.36E-01	1.39E+00	3.89E+00	U
WS	01	420752001	4/10/2017	K-40	3.22E+02	2.92E+01	2.06E+01	
WS	01	420752001	4/10/2017	La-140	1.08E-01	1.12E+00	3.74E+00	U
WS	01	420752001	4/10/2017	Mn-54	1.18E+00	7.58E-01	2.50E+00	U
WS	01	420752001	4/10/2017	Nb-95	1.60E+00	8.25E-01	2.64E+00	U
WS	01	420752001	4/10/2017	Pb-212	7.31E-01	2.53E+00	4.30E+00	U
WS	01	420752001	4/10/2017	Pb-214	-1.95E+00	2.47E+00	5.26E+00	U
WS	01	420752001	4/10/2017	Ru-103	-6.17E-02	7.49E-01	2.39E+00	U
WS	01	420752001	4/10/2017	Ru-106	-1.74E+00	6.22E+00	2.08E+01	U
WS	01	420752001	4/10/2017	Sb-124	-9.93E+00	5.55E+00	5.10E+00	U
WS	01	420752001	4/10/2017	Sb-125	1.65E+00	1.88E+00	6.06E+00	U
WS	01	420752001	4/10/2017	Se-75	1.24E+00	8.40E-01	2.63E+00	U
WS	01	420752001	4/10/2017	Th-228	7.31E-01	2.53E+00	4.30E+00	U
WS	01	420752001	4/10/2017	Zn-65	-5.06E-02	1.59E+00	5.30E+00	U
WS	01	420752001	4/10/2017	Zr-95	-2.08E-01	1.30E+00	4.34E+00	U
WS	01	423765001	5/17/2017	Ac-228	6.10E-01	3.17E+00	8.23E+00	U
WS	01	423765001	5/17/2017	Ag-108m	3.25E-01	4.46E-01	1.51E+00	U
WS	01	423765001	5/17/2017	Ag-110m	-2.03E-01	6.51E-01	2.18E+00	U
WS	01	423765001	5/17/2017	Ba-140	1.19E+00	2.61E+00	8.71E+00	U
WS	01	423765001	5/17/2017	Be-7	-3.33E+00	4.09E+00	1.30E+01	U
WS	01	423765001	5/17/2017	Bi-214	8.21E-01	2.37E+00	3.58E+00	U
WS	01	423765001	5/17/2017	Ce-141	-4.45E+00	1.90E+00	2.70E+00	U
WS	01	423765001	5/17/2017	Ce-144	1.26E+00	3.17E+00	1.04E+01	U
WS	01	423765001	5/17/2017	Co-57	-1.27E-02	4.00E-01	1.32E+00	U
WS	01	423765001	5/17/2017	Co-58	-2.98E-02	5.24E-01	1.67E+00	U
WS	01	423765001	5/17/2017	Co-60	4.64E-01	5.51E-01	1.86E+00	U
WS	01	423765001	5/17/2017	Cr-51	-2.11E+00	4.45E+00	1.50E+01	U
WS	01	423765001	5/17/2017	Cs-134	6.20E-01	5.36E-01	1.75E+00	U
WS	01	423765001	5/17/2017	Cs-137	6.37E-01	5.44E-01	1.78E+00	U
WS	01	423765001	5/17/2017	Fe-59	-5.12E-01	1.08E+00	3.49E+00	U
WS	01	423765001	5/17/2017	I-131	-1.20E-01	9.10E-01	3.08E+00	U
WS	01	423765001	5/17/2017	K-40	3.05E+02	2.34E+01	1.49E+01	
WS	01	423765001	5/17/2017	La-140	-4.66E-01	8.33E-01	2.56E+00	U
WS	01	423765001	5/17/2017	Mn-54	0.00E+00	1.15E+00	1.47E+00	U
WS	01	423765001	5/17/2017	Nb-95	1.54E-01	4.96E-01	1.61E+00	U
WS	01	423765001	5/17/2017	Pb-212	1.28E+00	2.13E+00	2.87E+00	U
WS	01	423765001	5/17/2017	Pb-214	-3.81E+00	2.04E+00	3.92E+00	U
WS	01	423765001	5/17/2017	Ru-103	-4.72E-01	5.52E-01	1.75E+00	U
WS	01	423765001	5/17/2017	Ru-106	-1.88E+00	4.63E+00	1.48E+01	U
WS	01	423765001	5/17/2017	Sb-124	-7.12E-01	1.30E+00	3.97E+00	U
WS	01	423765001	5/17/2017	Sb-125	-2.34E+00	1.43E+00	4.21E+00	U
WS	01	423765001	5/17/2017	Se-75	6.73E-01	6.96E-01	2.19E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	423765001	5/17/2017	Th-228	1.28E+00	2.13E+00	2.87E+00	U
WS	01	423765001	5/17/2017	Zn-65	1.24E+00	1.11E+00	3.77E+00	U
WS	01	423765001	5/17/2017	Zr-95	-9.15E-01	1.05E+00	2.76E+00	U
WS	01	425757001	6/12/2017	Ac-228	4.64E+00	4.21E+00	6.89E+00	U
WS	01	425757001	6/12/2017	Ag-108m	-7.85E-01	7.02E-01	1.31E+00	U
WS	01	425757001	6/12/2017	Ag-110m	-1.39E-01	6.26E-01	1.97E+00	U
WS	01	425757001	6/12/2017	Ba-140	1.83E-01	2.32E+00	7.70E+00	U
WS	01	425757001	6/12/2017	Be-7	-5.98E+00	3.96E+00	1.17E+01	U
WS	01	425757001	6/12/2017	Bi-214	6.90E-02	1.70E+00	3.54E+00	U
WS	01	425757001	6/12/2017	Ce-141	0.00E+00	1.78E+00	2.55E+00	U
WS	01	425757001	6/12/2017	Ce-144	-3.85E+00	3.11E+00	9.43E+00	U
WS	01	425757001	6/12/2017	Co-57	-1.76E-02	4.01E-01	1.31E+00	U
WS	01	425757001	6/12/2017	Co-58	-1.78E-01	4.88E-01	1.53E+00	U
WS	01	425757001	6/12/2017	Co-60	-2.60E-01	4.59E-01	1.46E+00	U
WS	01	425757001	6/12/2017	Cr-51	3.01E+00	4.21E+00	1.44E+01	U
WS	01	425757001	6/12/2017	Cs-134	1.99E-01	4.98E-01	1.62E+00	U
WS	01	425757001	6/12/2017	Cs-137	1.36E+00	1.04E+00	1.47E+00	U
WS	01	425757001	6/12/2017	Fe-59	-1.11E+00	9.55E-01	2.93E+00	U
WS	01	425757001	6/12/2017	I-131	-6.16E-01	9.36E-01	3.08E+00	U
WS	01	425757001	6/12/2017	K-40	3.17E+02	1.92E+01	1.45E+01	
WS	01	425757001	6/12/2017	La-140	2.69E-01	8.36E-01	2.77E+00	U
WS	01	425757001	6/12/2017	Mn-54	-2.41E-01	4.69E-01	1.46E+00	U
WS	01	425757001	6/12/2017	Nb-95	-4.04E-01	6.45E-01	1.61E+00	U
WS	01	425757001	6/12/2017	Pb-212	1.30E-01	1.61E+00	3.34E+00	U
WS	01	425757001	6/12/2017	Pb-214	-2.02E+00	1.77E+00	3.51E+00	U
WS	01	425757001	6/12/2017	Ru-103	-1.13E+00	7.27E-01	1.52E+00	U
WS	01	425757001	6/12/2017	Ru-106	8.49E-01	4.08E+00	1.34E+01	U
WS	01	425757001	6/12/2017	Sb-124	2.09E+00	1.15E+00	3.80E+00	U
WS	01	425757001	6/12/2017	Sb-125	-1.42E+00	1.22E+00	3.82E+00	U
WS	01	425757001	6/12/2017	Se-75	-4.74E-01	6.60E-01	1.99E+00	U
WS	01	425757001	6/12/2017	Th-228	1.30E-01	1.61E+00	3.34E+00	U
WS	01	425757001	6/12/2017	Zn-65	1.85E+00	1.01E+00	3.32E+00	U
WS	01	425757001	6/12/2017	Zr-95	1.06E+00	8.54E-01	2.78E+00	U
WS	01	429781001	6/12/2017	H-3	-3.20E+02	1.79E+02	6.35E+02	U
WS	01	427876001	7/10/2017	Ac-228	2.53E+00	3.68E+00	7.43E+00	U
WS	01	427876001	7/10/2017	Ag-108m	1.50E-01	4.46E-01	1.50E+00	U
WS	01	427876001	7/10/2017	Ag-110m	1.84E-01	6.83E-01	2.34E+00	U
WS	01	427876001	7/10/2017	Ba-140	-2.00E+00	3.16E+00	1.01E+01	U
WS	01	427876001	7/10/2017	Be-7	7.65E-01	4.75E+00	1.58E+01	U
WS	01	427876001	7/10/2017	Bi-214	1.08E+00	2.41E+00	4.32E+00	U
WS	01	427876001	7/10/2017	Ce-141	8.19E-01	9.55E-01	3.07E+00	U
WS	01	427876001	7/10/2017	Ce-144	-7.41E-01	3.40E+00	1.09E+01	U
WS	01	427876001	7/10/2017	Co-57	6.74E-01	4.72E-01	1.49E+00	U
WS	01	427876001	7/10/2017	Co-58	-3.93E-01	5.48E-01	1.66E+00	U
WS	01	427876001	7/10/2017	Co-60	-1.38E-01	5.62E-01	1.76E+00	U
WS	01	427876001	7/10/2017	Cr-51	-3.61E+00	4.87E+00	1.60E+01	U
WS	01	427876001	7/10/2017	Cs-134	-1.81E-01	5.12E-01	1.60E+00	U
WS	01	427876001	7/10/2017	Cs-137	-3.00E-02	5.44E-01	1.76E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	427876001	7/10/2017	Fe-59	-2.89E-01	1.15E+00	3.81E+00	U
WS	01	427876001	7/10/2017	I-131	2.88E-01	1.06E+00	3.61E+00	U
WS	01	427876001	7/10/2017	K-40	3.08E+02	2.06E+01	1.57E+01	
WS	01	427876001	7/10/2017	La-140	-2.64E-01	9.39E-01	2.98E+00	U
WS	01	427876001	7/10/2017	Mn-54	-8.42E-01	5.89E-01	1.65E+00	U
WS	01	427876001	7/10/2017	Nb-95	-1.53E+00	9.69E-01	1.65E+00	U
WS	01	427876001	7/10/2017	Pb-212	-2.05E+00	1.48E+00	3.42E+00	U
WS	01	427876001	7/10/2017	Pb-214	1.05E+00	2.91E+00	3.35E+00	U
WS	01	427876001	7/10/2017	Ru-103	-4.37E-01	5.74E-01	1.83E+00	U
WS	01	427876001	7/10/2017	Ru-106	-4.28E+00	5.14E+00	1.59E+01	U
WS	01	427876001	7/10/2017	Sb-124	-1.93E+00	1.76E+00	3.26E+00	U
WS	01	427876001	7/10/2017	Sb-125	9.22E-02	1.25E+00	4.20E+00	U
WS	01	427876001	7/10/2017	Se-75	6.68E-01	7.19E-01	2.24E+00	U
WS	01	427876001	7/10/2017	Th-228	-2.05E+00	1.48E+00	3.42E+00	U
WS	01	427876001	7/10/2017	Zn-65	8.22E-01	1.18E+00	4.00E+00	U
WS	01	427876001	7/10/2017	Zr-95	2.95E-01	1.04E+00	3.36E+00	U
WS	01	431065001	8/15/2017	Ac-228	-2.32E+00	4.00E+00	8.63E+00	U
WS	01	431065001	8/15/2017	Ag-108m	-2.84E-01	5.10E-01	1.47E+00	U
WS	01	431065001	8/15/2017	Ag-110m	-3.44E-01	7.65E-01	2.39E+00	U
WS	01	431065001	8/15/2017	Ba-140	-1.61E+00	2.57E+00	8.16E+00	U
WS	01	431065001	8/15/2017	Be-7	-5.69E+00	4.72E+00	1.44E+01	U
WS	01	431065001	8/15/2017	Bi-214	-2.07E+00	2.38E+00	4.05E+00	U
WS	01	431065001	8/15/2017	Ce-141	0.00E+00	2.11E+00	3.05E+00	U
WS	01	431065001	8/15/2017	Ce-144	-2.55E-01	3.49E+00	1.20E+01	U
WS	01	431065001	8/15/2017	Co-57	6.30E-01	4.98E-01	1.67E+00	U
WS	01	431065001	8/15/2017	Co-58	-3.92E-01	5.36E-01	1.65E+00	U
WS	01	431065001	8/15/2017	Co-60	5.86E-01	5.52E-01	1.91E+00	U
WS	01	431065001	8/15/2017	Cr-51	8.29E-01	4.90E+00	1.65E+01	U
WS	01	431065001	8/15/2017	Cs-134	-5.01E-01	9.00E-01	2.01E+00	U
WS	01	431065001	8/15/2017	Cs-137	-1.13E-01	5.16E-01	1.66E+00	U
WS	01	431065001	8/15/2017	Fe-59	-5.99E-01	1.07E+00	3.26E+00	U
WS	01	431065001	8/15/2017	I-131	2.29E-01	8.49E-01	2.72E+00	U
WS	01	431065001	8/15/2017	K-40	2.88E+02	2.50E+01	1.76E+01	
WS	01	431065001	8/15/2017	La-140	-1.03E+00	9.41E-01	2.40E+00	U
WS	01	431065001	8/15/2017	Mn-54	7.54E-01	5.16E-01	1.67E+00	U
WS	01	431065001	8/15/2017	Nb-95	-5.26E-01	5.82E-01	1.77E+00	U
WS	01	431065001	8/15/2017	Pb-212	2.56E-01	1.62E+00	4.00E+00	U
WS	01	431065001	8/15/2017	Pb-214	3.68E+00	2.77E+00	4.51E+00	U
WS	01	431065001	8/15/2017	Ru-103	-3.25E-01	5.38E-01	1.72E+00	U
WS	01	431065001	8/15/2017	Ru-106	-6.56E+00	4.91E+00	1.44E+01	U
WS	01	431065001	8/15/2017	Sb-124	1.52E+00	1.28E+00	4.41E+00	U
WS	01	431065001	8/15/2017	Sb-125	6.27E-01	1.56E+00	4.68E+00	U
WS	01	431065001	8/15/2017	Se-75	5.22E-01	7.15E-01	2.41E+00	U
WS	01	431065001	8/15/2017	Th-228	2.56E-01	1.62E+00	4.00E+00	U
WS	01	431065001	8/15/2017	Zn-65	2.39E+00	1.34E+00	3.56E+00	U
WS	01	431065001	8/15/2017	Zr-95	-9.46E-01	1.33E+00	3.22E+00	U
WS	01	432930001	9/11/2017	Ac-228	-1.91E+00	3.27E+00	7.41E+00	U
WS	01	432930001	9/11/2017	Ag-108m	3.26E-01	4.05E-01	1.35E+00	U
WS	01	432930001	9/11/2017	Ag-110m	-1.59E-01	6.41E-01	2.14E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	432930001	9/11/2017	Ba-140	4.62E+00	2.82E+00	7.81E+00	U
WS	01	432930001	9/11/2017	Be-7	6.71E+00	4.36E+00	1.40E+01	U
WS	01	432930001	9/11/2017	Bi-214	8.84E-01	2.24E+00	3.20E+00	U
WS	01	432930001	9/11/2017	Ce-141	-4.36E+00	1.79E+00	2.57E+00	U
WS	01	432930001	9/11/2017	Ce-144	9.82E-01	3.03E+00	9.72E+00	U
WS	01	432930001	9/11/2017	Co-57	-5.98E-01	4.25E-01	1.25E+00	U
WS	01	432930001	9/11/2017	Co-58	3.41E-01	4.69E-01	1.61E+00	U
WS	01	432930001	9/11/2017	Co-60	3.30E-01	5.47E-01	1.82E+00	U
WS	01	432930001	9/11/2017	Cr-51	-1.37E+01	5.39E+00	1.35E+01	U
WS	01	432930001	9/11/2017	Cs-134	0.00E+00	9.50E-01	1.62E+00	U
WS	01	432930001	9/11/2017	Cs-137	-4.10E-01	5.01E-01	1.52E+00	U
WS	01	432930001	9/11/2017	Fe-59	1.20E-01	1.01E+00	3.37E+00	U
WS	01	432930001	9/11/2017	I-131	4.65E-01	8.24E-01	2.77E+00	U
WS	01	432930001	9/11/2017	K-40	3.11E+02	2.34E+01	1.61E+01	
WS	01	432930001	9/11/2017	La-140	1.07E-01	7.89E-01	2.56E+00	U
WS	01	432930001	9/11/2017	Mn-54	-7.42E-01	4.82E-01	1.43E+00	U
WS	01	432930001	9/11/2017	Nb-95	3.26E-01	5.30E-01	1.71E+00	U
WS	01	432930001	9/11/2017	Pb-212	2.00E+00	2.21E+00	3.39E+00	U
WS	01	432930001	9/11/2017	Pb-214	1.95E+00	2.49E+00	3.94E+00	U
WS	01	432930001	9/11/2017	Ru-103	5.46E-01	5.35E-01	1.59E+00	U
WS	01	432930001	9/11/2017	Ru-106	-3.99E+00	4.26E+00	1.29E+01	U
WS	01	432930001	9/11/2017	Sb-124	-9.94E-02	1.19E+00	3.79E+00	U
WS	01	432930001	9/11/2017	Sb-125	2.97E-01	1.20E+00	3.99E+00	U
WS	01	432930001	9/11/2017	Se-75	-1.69E-01	5.99E-01	2.02E+00	U
WS	01	432930001	9/11/2017	Th-228	2.00E+00	2.21E+00	3.39E+00	U
WS	01	432930001	9/11/2017	Zn-65	1.78E-01	9.96E-01	3.33E+00	U
WS	01	432930001	9/11/2017	Zr-95	-5.75E-02	9.04E-01	2.86E+00	U
WS	01	436554001	9/11/2017	H-3	2.60E+02	1.72E+02	5.21E+02	U
WS	01	435699001	10/16/2017	Ac-228	-3.42E+00	3.89E+00	8.68E+00	U
WS	01	435699001	10/16/2017	Ag-108m	6.80E-02	4.26E-01	1.42E+00	U
WS	01	435699001	10/16/2017	Ag-110m	-6.74E-01	7.55E-01	2.27E+00	U
WS	01	435699001	10/16/2017	Ba-140	-1.23E-01	3.28E+00	1.08E+01	U
WS	01	435699001	10/16/2017	Be-7	-5.44E+00	4.99E+00	1.54E+01	U
WS	01	435699001	10/16/2017	Bi-214	0.00E+00	2.38E+00	3.10E+00	U
WS	01	435699001	10/16/2017	Ce-141	-1.63E+00	1.09E+00	3.40E+00	U
WS	01	435699001	10/16/2017	Ce-144	-4.14E-01	3.76E+00	1.29E+01	U
WS	01	435699001	10/16/2017	Co-57	-9.02E-01	5.26E-01	1.61E+00	U
WS	01	435699001	10/16/2017	Co-58	-4.53E-01	5.41E-01	1.64E+00	U
WS	01	435699001	10/16/2017	Co-60	8.21E-01	6.09E-01	2.08E+00	U
WS	01	435699001	10/16/2017	Cr-51	-1.15E+00	5.37E+00	1.79E+01	U
WS	01	435699001	10/16/2017	Cs-134	2.06E-01	5.74E-01	1.88E+00	U
WS	01	435699001	10/16/2017	Cs-137	2.09E-01	5.20E-01	1.71E+00	U
WS	01	435699001	10/16/2017	Fe-59	6.64E-01	1.33E+00	4.28E+00	U
WS	01	435699001	10/16/2017	I-131	-1.54E+00	1.34E+00	4.17E+00	U
WS	01	435699001	10/16/2017	K-40	3.45E+02	2.68E+01	1.82E+01	
WS	01	435699001	10/16/2017	La-140	-2.51E+00	1.15E+00	2.74E+00	U
WS	01	435699001	10/16/2017	Mn-54	1.51E-02	5.12E-01	1.65E+00	U
WS	01	435699001	10/16/2017	Nb-95	4.17E-01	5.77E-01	1.90E+00	U
WS	01	435699001	10/16/2017	Pb-212	-2.54E+00	1.88E+00	4.26E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	435699001	10/16/2017	Pb-214	4.73E+00	1.84E+00	4.81E+00	U
WS	01	435699001	10/16/2017	Ru-103	6.75E-01	6.32E-01	1.89E+00	U
WS	01	435699001	10/16/2017	Ru-106	7.96E-01	4.84E+00	1.59E+01	U
WS	01	435699001	10/16/2017	Sb-124	1.99E+00	1.45E+00	4.97E+00	U
WS	01	435699001	10/16/2017	Sb-125	7.08E-01	1.36E+00	4.56E+00	U
WS	01	435699001	10/16/2017	Se-75	2.47E-01	7.20E-01	2.44E+00	U
WS	01	435699001	10/16/2017	Th-228	-2.54E+00	1.88E+00	4.26E+00	U
WS	01	435699001	10/16/2017	Zn-65	-1.02E+00	1.29E+00	3.86E+00	U
WS	01	435699001	10/16/2017	Zr-95	6.00E-01	1.04E+00	3.40E+00	U
WS	01	438318001	11/15/2017	Ac-228	9.15E+00	9.58E+00	1.02E+01	U
WS	01	438318001	11/15/2017	Ag-108m	-3.08E-01	5.36E-01	1.77E+00	U
WS	01	438318001	11/15/2017	Ag-110m	-3.05E-01	9.79E-01	3.08E+00	U
WS	01	438318001	11/15/2017	Ba-140	5.10E+00	3.44E+00	1.14E+01	U
WS	01	438318001	11/15/2017	Be-7	1.38E+00	5.74E+00	1.76E+01	U
WS	01	438318001	11/15/2017	Bi-214	0.00E+00	3.40E+00	4.47E+00	U
WS	01	438318001	11/15/2017	Ce-141	-1.48E+00	1.10E+00	3.33E+00	U
WS	01	438318001	11/15/2017	Ce-144	-5.88E+00	4.35E+00	1.22E+01	U
WS	01	438318001	11/15/2017	Co-57	4.04E-01	5.15E-01	1.72E+00	U
WS	01	438318001	11/15/2017	Co-58	2.96E-01	6.42E-01	2.12E+00	U
WS	01	438318001	11/15/2017	Co-60	-1.44E+00	1.33E+00	2.94E+00	U
WS	01	438318001	11/15/2017	Cr-51	8.08E+00	6.54E+00	2.05E+01	U
WS	01	438318001	11/15/2017	Cs-134	2.24E+00	1.49E+00	2.42E+00	U
WS	01	438318001	11/15/2017	Cs-137	-4.61E-01	7.13E-01	2.24E+00	U
WS	01	438318001	11/15/2017	Fe-59	1.23E+00	1.44E+00	4.97E+00	U
WS	01	438318001	11/15/2017	I-131	-1.18E+00	1.09E+00	3.49E+00	U
WS	01	438318001	11/15/2017	K-40	3.47E+02	3.08E+01	2.09E+01	
WS	01	438318001	11/15/2017	La-140	-1.56E+00	1.21E+00	3.37E+00	U
WS	01	438318001	11/15/2017	Mn-54	-5.13E-01	6.00E-01	1.79E+00	U
WS	01	438318001	11/15/2017	Nb-95	1.47E-01	7.17E-01	2.35E+00	U
WS	01	438318001	11/15/2017	Pb-212	3.01E+00	2.61E+00	4.98E+00	U
WS	01	438318001	11/15/2017	Pb-214	2.06E+00	3.43E+00	6.07E+00	U
WS	01	438318001	11/15/2017	Ru-103	-3.69E-02	6.94E-01	2.33E+00	U
WS	01	438318001	11/15/2017	Ru-106	-7.31E+00	7.21E+00	2.22E+01	U
WS	01	438318001	11/15/2017	Sb-124	-3.96E+00	2.14E+00	5.21E+00	U
WS	01	438318001	11/15/2017	Sb-125	3.11E+00	1.86E+00	6.15E+00	U
WS	01	438318001	11/15/2017	Se-75	4.42E-01	8.70E-01	2.78E+00	U
WS	01	438318001	11/15/2017	Th-228	3.01E+00	2.61E+00	4.98E+00	U
WS	01	438318001	11/15/2017	Zn-65	2.45E-01	1.76E+00	5.28E+00	U
WS	01	438318001	11/15/2017	Zr-95	-2.16E-01	1.18E+00	3.77E+00	U
WS	01	439872001	12/5/2017	Ac-228	7.05E-01	3.11E+00	7.19E+00	U
WS	01	439872001	12/5/2017	Ag-108m	3.42E-02	4.05E-01	1.34E+00	U
WS	01	439872001	12/5/2017	Ag-110m	-1.02E+00	9.40E-01	2.12E+00	U
WS	01	439872001	12/5/2017	Ba-140	1.75E+00	2.60E+00	8.58E+00	U
WS	01	439872001	12/5/2017	Be-7	-8.00E+00	4.45E+00	1.24E+01	U
WS	01	439872001	12/5/2017	Bi-214	-4.77E-01	1.59E+00	3.82E+00	U
WS	01	439872001	12/5/2017	Ce-141	8.74E-02	1.58E+00	2.65E+00	U
WS	01	439872001	12/5/2017	Ce-144	2.57E-01	3.03E+00	9.68E+00	U
WS	01	439872001	12/5/2017	Co-57	6.06E-01	4.20E-01	1.31E+00	U
WS	01	439872001	12/5/2017	Co-58	1.14E-02	4.49E-01	1.53E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	01	439872001	12/5/2017	Co-60	-6.15E-01	5.31E-01	1.56E+00	U
WS	01	439872001	12/5/2017	Cr-51	6.05E+00	4.63E+00	1.53E+01	U
WS	01	439872001	12/5/2017	Cs-134	2.30E-01	5.15E-01	1.72E+00	U
WS	01	439872001	12/5/2017	Cs-137	3.35E-01	4.95E-01	1.61E+00	U
WS	01	439872001	12/5/2017	Fe-59	-7.20E-01	1.03E+00	3.26E+00	U
WS	01	439872001	12/5/2017	I-131	-1.49E+00	1.03E+00	3.08E+00	U
WS	01	439872001	12/5/2017	K-40	3.15E+02	2.30E+01	1.57E+01	
WS	01	439872001	12/5/2017	La-140	-1.13E+00	1.08E+00	2.83E+00	U
WS	01	439872001	12/5/2017	Mn-54	5.92E-01	4.53E-01	1.54E+00	U
WS	01	439872001	12/5/2017	Nb-95	-2.56E-01	5.36E-01	1.66E+00	U
WS	01	439872001	12/5/2017	Pb-212	4.07E-01	1.63E+00	3.29E+00	U
WS	01	439872001	12/5/2017	Pb-214	-3.73E+00	1.79E+00	3.44E+00	U
WS	01	439872001	12/5/2017	Ru-103	-6.59E-01	5.29E-01	1.59E+00	U
WS	01	439872001	12/5/2017	Ru-106	3.31E+00	3.95E+00	1.29E+01	U
WS	01	439872001	12/5/2017	Sb-124	-2.47E+00	1.66E+00	3.82E+00	U
WS	01	439872001	12/5/2017	Sb-125	3.59E-01	1.26E+00	4.18E+00	U
WS	01	439872001	12/5/2017	Se-75	1.07E+00	6.45E-01	2.10E+00	U
WS	01	439872001	12/5/2017	Th-228	4.07E-01	1.63E+00	3.29E+00	U
WS	01	439872001	12/5/2017	Zn-65	4.67E-01	1.13E+00	3.79E+00	U
WS	01	439872001	12/5/2017	Zr-95	6.90E-01	8.91E-01	2.88E+00	U
WS	01	441670001	12/5/2017	H-3	-1.07E+02	1.83E+02	6.18E+02	U
WS	10	423765004	5/18/2017	Ac-228	-1.67E-01	3.14E+00	6.40E+00	U
WS	10	423765004	5/18/2017	Ag-108m	-3.05E-01	3.59E-01	1.17E+00	U
WS	10	423765004	5/18/2017	Ag-110m	-4.65E-01	5.87E-01	1.79E+00	U
WS	10	423765004	5/18/2017	Ba-140	1.30E+00	2.08E+00	7.08E+00	U
WS	10	423765004	5/18/2017	Be-7	1.23E+00	3.76E+00	1.29E+01	U
WS	10	423765004	5/18/2017	Bi-214	0.00E+00	2.26E+00	3.77E+00	U
WS	10	423765004	5/18/2017	Ce-141	-1.40E+00	7.82E-01	2.27E+00	U
WS	10	423765004	5/18/2017	Ce-144	3.46E+00	2.80E+00	9.17E+00	U
WS	10	423765004	5/18/2017	Co-57	-5.46E-01	3.74E-01	1.14E+00	U
WS	10	423765004	5/18/2017	Co-58	-2.95E-01	4.27E-01	1.33E+00	U
WS	10	423765004	5/18/2017	Co-60	2.72E-01	4.01E-01	1.38E+00	U
WS	10	423765004	5/18/2017	Cr-51	-1.15E+00	4.15E+00	1.30E+01	U
WS	10	423765004	5/18/2017	Cs-134	-1.42E-02	4.46E-01	1.45E+00	U
WS	10	423765004	5/18/2017	Cs-137	7.04E-01	4.78E-01	1.58E+00	U
WS	10	423765004	5/18/2017	Fe-59	2.37E-01	8.97E-01	2.88E+00	U
WS	10	423765004	5/18/2017	I-131	-1.12E-02	7.46E-01	2.33E+00	U
WS	10	423765004	5/18/2017	K-40	1.30E+02	1.54E+01	1.15E+01	
WS	10	423765004	5/18/2017	La-140	-5.81E-01	6.47E-01	1.96E+00	U
WS	10	423765004	5/18/2017	Mn-54	-3.54E-01	4.51E-01	1.39E+00	U
WS	10	423765004	5/18/2017	Nb-95	1.03E+00	5.03E-01	1.59E+00	U
WS	10	423765004	5/18/2017	Pb-212	0.00E+00	1.71E+00	2.40E+00	U
WS	10	423765004	5/18/2017	Pb-214	8.22E-01	2.28E+00	3.70E+00	U
WS	10	423765004	5/18/2017	Ru-103	-1.21E-01	4.54E-01	1.37E+00	U
WS	10	423765004	5/18/2017	Ru-106	-1.35E+00	3.61E+00	1.18E+01	U
WS	10	423765004	5/18/2017	Sb-124	-2.16E-01	1.02E+00	3.30E+00	U
WS	10	423765004	5/18/2017	Sb-125	4.61E-01	1.13E+00	3.90E+00	U
WS	10	423765004	5/18/2017	Se-75	0.00E+00	1.32E+00	1.96E+00	U
WS	10	423765004	5/18/2017	Th-228	0.00E+00	1.71E+00	2.40E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	10	423765004	5/18/2017	Zn-65	2.98E-01	8.99E-01	2.76E+00	U
WS	10	423765004	5/18/2017	Zr-95	-2.85E-01	7.80E-01	2.51E+00	U
WS	10	423765004	5/18/2017	H-3	2.94E+02	1.44E+02	4.29E+02	U
WS	10	438318004	11/13/2017	Ac-228	4.51E+00	4.39E+00	8.09E+00	U
WS	10	438318004	11/13/2017	Ag-108m	3.20E-01	4.17E-01	1.36E+00	U
WS	10	438318004	11/13/2017	Ag-110m	-5.73E-01	6.22E-01	1.95E+00	U
WS	10	438318004	11/13/2017	Ba-140	-1.04E+00	2.57E+00	8.10E+00	U
WS	10	438318004	11/13/2017	Be-7	6.77E+00	4.19E+00	1.32E+01	U
WS	10	438318004	11/13/2017	Bi-214	-1.19E+00	2.08E+00	3.71E+00	U
WS	10	438318004	11/13/2017	Ce-141	-2.43E+00	1.59E+00	2.78E+00	U
WS	10	438318004	11/13/2017	Ce-144	-4.68E+00	3.43E+00	1.00E+01	U
WS	10	438318004	11/13/2017	Co-57	2.60E-01	4.21E-01	1.34E+00	U
WS	10	438318004	11/13/2017	Co-58	8.45E-01	4.95E-01	1.61E+00	U
WS	10	438318004	11/13/2017	Co-60	1.09E+00	5.38E-01	1.69E+00	U
WS	10	438318004	11/13/2017	Cr-51	-3.80E+00	4.50E+00	1.44E+01	U
WS	10	438318004	11/13/2017	Cs-134	-1.62E-01	8.93E-01	1.75E+00	U
WS	10	438318004	11/13/2017	Cs-137	1.07E+00	5.21E-01	1.65E+00	U
WS	10	438318004	11/13/2017	Fe-59	1.24E+00	1.02E+00	3.36E+00	U
WS	10	438318004	11/13/2017	I-131	3.35E-03	9.26E-01	3.06E+00	U
WS	10	438318004	11/13/2017	K-40	2.25E+02	1.95E+01	1.42E+01	
WS	10	438318004	11/13/2017	La-140	-3.78E-01	8.84E-01	2.89E+00	U
WS	10	438318004	11/13/2017	Mn-54	3.72E-01	4.82E-01	1.62E+00	U
WS	10	438318004	11/13/2017	Nb-95	1.11E-01	4.56E-01	1.54E+00	U
WS	10	438318004	11/13/2017	Pb-212	2.53E+00	2.00E+00	3.72E+00	U
WS	10	438318004	11/13/2017	Pb-214	0.00E+00	2.42E+00	3.70E+00	U
WS	10	438318004	11/13/2017	Ru-103	-8.73E-01	5.89E-01	1.49E+00	U
WS	10	438318004	11/13/2017	Ru-106	5.81E-01	4.09E+00	1.30E+01	U
WS	10	438318004	11/13/2017	Sb-124	3.24E-01	1.09E+00	3.69E+00	U
WS	10	438318004	11/13/2017	Sb-125	-1.24E+00	1.20E+00	3.69E+00	U
WS	10	438318004	11/13/2017	Se-75	7.65E-01	6.04E-01	1.99E+00	U
WS	10	438318004	11/13/2017	Th-228	2.53E+00	2.00E+00	3.72E+00	U
WS	10	438318004	11/13/2017	Zn-65	1.05E-01	9.52E-01	3.12E+00	U
WS	10	438318004	11/13/2017	Zr-95	2.83E-01	8.28E-01	2.81E+00	U
WS	10	438318004	11/13/2017	H-3	1.54E+02	1.25E+02	3.91E+02	U
WS	51	414893002	1/18/2017	Ac-228	1.76E+00	4.03E+00	9.07E+00	U
WS	51	414893002	1/18/2017	Ag-108m	-1.88E-01	4.70E-01	1.51E+00	U
WS	51	414893002	1/18/2017	Ag-110m	8.64E-01	7.37E-01	2.48E+00	U
WS	51	414893002	1/18/2017	Ba-140	4.00E-01	3.00E+00	9.70E+00	U
WS	51	414893002	1/18/2017	Be-7	8.50E+00	4.96E+00	1.57E+01	U
WS	51	414893002	1/18/2017	Bi-214	0.00E+00	3.17E+00	3.60E+00	U
WS	51	414893002	1/18/2017	Ce-141	-3.42E+00	1.77E+00	3.19E+00	U
WS	51	414893002	1/18/2017	Ce-144	7.95E+00	4.12E+00	1.21E+01	U
WS	51	414893002	1/18/2017	Co-57	-6.11E-02	4.96E-01	1.57E+00	U
WS	51	414893002	1/18/2017	Co-58	-3.04E-01	4.93E-01	1.60E+00	U
WS	51	414893002	1/18/2017	Co-60	-5.93E-01	5.72E-01	1.68E+00	U
WS	51	414893002	1/18/2017	Cr-51	-3.53E+00	5.11E+00	1.65E+01	U
WS	51	414893002	1/18/2017	Cs-134	1.84E-01	8.35E-01	2.12E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	414893002	1/18/2017	Cs-137	9.37E-01	6.05E-01	1.91E+00	U
WS	51	414893002	1/18/2017	Fe-59	1.84E+00	1.19E+00	3.90E+00	U
WS	51	414893002	1/18/2017	I-131	-1.26E+00	1.14E+00	3.54E+00	U
WS	51	414893002	1/18/2017	K-40	2.72E+02	2.17E+01	1.86E+01	
WS	51	414893002	1/18/2017	La-140	-7.10E-01	9.05E-01	2.85E+00	U
WS	51	414893002	1/18/2017	Mn-54	1.26E+00	8.70E-01	1.66E+00	U
WS	51	414893002	1/18/2017	Nb-95	4.96E-01	5.64E-01	1.92E+00	U
WS	51	414893002	1/18/2017	Pb-212	0.00E+00	2.32E+00	2.98E+00	U
WS	51	414893002	1/18/2017	Pb-214	3.62E+00	2.92E+00	4.32E+00	U
WS	51	414893002	1/18/2017	Ru-103	-4.19E-01	6.11E-01	1.91E+00	U
WS	51	414893002	1/18/2017	Ru-106	-5.26E+00	5.18E+00	1.54E+01	U
WS	51	414893002	1/18/2017	Sb-124	-1.13E+00	1.29E+00	3.99E+00	U
WS	51	414893002	1/18/2017	Sb-125	1.45E+00	1.48E+00	4.85E+00	U
WS	51	414893002	1/18/2017	Se-75	-1.16E+00	7.36E-01	2.22E+00	U
WS	51	414893002	1/18/2017	Th-228	0.00E+00	2.32E+00	2.98E+00	U
WS	51	414893002	1/18/2017	Zn-65	5.48E-01	1.25E+00	3.67E+00	U
WS	51	414893002	1/18/2017	Zr-95	-5.00E-04	9.52E-01	3.21E+00	U
WS	51	416970002	2/14/2017	Ac-228	6.65E+00	6.04E+00	8.07E+00	U
WS	51	416970002	2/14/2017	Ag-108m	3.31E-01	4.15E-01	1.38E+00	U
WS	51	416970002	2/14/2017	Ag-110m	2.59E-01	6.85E-01	2.08E+00	U
WS	51	416970002	2/14/2017	Ba-140	7.91E-01	2.49E+00	8.21E+00	U
WS	51	416970002	2/14/2017	Be-7	-7.25E+00	4.47E+00	1.29E+01	U
WS	51	416970002	2/14/2017	Bi-214	2.52E+00	2.76E+00	3.06E+00	U
WS	51	416970002	2/14/2017	Ce-141	1.32E+00	9.31E-01	2.67E+00	U
WS	51	416970002	2/14/2017	Ce-144	-1.37E-01	3.07E+00	9.80E+00	U
WS	51	416970002	2/14/2017	Co-57	1.31E-01	4.03E-01	1.30E+00	U
WS	51	416970002	2/14/2017	Co-58	-6.03E-01	5.06E-01	1.45E+00	U
WS	51	416970002	2/14/2017	Co-60	3.18E-01	5.08E-01	1.70E+00	U
WS	51	416970002	2/14/2017	Cr-51	5.10E+00	4.63E+00	1.55E+01	U
WS	51	416970002	2/14/2017	Cs-134	4.67E-01	5.54E-01	1.79E+00	U
WS	51	416970002	2/14/2017	Cs-137	-1.06E-01	5.07E-01	1.62E+00	U
WS	51	416970002	2/14/2017	Fe-59	5.83E-01	1.08E+00	3.25E+00	U
WS	51	416970002	2/14/2017	I-131	-1.16E+00	9.17E-01	2.83E+00	U
WS	51	416970002	2/14/2017	K-40	3.02E+02	2.16E+01	1.57E+01	
WS	51	416970002	2/14/2017	La-140	-7.93E-01	8.70E-01	2.59E+00	U
WS	51	416970002	2/14/2017	Mn-54	5.19E-02	4.52E-01	1.54E+00	U
WS	51	416970002	2/14/2017	Nb-95	2.51E-01	4.70E-01	1.52E+00	U
WS	51	416970002	2/14/2017	Pb-212	0.00E+00	1.96E+00	3.48E+00	U
WS	51	416970002	2/14/2017	Pb-214	-2.53E+00	1.71E+00	3.62E+00	U
WS	51	416970002	2/14/2017	Ru-103	-3.90E-01	5.25E-01	1.66E+00	U
WS	51	416970002	2/14/2017	Ru-106	1.38E-01	4.49E+00	1.45E+01	U
WS	51	416970002	2/14/2017	Sb-124	-7.71E-01	1.24E+00	3.77E+00	U
WS	51	416970002	2/14/2017	Sb-125	6.49E-01	1.24E+00	4.15E+00	U
WS	51	416970002	2/14/2017	Se-75	6.82E-01	6.33E-01	2.14E+00	U
WS	51	416970002	2/14/2017	Th-228	0.00E+00	1.96E+00	3.48E+00	U
WS	51	416970002	2/14/2017	Zn-65	-1.65E+00	1.53E+00	3.06E+00	U
WS	51	416970002	2/14/2017	Zr-95	-3.86E-01	8.44E-01	2.62E+00	U
WS	51	419055002	3/13/2017	Ac-228	2.14E+00	3.69E+00	5.18E+00	U
WS	51	419055002	3/13/2017	Ag-108m	-1.83E-01	3.56E-01	1.06E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	419055002	3/13/2017	Ag-110m	-4.19E-01	5.39E-01	1.49E+00	U
WS	51	419055002	3/13/2017	Ba-140	5.39E+00	3.04E+00	9.74E+00	U
WS	51	419055002	3/13/2017	Be-7	-2.16E+00	3.60E+00	1.19E+01	U
WS	51	419055002	3/13/2017	Bi-214	9.95E-01	1.68E+00	2.32E+00	U
WS	51	419055002	3/13/2017	Ce-141	-7.18E+00	2.38E+00	2.55E+00	U
WS	51	419055002	3/13/2017	Ce-144	1.15E+00	2.69E+00	8.70E+00	U
WS	51	419055002	3/13/2017	Co-57	2.43E-01	3.51E-01	1.13E+00	U
WS	51	419055002	3/13/2017	Co-58	-4.24E-02	3.84E-01	1.25E+00	U
WS	51	419055002	3/13/2017	Co-60	-3.55E-01	8.63E-01	1.53E+00	U
WS	51	419055002	3/13/2017	Cr-51	-4.01E+00	4.53E+00	1.35E+01	U
WS	51	419055002	3/13/2017	Cs-134	-4.70E-01	4.11E-01	1.25E+00	U
WS	51	419055002	3/13/2017	Cs-137	-1.85E-01	3.79E-01	1.23E+00	U
WS	51	419055002	3/13/2017	Fe-59	-1.83E-01	8.20E-01	2.61E+00	U
WS	51	419055002	3/13/2017	I-131	-6.64E-01	1.27E+00	4.26E+00	U
WS	51	419055002	3/13/2017	K-40	3.49E+02	1.66E+01	9.88E+00	
WS	51	419055002	3/13/2017	La-140	-6.73E-01	8.10E-01	2.57E+00	U
WS	51	419055002	3/13/2017	Mn-54	-2.49E-01	3.69E-01	1.17E+00	U
WS	51	419055002	3/13/2017	Nb-95	-1.60E+00	9.09E-01	1.32E+00	U
WS	51	419055002	3/13/2017	Pb-212	0.00E+00	2.02E+00	2.96E+00	U
WS	51	419055002	3/13/2017	Pb-214	-2.36E+00	2.02E+00	2.97E+00	U
WS	51	419055002	3/13/2017	Ru-103	-2.17E-01	4.79E-01	1.42E+00	U
WS	51	419055002	3/13/2017	Ru-106	8.19E-01	3.31E+00	1.11E+01	U
WS	51	419055002	3/13/2017	Sb-124	1.20E-01	7.42E-01	2.50E+00	U
WS	51	419055002	3/13/2017	Sb-125	-2.47E-01	1.02E+00	3.10E+00	U
WS	51	419055002	3/13/2017	Se-75	-1.23E+00	6.14E-01	1.63E+00	U
WS	51	419055002	3/13/2017	Th-228	0.00E+00	2.02E+00	2.96E+00	U
WS	51	419055002	3/13/2017	Zn-65	3.19E-01	7.92E-01	2.57E+00	U
WS	51	419055002	3/13/2017	Zr-95	-2.36E-01	6.84E-01	2.22E+00	U
WS	51	423130002	3/13/2017	H-3	-1.07E+00	1.60E+02	5.27E+02	U
WS	51	420752002	4/10/2017	Ac-228	0.00E+00	5.65E+00	7.42E+00	U
WS	51	420752002	4/10/2017	Ag-108m	-4.02E-01	4.23E-01	1.32E+00	U
WS	51	420752002	4/10/2017	Ag-110m	5.20E-01	6.52E-01	2.12E+00	U
WS	51	420752002	4/10/2017	Ba-140	3.01E+00	2.82E+00	8.43E+00	U
WS	51	420752002	4/10/2017	Be-7	-3.90E+00	4.14E+00	1.29E+01	U
WS	51	420752002	4/10/2017	Bi-214	-1.58E+00	2.09E+00	3.83E+00	U
WS	51	420752002	4/10/2017	Ce-141	-2.85E+00	1.26E+00	2.87E+00	U
WS	51	420752002	4/10/2017	Ce-144	2.14E+00	3.49E+00	1.10E+01	U
WS	51	420752002	4/10/2017	Co-57	-9.32E-03	4.73E-01	1.49E+00	U
WS	51	420752002	4/10/2017	Co-58	-4.05E-01	4.95E-01	1.49E+00	U
WS	51	420752002	4/10/2017	Co-60	2.61E-01	5.47E-01	1.85E+00	U
WS	51	420752002	4/10/2017	Cr-51	7.11E+00	4.87E+00	1.60E+01	U
WS	51	420752002	4/10/2017	Cs-134	7.28E-01	5.76E-01	1.87E+00	U
WS	51	420752002	4/10/2017	Cs-137	4.23E-01	5.07E-01	1.67E+00	U
WS	51	420752002	4/10/2017	Fe-59	-8.04E-01	1.06E+00	3.38E+00	U
WS	51	420752002	4/10/2017	I-131	-7.42E-02	8.97E-01	2.99E+00	U
WS	51	420752002	4/10/2017	K-40	2.23E+02	1.96E+01	1.48E+01	
WS	51	420752002	4/10/2017	La-140	-6.14E-02	8.34E-01	2.73E+00	U
WS	51	420752002	4/10/2017	Mn-54	5.56E-01	4.82E-01	1.57E+00	U
WS	51	420752002	4/10/2017	Nb-95	5.24E-01	4.88E-01	1.59E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	420752002	4/10/2017	Pb-212	-2.77E+00	1.51E+00	3.15E+00	U
WS	51	420752002	4/10/2017	Pb-214	1.26E+00	1.84E+00	4.10E+00	U
WS	51	420752002	4/10/2017	Ru-103	-3.41E-03	5.64E-01	1.66E+00	U
WS	51	420752002	4/10/2017	Ru-106	-6.28E+00	4.39E+00	1.26E+01	U
WS	51	420752002	4/10/2017	Sb-124	1.91E-04	9.61E-01	3.14E+00	U
WS	51	420752002	4/10/2017	Sb-125	-3.03E-01	1.26E+00	4.16E+00	U
WS	51	420752002	4/10/2017	Se-75	-9.43E-02	6.45E-01	2.18E+00	U
WS	51	420752002	4/10/2017	Th-228	-2.77E+00	1.51E+00	3.15E+00	U
WS	51	420752002	4/10/2017	Zn-65	1.23E+00	1.05E+00	3.57E+00	U
WS	51	420752002	4/10/2017	Zr-95	-1.59E+00	9.35E-01	2.50E+00	U
WS	51	423765002	5/16/2017	Ac-228	3.05E-01	4.14E+00	7.70E+00	U
WS	51	423765002	5/16/2017	Ag-108m	1.37E-01	4.34E-01	1.44E+00	U
WS	51	423765002	5/16/2017	Ag-110m	4.97E-01	6.14E-01	2.10E+00	U
WS	51	423765002	5/16/2017	Ba-140	4.10E+00	4.44E+00	8.50E+00	U
WS	51	423765002	5/16/2017	Be-7	3.51E+00	4.10E+00	1.36E+01	U
WS	51	423765002	5/16/2017	Bi-214	-5.69E-01	1.97E+00	4.04E+00	U
WS	51	423765002	5/16/2017	Ce-141	-4.24E+00	1.62E+00	2.55E+00	U
WS	51	423765002	5/16/2017	Ce-144	2.82E+00	3.15E+00	1.00E+01	U
WS	51	423765002	5/16/2017	Co-57	1.54E-01	3.94E-01	1.27E+00	U
WS	51	423765002	5/16/2017	Co-58	-2.54E-02	4.55E-01	1.54E+00	U
WS	51	423765002	5/16/2017	Co-60	-4.44E-01	5.45E-01	1.67E+00	U
WS	51	423765002	5/16/2017	Cr-51	-7.85E+00	4.86E+00	1.46E+01	U
WS	51	423765002	5/16/2017	Cs-134	1.08E-01	5.14E-01	1.76E+00	U
WS	51	423765002	5/16/2017	Cs-137	6.85E-01	5.33E-01	1.72E+00	U
WS	51	423765002	5/16/2017	Fe-59	4.04E-01	1.00E+00	3.37E+00	U
WS	51	423765002	5/16/2017	I-131	9.52E-02	9.40E-01	3.15E+00	U
WS	51	423765002	5/16/2017	K-40	2.71E+02	2.07E+01	1.44E+01	
WS	51	423765002	5/16/2017	La-140	-4.48E-01	8.89E-01	2.75E+00	U
WS	51	423765002	5/16/2017	Mn-54	-1.05E+00	5.27E-01	1.45E+00	U
WS	51	423765002	5/16/2017	Nb-95	-1.23E+00	1.02E+00	1.56E+00	U
WS	51	423765002	5/16/2017	Pb-212	6.71E-01	1.49E+00	3.39E+00	U
WS	51	423765002	5/16/2017	Pb-214	-1.57E+00	1.95E+00	3.74E+00	U
WS	51	423765002	5/16/2017	Ru-103	-1.28E-01	5.47E-01	1.58E+00	U
WS	51	423765002	5/16/2017	Ru-106	-1.07E+00	4.43E+00	1.41E+01	U
WS	51	423765002	5/16/2017	Sb-124	1.70E+00	1.19E+00	3.98E+00	U
WS	51	423765002	5/16/2017	Sb-125	-3.34E+00	1.96E+00	3.99E+00	U
WS	51	423765002	5/16/2017	Se-75	1.04E-01	5.73E-01	1.96E+00	U
WS	51	423765002	5/16/2017	Th-228	6.71E-01	1.49E+00	3.39E+00	U
WS	51	423765002	5/16/2017	Zn-65	1.44E+00	1.06E+00	3.54E+00	U
WS	51	423765002	5/16/2017	Zr-95	6.25E-01	8.89E-01	2.87E+00	U
WS	51	425757002	6/13/2017	Ac-228	-8.10E-01	2.88E+00	6.71E+00	U
WS	51	425757002	6/13/2017	Ag-108m	-7.89E-01	4.13E-01	1.16E+00	U
WS	51	425757002	6/13/2017	Ag-110m	6.35E-01	5.92E-01	2.00E+00	U
WS	51	425757002	6/13/2017	Ba-140	-2.67E+00	2.84E+00	7.76E+00	U
WS	51	425757002	6/13/2017	Be-7	-9.79E+00	5.83E+00	1.26E+01	U
WS	51	425757002	6/13/2017	Bi-214	1.12E+00	2.38E+00	2.87E+00	U
WS	51	425757002	6/13/2017	Ce-141	-2.95E-01	8.26E-01	2.40E+00	U
WS	51	425757002	6/13/2017	Ce-144	-6.74E-01	2.87E+00	9.14E+00	U
WS	51	425757002	6/13/2017	Co-57	3.16E-01	3.70E-01	1.18E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS	
WS	51	425757002	6/13/2017	Co-58	-1.25E-01	4.14E-01	1.39E+00	U	
WS	51	425757002	6/13/2017	Co-60	1.08E-01	4.49E-01	1.48E+00	U	
WS	51	425757002	6/13/2017	Cr-51	2.40E+00	4.06E+00	1.37E+01	U	
WS	51	425757002	6/13/2017	Cs-134	-1.18E-01	4.62E-01	1.55E+00	U	
WS	51	425757002	6/13/2017	Cs-137	1.08E+00	5.35E-01	1.63E+00	U	
WS	51	425757002	6/13/2017	Fe-59	4.92E-01	9.05E-01	3.03E+00	U	
WS	51	425757002	6/13/2017	I-131	3.99E-01	8.09E-01	2.72E+00	U	
WS	51	425757002	6/13/2017	K-40	2.53E+02	1.85E+01	1.36E+01		
WS	51	425757002	6/13/2017	La-140	-7.99E-02	6.68E-01	2.12E+00	U	
WS	51	425757002	6/13/2017	Mn-54	-2.22E-01	4.20E-01	1.39E+00	U	
WS	51	425757002	6/13/2017	Nb-95	0.00E+00	1.22E+00	1.35E+00	U	
WS	51	425757002	6/13/2017	Pb-212	2.24E+00	1.87E+00	3.17E+00	U	
WS	51	425757002	6/13/2017	Pb-214	-1.75E+00	1.65E+00	3.62E+00	U	
WS	51	425757002	6/13/2017	Ru-103	-5.67E-01	5.32E-01	1.45E+00	U	
WS	51	425757002	6/13/2017	Ru-106	2.41E+00	3.92E+00	1.27E+01	U	
WS	51	425757002	6/13/2017	Sb-124	-1.72E+00	1.03E+00	2.88E+00	U	
WS	51	425757002	6/13/2017	Sb-125	-1.65E+00	1.37E+00	3.72E+00	U	
WS	51	425757002	6/13/2017	Se-75	6.78E-01	5.81E-01	1.95E+00	U	
WS	51	425757002	6/13/2017	Th-228	2.24E+00	1.87E+00	3.17E+00	U	
WS	51	425757002	6/13/2017	Zn-65	4.10E-01	1.08E+00	3.18E+00	U	
WS	51	425757002	6/13/2017	Zr-95	4.30E-01	8.12E-01	2.61E+00	U	
WS	51	429781002	6/13/2017	H-3	-1.62E+02	1.91E+02	6.53E+02	U	
WS	51	427876002	7/10/2017	Ac-228	8.30E+00	5.26E+00	7.94E+00	UI	
WS	51	427876002	7/10/2017	Ag-108m	-7.75E-01	5.08E-01	1.47E+00	U	
WS	51	427876002	7/10/2017	Ag-110m	3.26E+00	1.86E+00	2.27E+00	UI	
WS	51	427876002	7/10/2017	Ba-140	-2.53E+00	3.10E+00	9.54E+00	U	
WS	51	427876002	7/10/2017	Be-7	2.25E-01	4.62E+00	1.50E+01	U	
WS	51	427876002	7/10/2017	Bi-214	1.96E+00	2.67E+00	3.35E+00	U	
WS	51	427876002	7/10/2017	Ce-141	-3.50E+00	1.61E+00	3.05E+00	U	
WS	51	427876002	7/10/2017	Ce-144	1.39E+00	3.46E+00	1.17E+01	U	
WS	51	427876002	7/10/2017	Co-57	2.11E-01	4.57E-01	1.55E+00	U	
WS	51	427876002	7/10/2017	Co-58	2.09E+00	9.80E-01	1.57E+00	UI	M
WS	51	427876002	7/10/2017	Co-60	1.08E+00	5.52E-01	1.81E+00	U	
WS	51	427876002	7/10/2017	Cr-51	3.44E+00	5.10E+00	1.68E+01	U	
WS	51	427876002	7/10/2017	Cs-134	-1.90E-01	5.02E-01	1.68E+00	U	
WS	51	427876002	7/10/2017	Cs-137	5.37E-01	5.58E-01	1.80E+00	U	
WS	51	427876002	7/10/2017	Fe-59	-1.50E-01	1.07E+00	3.54E+00	U	
WS	51	427876002	7/10/2017	I-131	1.79E+00	1.21E+00	3.86E+00	U	
WS	51	427876002	7/10/2017	K-40	2.37E+02	1.92E+01	1.47E+01		
WS	51	427876002	7/10/2017	La-140	-2.45E+00	1.77E+00	3.20E+00	U	
WS	51	427876002	7/10/2017	Mn-54	2.91E-02	4.66E-01	1.59E+00	U	
WS	51	427876002	7/10/2017	Nb-95	1.13E+00	5.93E-01	1.52E+00	U	
WS	51	427876002	7/10/2017	Pb-212	5.29E+00	2.52E+00	3.65E+00	UI	
WS	51	427876002	7/10/2017	Pb-214	-8.72E-01	1.79E+00	3.98E+00	U	
WS	51	427876002	7/10/2017	Ru-103	1.78E-02	6.08E-01	1.97E+00	U	
WS	51	427876002	7/10/2017	Ru-106	-1.79E+00	4.46E+00	1.40E+01	U	
WS	51	427876002	7/10/2017	Sb-124	-1.21E+00	1.49E+00	3.91E+00	U	
WS	51	427876002	7/10/2017	Sb-125	-7.39E-01	1.36E+00	4.32E+00	U	
WS	51	427876002	7/10/2017	Se-75	-2.37E-01	6.60E-01	2.16E+00	U	

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	427876002	7/10/2017	Th-228	5.29E+00	2.52E+00	3.65E+00	UI
WS	51	427876002	7/10/2017	Zn-65	1.30E-01	1.09E+00	3.65E+00	U
WS	51	427876002	7/10/2017	Zr-95	-2.58E-01	9.42E-01	2.95E+00	U
WS	51	431065002	8/14/2017	Ac-228	3.40E+00	3.47E+00	8.30E+00	U
WS	51	431065002	8/14/2017	Ag-108m	-5.20E-01	4.63E-01	1.41E+00	U
WS	51	431065002	8/14/2017	Ag-110m	-9.16E-01	6.83E-01	2.05E+00	U
WS	51	431065002	8/14/2017	Ba-140	-1.18E+00	2.33E+00	7.32E+00	U
WS	51	431065002	8/14/2017	Be-7	1.18E+00	4.13E+00	1.35E+01	U
WS	51	431065002	8/14/2017	Bi-214	7.57E-01	1.79E+00	3.78E+00	U
WS	51	431065002	8/14/2017	Ce-141	7.06E-01	9.95E-01	2.88E+00	U
WS	51	431065002	8/14/2017	Ce-144	1.15E-01	3.54E+00	1.11E+01	U
WS	51	431065002	8/14/2017	Co-57	1.44E-01	4.72E-01	1.49E+00	U
WS	51	431065002	8/14/2017	Co-58	2.77E-01	5.00E-01	1.71E+00	U
WS	51	431065002	8/14/2017	Co-60	3.12E-01	5.41E-01	1.80E+00	U
WS	51	431065002	8/14/2017	Cr-51	-2.99E+00	4.58E+00	1.48E+01	U
WS	51	431065002	8/14/2017	Cs-134	-1.03E-01	5.00E-01	1.67E+00	U
WS	51	431065002	8/14/2017	Cs-137	7.28E-01	5.16E-01	1.65E+00	U
WS	51	431065002	8/14/2017	Fe-59	-9.13E-01	1.12E+00	3.50E+00	U
WS	51	431065002	8/14/2017	I-131	-1.66E-02	8.30E-01	2.75E+00	U
WS	51	431065002	8/14/2017	K-40	3.07E+02	2.32E+01	1.59E+01	
WS	51	431065002	8/14/2017	La-140	1.71E-01	8.77E-01	2.84E+00	U
WS	51	431065002	8/14/2017	Mn-54	0.00E+00	6.27E-01	1.49E+00	U
WS	51	431065002	8/14/2017	Nb-95	0.00E+00	1.05E+00	1.64E+00	U
WS	51	431065002	8/14/2017	Pb-212	2.95E+00	2.09E+00	3.89E+00	U
WS	51	431065002	8/14/2017	Pb-214	-1.83E+00	1.95E+00	4.10E+00	U
WS	51	431065002	8/14/2017	Ru-103	3.17E-02	5.47E-01	1.59E+00	U
WS	51	431065002	8/14/2017	Ru-106	-5.61E+00	4.71E+00	1.38E+01	U
WS	51	431065002	8/14/2017	Sb-124	-2.55E-01	1.14E+00	3.80E+00	U
WS	51	431065002	8/14/2017	Sb-125	1.30E+00	1.30E+00	4.27E+00	U
WS	51	431065002	8/14/2017	Se-75	-4.01E-01	6.49E-01	2.13E+00	U
WS	51	431065002	8/14/2017	Th-228	2.95E+00	2.09E+00	3.89E+00	U
WS	51	431065002	8/14/2017	Zn-65	9.44E-01	1.04E+00	3.49E+00	U
WS	51	431065002	8/14/2017	Zr-95	-9.78E-01	1.56E+00	2.64E+00	U
WS	51	432930002	9/12/2017	Ac-228	2.03E+00	3.98E+00	5.09E+00	U
WS	51	432930002	9/12/2017	Ag-108m	-1.50E-01	3.83E-01	1.27E+00	U
WS	51	432930002	9/12/2017	Ag-110m	-1.94E-02	6.37E-01	2.02E+00	U
WS	51	432930002	9/12/2017	Ba-140	9.97E-01	2.09E+00	6.96E+00	U
WS	51	432930002	9/12/2017	Be-7	4.66E+00	3.72E+00	1.23E+01	U
WS	51	432930002	9/12/2017	Bi-214	-1.60E+00	1.80E+00	3.67E+00	U
WS	51	432930002	9/12/2017	Ce-141	-1.27E+00	9.07E-01	2.46E+00	U
WS	51	432930002	9/12/2017	Ce-144	-4.70E+00	3.17E+00	9.35E+00	U
WS	51	432930002	9/12/2017	Co-57	-1.97E-01	3.97E-01	1.27E+00	U
WS	51	432930002	9/12/2017	Co-58	-5.34E-01	4.65E-01	1.36E+00	U
WS	51	432930002	9/12/2017	Co-60	1.38E-01	4.70E-01	1.58E+00	U
WS	51	432930002	9/12/2017	Cr-51	-6.82E-01	3.93E+00	1.34E+01	U
WS	51	432930002	9/12/2017	Cs-134	3.91E-01	6.63E-01	1.66E+00	U
WS	51	432930002	9/12/2017	Cs-137	-7.47E-01	9.49E-01	2.18E+00	U
WS	51	432930002	9/12/2017	Fe-59	-5.72E-01	9.37E-01	3.04E+00	U
WS	51	432930002	9/12/2017	I-131	7.04E-01	7.17E-01	2.42E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	432930002	9/12/2017	K-40	3.36E+02	2.43E+01	1.46E+01	
WS	51	432930002	9/12/2017	La-140	-1.19E+00	1.50E+00	2.56E+00	U
WS	51	432930002	9/12/2017	Mn-54	5.73E-01	4.51E-01	1.45E+00	U
WS	51	432930002	9/12/2017	Nb-95	0.00E+00	1.25E+00	1.34E+00	U
WS	51	432930002	9/12/2017	Pb-212	1.58E+00	1.81E+00	3.35E+00	U
WS	51	432930002	9/12/2017	Pb-214	9.26E-01	2.07E+00	3.73E+00	U
WS	51	432930002	9/12/2017	Ru-103	1.45E-01	4.53E-01	1.51E+00	U
WS	51	432930002	9/12/2017	Ru-106	7.01E+00	4.27E+00	1.37E+01	U
WS	51	432930002	9/12/2017	Sb-124	-9.21E-01	1.03E+00	3.05E+00	U
WS	51	432930002	9/12/2017	Sb-125	4.28E-02	1.20E+00	4.04E+00	U
WS	51	432930002	9/12/2017	Se-75	7.44E-01	6.27E-01	1.94E+00	U
WS	51	432930002	9/12/2017	Th-228	1.58E+00	1.81E+00	3.35E+00	U
WS	51	432930002	9/12/2017	Zn-65	4.91E-01	1.02E+00	3.08E+00	U
WS	51	432930002	9/12/2017	Zr-95	-5.59E-02	8.76E-01	2.50E+00	U
WS	51	436554002	9/12/2017	H-3	8.90E+01	1.60E+02	5.13E+02	U
WS	51	435699002	10/17/2017	Ac-228	0.00E+00	3.26E+00	8.62E+00	U
WS	51	435699002	10/17/2017	Ag-108m	5.23E-01	5.22E-01	1.75E+00	U
WS	51	435699002	10/17/2017	Ag-110m	1.17E-01	7.82E-01	2.52E+00	U
WS	51	435699002	10/17/2017	Ba-140	7.85E+00	5.90E+00	1.08E+01	U
WS	51	435699002	10/17/2017	Be-7	1.05E+00	5.11E+00	1.71E+01	U
WS	51	435699002	10/17/2017	Bi-214	-2.72E-01	2.19E+00	4.66E+00	U
WS	51	435699002	10/17/2017	Ce-141	-8.47E-01	1.79E+00	3.83E+00	U
WS	51	435699002	10/17/2017	Ce-144	3.11E+00	4.39E+00	1.40E+01	U
WS	51	435699002	10/17/2017	Co-57	2.85E-01	5.73E-01	1.85E+00	U
WS	51	435699002	10/17/2017	Co-58	-3.91E-01	6.00E-01	1.86E+00	U
WS	51	435699002	10/17/2017	Co-60	-3.67E-01	5.82E-01	1.86E+00	U
WS	51	435699002	10/17/2017	Cr-51	6.15E+00	6.06E+00	2.04E+01	U
WS	51	435699002	10/17/2017	Cs-134	-1.42E-01	6.34E-01	2.02E+00	U
WS	51	435699002	10/17/2017	Cs-137	3.73E-01	6.15E-01	2.03E+00	U
WS	51	435699002	10/17/2017	Fe-59	-1.84E-01	1.17E+00	3.95E+00	U
WS	51	435699002	10/17/2017	I-131	1.99E+00	1.31E+00	4.28E+00	U
WS	51	435699002	10/17/2017	K-40	2.95E+02	2.74E+01	1.68E+01	
WS	51	435699002	10/17/2017	La-140	-1.33E+00	1.08E+00	3.12E+00	U
WS	51	435699002	10/17/2017	Mn-54	-8.26E-01	6.29E-01	1.81E+00	U
WS	51	435699002	10/17/2017	Nb-95	1.66E-01	6.00E-01	1.96E+00	U
WS	51	435699002	10/17/2017	Pb-212	6.96E-01	2.79E+00	4.71E+00	U
WS	51	435699002	10/17/2017	Pb-214	-6.09E-01	2.62E+00	4.85E+00	U
WS	51	435699002	10/17/2017	Ru-103	1.15E+00	8.28E-01	2.03E+00	U
WS	51	435699002	10/17/2017	Ru-106	-2.17E+00	5.17E+00	1.66E+01	U
WS	51	435699002	10/17/2017	Sb-124	-1.82E+00	1.51E+00	4.38E+00	U
WS	51	435699002	10/17/2017	Sb-125	1.13E+00	1.54E+00	5.19E+00	U
WS	51	435699002	10/17/2017	Se-75	-1.40E+00	1.30E+00	2.79E+00	U
WS	51	435699002	10/17/2017	Th-228	6.96E-01	2.79E+00	4.71E+00	U
WS	51	435699002	10/17/2017	Zn-65	-2.05E+00	1.27E+00	3.66E+00	U
WS	51	435699002	10/17/2017	Zr-95	9.80E-01	1.08E+00	3.55E+00	U
WS	51	438318002	11/13/2017	Ac-228	-3.65E+00	4.15E+00	7.15E+00	U
WS	51	438318002	11/13/2017	Ag-108m	-2.00E-01	4.37E-01	1.44E+00	U
WS	51	438318002	11/13/2017	Ag-110m	6.17E-02	6.51E-01	2.09E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	438318002	11/13/2017	Ba-140	-6.17E+00	6.10E+00	8.88E+00	U
WS	51	438318002	11/13/2017	Be-7	-2.94E+00	4.33E+00	1.40E+01	U
WS	51	438318002	11/13/2017	Bi-214	0.00E+00	2.97E+00	3.00E+00	U
WS	51	438318002	11/13/2017	Ce-141	2.45E+00	1.57E+00	3.16E+00	U
WS	51	438318002	11/13/2017	Ce-144	-1.17E+00	3.66E+00	1.16E+01	U
WS	51	438318002	11/13/2017	Co-57	-2.58E-01	4.89E-01	1.55E+00	U
WS	51	438318002	11/13/2017	Co-58	5.84E-01	4.85E-01	1.57E+00	U
WS	51	438318002	11/13/2017	Co-60	0.00E+00	9.07E-01	1.76E+00	U
WS	51	438318002	11/13/2017	Cr-51	-6.20E+00	5.25E+00	1.68E+01	U
WS	51	438318002	11/13/2017	Cs-134	9.58E-02	5.17E-01	1.68E+00	U
WS	51	438318002	11/13/2017	Cs-137	-1.87E-01	5.04E-01	1.62E+00	U
WS	51	438318002	11/13/2017	Fe-59	1.69E+00	1.14E+00	3.82E+00	U
WS	51	438318002	11/13/2017	I-131	8.83E-01	1.11E+00	3.76E+00	U
WS	51	438318002	11/13/2017	K-40	2.91E+02	2.36E+01	1.59E+01	
WS	51	438318002	11/13/2017	La-140	-5.59E-01	8.91E-01	2.81E+00	U
WS	51	438318002	11/13/2017	Mn-54	-4.42E-01	4.94E-01	1.50E+00	U
WS	51	438318002	11/13/2017	Nb-95	4.65E-01	5.28E-01	1.72E+00	U
WS	51	438318002	11/13/2017	Pb-212	2.25E+00	2.41E+00	3.21E+00	U
WS	51	438318002	11/13/2017	Pb-214	-8.61E-01	2.17E+00	4.28E+00	U
WS	51	438318002	11/13/2017	Ru-103	-1.72E+00	8.75E-01	1.67E+00	U
WS	51	438318002	11/13/2017	Ru-106	6.11E+00	4.64E+00	1.50E+01	U
WS	51	438318002	11/13/2017	Sb-124	-3.47E-01	1.05E+00	3.35E+00	U
WS	51	438318002	11/13/2017	Sb-125	3.20E+00	1.50E+00	4.60E+00	U
WS	51	438318002	11/13/2017	Se-75	7.81E-01	7.15E-01	2.41E+00	U
WS	51	438318002	11/13/2017	Th-228	2.25E+00	2.41E+00	3.21E+00	U
WS	51	438318002	11/13/2017	Zn-65	5.81E-02	1.07E+00	3.19E+00	U
WS	51	438318002	11/13/2017	Zr-95	-5.71E-01	8.86E-01	2.77E+00	U
WS	51	439872002	12/6/2017	Ac-228	3.98E+00	5.02E+00	7.51E+00	U
WS	51	439872002	12/6/2017	Ag-108m	9.33E-02	3.80E-01	1.28E+00	U
WS	51	439872002	12/6/2017	Ag-110m	-2.05E-01	6.12E-01	1.91E+00	U
WS	51	439872002	12/6/2017	Ba-140	3.65E+00	2.56E+00	8.36E+00	U
WS	51	439872002	12/6/2017	Be-7	-8.36E+00	4.22E+00	1.16E+01	U
WS	51	439872002	12/6/2017	Bi-214	-4.70E+00	2.25E+00	3.50E+00	U
WS	51	439872002	12/6/2017	Ce-141	-1.61E+00	1.30E+00	2.62E+00	U
WS	51	439872002	12/6/2017	Ce-144	1.04E+00	3.06E+00	9.94E+00	U
WS	51	439872002	12/6/2017	Co-57	6.92E-01	4.24E-01	1.32E+00	U
WS	51	439872002	12/6/2017	Co-58	-7.99E-01	4.79E-01	1.29E+00	U
WS	51	439872002	12/6/2017	Co-60	6.16E-02	4.70E-01	1.57E+00	U
WS	51	439872002	12/6/2017	Cr-51	-7.57E+00	4.65E+00	1.34E+01	U
WS	51	439872002	12/6/2017	Cs-134	6.89E-01	6.35E-01	1.58E+00	U
WS	51	439872002	12/6/2017	Cs-137	1.16E-01	1.06E+00	1.49E+00	U
WS	51	439872002	12/6/2017	Fe-59	2.30E-01	1.08E+00	3.22E+00	U
WS	51	439872002	12/6/2017	I-131	1.83E+00	9.72E-01	3.11E+00	U
WS	51	439872002	12/6/2017	K-40	3.48E+02	2.36E+01	1.38E+01	
WS	51	439872002	12/6/2017	La-140	3.35E-01	7.63E-01	2.54E+00	U
WS	51	439872002	12/6/2017	Mn-54	1.72E-01	4.40E-01	1.43E+00	U
WS	51	439872002	12/6/2017	Nb-95	-2.81E-01	4.99E-01	1.56E+00	U
WS	51	439872002	12/6/2017	Pb-212	-2.39E+00	1.75E+00	3.35E+00	U
WS	51	439872002	12/6/2017	Pb-214	-3.51E+00	1.83E+00	3.38E+00	U
WS	51	439872002	12/6/2017	Ru-103	-2.16E+00	1.07E+00	1.43E+00	U

SAMPLE TYPE	STATION	LSN	END DATE	NUCLIDE	CONC (pCi/kg)	STD.DEV. (pCi/kg)	MDC (pCi/kg)	FLAGS
WS	51	439872002	12/6/2017	Ru-106	9.95E-01	3.89E+00	1.28E+01	U
WS	51	439872002	12/6/2017	Sb-124	1.23E-01	1.01E+00	3.29E+00	U
WS	51	439872002	12/6/2017	Sb-125	1.83E+00	1.17E+00	3.82E+00	U
WS	51	439872002	12/6/2017	Se-75	3.81E-01	6.12E-01	1.92E+00	U
WS	51	439872002	12/6/2017	Th-228	-2.39E+00	1.75E+00	3.35E+00	U
WS	51	439872002	12/6/2017	Zn-65	3.52E-01	9.63E-01	3.27E+00	U
WS	51	439872002	12/6/2017	Zr-95	1.03E+00	8.45E-01	2.74E+00	U
WS	51	441670002	12/6/2017	H-3	2.71E+02	2.02E+02	6.17E+02	U

FLAGS

A blank Flag field indicates that the measured activity is considered positive as it is greater than the MDC and has no other qualifiers noted.

U: Target isotope was analyzed for but not detected above the MDC and LLD.
UI: Uncertain identification for gamma spectroscopy.
X: Lab-specific qualifier:
(1) False positive due to the presence of radon gas in the water.
M: Reported result is less than the LLD and greater than the MDC.
DL: Measured MDC is greater than the LLD.
DL*: Near miss of MDC being within round-off difference of being greater than the LLD.