INL/INT-15-37431
Revision 0

INL/MIS-20-60906

Historical Data Analysis Supporting the Data Quality Objectives for the INL Site Environmental Soil Monitoring Program

February 2017

The INL is a
U.S. Department of Energy
National Laboratory
operated by
Battelle Energy Alliance

INL/INT-15-37431
Revision 0

Historical Data Analysis Supporting the Data Quality Objectives for the INL Site Environmental Soil Monitoring Program

February

Idaho National Laboratory
Idaho Falls, Idaho 83415

Historical Data Analysis Supporting the Data Quality Objectives for the INL Site Environmental Soil Monitoring Program

INL/INT-15-37431
Revision 0

February 2017

Approved by:

Scott Lee
Manager

2-8-17
Date

ABSTRACT

This document represents the initial evaluation and soil monitoring proposed by Battelle Energy Alliance, LLC (BEA) in 2015. The evaluation included analyses of historical soil monitoring data and soil inventories, current emission estimates, and modeled potential deposition/accumulation patterns. The initially proposed monitoring included a 5-year rotation of in-situ gamma measurements augmented by soil sampling with laboratory analyses near each major active and some inactive facilities. It also proposed rotational in-situ gamma measurements and soil sampling at two centrally located onsite air monitoring locations coinciding with sampling at the traditional offsite soil monitoring locations. The chosen alternative includes only physical soil sampling with laboratory analysis and only at the Radioactive Waste Management Complex (RWMC), the two air monitors and the offsite locations as documented in Data Quality Objectives Supporting the Environmental Soil Monitoring Program for the Idaho National Laboratory (INL) Site, INL/EXT-15-34909, Revision 0, February 2016. The data and evaluations in this document are valid for comparisons with future soil data that may be collected in many INL site locations.

CONTENTS

FIGURES

TABLES

ACRONYMS

ARA	Airborne Radiation Area
ATR	Advanced Test Reactor
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	Department of Energy
DQO	data quality objective
DS	decision statement
EFS	Experimental Field Station
EPA	Environmental Protection Agency
ICDF	INL CERCLA Disposal Facility
IET	Initial Engine Test
INL	Idaho National Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
LOFT	Loss of Fluid Test
MFC	Materials and Fuels Complex
NESHAPs	National Emission Standards for Hazardous Air Pollutants
PSQ	principal study question
RESL	Radiological and Environmental Sciences Laboratory
REST	Highway 20-26 Big Lost River rest area
RWMC	Radioactive Waste Management Complex
SMC	Specific Manufacturing Capability
TSF	Technical Support Facility
UTL	upper tolerance limit
WRRTF	Water Reactor Research Test Facility

Historical Data Analysis Supporting the Data Quality Objectives for the INL Site Environmental Soil Monitoring Program

1. INTRODUCTION

Soil provides an integrating media that can account for contaminants released to the atmosphere, either directly in gaseous effluents or indirectly from resuspension of onsite contamination or through liquid effluents released to a stream that is subsequently used for irrigation (DOE 2015). Soil sampling is a useful approach to determine the accumulation of initially airborne radionuclides that have been deposited on the ground but generally serves a supplementary role in environmental surveillance monitoring programs (Gallegos 1995, Hardy and Krey 1971, EML 1997). However, soil sampling is of questionable value in attempting to estimate small increments of deposition over a period of a few years or less and it is not recommended as a routine method of environmental monitoring except in preoperational surveys (EML 1997). Soil sampling and analysis should be used to evaluate the long-term accumulation trends to estimate environmental radionuclide inventories (DOE 2015).

The purpose of the Environmental Soil Monitoring Program at Idaho National Laboratory (INL) is to monitor levels of radionuclides in soils within INL Site boundaries and surrounding areas. The program involves determining long-term accumulation trends and establishing and maintaining baseline inventories of radionuclides in the soils around INL facilities and in areas within 50 miles of the INL Site boundary.

This document presents the development of the data quality objectives (DQOs) for the INL Soil Monitoring Program. This DQO follows the Environmental Protection Agency (EPA) DQO process (EPA 2006). The DQO process is used to clarify objectives, define the type of data, and specify the limits on the likelihood of making potential decision errors that will be used as the basis for establishing the quality and quantity of data needed to support decision-making.

1.1 Background and Scope

The INL Site has a long history of operation that includes various large-scale experiments, and large user facilities, such as reactors. The primary sources of soil contamination were the operation of reactors, radioactive material management, processes such as calcining, and unplanned releases to native soil, such when the Subsurface Disposal Area of the Radioactive Waste Management Complex (RWMC) was flooded in 1962 and 1969. Soil sampling has been performed at INL Site for decades to evaluate facility contributions to environmental levels of manmade radionuclides. In 1970, the Department of Energy (DOE) Radiological and Environmental Sciences Laboratory (RESL) established a routine program for collecting surface soils (0–5 and 5–10 cm) on and around INL Site. At that time, RESL established extensive onsite soil sampling grids outside facilities. Offsite locations were also established by RESL during this process to serve as background sites. Between 1970 and 1978 RESL sampled these onsite grids extensively, and then reduced the onsite sampling frequency to a 7-year rotation (see Appendix A) and offsite to every 2 years. RESL analyzed all samples (on and offsite) for gamma-emitting radionuclides. In addition, the surface component (0–5 cm) of the offsite samples was analyzed for Sr-90 and alpha emitting radionuclides (Am-241 and isotopes of plutonium). However, current operations are significantly reduced, many of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites have been remediated, and all but one reactor has been shut down. In addition, years of sampling and analyses that characterized the nature and extent of the contamination in these areas show slowly declining trends in the concentrations of short-lived manmade radionuclides.

While the soil program will continue monitoring locations that were historically contaminated from INL Site activities on a rotational basis, the current basis for sampling soil as listed in the DOE Handbook for Environmental Radiological Effluent Monitoring and Environmental Surveillance (DOE 2015) is to "evaluate the long term accumulation trends and to estimate environmental radionuclide inventories." As such, these historically contaminated areas (as well as current emissions from active facilities) are viewed as source terms to be evaluated for possible impacts to the environment as modeled at INL Site locations with the highest deposition potential. Even in the locations of highest potential deposition, modeling results show little chance for detectable accumulations. The Handbook also states that sampling points for environmental monitoring should be located in areas that are susceptible to contamination and that one of the primary purposes of monitoring is to "characterize routine and non-routine releases of radioactive material." Thus, areas where radiological activities take place will be sampled to maintain a baseline inventory for those areas. Baseline inventories will also be determined for other areas where it is deemed practicable.

1.2 Program Drivers

Sampling of soil is performed on and around the INL Site to meet the following requirements and criteria for environmental surveillance of DOE facilities:

- DOE Order 458.1, "Radiation Protection of the Public and the Environment"
- "DOE Handbook Environmental Radiological Effluent Monitoring and Environmental Surveillance" (DOE 2015), which updates and supersedes *Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance* (DOE/EH-0173t) (DOE 1991).

Other key drivers of the soil surveillance program include stakeholder inputs and values.

Each facility is responsible for monitoring within the facility boundaries so those areas are not addressed by this monitoring program.

Onsite air monitoring is conducted at effective fixed positions based on projections made by CALPUFF, 114a non-steady-state Lagrangian puff dispersion model (Rood and Sondrup 2014). The DOE Handbook (DOE 2015) states, "Where possible, soil sampling locations should be selected to coincide with air sampling stations, since the comparability of data may be important in achieving the objectives of the overall environmental sampling program." Therefore, to support the air surveillance program and comply with the Handbook, soil data should be obtained in the vicinity of air monitoring locations that are in the vicinity of the areas that are monitored under this program (predetermined with CALPUFF) that will most likely be affected by a planned or unplanned release from INL activities. Soil data will be collected on and around the INL Site at frequencies and locations evaluated using historical measurements and results of modeled deposition of radionuclides released by INL Site activities. In addition, soil sampling will be conducted at offsite areas that are not expected to be impacted by INL Site releases to characterize the distribution and fate of naturally occurring and fall-out radionuclides in soil to estimate the contribution to onsite soil measurements. Data from offsite locations will also be used to develop and maintain a baseline inventory for those locations.

1.3 Data Quality Objectives Process

The DQOs are discussed in the context of the DQO process as defined by Guidance for the Data Quality Objectives Process (EPA 2006). The EPA developed this process to ensure that the type, quantity, and quality of data used in decision-making are appropriate for the intended application. The DQO process includes seven steps, each of which has specific outputs. Each of the following sections corresponds to a step in the DQO process, and the output for each step is provided as appropriate. The DQOs do the following:

1. Clarify the study objective.

2. Define the most appropriate type of data to collect.
3. Determine the most appropriate conditions from which to collect the data.
4. Specify tolerable limits on decision errors that will be used as a basis for establishing the quantity and quality of data needed to support the decision(s) to be made using the data.

The DQOs for the Environmental Soil Monitoring Program are discussed in the rest of this document.

2. STEP 1: STATE THE PROBLEM

INL Site activities have the potential to increase radionuclide concentrations in soils inside the INL Site boundaries and in the areas surrounding INL Site. Research activities at the INL Site involve anthropogenic radioactive materials; therefore, there is a potential for soil contamination within INL Site boundaries and in the areas surrounding INL Site. Thus, the INL Site monitors radionuclide concentrations to evaluate long-term accumulation trends and to estimate environmental radionuclide inventories. Radiological research has been conducted at the INL Site since the 1950s. Years of environmental monitoring data show that manmade radionuclide contaminated soil of INL origin exists near onsite emission points, that shorter-lived radionuclides (Cs-137 and Sr-90) continue to show a slow but steady decrease, and that manmade radionuclides detected offsite are present due to worldwide fallout unrelated to INL activities. Radionuclides also occur naturally and natural radionuclide concentrations vary in the areas surrounding the INL Site. Therefore, the ongoing soil surveillance program determines baseline concentrations in each localized area so that a baseline radionuclide inventory can be established and maintained for those sites.

The problem statement addressed by these DQOs is to determine the long-term deposition of radionuclides from INL activities in the soils in and surrounding the INL Site and to characterize the radionuclide inventory in the soils for key areas within the INL boundaries and in the surrounding areas.

3. STEP 2: IDENTIFY THE GOALS OF THE STUDY

The second step in the DQO process is to identify the decisions and the potential actions that will be affected by the data collected. This is done by specifying principal study questions (PSQs), alternative actions that could result from resolution of the PSQs, and combining the PSQs and alternative actions into decision statements (DSs). This monitoring effort is designed to answer two PSQs:

PSQ1: What is the baseline inventory of radionuclides of interest in the soils for the areas under investigation?

DS1: Determine the concentration of radionuclides of interest in the soil and use monitoring data to update the baseline over time.

PSQ2: What is the long-term deposition of radionuclides in soils due to INL activities?

DS2: Use air models to determine the most likely locations of deposition of radionuclides due to INL activities and monitor those soils to determine the long-term deposition due to Site activities.

4. STEP 3: IDENTIFY INFORMATION INPUTS

Inputs needed to resolve the DSs include the following:

- Identification of radionuclides of interest for soils in INL and surrounding areas
- Quantification of the radionuclide concentrations in the soils within the region being studied
- Historical radionuclide concentrations in the soils for the region being studied
- Pertinent historical information for each area

- Wind patterns within the region to identify the area most likely to be exposed to radioactive fallout from Site activities
- Identification of possible source terms of radionuclides
- Identification of areas that may have increased inventories due to past activities
- Location of population centers in the regional vicinity of the Site
- Locations of areas within the Site boundaries where planned or unplanned releases may occur due to INL activities.

The historical information obtained from the area of interest will be used to establish localized baseline radionuclide inventories. It is known that the natural level of radiation can vary considerably within the region that is being examined. Therefore, the historical radionuclide concentration information and Site history information will be obtained and analyzed to determine the appropriate background levels for each localized region and to establish a baseline for each area. This will provide the necessary basis for determining the effect of a planned or unplanned release in soils potentially affected by such a release. Site information for each area can shed light on the measured radionuclide concentrations in the area to ensure that measurements are consistent with what is expected based on historical measurements.

Table 1 shows the radionuclides that are of primary concern under this monitoring effort. Appendix A provides the justification for the selection. The radionuclide I-129 will also be investigated. However, it is not currently emitted by any Site activities and the inventory at the Site is constant. Thus, it is not addressed in these DQOs because they are concerned with radionuclides that may affect soils due to a release or long-term deposition.

Table 1. Radionuclides that will be measured under the soil monitoring program.

Radionuclides	
Am-241	Sr-90
Cs-137	Pu-238
Pu-239/240	

5. STEP 4: DEFINE THE BOUNDARIES OF STUDY

5.1 Physical Boundaries

The physical boundaries of the study include areas within the Site boundary and the 50-mile radius surrounding the INL Site per DOE guidance (DOE 2015). This area of interest has been divided into three regions based on proximity to source terms and the public:

- Near Facility Region
- Mid-Range Region
- Distant Region, limited to a 50-mile radius of the INL Site.

Table 2. Sampling areas within each of the two regions.

Near Facility Region	Mid-Range Region	Distant Region
ATR	Rest Area	Frenchman's Cabin (new site)
ARA	EFS	Howe
INTEC		Monteview
MFC		Mud Lake
RWMC		Atomic City
TAN/SMC		Blackfoot
		Federal Aviation Administration Tower
		Butte City
		Blue Dome/Birch Creek Hydro
		Carey (Craters of the Moon)
		St. Anthony (Rexburg)
		Selected Ambient air monitoring locations

Sampling locations are selected using the following guiding criteria:

- Areas where a planned or unplanned release is most likely to occur
- Areas of likely deposition of radionuclides from source terms based on air deposition modeling
- Areas where an air monitoring location exists
- Areas with increased radionuclide inventories due to past activities
- Areas where historical data are available.

5.2 Temporal Boundaries

The temporal boundaries for soil monitoring are encompassed by the time between soil sample collections at a location, which may have been as early as the 1970s, up until soil monitoring is no longer measured under this program. Soil monitoring will continue as long as the Site is operational under DOE. This is likely to be long as 100 years into the future. The number of monitoring locations at a specific sampling area and the length of time that a particular sampling location is measured can vary depending on changes in conditions or activities in that particular sampling location.

The DOE Handbook states "Environmental surveillance measurements may be performed occasionally when potential dose is low, but should be performed at least every 5 years" (DOE 2015). Based on historical data and deposition modeling included in "Data Quality Objectives Supporting the Environmental Soil Monitoring Program for the INL Site" (INL 2015), the annual sampling frequency is technically unjustifiable for soils because examination of 40 years of data shows that concentrations of radionuclides in these soils are aged fallout products. The longer-lived radionuclide concentrations should remain constant, unless soils are disturbed. Cesium-137 and Sr-90 will continue to decrease with time. The decreasing trends are not statistically observable over short time periods (i.e., every 2 years), but rather require longer periods to distinguish the trends from natural variability in soil samples. In addition, atmospheric dispersion modeling of current releases shows that offsite soil concentrations from INL sources will never be distinguishable from background. For this reason, a 5-year sampling regime has been selected to maintain baseline and confirm observed trends in each region. When monitoring global fallout, short-term changes in radiation concentrations are generally small compared to the variability in the local radionuclide distribution (EML 1997). If a major unplanned release is detected on the INL Site,

select locations on the Site boundary may be sampled in response, if it is believed, through modeling or air monitoring, that the location may be affected.

5.3 Practical Considerations

Practical constraints on collecting data are access to the property where samples are to be collected, the lack of undisturbed surface soil (e.g., some air monitor locations), the cost of sampling and analysis, and the time needed to collect and analyze samples. Soil sampling locations have been identified at INL for over 40 years and those same locations will be used to determine where samples will be collected under this monitoring effort. Soil sampling locations should be placed at points corresponding to air sampling locations to allow for comparability of data in areas that may be affected by a planned or unplanned release. However, some air monitors are located in areas that do not have soil or that are not associated with areas that are examined under this monitoring program. Samples will not be collected at these locations.

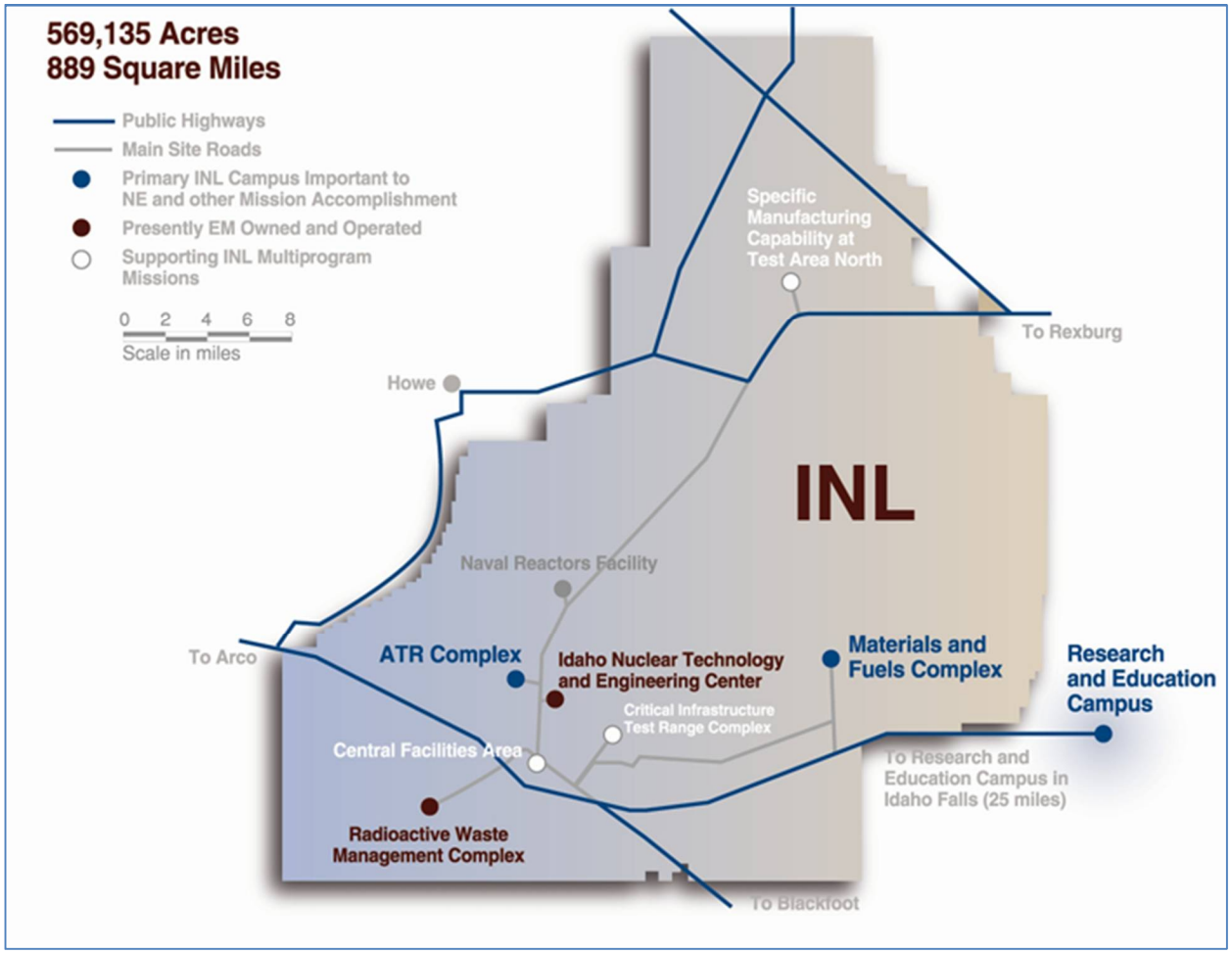

Figure 1. Map of the INL Site showing the locations of major facilities.

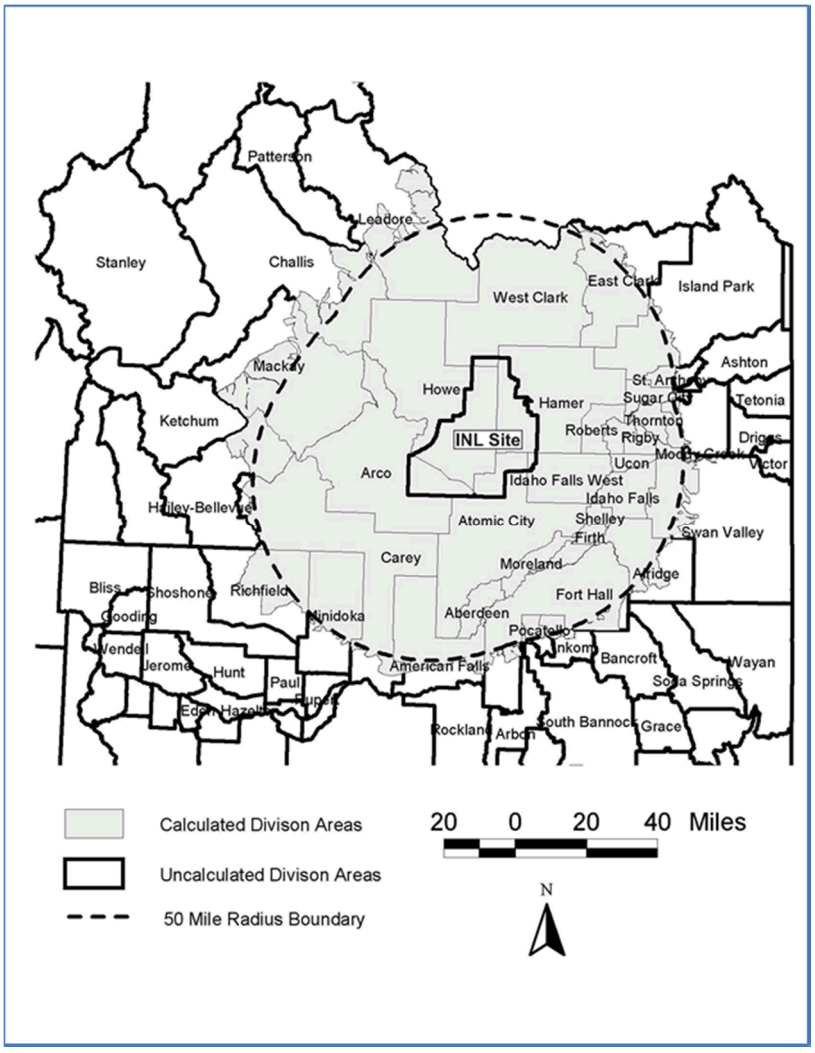

Figure 2. Region within 50 miles of INL Site facilities showing Census divisions used in the 50-mile population dose calculation.

6. STEP 5: DEVELOP THE ANALYTICAL APPROACH

Step 5 defines the analytical approach, which requires that the population parameters that will be used for decision making are defined as well as the action levels and appropriate estimators. The analytical approach is varied and involved. A comprehensive discussion of the approach is dependent on the statistical methods that are used to develop action limits and analyze data as it is obtained. Appendix C contains the details of the statistical analysis involved in the analytical approach while this section provides a high-level overview of the approach.

The first PSQ defined in Section 3 pertains to establishing a baseline radionuclide inventory for the soils associated with each of the near-facility regions and distant regions. This baseline provides a frame of reference in the case of a planned or unplanned release to determine the effect of the release on the soils. A background level will be computed for each near-facility and distant region to establish the baseline. Individual measurements obtained during sampling events can also be compared to the background level to alert the monitoring program when there is potentially high measurement. The background level assumes a parameter of the 99th percentile of all radionuclide concentrations in the soil. Thus, the 99%/95% upper tolerance limit (UTL) will be used as the estimate for the background level.

This is the level such that 99% of the concentrations will be less than the background level with 95% confidence. The data obtained from each sampling event will be compared to the appropriate set of background levels to determine if any of the measurements exceed the background level. If the background level is exceeded, the sample will be further investigated to assess the reason for the larger value. It is assumed that 1% of the concentrations will exceed the background level. Thus, a single measurement that exceeds the background level does not necessarily indicate an unusually high amount of that radionuclide in the area. Once the data obtained from a sampling event have been examined and compared to the background levels, the background level will be updated using the new data to ensure that the baseline profile remains current. Table 3 shows the background levels for each of the areas in the near-facility and distant region. These background levels were computed using historical data that is listed in Appendix D.

Table 3. Background levels for near-facility and distant areas.

Radionuclide	Am-241 (pCi/g)	Cs-137 (pCi/g)	Pu-238 (pCi/g)	Pu-239/240 (pCi/g)	Sr-90 (pCi/g)
INL Sites					
ARA	0.401	133	0.025	0.0577	57
ATR	0.49	223	0.0116	0.0728	1.349
INTEC	0.9	40	0.387	0.73	14.9
MFC	0.008	1.99	0.01	0.0487	0.953
RWMC	8.4	3.54	0.058	2.57	2.47
TAN	0.086	23.8	0.014	0.029	1.754
Distant Sites					
Atomic City	0.0278	1.012	0.0227	0.0573	0.734
Blackfoot	0.0405	2.697	0.154	0.239	0.398
Butte City	0.0942	1.248	0.0337	0.0487	0.56
Carey	0.0556	0.963	0.0447	0.0671	0.534
FAA	0.0356	1.623	0.0743	0.0829	0.806
Frenchman's Cabin	Insufficient data to compute a background value				
Howe	0.01	0.7	0.0119	0.0353	0.67
Monteview	0.0194c	1.11	0.035	0.0477	0.268
Mud Lake	0.0875	0.624	0.0514	0.0892	0.335
Blue Dome/Birch Creek Hydro	0.0268	1.583	0.0144c	0.0677	0.911
St. Anthony	0.0422	1.758	0.0857	0.0954	0.948

Data are collected at the mid-range areas, Highway 20-26 Big Lost River rest area at Milepost 265 (REST) and Experimental Field Station (EFS), to determine long-term deposition of radionuclides. A trend analysis will be performed on data obtained from these locations to assess the deposition over time. Historical data are not available for REST or EFS, so trend analysis will begin when sufficient data are available.

7. STEP 6: SPECIFY PERFORMANCE OR ACCEPTANCE CRITERIA

This step is where decision rules and estimation uncertainty are defined. The purpose of the soils monitoring effort is to obtain acceptable estimates of the radionuclide inventory in areas within the INL boundaries and in the surrounding areas. Thus, the analytical plan is developed for estimation rather than decision making. The level of confidence for the background doses was chosen to be 95% and the other uncertainties were minimized by ensuring that sufficient data are collected at each area and that best sampling practices are implemented. Although every sampling project has a chance of committing a decision error, this program has numerous checks and balances in place such as historical data, sampling conducted under other programs, and monitoring of other media such as air and biota. These additional safeguards ensure that the chance of missing an authentic increase in radiation from INL is negligible.

8. STEP 7: DEVELOP THE DETAILED PLAN FOR OBTAINING DATA

Step 7 of the DQO process is where a detailed plan is laid out for obtaining data of sufficient quality to answer the primary questions of the study. It is important that the data are collected in a manner that meets the requirements of the statistical methods that will be used to analyze the data. This study obtains data from several areas both within INL boundaries and in surrounding areas. The location, history, and purpose of each of these areas differ so data requirements are not the same for all areas. Areas that are adjacent to facilities where radiological activities are taking place require sampling to ensure that the baseline inventory for those areas is adequately defined in the case of a planned or unplanned release. Areas that are not in the vicinity of radiological activities correspondingly require fewer sampling locations to maintain a baseline and examine long-term deposition.

This section outlines the general reasoning behind the number of monitoring locations at each area, the frequency of sampling, the methodology for selecting sampling locations, and lastly provides a detailed explanation for selecting sampling locations at the Site, at Idaho Falls facilities, and in the regional area.

8.1 Sampling Design

Statistical methods typically require that sampling locations are determined using a probability sampling design. That is a random method is used to determine sampling locations. Practical constraints are incorporated in location selection, such as predominant wind directions, accessibility, and facility features, while still maintaining a sufficient amount of randomness to meet the requirements of the statistical methods. Data have been collected over years from the same locations at many of these areas and previous sampling locations are taken into account when determining future sampling locations to ensure continuity and optimal information.

The most basic probability sampling method is simple random sampling. It is the method upon which the others are built. A simple random sample is where every possible sample is identified and then a random number generator is used to select the sample locations that will be used. No human bias is involved in sample location selection. It is important to note that haphazard sampling is acutely biased in nature and is not random sampling.

Another sampling method is systematic random sampling. Systematic random sampling is where a system, such as fixed intervals along a line or on a systematic grid, is used to select sample locations. The starting location is determined by random selection. Thus, the system is not random, but the placement is; the method is still a probability sampling method. This sampling design is applicable when uniform coverage of an area is desired. It is also often easier to implement a systematic method in the field than a non-systematic design.

Composite sampling is a method where sample locations are determined by a random sampling method and 2–5 samples are mixed together and one representative aliquot is collected from the composite and analyzed. Samples that are composited together should be close to each other so that as much of the information in regard to variability across the area being sampled can be preserved. Composite sampling has several benefits. This method provides more accurate averages at a lower cost because the information from two to five samples can be obtained for the cost of one analytical sample. Composites are helpful with soil sampling because soil is expressly heterogeneous. Compositing samples allow the data user to gain a more accurate profile of the area in question. However, composite samples mask some of the variability, which must be considered during data analysis. It is essential that measures such as UTLs that are computed from composite samples are compared with other composite samples.

A method that is often used with soil is MULTI INCREMENT® sampling. This sampling method was developed by Envirostat and uses the principles developed by Pierre Gy for his Theory of Sampling method (Gy 1979). MULTI INCREMENT sampling is often mistaken for composite sampling, but they are very different in implementation and benefits. A MULTI INCREMENT sampling design is one where the sampling area is clearly defined and decision units are identified. Decision units are areas where a decision would be made and often covers a large area. A grid is placed over each decision unit and many small samples are collected systematically over the grid. All of the samples are combined and thoroughly mixed to ensure the soil is homogenous. One representative sample is collected from the homogenized soils and is analyzed. MULTI INCREMENT sampling is designed to determine the mean concentration of a particular analyte over a specific area and it is remarkably effective at determining the mean. However, the variability of the concentrations in that area cannot be measured and thus MULTI INCREMENT sampling cannot determine if an individual measurement from the area in question is within the normal range of concentrations.

The primary goals of the soil monitoring programs are to measure long-term deposition and to maintain a baseline for different areas inside the Site and in the surrounding areas. The baseline profile is defined by UTLs that can be compared to individual measurements to determine if those individual measurements are within the normal range of concentrations for that area. Thus, MULTI INCREMENT sampling cannot be used to meet the objectives of the monitoring program. A combination of systematic sampling and composite sampling will be used for this program. Each of the areas within Site boundaries that are to be monitored to maintain a baseline inventory have sampling locations that have been identified for many years. It is unnecessary to collect samples at all of these locations to establish and maintain a background profile. Thus, a systematic random sampling method will be used to determine which sample locations will be included under the program. Section 8.4 outlines the methodology that is used for each of the six near-facility regions in detail.

A composite sample consisting of five individual samples will be used at each sampling locations. This will minimize the heterogeneity at each sampling location. Five samples will be collected at the corners of a 10 × 10 meter square and a sample will be collected in the middle. All five samples will be well mixed and a single composite sample will be analyzed (see Figure 3). This compositing methodology will be used at all sampling locations regardless of location or purpose.

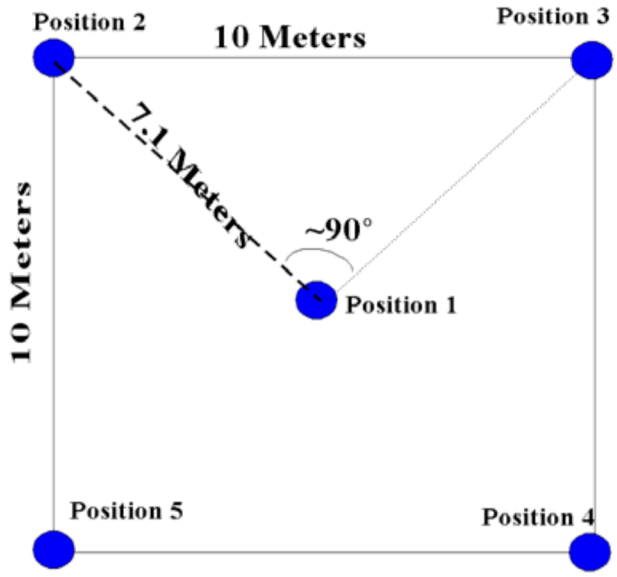

Figure 3. Composite sampling grid.

8.2 Methodology for the Number of Monitoring Locations

This subsection outlines the methodology for determining the number of monitoring locations at a specific area and for the frequency of sample collection. The general guidelines for each type of area are discussed along with area features that assist in determining the sampling locations and the number samples that are needed in a specific area.

The soil monitoring program establishes the baseline inventory of radionuclides in the soils within INL boundaries and in the surrounding areas as well as determines the long-term deposition of radionuclides in the soils due to INL activities. The number of samples needed to perform an analysis is dependent on the statistical methods used to analyze the data and make decisions. Some statistical methods, such as the upper confidence limit, have formulas associated with them to aid the data user in determining how many samples are required to meet certain quality criteria. However, UTLs will be used to compute baseline inventories with the monitoring data and UTLs do not have sample size equations associated with them to aid in determining an appropriate sample size. Thus, other criteria must be used to determine the appropriate sample size. Characteristics, such as variability of the data, history, and current activities associated with the area being sampled, and the size of the area, are all taken into account when determining the number of samples needed and the location of those samples.

Because the primary concern is about areas where a planned or unplanned release from INL may occur, facilities within the Site that perform radiological activities are where sampling will be most concentrated. There are also areas within the Site boundaries and outside of the Site boundaries that are not in close proximity to radiological activities, but are located where the public may be affected. Hence, establishing a baseline radiological inventory of the soils in those areas is of interest in the case of an event. Fewer monitoring locations are needed in these areas because of their distance from the potential sources of INL radiation. The sample size criterion considers the proximity of an area to radiological activities when determining the minimum number of samples to be collected.

The criteria for determining sample size considers the proximity of the areas to radiological activities, the ability to compute appropriate statistical measures, the variability in radionuclide concentrations across the area exhibited in historical data, and the physical characteristics of the area. Areas are separated into three main categories: near facility, mid-range, and distant areas. Near facility areas are facilities within the Site boundaries where radiological activities are taking place or have taken place. Not all such

locations were selected for sampling. A facility was included in the set of sites to be sampled if radiological activities are taking place or if previous activities may have resulted in higher concentrations of radionuclides in the soils than in surrounding areas. Mid-range areas will be sampled only to assess long-term deposition. Distant areas may be along the Site boundary or outside of the Site boundary. These include areas where no radiological activities take place but where the public may be present. A baseline radiological inventory will also be developed for these areas; however, fewer sampling locations are required to attain and maintain a baseline for the distant areas than for the near facility areas.

Large facility areas require a minimum of 8–15 sampling locations, not including duplicates. This is because a UTL will need to be computed and maintained for the area every 5 years to ensure it remains relevant because it is possible that radiation inventory could change at those locations due to facility activities. Site characteristics or other motivators may indicate that more than eight monitoring locations are warranted. Historical data were examined to aid in determining the number of samples needed from a particular area. If the variability for a facility is large more sample locations were selected.

Mid-range areas only require a single composite sample consisting of five grab samples. As with the near-facility areas, it may be warranted to identify more than five sampling locations around the area due to physical characteristics of the area or other reasons.

Distant areas may be maintained with a single composite sample consisting of five grab samples. Fewer samples are required at such areas because of their distance from an INL activity-based source. However, background levels can be maintained with one sample location because of the availability of historical data. It is possible to use data acquired over time to compute area-specific background doses because the doses at the distant locations have not previously exhibited evidence of increased dose from INL radiological activities.

The Handbook guidance allows for surveillance monitoring as infrequently as every 5 years if the projected annual effective dose to the public is less than 0.1 mrem per year, which is the case for INL. Because the focus of soil monitoring is to establish and maintain a baseline inventory and to assess long-term deposition, sampling on a 5-year rotation schedule is adequate to meet project requirements.

8.3 Methodology for Soil Monitoring Location Selection

The previous section provides a minimum number of monitoring locations for each type of area, but it does not indicate where the soil sampling locations should be located or how to determine whether more than the minimum number is warranted. This section provides guidelines for incorporating this approach in determining the location of specific sampling locations for an area. The guidelines consist of knowledge of the location of sources of external radiation that are to be monitored, natural conditions that may affect the spread of radionuclides, the location of air monitoring locations, the area of elevated simulated air concentrations, and stakeholder concern.

Proximity to potential source of radiation. One of the most important factors in determining the location of sampling locations is where the potential sources of a radiation release are located. The monitoring program does not measure inside of the outer fence of any INL facility; the INL Radiological Control program is responsible for monitoring those areas. Therefore, this monitoring program places many of the sampling locations near the fence surrounding these facilities to ensure the areas that are most likely to be affected by a release are measured.

Prevailing wind directions. The Handbook guidance states that sampling should occur in the prevailing wind directions. In most INL locations the predominant wind direction is from the southwest, but there is also a significant component of wind from the northeast. For this reason sample locations will be placed both to the northeast and the southwest of near-facility areas. These soil sampling locations are placed close to the outer facility fence lines and extend as far as the wind may carry particulates originating from the Site. The stacks at the Materials and Fuels Complex (MFC), Idaho Nuclear Technology and Engineering Center (INTEC), and Advanced Test Reactor (ATR) Complex, which are

the stacks with potential radioactive emissions that are evaluated annually for National Emission Standards for Hazardous Air Pollutants (NESHAPs) require that sampling extends further from the Site boundaries than at other near-facility sites. The estimated distances result from simulations using the Gaussian plume model and area-specific wind rose information averaged from 3 years (2006–2008). These simulations are summarized in Appendix A.

Low-Volume Air Monitoring Locations. Sampling locations were identified at low-volume air monitoring locations when possible for data integration purposes. This provides measured air concentrations and direct radiation doses that can be compared to simulated air concentrations that are predicted for the Annual Site Environmental Reports. As an example, the offsite regional monitoring location direct radiation measurements are averaged and compared to the calculated effective dose from natural background sources (see Table 7-6 in DOE-ID [2014]). The ability to collocate sampling locations with existing air monitors is limited by proximity of soil to the air monitor and to the availability of air monitors within areas where soil monitoring is beneficial.

Stakeholder concerns. In some cases, soil sampling locations were determined to alleviate concerns by public stakeholders. This is generally the case for soil sampling located away from active INL facilities and in regional population centers. Monitoring at these locations provides a baseline radionuclide inventory that can be referenced in the case of a planned or unplanned release.

Soil samples will be collected from surface soils only. The primary purpose is to maintain a background inventory of area that can be used to assess the effect of a planned or unplanned release. The impact of a release would be most evident on the surface soils, so sampling of subsurface soils is of little value in achieving the goals outlined in these DQOs.

8.4 Area Specific Monitoring Locations

This subsection discusses the specific sampling locations for each of the areas. The characteristics of the facility that affect the placement and number of soil sampling locations are discussed and shown in Figures 4 through 10. Each figure shows the soil sampling locations that are selected in this DQO for use in soil monitoring. These locations are designated with a maroon triangle. The areas that are addressed in this subsection are ATR Complex, Auxiliary Reactor Area (ARA), INTEC, MFC, RWMC, Specific Manufacturing Capability (SMC), and Resident Receptor locations. Historical data collected from the 1970s through 2014 were examined to determine concentrations variability and other characteristics that influenced the location and number of monitoring locations that were selected. Findings from the historical data are addressed in each facility subsection.

8.4.1 Advanced Test Reactor Complex

Historical data collected near the ATR complex was examined to select the sampling locations that will be used for monitoring that facility. Historical samples were collected in the area northeast of ATR and also Northeast and Southwest of the Warm Waste Pond. Examination of concentrations observed in those samples from the 1970s through 2014 shows that radionuclide concentrations are highest in the northeast transect through the center of the Warm Waste Pond. The highest concentrations were observed at sample Location 4.2, which is along the northeast boundary of the pond. The highest concentration near ATR is at sample Location 4.5.

Sample locations are numbered from −2.2 through 8.3 near the pond and from A1.2 through A5.5 near ATR. A systematic sampling approach that samples every fifth sample location was developed for the samples near the ponds and every third sample was selected near the main facility. A random number generator selected 3 as a random start location for the pond and 1 for the main facility. Thus, the first selected sample is −1.3 and then every fifth sample was selected thereafter. This resulted in seven monitoring locations being selected by this method. A few of the sample locations are in the ATR ponds. When this occurred alternative sampling locations were selected that were near the original ones. Two other locations were identified as having higher concentrations of radionuclides than other methods so they were also selected as soil monitoring locations to ensure that these areas are adequately characterized. These locations are 4.2 and A4.5. The total number of monitoring locations at ATR is 14. This provides sufficient data to compute a UTL while assuring areas with higher radionuclide concentrations are adequately monitored.

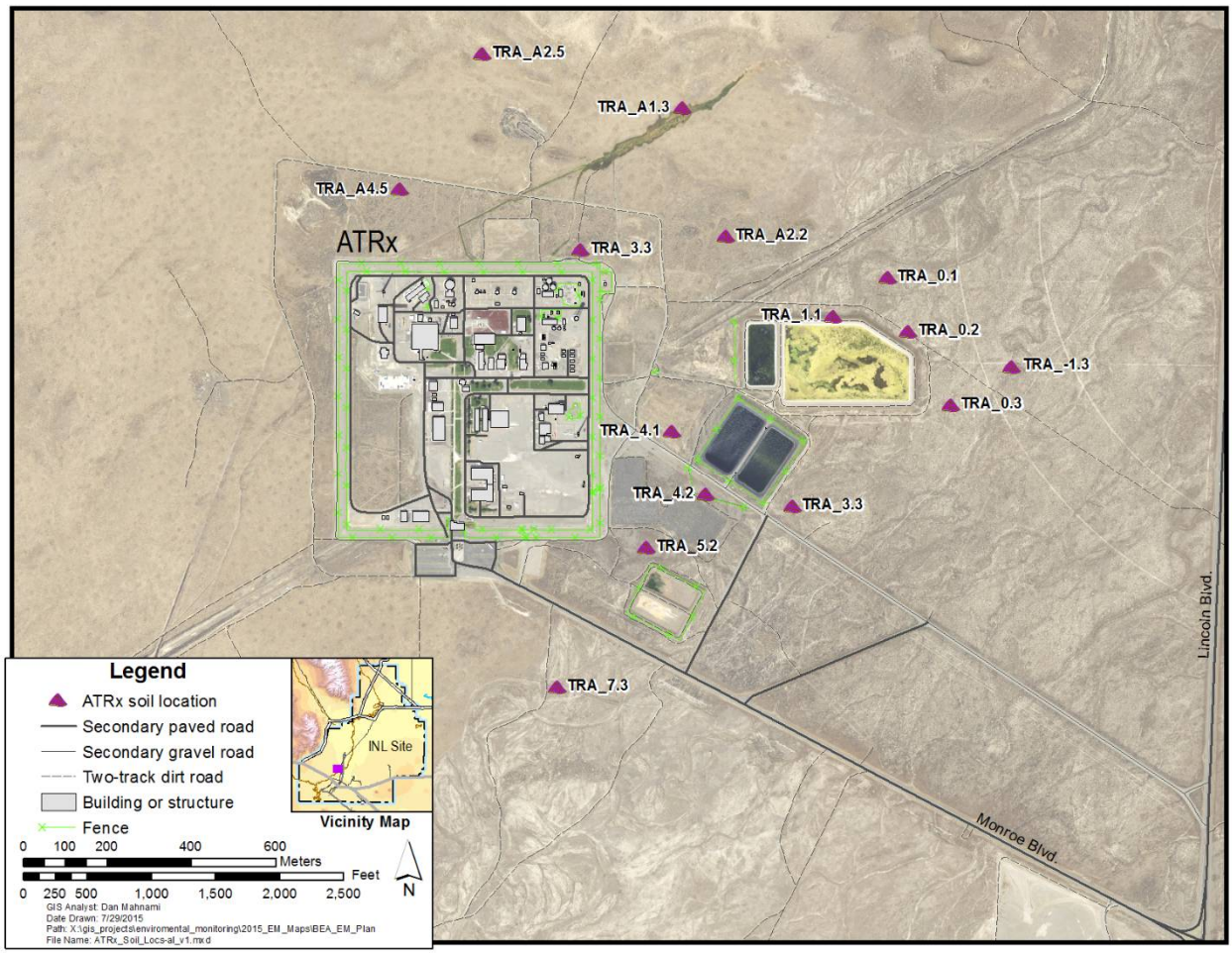

Figure 4. Soil monitoring locations at ATR.

8.4.2 Auxiliary Reactor Area

The sample locations at ARA are located radially from the facility. Prior to the year 2000 sample locations were identified by an angle and a distance from the center. After 2000, samples were identified by number. Historical data were assessed to determine where the highest concentrations of radionuclides were in the area and examine patterns of distribution. This is also where the burial ground for SL-1 is located. It was found that the highest concentrations were seen along the northeast border of the facility and to the south and east of SL-1. A modified systematic random sampling plan was used to select

monitoring locations. A random start of 2 was determined and every eighth sample number was selected for inclusion. Several additional points were selected along the northeast boarder of ARA and in the vicinity south and east of SL-1 to ensure that these areas are adequately documented. This resulted in 15 monitoring locations for ARA. Locations are shown on the map in Figure 5.

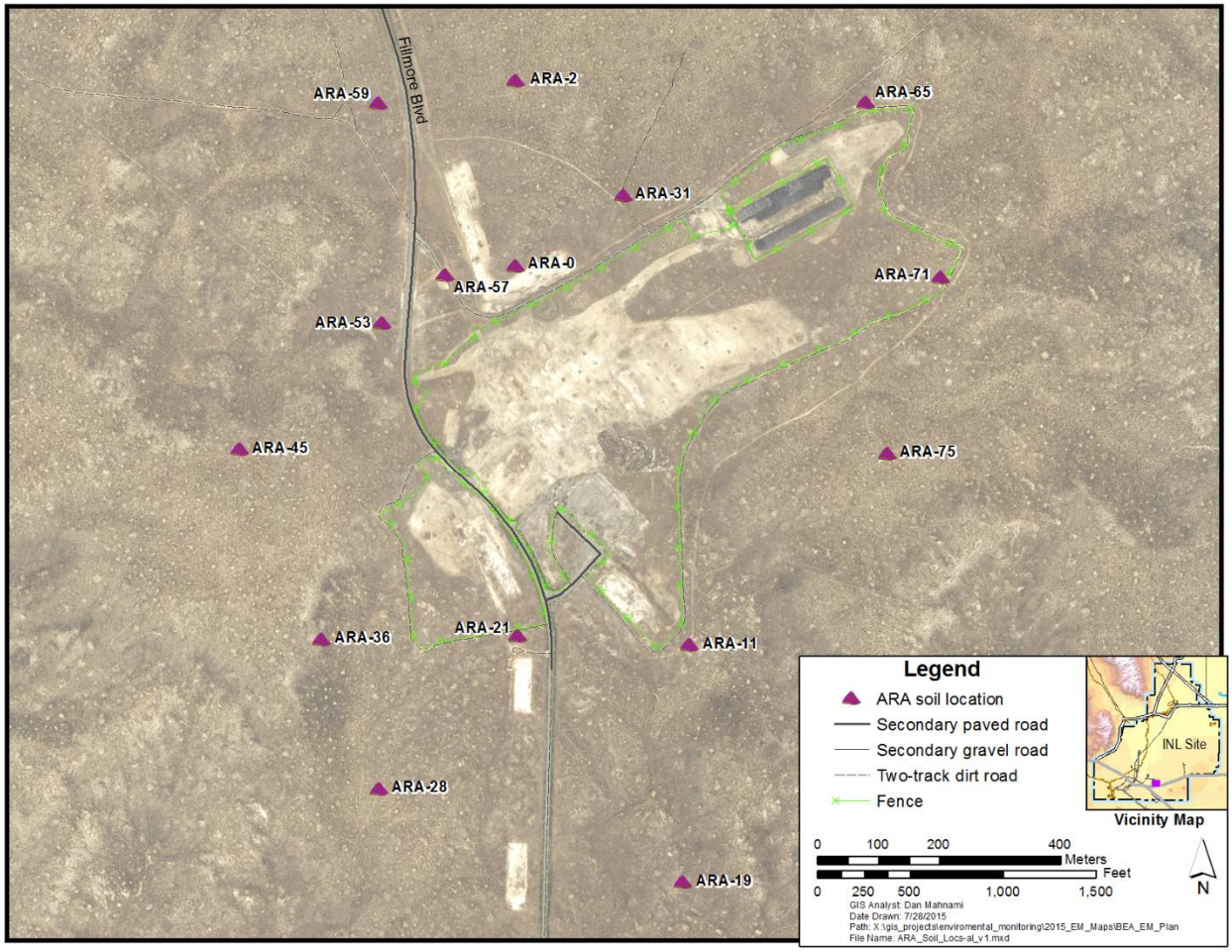

Figure 5. Soil monitoring locations at ARA.

8.4.3 Idaho Nuclear Technology and Engineering Center

The RESL program used an extensive grid to sample the soils surrounding INTEC. Although sampling locations are identified for every point on the grid not all of the locations were sampled. However, sufficient sampling was conducted to form a clear picture of where the radionuclides are present in the highest concentrations. Data collected from the 1970s through 2014 show that the concentrations of radionuclides are higher northeast and southwest of the facility. Concentrations are higher close to the facility than they are further away from the facility. The area southwest of INTEC and within about 200 ft of the facility boundary shows the highest concentrations in the area.

A systematic design was used to select sampling locations. A grid was placed on the sampling area that divided that sample locations into groups of 16 samples (4 × 4 squares). A random number generator selected 12 as the random start location. So, every twelfth sampling location within each 4 × 4 square was selected as a monitoring location. The main grid does not start with location C120, which is the most northwestern sample point. It was moved to fit the pattern where radionuclides were observed. The northwest corner of the main sampling grid is Location C96. Some of the squares were not sampled

because they were not close to areas where radionuclides were observed. As stated previously, higher concentrations of radionuclides were observed in the area southwest of the facility. Four additional monitoring locations (B29, B36, B50, and B92) were selected from this area to ensure that the area is adequately characterized. Some of the selected samples were in areas that are now within INL CERCLA Disposal Facility (ICDF), in a parking lot, or are otherwise inaccessible. When this occurred, an alternative monitoring location was selected that was close to the original selection. Figure 6 shows the selected soil monitoring locations.

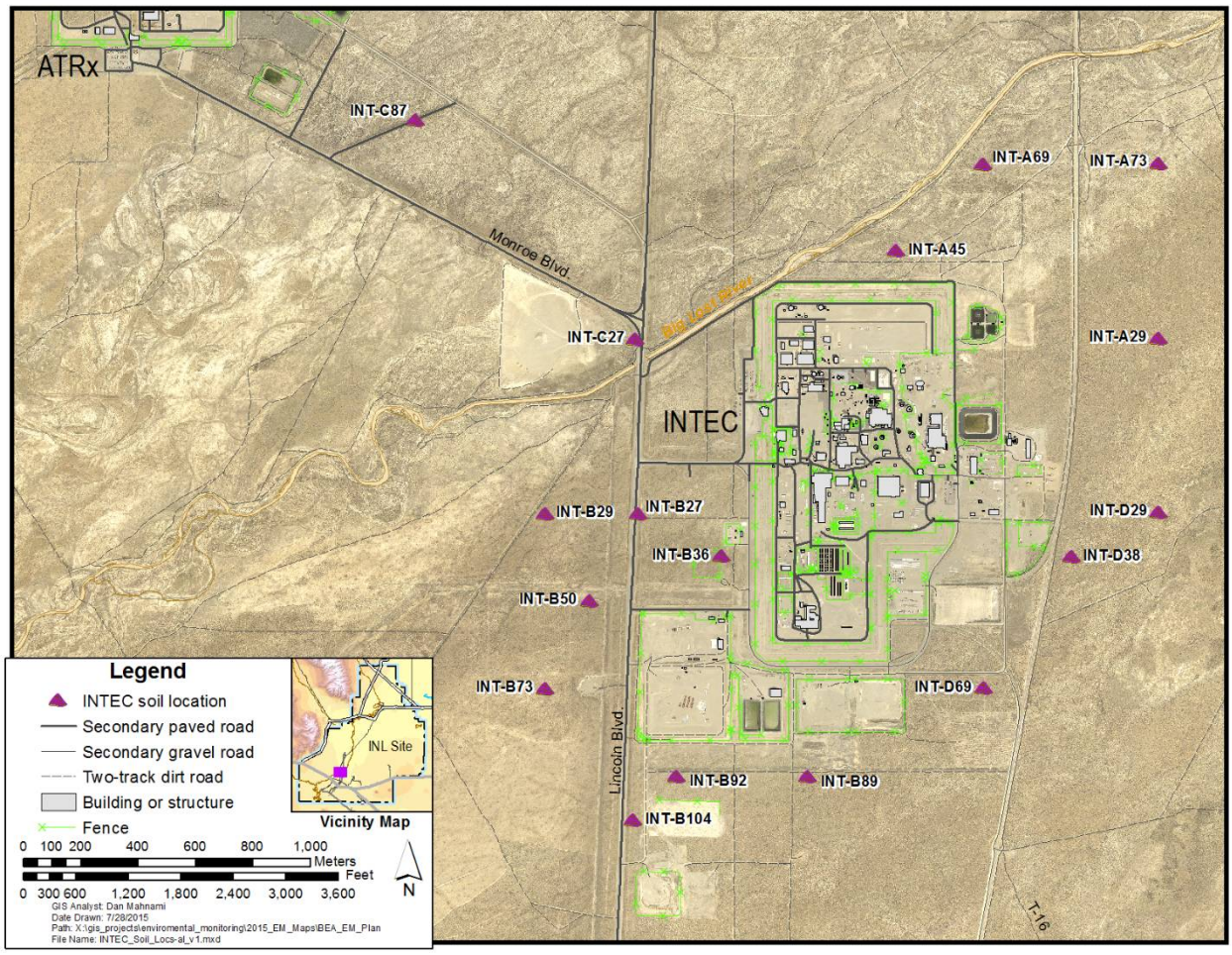

Figure 6. Soil monitoring locations at INTEC.

8.4.4 MFC

Samples were collected from MFC surrounding the main facility and surrounding TREAT. Four sample locations are located around TREAT and 18 sample locations are located around the main facility. The main facility locations are predominantly northeast and southwest of the facility. Historical data collected from the 1970s through 2014 were examined to determine trends in radionuclide concentrations. The historical data show that some of the some of the radionuclides have higher concentrations at TRT-2 and TRT-4 while others have higher concentrations at TRT-1 and TRT-3. The highest concentrations around the main facility were seen at locations EBR II-6, EBR II-11, and EBR II-15. EBR II-6 and EBR II-11 are close to the north side of the fence.

Because higher concentrations of radionuclides were observed in all four sampling locations around TREAT, it is proposed that all four of those locations are retained as monitoring locations. The three

locations where higher radionuclide concentrations were observed are also included as monitoring locations. A systematic random sampling design was used to select samples from the north side of the main facility and then from the south side of the main facility. The sample numbers that were not already selected were lined up and a random starting point between 1 and 3 was chosen. A random number generator selected 1 for the southern samples and 3 for the northern samples. The selected soil monitoring locations are shown in Figure 7. Some of the sampling areas were not accessible. When this occurred alternative sampling locations that were near the originally selected locations were chosen as monitoring locations.

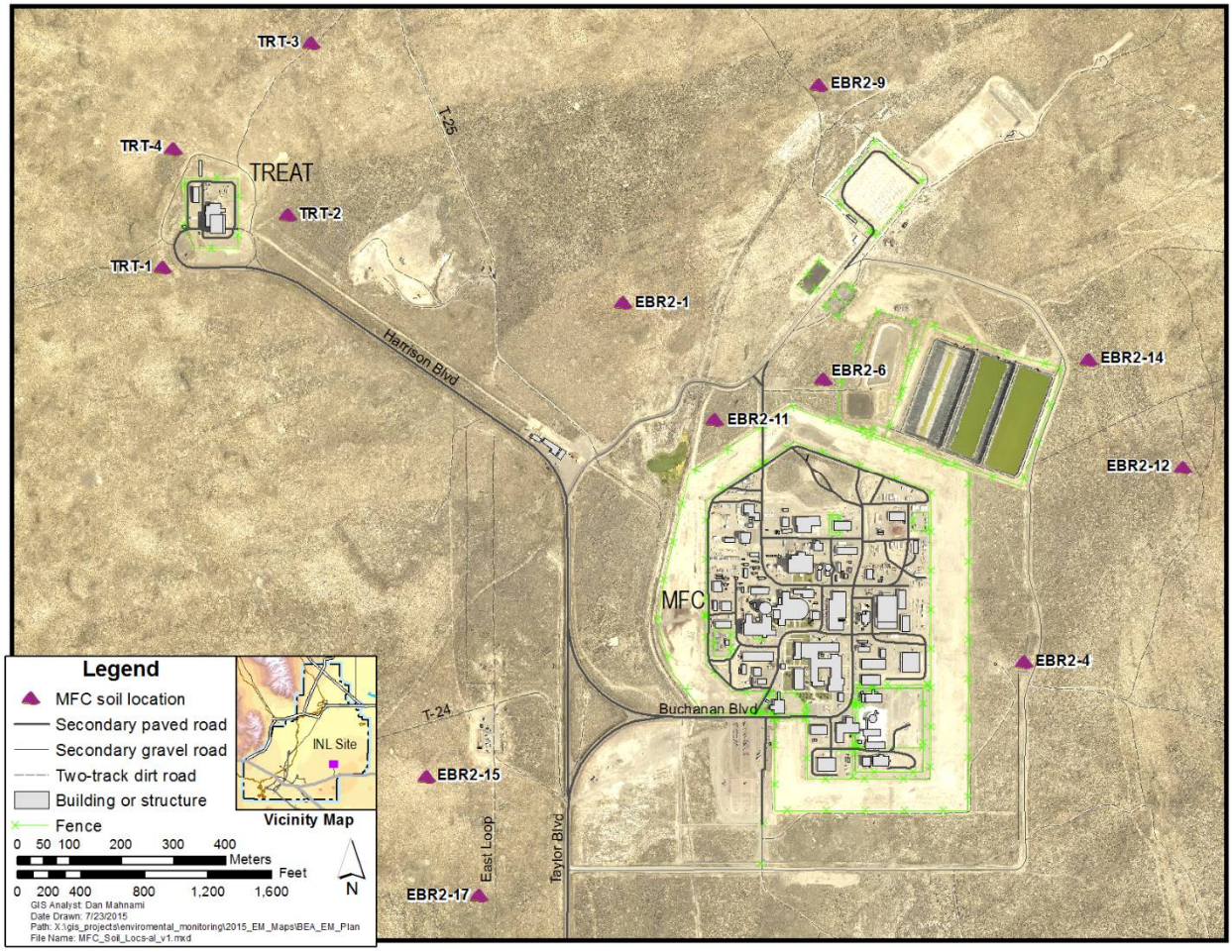

Figure 7. Soil monitoring locations at MFC.

8.4.5 Radioactive Waste Management Complex

Historical data are RWMC were concentrated southwest and northeast of the facility. The data show that the highest concentrations of radionuclides are along the north fence and at locations RW2-1, RW3-1, and RW3-2. A systematic random sampling design was used to determine which of these locations will be used as monitoring locations. It was determined to sample every third location so the sample identifier numbers were lined up from smallest number to largest number and every third location was selected. A random number generator selected the first sample as the random start location. Because the north and west sides of the fence have much higher concentrations of radionuclides than the other locations, Locations RW2-1, RW2-4, RW3-1, RW3-2, RW5-4, RW5-5, and RW5-8 are included as monitoring locations in addition to those selected through systematic random sampling. Figure 8 shows the monitoring locations.

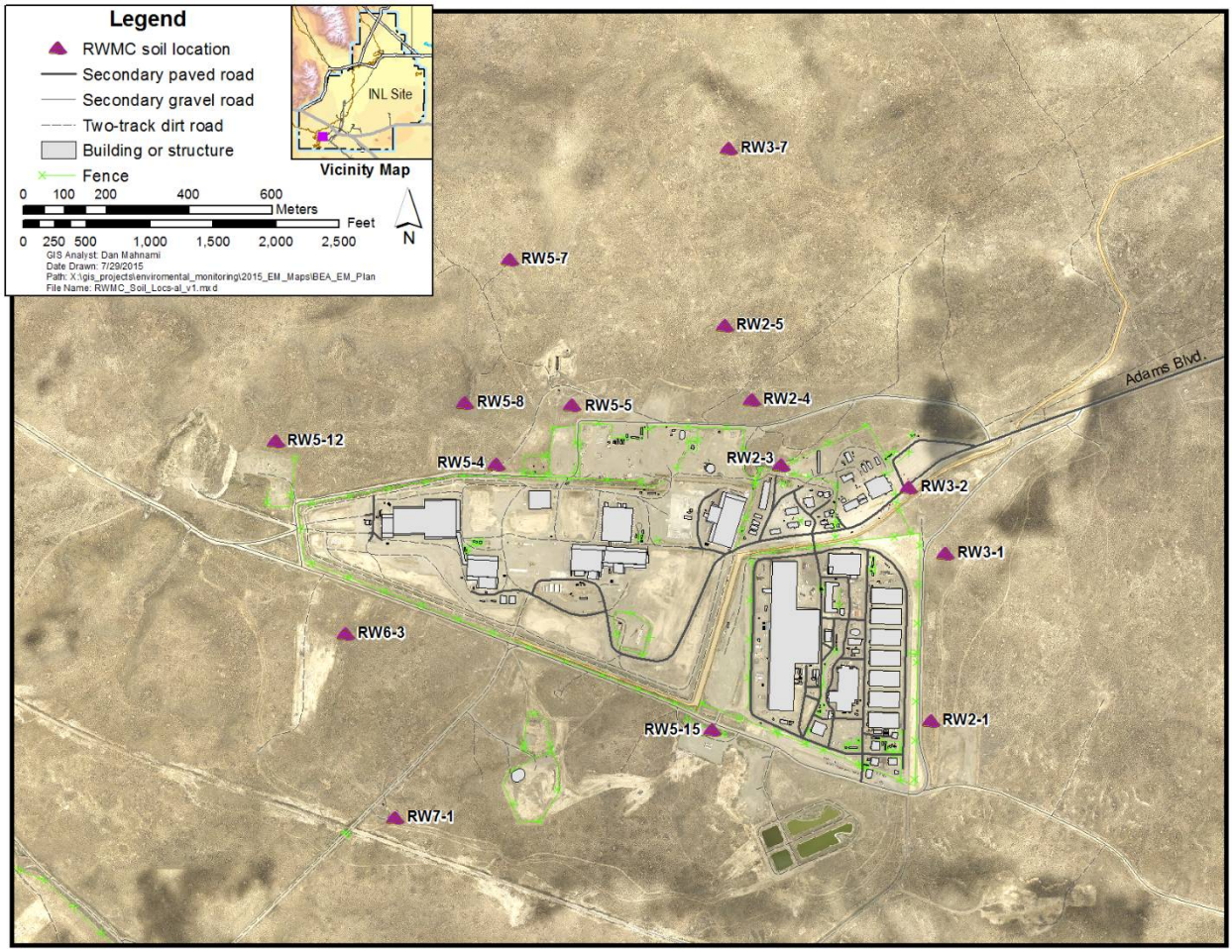

Figure 8. Soil monitoring locations at RWMC.

8.4.6 SMC/TAN

Historical data at the SMC/TAN complex was examined to select the sampling locations that will be used for monitoring that facility. Historical samples were collected in the areas surrounding Initial Engine Test (IET), Loss-of-Fluid Test (LOFT), Technical Support Facility (TSF), and Water Reactor Research Test Facility (WRRTF). The distribution of sample locations is widespread. However, the concentrations of radionuclides are rather low. Historical data were used to determine the sampling locations in each for the four main areas that had the highest concentrations of radionuclides. Two locations were selected from both IET and WRRTF. Three locations were selected from LOFT. Nine sampling locations are identified near TSF. A systematic random sample was used to select three samples from that area. The sample locations were ordered by number and a random number generator selected 2 as the random start. Figure 9 shows the selected monitoring locations.

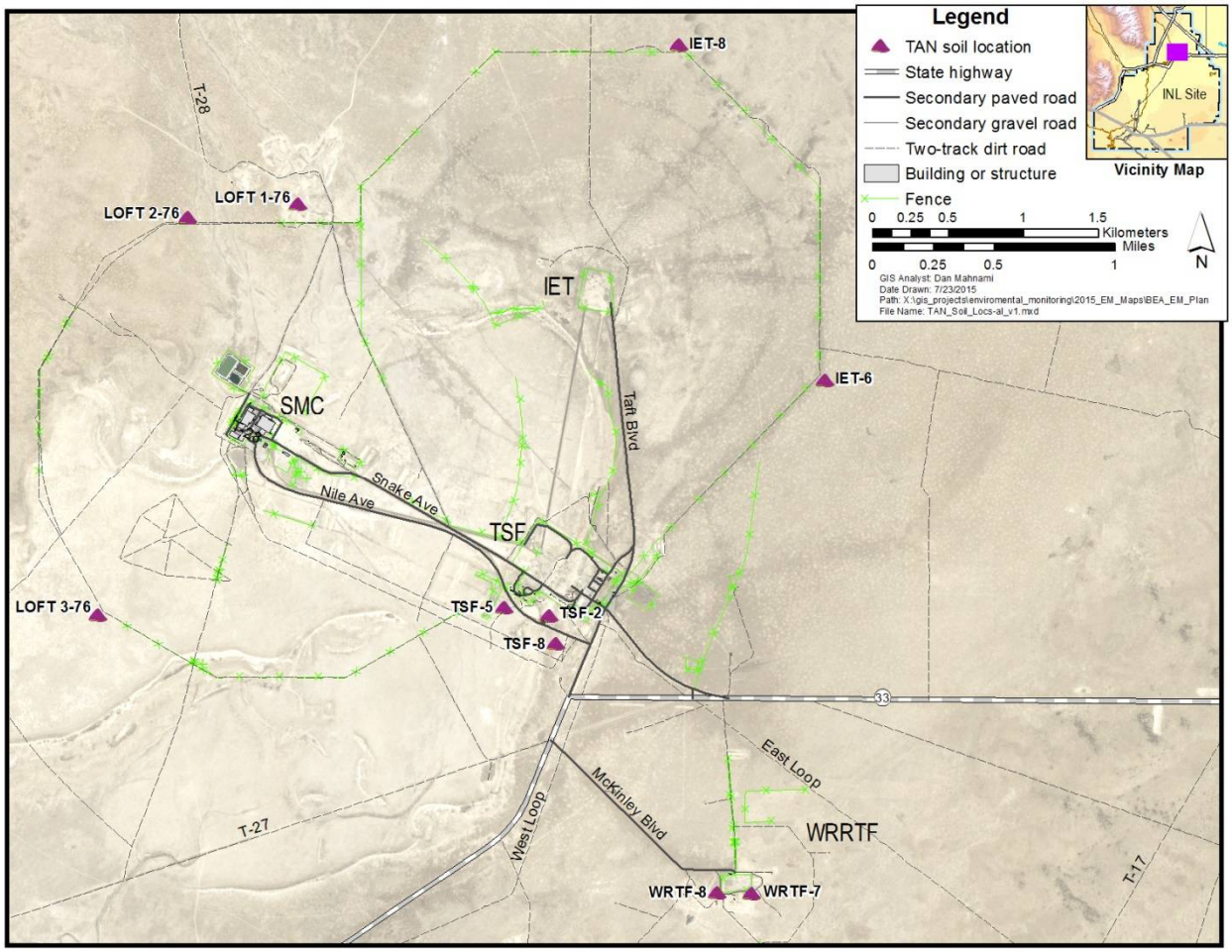

Figure 9. Soil monitoring locations at SMC/TAN.

8.4.7 Resident Receptor Locations

Eleven distant areas and two mid-range areas are monitored under this the soil monitoring program. One composite sample comprised of five grab samples is collected from each of these locations during each sampling event. Data collected over time is used to compute a baseline inventory for each area. Because extensive historical data exists for most of these areas the same sampling location will continue to be used to ensure that there is data comparability over time. Figure 10 shows the distant sampling locations and the mid-range sample locations.

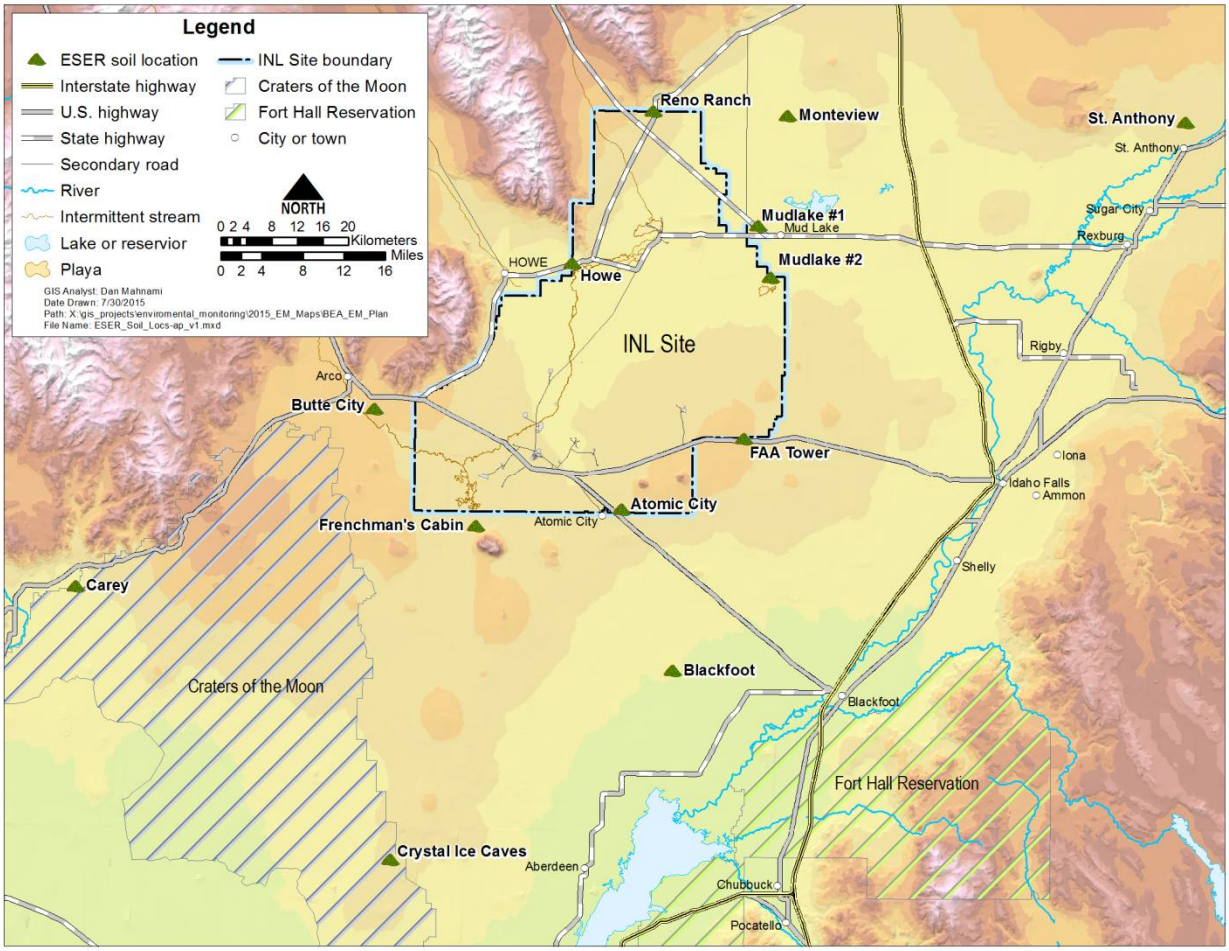

Figure 10. Soil monitoring locations at SMC/TAN.

9. CONCLUSIONS

As previously mentioned, this document represents the initial evaluation and soil monitoring proposed by BEA in 2015. The evaluation included analyses of historical soil monitoring data and soil inventories, current emission estimates, and modeled potential deposition/accumulation patterns. The initially proposed monitoring included a 5-year rotation of in-situ gamma measurements augmented by soil sampling with laboratory analyses near each major active and some inactive facilities. It also proposed rotational in-situ gamma measurements and soil sampling at two centrally located onsite air monitoring locations coinciding with sampling at the traditional offsite soil monitoring locations. The preferred alternative selected by DOE includes only physical soil sampling with laboratory analysis and only at RWMC, the two air monitors, and the offsite locations, as documented in Data Quality Objectives Supporting the Environmental Soil Monitoring Program for the INL Site, INL/EXT-15-34909, Revision 0, February 2016. The data and evaluations in this document are valid for comparisons with future soil data that may be collected in many INL Site locations. This document provides a technical explanation and justification for the process used to select sampling locations, analyze results, and make decisions based on acquired data. The number and location of soil sampling locations at each area may change as INL activities change. However, as long as changes are made within the guidelines set out in this document, such changes will not be in violation of the DQO parameters. Additional information is available in the INL 2014 report, *Technical Basis for Environmental Monitoring and Surveillance at the Idaho National Laboratory Site*, DOE/ID-11485, February 2014.

10. REFERENCES

DOE, 2015, DOE Handbook, "Environmental Radiological Effluent Monitoring and Environmental Surveillance," DOE-HDBK-1216-2015.

DOE Order 458.1, 2011, "Radiation Protection of the Public and Environment," U.S. Department of Energy, February 2011.

INL, 2014, *Technical Basis for Environmental Monitoring and Surveillance at the Idaho National Laboratory Site*, DOE/ID-11485, February 2014.

INL, 2016, *Data Quality Objectives Supporting the Environmental Soil Monitoring Program for the INL Site*, INL/EXT-15-34909, February 2016.

Rood, A. S. and A. J. Sondrup, 2015, *Quantitative Assessment of Detection Frequency for the INL Ambient Air Monitoring Network*, INL/EXT-14-33194, March 2015.

Jessmore, P. J., L. A. Lopez, and T. J. Haney, 1994, *Compilation and Evaluation of the Idaho National Engineering Laboratory Radiological and Environmental Sciences Laboratory Surface Soil Sample Data for Use in Operable Unit 10-06 Baseline Risk Assessment*, EGG-ER-11227, September 1994.

Gy, P. M., 1979, *Sampling of Particulate Materials: Theory and Practice*, Elsevier Scientific Publishing Company, 1979.

Rood, et al., 1996, *Executive Summary for Background Dose Equivalent Rates and Surficial Soil Metal and Radionuclide Concentrations for the Idaho National Engineering Laboratory*, INEL-94/0250, Rev. 1, September 1996.

Morris, R. C., 2000, *Radioecology of Iodine-129 in the Sagebrush-Steppe Ecosystem*, Environmental Science & Research Foundation, Inc., Annual Technical Report to DOE-ID, ESRF-037, June 2000.

11. APPENDIXES

Appendix A, "Historical Information and Air Modeling Results that Determine Radionuclides of Interest and Soil Sample Locations"

Appendix B, "Statistical Analysis Associated with Soil Monitoring Data Quality Objectives"

Appendix C, "Data Used for Decision Limits"

Appendix A

Historical Information and Air Modeling Results that Determine Radionuclides of Interest and Soil Sample Locations

This appendix lists and describes the sources used for determine the radionuclides of interest for soil monitoring and where soil samples should be collected. The type of information is described that is needed to meet performance acceptance criteria and provides direction for sampling and analysis methods.

A-1. RADIONUCLIDES OF INTEREST

Air is considered to be the most critical pathway from the Idaho National Laboratory (INL) Site to offsite receptors (DOE 2015, DOE/ID 2014a, and NCRP 2010). Surface soil can become contaminated with radionuclides by deposition of airborne particles released from INL Site activities.

Information on current radiological effluents is contained in the most recent INL Site NESHAP report, *National Emission Standards for Hazardous Air Pollutants—Calendar Year 2013 INL Report for Radionuclides*, referred to hereafter as the NESHAPs Report (DOE-ID 2014b). Using data from the 2007–2013 NESHAP reports, the radionuclides that contribute at least 1% of the total estimated dose (for a total of 97% of the total estimated dose) over the 7-year period are summarized in Table A-1. Estimated doses to the Maximally Exposed Individual (MEI) during this time period ranged from 0.093 mrem to 0.131 mrem.

Table A-1. Radionuclides that are important in terms of radiological dose based on the 2007–2013 NESHAP reports (Rood and Sondrup 2014).

Radionuclide[a]	Percent of total dose (2007–2013)[b]
H-3 (vapor)	25.22%
Pu-239/240	19.78%
Cs-137	18.13%
Sr-90	12.49%
Am-241	8.20%
Ar-41 (gas)	7.22%
I-129	4.54%
Pu-238	1.51%
Total	97.09%

a. Unless otherwise indicated, radionuclide is assumed to be in a particulate form.
b. Dose estimated using CAP-88PC (Version 3.0), INL Site meteorological data, and NESHAPs source terms.

Of the radionuclides shown in Table A-1, Am-241, Cs-137, Sr-90, I-129, and isotopes of plutonium are released in particulate form and could be deposited on surface soil. Once in the soil, radionuclides are available for direct exposure, uptake by plants, resuspension of particles, and mixing from human activities, such as agriculture. Cesium-137, Am-241, Pu-238, and Pu-239/240 were also were identified by Radiological and Environmental Sciences Laboratory (RESL) in areas on the INL Site potentially contaminated with radionuclides in excess of offsite background levels (Jessmore et al., 1994).

In addition to radionuclides that are specific to a particular operation or facility, naturally occurring (e.g., the uranium and thorium decay chains and beryllium [Be-7]) and fall-out radionuclides can be expected in soil samples."

To establish background levels of natural and fallout radioactivity in surface soil and to assess any potential buildup of radioactivity offsite from INL Site operations, soil samples have been collected from undisturbed distant and boundary locations every year since 1970, except 1972, 1977, and 1979 (DOE/ID 1981). A biennial sampling program was established in 1978 and included offsite locations from Idaho Falls, Blackfoot, Pocatello, Crystal Ice Caves, Craters of the Moon, and St. Anthony. Boundary locations included Reno Ranch, Monteview, Mud Lake (two stations), Atomic City, Arco, and Howe. (A rotating 7-year schedule was used to sample onsite soils around major INL Site facilities.) In 1984, Pocatello and Idaho Falls were removed from the routine sampling program. In 1984, three samples (Mud Lake No. 1, Mud Lake No. 2, and Crystal Ice Caves) were excluded from the data set because they appeared to be uncharacteristically low and may have been influenced by disturbance (vehicular traffic, farming, etc.). These sampling locations and the location at Monteview were re-evaluated and moved to more representative undisturbed locations in 1986. The sampling site at the Federal Aviation Administration (FAA) Tower was added to the boundary group in 1986. Collection of soil at Frenchman's Cabin, the location of the MEI, began in 2010. Current offsite soil sampling locations are shown in Figure A-1.

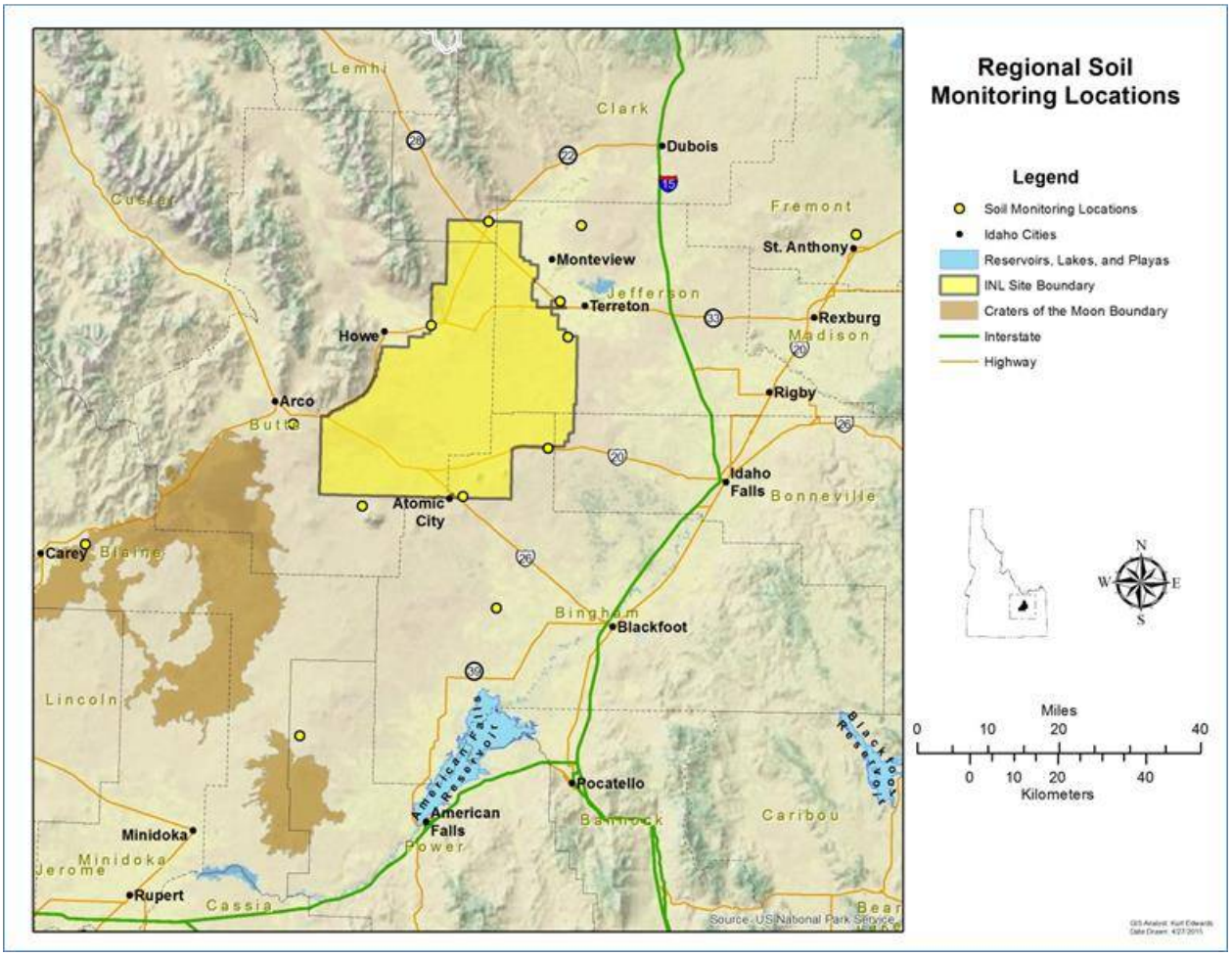

Figure A-1. Offsite soil-sampling locations.

Soil samples collected in 1970, 1971, and 1973 represented a composite of five cores of soil from 1-m^2 area. Each core was a cylinder 10 cm in diameter and 5 cm in depth. In all other years, the five cores were collected from a 100-m^2 area. A number of samples were also collected from the 5- to 10-cm depth. The core method provides a useful measure of the concentration of deposited material in soil related to the amount per unit area and allows for the estimation of the inventory of the material deposited over a given area (EML Procedures Manual, HASL-300, 28th Edition, available at https://www.orau.org/ptp/PTP%20Library/library/DOE/eml/hasl300/HASL300TOC.htm).

Soils were dried and sieved with a 35-mesh size so that only soil particles less than 500 μm in diameter were analyzed. All soil samples were analyzed for gamma-emitting radionuclides. Most surface soil samples (0–5 cm in depth) were also analyzed for Sr-90 and alpha-emitting radionuclides.

Iodine-129 has not been detected in surface outside of the INL Site because it is not routinely analyzed for due to the expense of analysis. According to annual site environmental reports (Hoff et. al., 1991, DOE 1991, Hoff et al., 1992, Hoff et al., 1993, Mitchell 1994, Mitchell et al., 1995, Mitchell et al., 1996) approximately 3.6 Ci of I-129 were released through 1995 from a 69-m stack located at Idaho Nuclear Technology and Engineering Center (INTEC). From 1996 through 1999, the Environmental Science and Research Foundation (ESRF) sampled sagebrush, grass-forb, litter, small mammals, and four soil compartments to estimate the total I-129 inventory on the INL Site (Morris 2000). The results were never published (Morris and Soto, unpublished data) but were shared with the Environmental Surveillance Education and Research (ESER) program (Morris 2003). The ESRF collected three samples each of four soil layers, litter, sage brush, grass, and forbs, and small mammal samples at each of 16 locations on and near the INL Site for I-129 analysis. Although a preliminary study, they estimated that most of the current inventory of I-129 on the INL Site resides southwest of INTEC, highest in litter and lowest in deep soil. They also approximated that around 6% of the total inventory released to the environment remains at the INL Site. They hypothesized that the rest was transported offsite after release from the stack. The I-129 concentration in forbs and grasses collected just south of the INL boundary and north of the Big Southern Butte, where the highest air concentrations have been modeled to occur offsite (Rood and Sondrup 2014), averaged 1.8 pCi/kg. Iodine-129 concentrations in upper soil at the same location averaged 1.2 pCi/kg.

No particular trend is indicated in the graphs of Am-241, Pu-238, and Pu 239/240 concentrations in surface soil (0–5 cm) over time (DOE 2014). This is consistent with the long half-lives of these radionuclides and the relative immobility of these radionuclides in undisturbed soils. A study of soil profiles of plutonium and americium in Nevada Test Site soils indicate that 95% of these radionuclides dispersed as fallout to desert environment had remained in the top 5 cm of soil (Romney et al., 1987). This is not surprising given the high hydraulic conductivity of these radionuclides and low amount of rainfall in the region. Any downward migration of particles and the contaminants attached to them is fundamentally influenced by gravity, such as when particles fall into open pore spaces (Till et al., 2008), making it less susceptible to resuspension.

Table A-2 presents summary statistics for results of offsite soil samples collected initially by RESL from 1975 through 1998 and subsequently by contractors at primarily the same locations through 2014 (biennially since 1978). The surface data do not suggest any concentration changes in Am-241 and plutonium isotopes over time; therefore, the data do not indicate any accumulation over time from INL Site operations. However, concentrations of Cs-137 and Sr-90 show that these radionuclides have decreased over time in surface soil. For this reason, only the latest results for Cs-137 and Sr-90 are shown in Table 2 as representative of current concentrations. In addition, all radionuclides except Pu-238 were shown through t-tests to have activities that depend on depth (Rood et al., 1995). That is, concentrations decrease with depth. Cesium-137 was analyzed for in surface (0–5 cm) and deeper soil.

Table A-2. Summary statistics for RESL and current data for offsite samples collected at depths of 0–5 cm and 5–10 cm (pCi/g).

Radionuclide	Year	Sample depth (cm)	N	Minimum	Maximum	Mean	Upper 95% confidence limit
Am-241a	1975–2014	0–5	257	-0.0003±0.002	0.029±0.002	0.006	0.021
	1992b	5–10	18	-0.001±0.002	0.01±0.004	0.002	0.0035
Cs-137c	2014	0–5	13	0.16±0.001	0.64±0.04	0.37	0.44
	2014	5–10	96	-0.01±0.01	0.88±0.01	0.16	0.015
Pu-238a	1975–2014	0–5	276	-0.0015±0.0012	0.012±0.006	0.003	0.014
	1992b	5–10	20	-0.000035±0.0004	0.0062±0.0001	0.0011	0.0019
Pu-239/240a	1975–2014	0–5	275	0.0002±0.0008	0.27±0.003	0.018	0.057
	1992b	5–10	20	0.00±0.0012	0.029±0.0009	0.0048	0.0078
Sr-90c	2014	0–5	13	0.0001±0.03	0.036±0.05	0.12	0.16

a. Geometric means and upper confidence limits were calculated for Am-241, Pu-238, and Pu-239/240 by combining data sets from 1975 to 2014. Historic data sets were reported by RESL with geometric means and confidence limits because the results were typically lognormally distributed. More current data were also evaluated as having lognormal distributions to compare and combine all results.
b. Results shown for Am-241, Pu-238, and Pu-239/240 for the 5–10 cm depth were measured in samples collected during a special study in 1992. No samples collected at this depth since then have been analyzed for these radionuclides.
c. Arithmetic means and upper confidence limits were calculated for Sr-90 and Cs-137 using 2014 data. These data were determined to be normally distributed.

Most of the activity is in the top 5-cm layer—about 85% of the Cs-137 and Pu-239, according to studies conducted by RESL (DOE/ID 1976). Contemporary research at the INL Site using in-situ gamma-ray spectrometry shows that the depth profile of Cs-137 in regional and INL Site soils is exponential, with the majority of activity in the upper 0–5 cm layer (Walker 2000, Giles et al. 2008). Walker (2008) compared in-situ and conventional soil collection techniques and found that an average 90% of Cs-137 collected at an undisturbed location (Reno Ranch) was in the first 3 centimeters of soil. The majority of Cs-137 in two samples collected on the INL Site was found in the first 5 centimeters of soil. Walker (2008) concluded that soil sampling to a depth of 5 centimeters corresponds to averaging over 90% of the total Cs-137 inventory in a soil column.

Further analysis of Cs-137 and Sr-90 concentrations in surface soil samples collected from 1975 through 2014 demonstrate the decreasing trends in the radionuclides. Cesium-137 was detected (above 3s) in most surface soil samples and Sr-90 was detected in about half of the samples collected. Statistical comparisons of geometric mean surface concentrations (nCi/m^2) of the radionuclides in distant and boundary locations have not indicated any differences due to location. There are large uncertainties associated with the estimated averages due to the highly unreproducible nature of sampling soil, a heterogeneous medium.

A plot of average areal Cs-137 concentrations over time, from 1975 through 2014, indicates an exponential rate of decrease in areal concentration that is indicative of radioactive decay (Figure A-2). The data were plotted as nCi/m^2, as recommended in HASL-300, which states that "…The most useful measures of the concentration of deposited material in soil relate to the amount per unit area. Therefore, sampling is carried out in such a way that the weight of the material collected can be directly related to the area sampled and the depth of the sampling. The analytical results from a weighed aliquot of the soil sample can then be readily related to area concentration." (HASL-300 recommendations on soil sampling may be found at https://www.orau.org/ptp/PTP%20Library/library/DOE/eml/hasl300/sampling.pdf.)

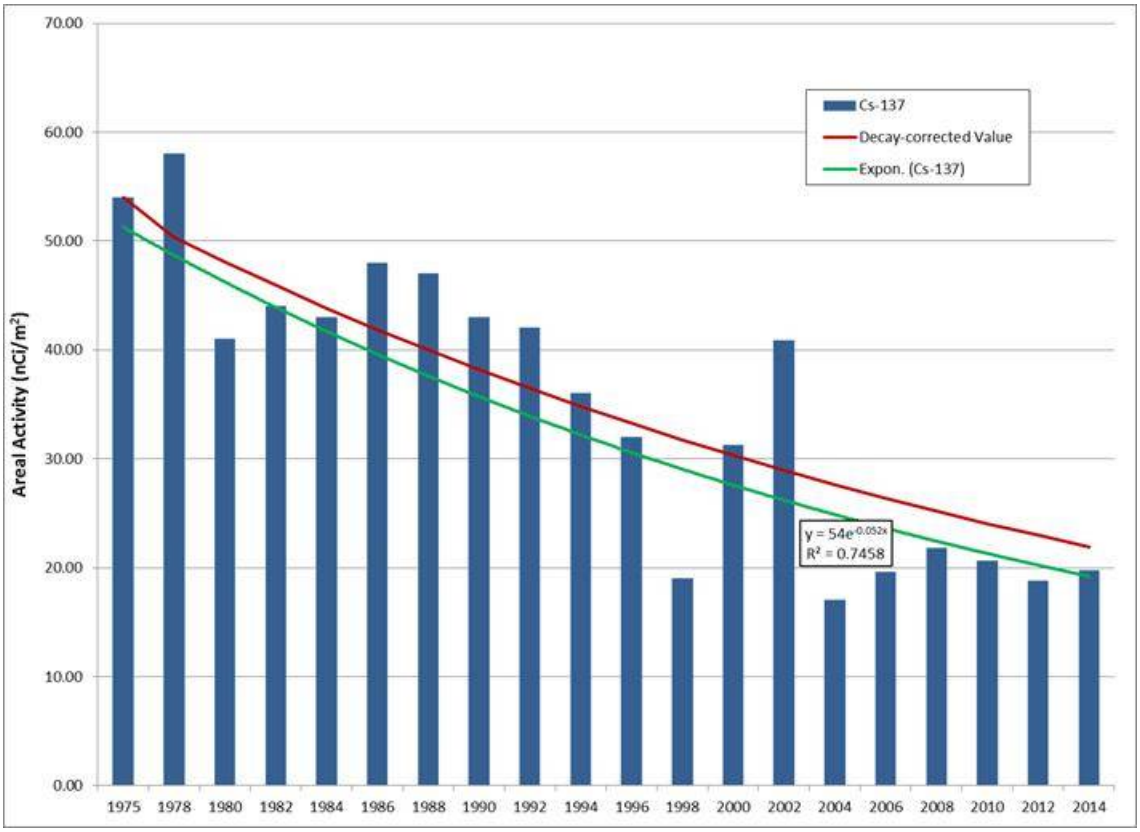

Figure A-2. Areal activity of Cs-137 in offsite surface soil sampled from 1975 through 2014. Each column represents the geometric average of all locations for that year.

Mean annual concentrations of Sr-90 in surface over time appear to decrease at a rate which exceeds that projected for radioactive decay (Figure A-3). Sr-90 is more mobile than Cs-137 in alkaline soils (Schulz 1965) and the accelerated decrease may be due to other processes in the soil, such as movement into other soil compartments or uptake by plants. This is further illustrated by the Cs-137/Sr-90 ratio that increases with time (Figure A-4). These decreasing trends indicate that the source of Cs-137 and Sr-90 is not from INL Site operations and is most likely derived from worldwide fallout activity. It is interesting to note that the trends observed in the Cs-137 and Sr-90 can only be observed over a long period of time (decades) and not over relatively short periods (i.e., years). This is because radionuclide measurements are highly variable because of the inhomogeneous distribution of radioactivity in soil due to variable patterns of deposition, differences in geography, and other environmental factors. The highly variable nature of soil is illustrated in Figures A-5 and A-6, which shows scatterplots of individual results of analyses for of Cs-137 and Sr-90 in offsite soil samples collected from 2000 through 2014.

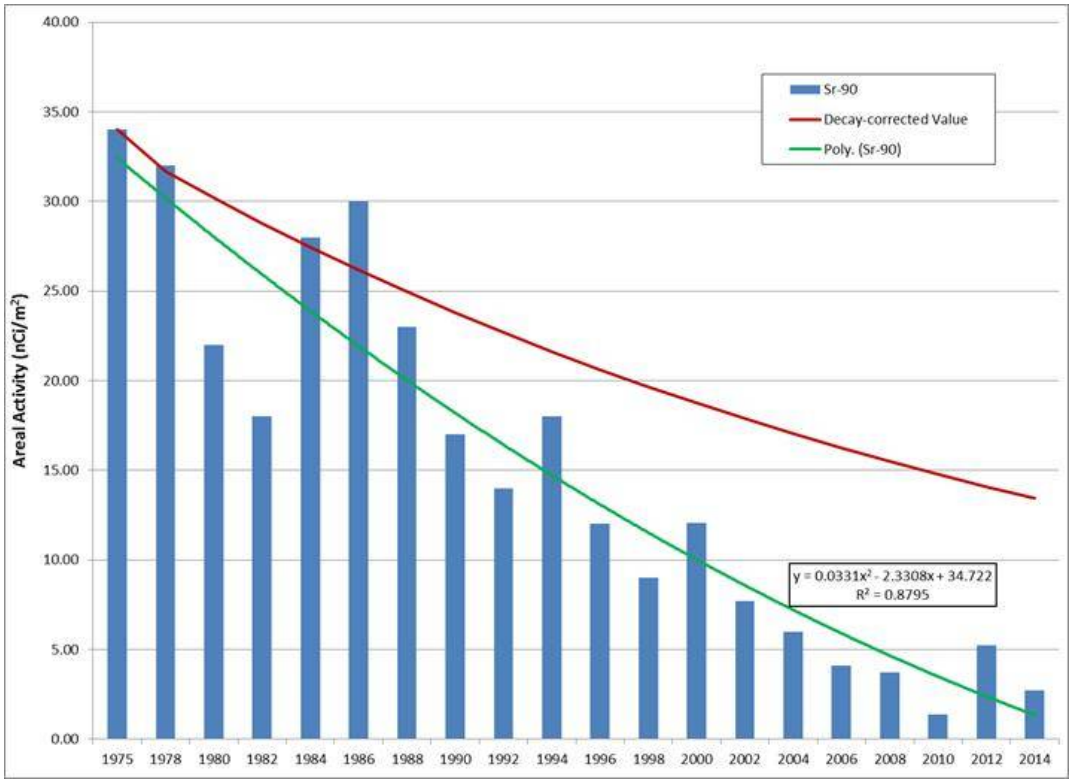

Figure A-3. Areal activity of Sr-90 in offsite surface soil sampled from 1975 through 2014. Each column represents the geometric average of all locations for that year.

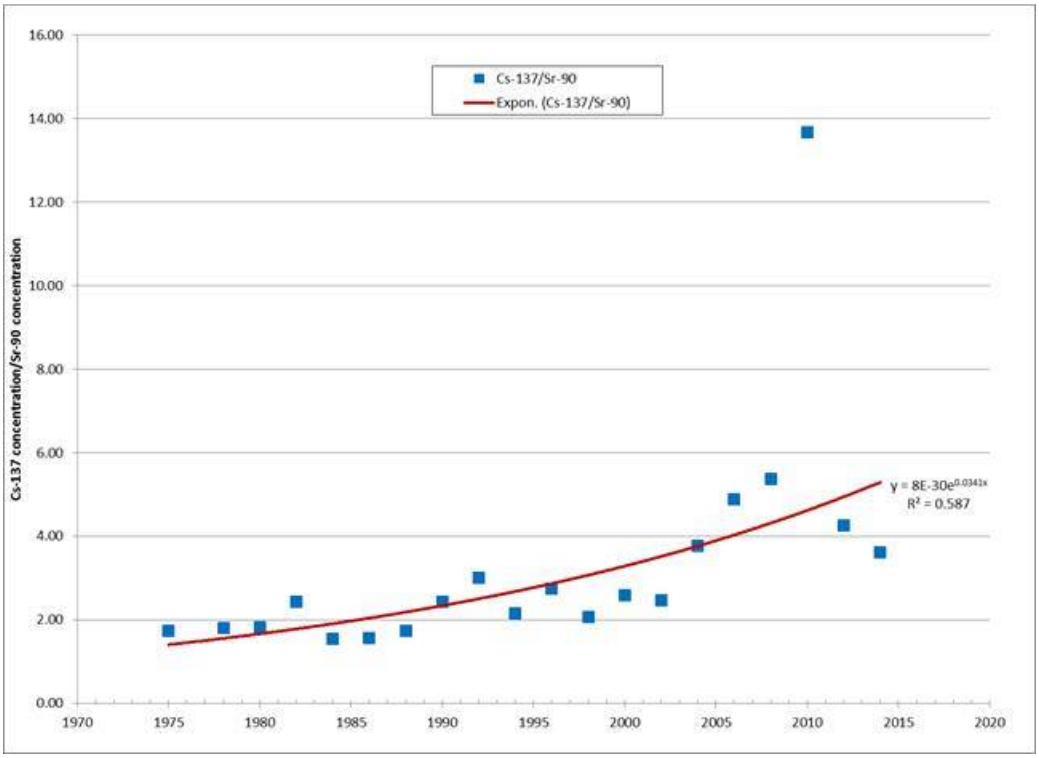

Figure A-4. Cs-137/Sr-90 ratios in offsite surface soil shown as a function of time.

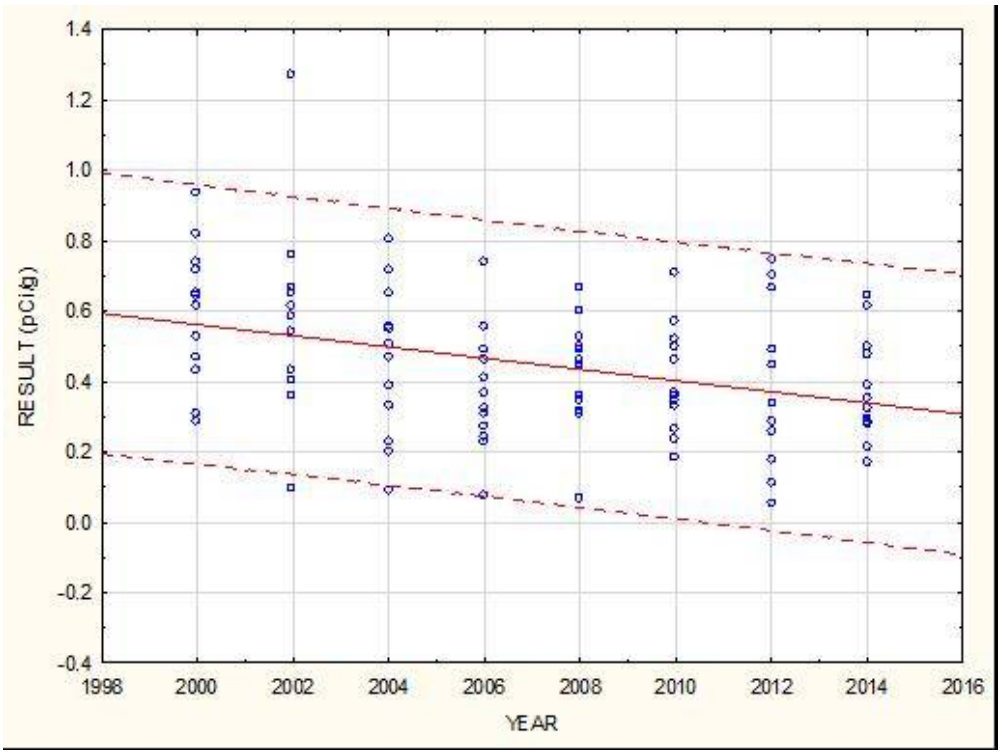

Figure A-5. Scatterplot of individual measurements of Cs-137 in surface soil samples collected at locations off the INL Site from 2000 to 2014. A trend line and 95% confidence limits are shown.

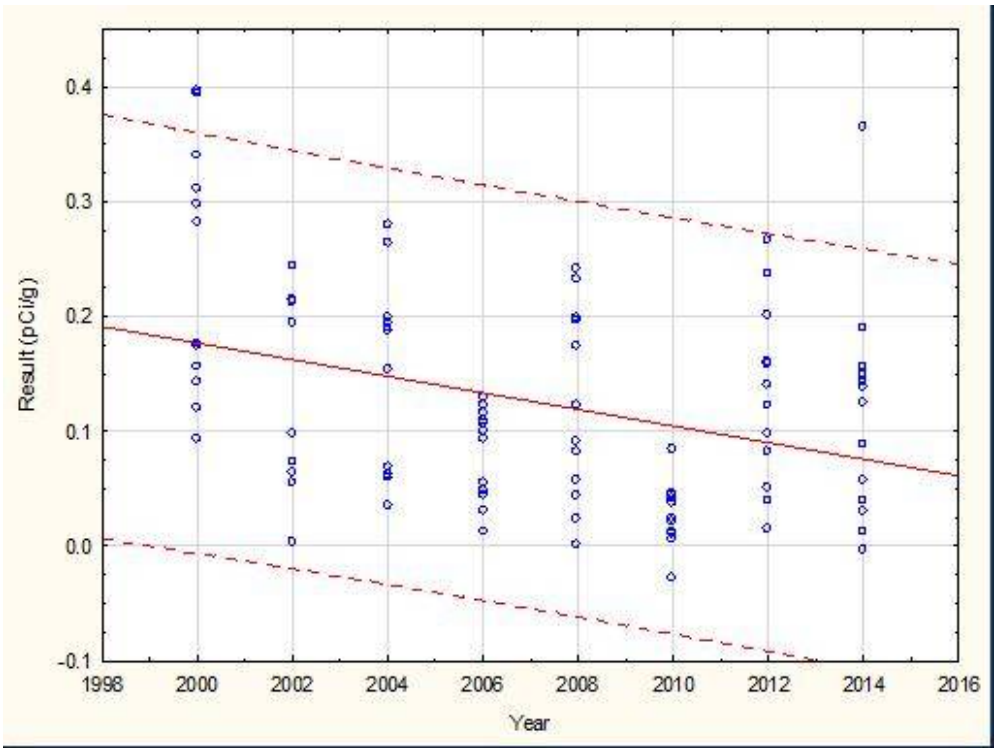

Figure A-6. Scatterplot of individual measurements of Sr-90 in surface soil samples collected at locations off the INL site from 2000 to 2014. A trend line and 95% confidence limits are shown.

Cesium concentrations measured in surface (0–5 cm) and subsurface (5–10 cm) soil samples collected from 2000 to 2014 show a distinct difference between these two layers but a similarity in patterns (Figure A-7). The similarity suggests that differences from year to year not only reflect radioactive decay but sample area heterogeneity. In addition, radionuclide movement between soil layers is not currently indicated (i.e., the lower soil layer is not increasing in Cs-137 concentration when the upper layer is decreasing.)

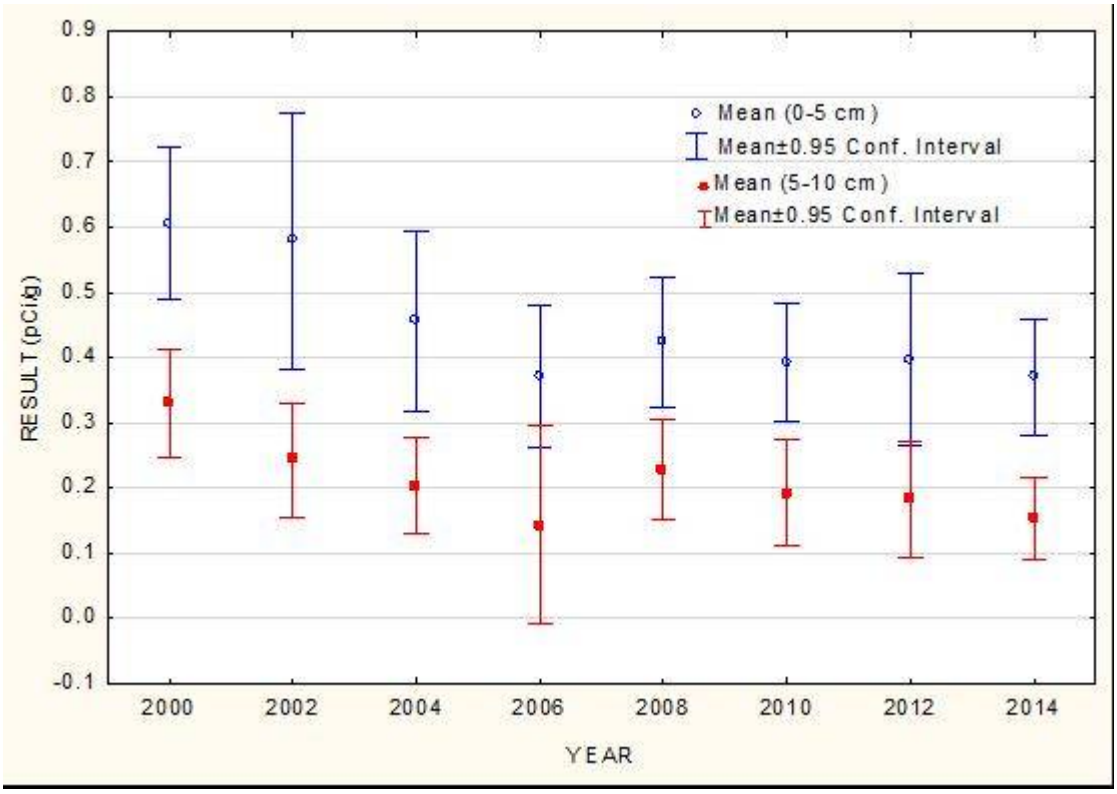

Figure A-7. Mean Cs-137 concentrations in upper and lower soil layers.

In summary, results of four decades of soil monitoring show that background concentrations of transuranics in undisturbed surface soils remain fairly constant over time. Cs-137 appears to be decreasing primarily from radioactive decay. Sr-90 is decreasing at a rate faster than radioactive decay indicating that other processes, such as uptake by plants, are involved. The majority of radionuclides appear to reside in the upper 5 cm of soil. There is no evidence of radionuclides being present in offsite soils as a result of INL Site releases. Rather it appears that Am-241, Cs-137, Pu-238, Pu-239/240, and Sr-90 were deposited as fallout from historical global nuclear weapons testing.

A-2. MEASUREMENT OF RADIONUCLIDES IN INL SITE SOIL

- Historical concentrations of radionuclides of interest in site soils:
  - Soil sampling
  - In situ sampling
  - Trends.
- Locations of sites within the INL Site boundaries that have been historically monitored (initially by RESL) for contamination (Radioactive Waste Management Complex [RWMC] soils outside the RWMC fence, INTEC soils, others?)
- I-129 contamination outside of INTEC.

A-3. RADIONUCLIDE DEPOSITION AND DISPERSION PATTERNS

Air dispersion modeling, using CALPUFF and INL Site meteorological data measured from 2006 through 2008, was performed to develop data quality objectives for radiological air surveillance for the INL Site using methodology documented in Rood and Sondrup (2014). The same methodology was used to discern deposition patterns. For deposition, it was assumed that the particulates released from the INL Site have a geometric mean (GM) diameter of 1 micron and a geometric standard deviation (GSD) of 1.5 microns. Based on historical NESHAP data, the major sources of Cs-137 and Sr-90 are the Advanced Test Reactor (ATR) Complex and INTEC facilities; the major source of I-129 is INTEC and the Materials and Fuels Complex (MFC); and the major source of Am-241 and isotopes of plutonium is RWMC. Figure A-8 shows the locations of these facilities. The deposition patterns resulting from these sources reflect the southwest/northeast wind patterns typical of the INL Site (e.g., Figures A-9 through A-12). The CALPUFF model also demonstrates that the maximum offsite deposition value is located between the southwest INL Site boundary and the Great Southern Butte for emissions from ATR, INTEC, and RWMC. The Highway26/20 rest stop is also a potential location of interest as the highway traverses the INL Site through higher regions of modeled deposition and is a location accessed by the public. The Mud Lake/Terreton area and Atomic City are an offsite areas primarily impacted by emissions from MFC. Howe is an offsite location of concern for deposition of particulates released from ATR.

Potential deposition of sources at individual air sampling stations was investigated further to determine where and how long it would take for radionuclide deposition to result in measureable concentrations. For this exercise three particle sizes were assumed:

1. 1 μm (mitigated/filtered)
2. 10 μm (unmitigated/unfiltered)
3. 30-μm (large particles, such as resuspended soil).

Particle sizes are important in terms of deposition rates and health consequences. In general, HEPA-filtered effluent results particles less than 1 μm, so deposition from filtered effluent is not expected to contribute appreciably to offsite soil contamination. This is significant because particles less than 3.5 μm in diameter are respirable and can penetrate the deep respiratory tract (Sehmel 1984). Larger particle releases may result from unplanned releases or releases from fugitive dust sources. In these cases, deposition may be significant and measureable near the source. Particles in excess of 15 μm are likely to be filtered out by nasal hair or impact only the nasopharyngeal surface (Sehmel 1984). Although large-particle releases do not present an inhalation health risk because the particles are not inhalable, they may present a soil contamination issue depending on the magnitude of the release. The Environmental Protection Agency (EPA 2004) assumes for estimation of annual emissions of radionuclides from contaminated soils that erosion is highest for particles in the size range from 15 to 30 μm and lower for smaller particle sizes.

The following sources were selected for further evaluation because they contribute at least 1% to the annual dose estimated for National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance or because, in the case of MFC, they represent a geographical location of key operational activities on the INL Site:

1. ATR Complex
    a. TRA-770 Stack
    b. ATR Complex ground level release (Test Reactor Area [TRA] warm waste ponds)
2. INTEC ground level release (TMI-2 Independent Spent Storage Installation and INL Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Disposal Facility (ICDF)

3. MFC
    a. MFC-764 Stack
    b. MFC ground level release
4. RWMC.

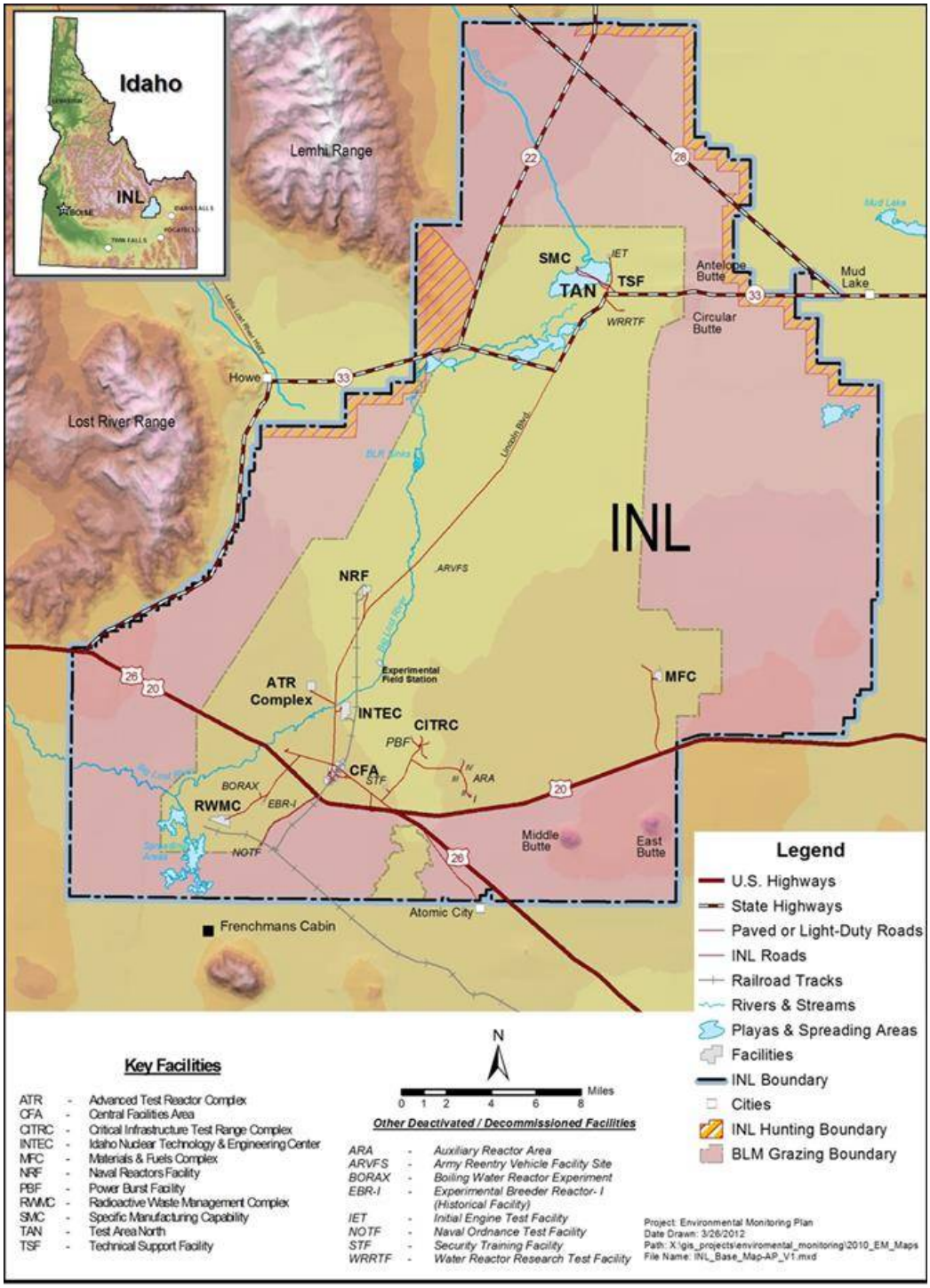

Figure A-8. Major facilities at the INL Site.

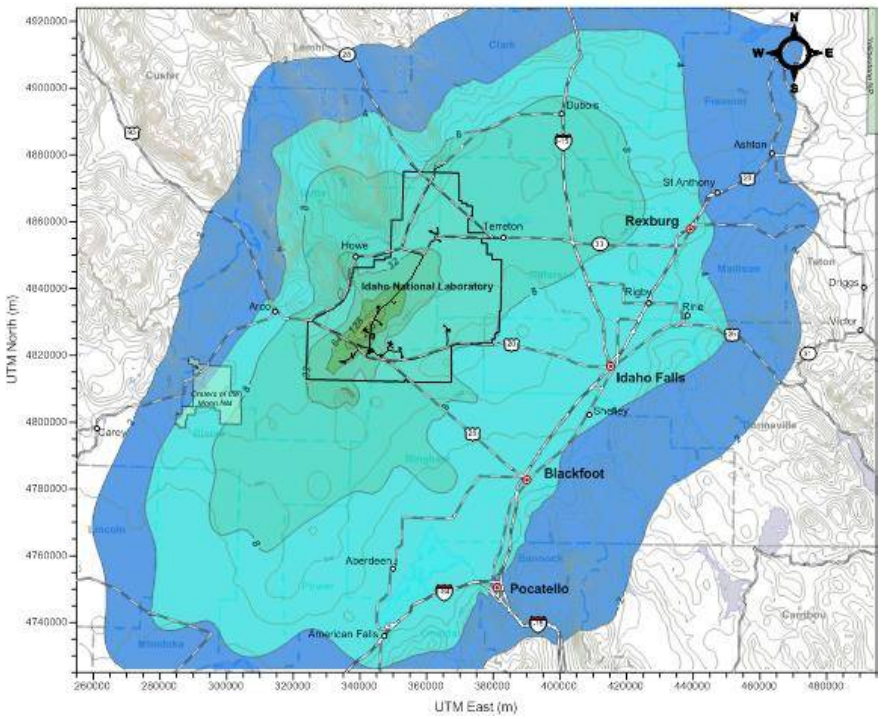

Figure A-9. Unit deposition values (hr $m^{-2} \times 10^{9}$) for particles 1 micron in diameter released continuously from the ATR Complex TRA-770 stack for 1 year.

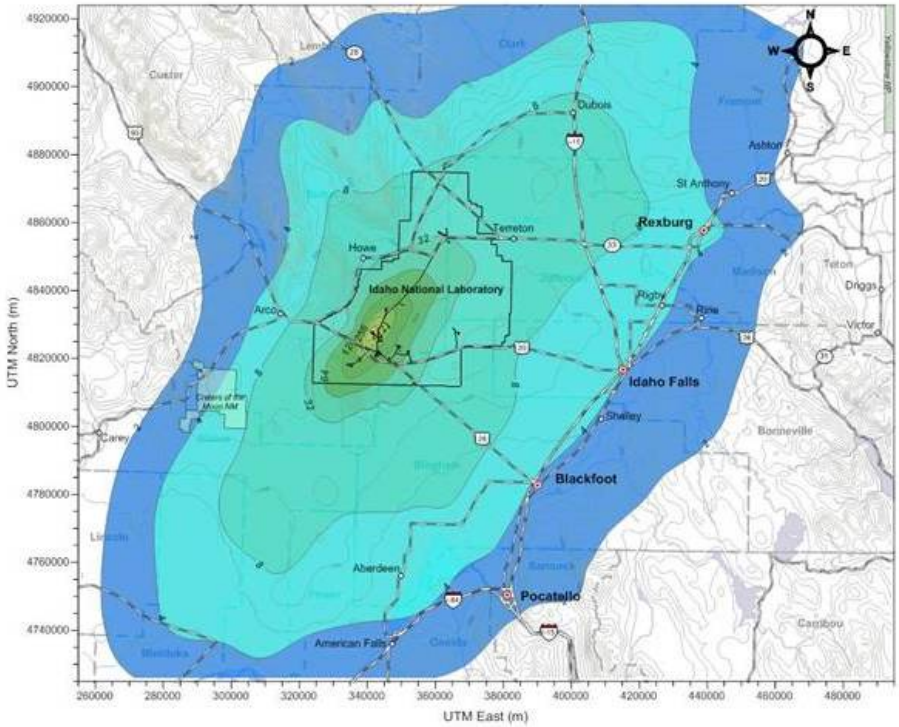

Figure A-10. Unit deposition values (hr $m^{-2} \times 10^{9}$) for particles 1 micron in diameter released continuously at ground level from the ATR Complex for 1 year.

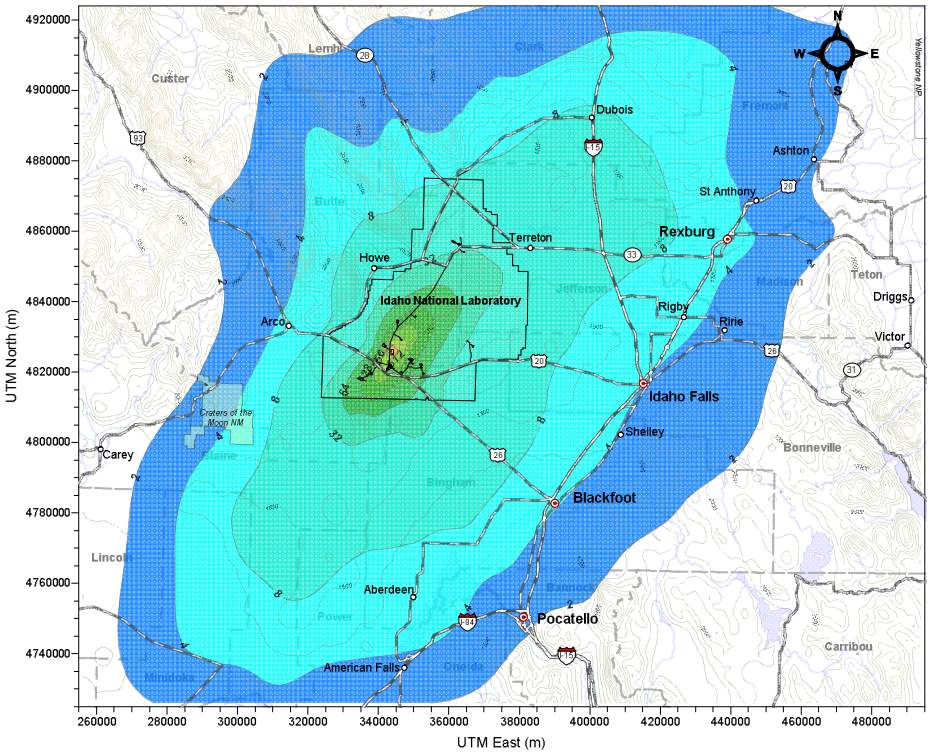

Figure A-11. Unit deposition values (hr $m^{-2} \times 10^{9}$) for particles 1 micron in diameter released continuously at ground level from INTEC for 1 year.

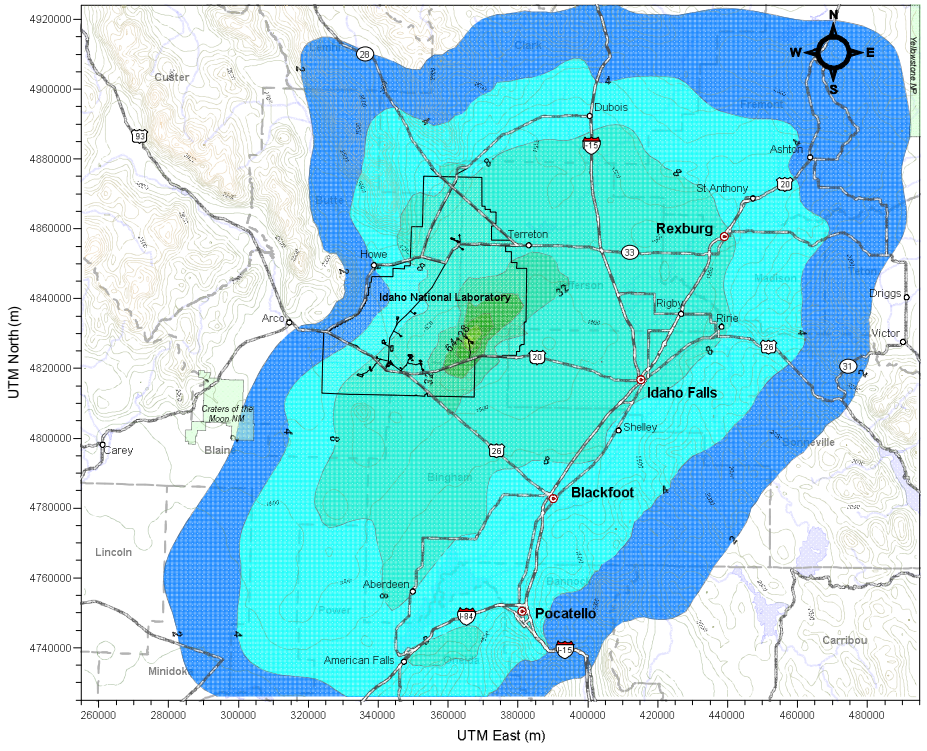

Figure A-12. Unit deposition values (hr $m^{-2} \times 10^{9}$) for particles 1 micron in diameter released continuously from the MFC-764 stack for 1 year.

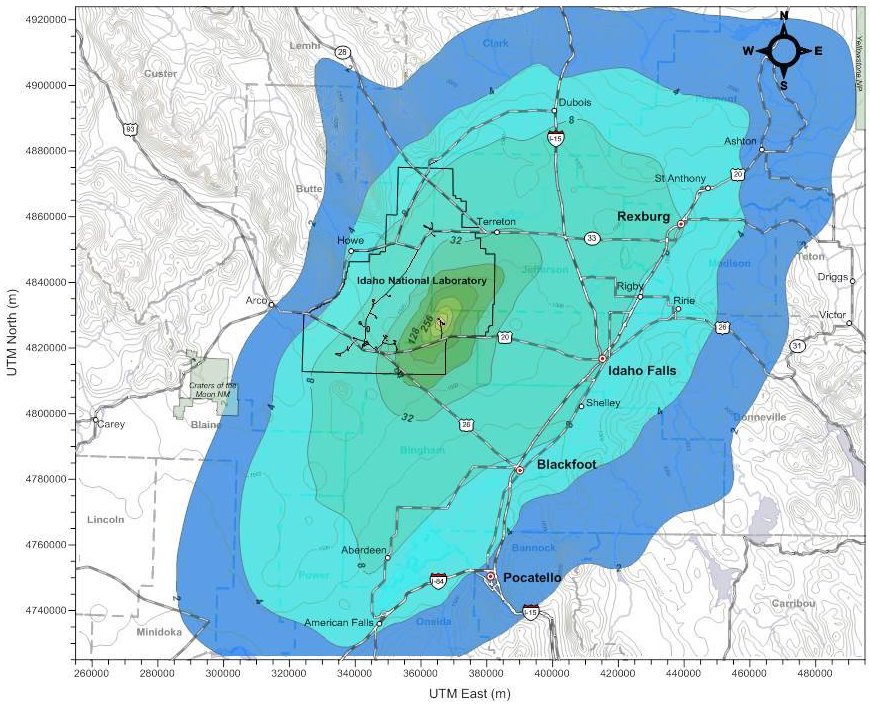

Figure A-13. Unit deposition values (hr $m^{-2} \times 10^9$) for particles 1 micron in diameter released continuously at ground level from MFC for 1 year.

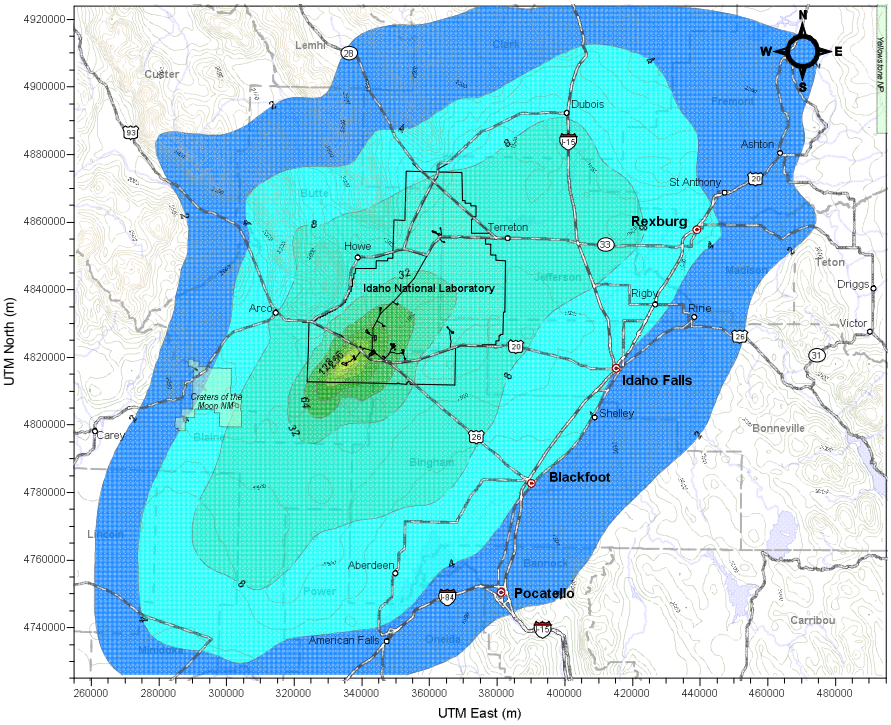

Figure A-14. Unit deposition values (hr $m^{-2} \times 10^9$) for particles 1 micron in diameter released continuously at ground level from the RWMC for 1 year.

Using the CALPUFF model, unit deposition factors (nCi/m^2 per 1 Ci released in air) were calculated for all INL Site air sampler locations and locations near a source were estimated for 1-, 10-, and 30-μm particles. Details of the analytical exercise appear in Appendix C.

The annual amount of deposition (ψ) that might occur from an annual release quantity can be estimated by

$$\psi = \sum_{i=1}^{n} \frac{\psi_{u,i} Q_i}{Q_u} \tag{1}$$

where $\psi_{u,i}$ = the annual deposition for a 1 Ci/yr release for particle size *i* (Ci/m^2), Q_i = the annual release for a radionuclide with particle size *i* (Ci/yr), and Q_u is the unit release quantity (1 Ci/yr). For this evaluation, it was simply assumed that each release was of a uniform particle size (i.e., *i* = 1-μm, 10-μm, or 30 μm) so that $\psi = \psi_{u,i}$.

Assuming a constant release rate over time, the amount of activity that accumulates over time is the product of ψ and the number of years of accumulation. The time necessary to accumulate enough activity such that it can be measured in surface soil above background is found by

$$t = \frac{\Delta C}{\psi} \tag{2}$$

where ΔC is the amount of activity accumulated in surface soil that could be measured statistically above background. For this exercise, ΔC was estimated by subtracting the mean value from the 95% upper confidence limit (UCL). It is assumed that the radionuclide can be detected if it is measured at that value above the background concentration. It is also assumed that ΔC can be detected by the analytical laboratory (i.e., it is greater than the minimum detectable concentration [MDC]).

Means and 95% UCLs of background soil concentrations for radionuclides of concern are presented in Table A-3, along with MDCs. Iodine-129 is not included in Table 3 and was not assessed in this exercise because it is not actually released to the environment. It is a hypothetical source term provided in the NESHAP report that is estimated as a fraction of TMI-2 dry fuel inventory in storage (Scott Lee, personal communication, April 22, 2015). The statistical descriptions of long-lived radionuclides (Am-241, Pu-238, and Pu-239/240) were based on data collected from 1975 through 2014. The earlier data collected by RESL from 1975 through 1992 and by the Environmental Science and Research Foundation from 1992 through 1996 were summarized in annual reports as geometric (lognormal) means and 95% uncertainty limits. Results from 1998 through 2014 were analyzed for geometric means and UCLs The summary data were combined statistically to yield the results in Table A-3. In the cases of Sr-90 and Cs-137, the 2014 data were determined to be normally distributed; therefore, the arithmetic means and UCLs were accepted as the current statistics for these radionuclides.

It is important to note that the buildup calculation approach described above is very conservative in nature. That is, it only considers deposition on soil surface and does not include processes that act to deplete radionuclides in soil, such as radioactive decay and resuspension of contaminated particles via wind (see Figure A-11). Thus, the actual times to achieve measureable build-up would be longer.

Table A-3. Key radionuclide background concentrations in offsite soil as of 2014. The means and upper confidence limits were calculated with all data regardless if they were above the detection level.

Radionuclide	2014		1975–2014		ΔC (UCL – Mean) (nCi/m^2)	MDC (nCi/m^2)
	Mean (nCi/m^2)	UCL (nCi/m^2)	Mean (nCi/m^2)	UCL (nCi/m^2)		
Am-241[a]	NU[c]	NU	0.33	0.63	0.30	0.3
Cs-137[b]	20.74	24.08	NU	NU	3.34	0.5
Pu-238[a]	NU	NU	0.17	0.36	0.19	0.2
Pu-239[a]	NU	NU	0.98	1.48	0.50	0.2
Sr-90[b]	6.36	8.80	NU	NU	2.44	2.2

a. Combined data set derived from biennial results reported for offsite soils in annual reports from 1975–2014. All data were assumed to be lognormally distributed. Means are geometric averages.
b. Annual results for offsite soils collected in 2014. The results were determined to be normally distributed and arithmetic means and upper confidence limit.
c. NU = Not used
d. MDC = Minimum Detectable Concentration (based on lowest MDC reported by the current analytical laboratory for each radionuclide).

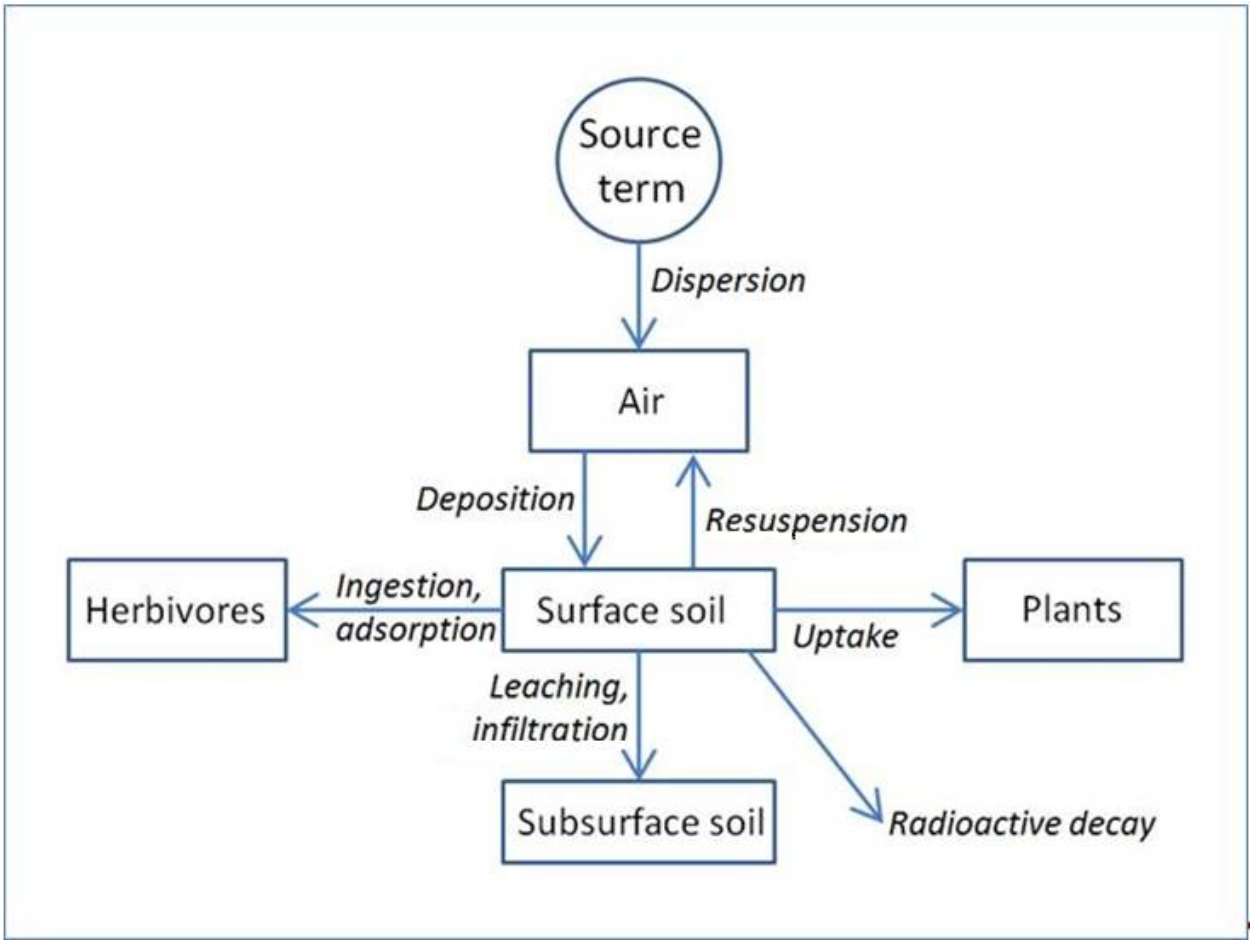

Figure A-15. Major process which affected radionuclide concentrations in surface soil.

A-3.1 Advanced Test Reactor Test Complex

The ATR Complex (formerly known as the Reactor Technology Complex [RTC] and TRA) was established in the early 1950s for studying the effects of radiation on materials, fuels, and equipment. The ATR is currently the only operating reactor at the ATR Complex. The ATR tests materials for the nation's next generation of nuclear power plants. ATR is also used to manufacture a significant portion of the nation's medical nuclear isotopes. Radiological air emissions from the ATR Complex are primarily associated with operation of the ATR. These emissions are released through the TRA-770 stack and include noble gases, iodines, and other mixed fission and activation products. Other radiological air emissions are associated with sample analysis, site remediation, research and development activities, and decommissioning and demolition activities.

Table A-4 presents results of the time calculations at each air sampling location for a release from the TRA-770 stack. For this calculation it was assumed that the entire source term reported for the ATR Complex for the 2013 NESHAP report (DOE/ID 2014) is released through the stack. This assumes a filtered particle diameter of 1 μm. As can be seen in the table, the shortest time period needed to achieve the estimated build-up level is over 650 years for Sr-90 at air monitors located near the facility (Battelle Energy Alliance, LLC [BEA]-RTC and BEA-TRA) and over 1,300 years at the Highway 20/26 rest stop (a point of public access).

Table A-5 presents the results of calculations using a ground level release from the ATR Complex. The source terms used were based on fugitive emissions reported in the 2013 NESHAP report (DOE/ID 2014). Fugitive emissions consist of all air releases not released through a confined air stream and include diffuse sources (EPA 2004). Diffuse sources include soils, surface water/evaporation, buildings, tank venting, equipment venting, and releases from underground testing. The fugitive source terms estimated for Cs-137 and Sr-90 in the NESHAP report were based on a cumulative inventory in the TRA warm waste ponds. The emission rate from the ponds was derived by calculating the pond inventory for each radionuclide, in Ci, by a resuspension rate of 1×10^{-10} s^{-1} (DeWayne King, personal communication, April 29, 2015). This calculation is highly unrealistic as contaminants in water most likely end up submerged in the pond sediments and are not available for resuspension. A more realistic approach assumes that at most 10% of the sediment along the pond edges is exposed to air, dried, and becomes available, as 30-μm particles, for erosion by wind. A resuspension rate factor of 1×10^{-12} s^{-1} has been estimated for undisturbed soils at the INL Site using measured airborne particulate mass concentrations and particulate resuspension rate equations (EPA 2003) and was adopted for this exercise. The source terms used for generation of Table A-5 are thus three orders of magnitude smaller than those reported in DOE/ID (2014).

Table A-5 shows that Sr-90 attached to large particles would deposit close to the release site and would be detected at BEA-RTC and BEA-TRA after 160 years. It would take 50,000 years to be measureable above background at EFS and 54,000 years at the Highway 20/26 rest stop.

Table A-4. Estimated time (years) to achieve build-up concentration in surface soil for 1 μm particles released continuously for 1 year from a stack (TRA-770 stack) at the Advanced Test Reactor Complex.[a] The top five results are highlighted. Two of the sampler locations, Van Buren and EFS, have replicate samplers (BEA-VAN and ESER-VAN, BEA-EFS, and ESER-EFS).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
TRA-770	BEA-TRA	5.64E+04	2.15E+03	6.27E+13	2.45E+05	7.77E+02
TRA-770	BEA-CPP	6.24E+05	2.38E+04	6.94E+14	2.71E+06	8.59E+03
TRA-770	BEA-RWMC	2.76E+05	1.05E+04	3.07E+14	1.20E+06	3.80E+03
TRA-770	BEA-VAN	2.48E+05	9.43E+03	2.75E+14	1.08E+06	3.41E+03
TRA-770	BEA-IRC	6.42E+06	2.44E+05	7.13E+15	2.79E+07	8.83E+04
TRA-770	BEA-BLKFT	5.74E+06	2.18E+05	6.37E+15	2.49E+07	7.90E+04
TRA-770	BEA-SMC	1.37E+06	5.21E+04	1.52E+15	5.94E+06	1.88E+04
TRA-770	BEA-GATE	9.15E+05	3.48E+04	1.02E+15	3.97E+06	1.26E+04
TRA-770	BEA-ARA	1.94E+06	7.38E+04	2.15E+15	8.42E+06	2.67E+04
TRA-770	BEA-REST	9.72E+04	3.70E+03	1.08E+14	4.22E+05	1.34E+03
TRA-770	BEA-IF	6.49E+06	2.47E+05	7.21E+15	2.82E+07	8.94E+04
TRA-770	BEA-NRF	3.33E+05	1.27E+04	3.70E+14	1.45E+06	4.58E+03
TRA-770	BEA-RTC	4.76E+04	1.81E+03	5.29E+13	2.07E+05	6.55E+02
TRA-770	BEA-EBR	2.93E+05	1.12E+04	3.25E+14	1.27E+06	4.03E+03
TRA-770	BEA-MFC	2.54E+06	9.68E+04	2.83E+15	1.11E+07	3.50E+04
TRA-770	BEA-SUGAR	8.75E+06	3.33E+05	9.72E+15	3.80E+07	1.20E+05
TRA-770	BEA-PBF	1.31E+06	4.99E+04	1.46E+15	5.70E+06	1.81E+04
TRA-770	BEA-INTEC	5.68E+05	2.16E+04	6.32E+14	2.47E+06	7.83E+03
TRA-770	BEA-CFA	4.93E+05	1.88E+04	5.48E+14	2.14E+06	6.79E+03
TRA-770	BEA-EFS	2.30E+05	8.75E+03	2.56E+14	9.99E+05	3.17E+03
TRA-770	BEA-CRATE	5.44E+06	2.07E+05	6.05E+15	2.37E+07	7.49E+04
TRA-770	ESER-VAN	2.48E+05	9.44E+03	2.75E+14	1.08E+06	3.41E+03
TRA-770	ESER-CRA	5.44E+06	2.07E+05	6.05E+15	2.37E+07	7.49E+04
TRA-770	ESER-ARC	4.52E+06	1.72E+05	5.02E+15	1.97E+07	6.22E+04
TRA-770	ESER-SUG	8.75E+06	3.33E+05	9.72E+15	3.80E+07	1.20E+05
TRA-770	ESER-IDA	6.49E+06	2.47E+05	7.21E+15	2.82E+07	8.94E+04
TRA-770	ESER-DUB	3.61E+06	1.37E+05	4.01E+15	1.57E+07	4.97E+04

Table A-4. (continued).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
TRA-770	ESER-MON	2.92E+06	1.11E+05	3.25E+15	1.27E+07	4.02E+04
TRA-770	ESER-FAA	6.21E+06	2.36E+05	6.90E+15	2.70E+07	8.55E+04
TRA-770	ESER-MAI	1.28E+06	4.87E+04	1.42E+15	5.56E+06	1.76E+04
TRA-770	ESER-EFS	2.30E+05	8.75E+03	2.55E+14	9.99E+05	3.16E+03
TRA-770	ESER-ATO	2.41E+06	9.19E+04	2.68E+15	1.05E+07	3.32E+04
TRA-770	ESER-MOU	5.74E+06	2.18E+05	6.37E+15	2.49E+07	7.90E+04
TRA-770	ESER-BLU	5.25E+06	2.00E+05	5.83E+15	2.28E+07	7.22E+04
TRA-770	ESER-TER	2.51E+06	9.57E+04	2.79E+15	1.09E+07	3.46E+04
TRA-770	ESER-HOW	1.28E+06	4.86E+04	1.42E+15	5.55E+06	1.76E+04

a. This assumes that the entire source term for the ATR Complex reported for 2013 is released through the TRA-770 stack. The source terms are 7.01E−05 Ci/yr for Am-241, 2.05E−02 Ci/yr for Cs-137, 4.06E−14 Ci/yr for Pu-238, 2.67E−05 Ci/yr for Pu-239/240, and 4.24E−02 Ci/yr for Sr-90.

Table A-5. Estimated time (years) to achieve build-up concentration in surface soil for 30 µm particles released continuously for 1 year at ground level from the Advanced Test Reactor Complex.[a] The shortest five time periods are highlighted in yellow. Two of the sampler locations, Van Buren and EFS, have replicate samplers (BEA-VAN and ESER-VAN, BEA-EFS, and ESER-EFS).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238[b]	Pu-239	Sr-90
ATR-GL	BEA-TRA	1.21E+04	4.59E+02	1.34E+13	5.24E+04	1.66E+02
ATR-GL	BEA-CPP	4.31E+06	1.64E+05	4.79E+15	1.87E+07	5.93E+04
ATR-GL	BEA-RWMC	1.73E+07	6.57E+05	1.92E+16	7.50E+07	2.37E+05
ATR-GL	BEA-VAN	5.05E+06	1.92E+05	5.61E+15	2.19E+07	6.95E+04
ATR-GL	BEA-IRC	8.55E+09	3.26E+08	9.50E+18	3.72E+10	1.18E+08
ATR-GL	BEA-BLKFT	1.74E+10	6.61E+08	1.93E+19	7.54E+10	2.39E+08
ATR-GL	BEA-SMC	1.47E+08	5.61E+06	1.64E+17	6.41E+08	2.03E+06
ATR-GL	BEA-GATE	5.96E+07	2.27E+06	6.63E+16	2.59E+08	8.21E+05
ATR-GL	BEA-ARA	4.78E+08	1.82E+07	5.32E+17	2.08E+09	6.58E+06
ATR-GL	BEA-REST	3.90E+06	1.49E+05	4.33E+15	1.70E+07	5.37E+04
ATR-GL	BEA-IF	8.17E+09	3.11E+08	9.08E+18	3.55E+10	1.12E+08
ATR-GL	BEA-NRF	4.80E+06	1.83E+05	5.34E+15	2.09E+07	6.61E+04
ATR-GL	BEA-RTC	1.46E+04	5.56E+02	1.62E+13	6.35E+04	2.01E+02
ATR-GL	BEA-EBR	1.32E+07	5.01E+05	1.46E+16	5.72E+07	1.81E+05

Table A-5. (continued).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238[b]	Pu-239	Sr-90
ATR-GL	BEA-MFC	6.19E+08	2.36E+07	6.87E+17	2.69E+09	8.52E+06
ATR-GL	BEA-SUGAR	4.84E+09	1.84E+08	5.38E+18	2.10E+10	6.67E+07
ATR-GL	BEA-PBF	1.55E+08	5.90E+06	1.72E+17	6.73E+08	2.13E+06
ATR-GL	BEA-INTEC	4.32E+06	1.65E+05	4.80E+15	1.88E+07	5.95E+04
ATR-GL	BEA-CFA	1.92E+07	7.32E+05	2.14E+16	8.36E+07	2.65E+05
ATR-GL	BEA-EFS	3.63E+06	1.38E+05	4.04E+15	1.58E+07	5.00E+04
ATR-GL	BEA-CRATE	4.08E+09	1.55E+08	4.54E+18	1.78E+10	5.62E+07
ATR-GL	ESER-VAN	5.05E+06	1.92E+05	5.62E+15	2.20E+07	6.96E+04
ATR-GL	ESER-CRA	4.08E+09	1.55E+08	4.54E+18	1.78E+10	5.62E+07
ATR-GL	ESER-ARC	1.85E+09	7.03E+07	2.05E+18	8.02E+09	2.54E+07
ATR-GL	ESER-SUG	4.84E+09	1.84E+08	5.38E+18	2.10E+10	6.67E+07
ATR-GL	ESER-IDA	8.17E+09	3.11E+08	9.08E+18	3.55E+10	1.12E+08
ATR-GL	ESER-DUB	1.18E+09	4.49E+07	1.31E+18	5.12E+09	1.62E+07
ATR-GL	ESER-MON	3.41E+08	1.30E+07	3.79E+17	1.48E+09	4.69E+06
ATR-GL	ESER-FAA	1.67E+09	6.34E+07	1.85E+18	7.24E+09	2.29E+07
ATR-GL	ESER-MAI	2.10E+08	8.00E+06	2.34E+17	9.13E+08	2.89E+06
ATR-GL	ESER-EFS	3.65E+06	1.39E+05	4.06E+15	1.59E+07	5.03E+04
ATR-GL	ESER-ATO	1.39E+09	5.29E+07	1.54E+18	6.04E+09	1.91E+07
ATR-GL	ESER-MOU	1.74E+10	6.61E+08	1.93E+19	7.55E+10	2.39E+08
ATR-GL	ESER-BLU	1.69E+09	6.42E+07	1.88E+18	7.33E+09	2.32E+07
ATR-GL	ESER-TER	2.25E+08	8.57E+06	2.50E+17	9.78E+08	3.10E+06
ATR-GL	ESER-HOW	2.19E+08	8.35E+06	2.44E+17	9.53E+08	3.02E+06

a. This assumes that the fugitive source term only for the RTC reported for 2013 is released at ground level. The source terms are 7.01E−08 Ci/yr for Am-241, 2.05E−05 Ci/yr for Cs-137, 4.06E−17 Ci/yr for Pu-238, 2.67E−08 Ci/yr for Pu-239/240, and 4.24E−05 Ci/yr for Sr-90.

A-3.2 Idaho Nuclear Technology and Engineering Center

Idaho Nuclear Technology and Engineering Center (INTEC) was established in the 1950s to recover usable uranium from spent nuclear fuel generated in government reactors and to store spent nuclear fuel. Radiological air emissions from INTEC sources are primarily associated with liquid-waste operations, including effluents from the Tank Farm Facility, Process Equipment Waste Evaporator, and Liquid Effluent Treatment and Disposal, which are exhausted through the main stack. These radioactive emissions include particulates and gaseous radionuclides. Additional radioactive emissions are associated with decommissioning and decontamination activities, wet-to-dry spent nuclear fuel transfers, environmental remediation, remote-handled transuranic waste management, radiological and hazardous-waste storage facilities, and contaminated-equipment maintenance.

In 2013, air doses from INTEC activities were estimated primarily from fugitive emissions from CPP-1774 (TMI-2 Independent Spent Storage Installation) and from ICDF. Most of the INTEC doses are due to hypothetical releases from the TMI-2 Independent Spent Storage Installation. Given the fact that the fuel is stored in casks inside of a vault, the calculated emissions are unrealistic. The ICDF pond and landfill could potentially release radionuclides through resuspension. However, the estimated release rates are orders of magnitude less than that calculated for the TMI-2 Independent Spent Storage Installation.

For this exercise, it was conservatively assumed that 10% of the total INTEC source term (not including stack releases) was actually available for release to air as unfiltered 10-μm particles. The results are shown in Table A-6. According to the modeled results, it would take over 160 years for Cs-137 to be detected in soil at the nearest air samplers (BEA-CPP and BEA-INTEC) and over 1,000 years at EFS.

Table A-6. Estimated time (years) to achieve build-up concentration in surface soil for 10-µm particles released continuously for 1 year at ground level from Idaho Nuclear Technology and Engineering Complex.[a] The top five results are highlighted in yellow. Two of the sampler locations, Van Buren and EFS, have replicate samplers (BEA-VAN and ESER-VAN, BEA-EFS, and ESER-EFS).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238b	Pu-239	Sr-90
INTEC-GL	BEA-TRA	1.45E+08	5.36E+03	8.98E+04	5.24E+04	7.18E+03
INTEC-GL	BEA-CPP	4.04E+06	1.49E+02	2.50E+03	1.46E+03	2.00E+02
INTEC-GL	BEA-RWMC	2.81E+08	1.04E+04	1.74E+05	1.01E+05	1.39E+04
INTEC-GL	BEA-VAN	6.79E+07	2.51E+03	4.20E+04	2.45E+04	3.36E+03
INTEC-GL	BEA-IRC	2.12E+10	7.81E+05	1.31E+07	7.64E+06	1.05E+06
INTEC-GL	BEA-BLKFT	3.47E+10	1.28E+06	2.15E+07	1.25E+07	1.72E+06
INTEC-GL	BEA-SMC	1.80E+09	6.64E+04	1.11E+06	6.50E+05	8.90E+04
INTEC-GL	BEA-GATE	7.00E+08	2.58E+04	4.33E+05	2.53E+05	3.46E+04
INTEC-GL	BEA-ARA	6.27E+08	2.31E+04	3.88E+05	2.26E+05	3.10E+04
INTEC-GL	BEA-REST	2.72E+08	1.00E+04	1.68E+05	9.81E+04	1.34E+04
INTEC-GL	BEA-IF	2.03E+10	7.50E+05	1.26E+07	7.33E+06	1.00E+06
INTEC-GL	BEA-NRF	1.86E+08	6.85E+03	1.15E+05	6.70E+04	9.18E+03
INTEC-GL	BEA-RTC	1.16E+08	4.29E+03	7.18E+04	4.19E+04	5.74E+03
INTEC-GL	BEA-EBR	1.23E+08	4.54E+03	7.60E+04	4.44E+04	6.08E+03
INTEC-GL	BEA-MFC	2.33E+09	8.58E+04	1.44E+06	8.39E+05	1.15E+05
INTEC-GL	BEA-SUGAR	2.27E+10	8.39E+05	1.41E+07	8.21E+06	1.12E+06
INTEC-GL	BEA-PBF	1.66E+08	6.12E+03	1.03E+05	5.99E+04	8.20E+03
INTEC-GL	BEA-INTEC	3.82E+06	1.41E+02	2.37E+03	1.38E+03	1.89E+02
INTEC-GL	BEA-CFA	2.26E+07	8.33E+02	1.40E+04	8.15E+03	1.12E+03
INTEC-GL	BEA-EFS	2.96E+07	1.09E+03	1.83E+04	1.07E+04	1.47E+03
INTEC-GL	BEA-CRATE	3.40E+10	1.26E+06	2.10E+07	1.23E+07	1.68E+06
INTEC-GL	ESER-VAN	6.78E+07	2.50E+03	4.20E+04	2.45E+04	3.35E+03
INTEC-GL	ESER-CRA	3.40E+10	1.26E+06	2.10E+07	1.23E+07	1.68E+06
INTEC-GL	ESER-ARC	1.65E+10	6.11E+05	1.02E+07	5.97E+06	8.18E+05
INTEC-GL	ESER-SUG	2.27E+10	8.39E+05	1.41E+07	8.21E+06	1.12E+06
INTEC-GL	ESER-IDA	2.03E+10	7.50E+05	1.26E+07	7.33E+06	1.00E+06
INTEC-GL	ESER-DUB	8.91E+09	3.29E+05	5.51E+06	3.22E+06	4.40E+05

Table A-6. (continued).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238b	Pu-239	Sr-90
INTEC-GL	ESER-MON	2.21E+09	8.15E+04	1.36E+06	7.97E+05	1.09E+05
INTEC-GL	ESER-FAA	5.96E+09	2.20E+05	3.69E+06	2.15E+06	2.95E+05
INTEC-GL	ESER-MAI	1.83E+08	6.76E+03	1.13E+05	6.61E+04	9.05E+03
INTEC-GL	ESER-EFS	2.96E+07	1.09E+03	1.83E+04	1.07E+04	1.46E+03
INTEC-GL	ESER-ATO	1.38E+09	5.08E+04	8.51E+05	4.97E+05	6.80E+04
INTEC-GL	ESER-MOU	3.47E+10	1.28E+06	2.15E+07	1.25E+07	1.72E+06
INTEC-GL	ESER-BLU	1.13E+10	4.18E+05	7.01E+06	4.09E+06	5.60E+05
INTEC-GL	ESER-TER	1.55E+09	5.72E+04	9.59E+05	5.60E+05	7.66E+04
INTEC-GL	ESER-HOW	2.06E+09	7.59E+04	1.27E+06	7.42E+05	1.02E+05

a. The fugitive source term for INTEC reported for 2012. The source terms are 5.67E−09 Ci/yr for Am-241, 1.71E−03 Ci/yr for Cs-137, 5.90E−06 Ci/yr for Pu-238, 2.60E−05 Ci/yr for Pu-239/240, and 9.55E−04 Ci/yr for Sr-90.

A-3.3 Materials and Fuels Complex

Materials and Fuels Complex (MFC), originally called Argonne National Laboratory–West, was established in the 1950s to research and develop nuclear reactors and fuel. Four reactors have been constructed at MFC: Transient Reactor Test Facility, Experimental Breeder Reactor II (EBR-II), Zero Power Physics Reactor and Neutron Radiography Reactor (NRAD). Only one of these reactors, NRAD, is currently operating. Today, the MFC is the prime testing center in the U.S. for demonstration and proof-of-concept of nuclear energy technologies. Research and development activities at MFC are focused on areas of national concern, including energy, nuclear safety, spent nuclear fuel treatment, nuclear material disposal, nonproliferation, decommissioning and decontamination technologies, projects to support space exploration, and homeland security.

Radiological air emissions are primarily associated with spent-fuel treatment at the Fuel Conditioning Facility (FCF) and waste characterization at the Hot Fuel Examination Facility (HFEF). These facilities are equipped with continuous emission monitoring (CEM) systems. On a monthly basis, the effluent streams from FCF, HFEF, and other non-CEM radiological facilities are sampled and analyzed for particulate radionuclides. Gaseous and particulate radionuclides may also be released from other MFC facilities during laboratory research activities, sample analysis, waste handling and storage, and maintenance operations. Both measured and estimated emissions from MFC sources are consolidated for NESHAPS reporting on an annual basis.

In 2013, none of the facilities at MFC contributed at least 1% of the total estimated dose to the MEI. However, given the isolated location of the MFC and the potential for new projects at that site, deposition calculations were made to demonstrate potential buildup patterns in surface soils surrounding the facility.

Tables A-7 and A-8 present results of build-up calculations made with source terms used for the 2013 NESHAPS report (DOE/ID 2014). In addition to the air sampling locations listed in previous tables, two new potential locations were added: the MFC parking lot and the MFC guard shack. These are the only locations downwind of the MFC that have access to power. Results show that, given the current source term, it would take millions of years for radionuclides to be detected in surface soils at current and proposed air sampling locations.

Table A-7. Estimated time (years) to achieve build-up concentration in surface soil for 1 μm particles released continuously for 1 year from a stack (MFC-764 stack) at the Materials and Fuel Complex. The top five results are highlighted. Two of the sampler locations, MFC Parking Lots and MFC Guard Shack, are proposed.

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
MFC-764	BEA-TRA	NA	NA	NA	4.32E+10	2.00E+10
MFC-764	BEA-CPP	NA	NA	NA	3.14E+10	1.46E+10
MFC-764	BEA-RWMC	NA	NA	NA	3.73E+10	1.73E+10
MFC-764	BEA-VAN	NA	NA	NA	3.53E+10	1.64E+10
MFC-764	BEA-IRC	NA	NA	NA	6.15E+10	2.86E+10
MFC-764	BEA-BLKFT	NA	NA	NA	5.94E+10	2.76E+10
MFC-764	BEA-SMC	NA	NA	NA	3.52E+10	1.63E+10
MFC-764	BEA-GATE	NA	NA	NA	3.64E+10	1.69E+10
MFC-764	BEA-ARA	NA	NA	NA	1.52E+10	7.05E+09
MFC-764	BEA-REST	NA	NA	NA	4.41E+10	2.05E+10
MFC-764	BEA-IF	NA	NA	NA	6.08E+10	2.82E+10
MFC-764	BEA-NRF	NA	NA	NA	4.47E+10	2.07E+10
MFC-764	BEA-RTC	NA	NA	NA	4.36E+10	2.02E+10
MFC-764	BEA-EBR	NA	NA	NA	3.57E+10	1.66E+10
MFC-764	BEA-MFC	NA	NA	NA	3.78E+08	1.76E+08
MFC-764	BEA-SUGAR	NA	NA	NA	6.87E+10	3.19E+10
MFC-764	BEA-PBF	NA	NA	NA	1.97E+10	9.14E+09
MFC-764	BEA-INTEC	NA	NA	NA	3.11E+10	1.45E+10
MFC-764	BEA-CFA	NA	NA	NA	2.93E+10	1.36E+10
MFC-764	BEA-EFS	NA	NA	NA	3.08E+10	1.43E+10
MFC-764	BEA-CRATE	NA	NA	NA	2.16E+11	1.00E+11
MFC-764	ESER-VAN	NA	NA	NA	3.53E+10	1.64E+10
MFC-764	ESER-CRA	NA	NA	NA	2.16E+11	1.00E+11
MFC-764	ESER-ARC	NA	NA	NA	1.68E+11	7.79E+10
MFC-764	ESER-SUG	NA	NA	NA	6.87E+10	3.19E+10
MFC-764	ESER-IDA	NA	NA	NA	6.08E+10	2.82E+10
MFC-764	ESER-DUB	NA	NA	NA	5.58E+10	2.59E+10

Table A-7. (continued).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
MFC-764	ESER-MON	NA	NA	NA	3.21E+10	1.49E+10
MFC-764	ESER-FAA	NA	NA	NA	1.57E+10	7.27E+09
MFC-764	ESER-MAI	NA	NA	NA	2.42E+10	1.12E+10
MFC-764	ESER-EFS	NA	NA	NA	3.08E+10	1.43E+10
MFC-764	ESER-ATO	NA	NA	NA	1.17E+10	5.43E+09
MFC-764	ESER-MOU	NA	NA	NA	5.94E+10	2.76E+10
MFC-764	ESER-BLU	NA	NA	NA	6.21E+10	2.89E+10
MFC-764	ESER-TER	NA	NA	NA	1.59E+10	7.37E+09
MFC-764	ESER-HOW	NA	NA	NA	1.06E+11	4.92E+10
MFC-764	MFC Parking Lot	NA	NA	NA	6.22E+08	2.89E+08
MFC-764	MFC Guard Shack	NA	NA	NA	8.27E+08	3.84E+08

a. This assumes that the entire source term for the MFC Main stack reported for 2013 is released. The source terms are 0 Ci/yr for Am-241, 0 Ci/yr for Cs-137, 0 Ci/yr for Pu-238, 8.78E−09Ci/yr for Pu-239, and 9.51E−08 Ci/yr for Sr-90.

Table A-8. Estimated time (years) to achieve build-up concentration in surface soil for 30 µm particles released continuously for 1 year at ground level from the Materials and Fuels Complex. The shortest five time periods are highlighted in yellow. Two of the sampler locations, MFC Parking Lots and MFC Guard Shack, are proposed.

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
MFC-GL	BEA-TRA	9.91E+12	2.24E+08	1.04E+19	1.13E+09	3.61E+08
MFC-GL	BEA-CPP	7.21E+12	1.63E+08	7.55E+18	8.25E+08	2.63E+08
MFC-GL	BEA-RWMC	8.56E+12	1.93E+08	8.96E+18	9.80E+08	3.12E+08
MFC-GL	BEA-VAN	8.10E+12	1.83E+08	8.48E+18	9.28E+08	2.95E+08
MFC-GL	BEA-IRC	1.41E+13	3.19E+08	1.48E+19	1.62E+09	5.15E+08
MFC-GL	BEA-BLKFT	1.36E+13	3.08E+08	1.43E+19	1.56E+09	4.97E+08
MFC-GL	BEA-SMC	8.08E+12	1.82E+08	8.46E+18	9.25E+08	2.94E+08
MFC-GL	BEA-GATE	8.36E+12	1.89E+08	8.75E+18	9.57E+08	3.05E+08
MFC-GL	BEA-ARA	3.48E+12	7.86E+07	3.65E+18	3.99E+08	1.27E+08
MFC-GL	BEA-REST	1.01E+13	2.28E+08	1.06E+19	1.16E+09	3.69E+08
MFC-GL	BEA-IF	1.40E+13	3.15E+08	1.46E+19	1.60E+09	5.08E+08
MFC-GL	BEA-NRF	1.03E+13	2.31E+08	1.07E+19	1.17E+09	3.74E+08

Table A-8. (continued).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
MFC-GL	BEA-RTC	1.00E+13	2.26E+08	1.05E+19	1.15E+09	3.65E+08
MFC-GL	BEA-EBR	8.20E+12	1.85E+08	8.58E+18	9.38E+08	2.99E+08
MFC-GL	BEA-MFC	8.69E+10	1.96E+06	9.10E+16	9.95E+06	3.16E+06
MFC-GL	BEA-SUGAR	1.58E+13	3.56E+08	1.65E+19	1.80E+09	5.74E+08
MFC-GL	BEA-PBF	4.52E+12	1.02E+08	4.73E+18	5.17E+08	1.65E+08
MFC-GL	BEA-INTEC	7.15E+12	1.61E+08	7.49E+18	8.19E+08	2.60E+08
MFC-GL	BEA-CFA	6.72E+12	1.52E+08	7.03E+18	7.69E+08	2.45E+08
MFC-GL	BEA-EFS	7.07E+12	1.59E+08	7.40E+18	8.09E+08	2.58E+08
MFC-GL	BEA-CRATE	4.95E+13	1.12E+09	5.18E+19	5.67E+09	1.80E+09
MFC-GL	ESER-VAN	8.10E+12	1.83E+08	8.48E+18	9.27E+08	2.95E+08
MFC-GL	ESER-CRA	4.95E+13	1.12E+09	5.18E+19	5.67E+09	1.80E+09
MFC-GL	ESER-ARC	3.85E+13	8.69E+08	4.03E+19	4.41E+09	1.40E+09
MFC-GL	ESER-SUG	1.58E+13	3.56E+08	1.65E+19	1.80E+09	5.74E+08
MFC-GL	ESER-IDA	1.40E+13	3.15E+08	1.46E+19	1.60E+09	5.08E+08
MFC-GL	ESER-DUB	1.28E+13	2.89E+08	1.34E+19	1.47E+09	4.67E+08
MFC-GL	ESER-MON	7.37E+12	1.66E+08	7.72E+18	8.44E+08	2.69E+08
MFC-GL	ESER-FAA	3.59E+12	8.11E+07	3.76E+18	4.12E+08	1.31E+08
MFC-GL	ESER-MAI	5.55E+12	1.25E+08	5.81E+18	6.35E+08	2.02E+08
MFC-GL	ESER-EFS	7.07E+12	1.59E+08	7.40E+18	8.09E+08	2.57E+08
MFC-GL	ESER-ATO	2.68E+12	6.05E+07	2.81E+18	3.07E+08	9.77E+07
MFC-GL	ESER-MOU	1.36E+13	3.08E+08	1.43E+19	1.56E+09	4.97E+08
MFC-GL	ESER-BLU	1.43E+13	3.22E+08	1.49E+19	1.63E+09	5.20E+08
MFC-GL	ESER-TER	3.64E+12	8.22E+07	3.81E+18	4.17E+08	1.33E+08
MFC-GL	ESER-HOW	2.43E+13	5.48E+08	2.55E+19	2.78E+09	8.86E+08
MFC-GL	MFC Parking Lot	1.43E+11	3.22E+06	1.49E+17	1.63E+07	5.20E+06
MFC-GL	MFC Guard Shack	1.90E+11	4.29E+06	1.99E+17	2.17E+07	6.92E+06

a. This assumes that the entire source term for the MFC reported for 2012 is released at ground level. The source terms are 2.31E−11 Ci/yr for Am-241, 1.14E−05 Ci/yr for Cs-137, 1.42E−17 Ci/yr for Pu-238, 3.34E−07 Ci/yr for Pu-239, and 5.28E−06 Ci/yr for Sr-90.

A-3.4 Radioactive Waste Management Complex

The Radioactive Waste Management Complex (RWMC), located in the southwestern corner of the INL Site, is a controlled-access area with a primary mission to dispose of INL-generated low-level radioactive waste and to temporarily store contact-handled and remote-handled transuranic waste that will be shipped to other designated facilities for disposal. The Accelerated Retrieval Project (ARP), regulated under CERCLA, is removing targeted waste from the subsurface disposal area (SDA), disposing of transuranic waste at an offsite facility, and remediating and closing the SDA.

Current operations at the RWMC include the Advanced Mixed Waste Treatment Program (AMWTP). The AMWTP includes the retrieval of mixed transuranic waste from temporary storage, characterizing the waste, treating the waste to meet disposal criteria, and packaging the waste for shipment to the Waste Isolation Pilot Plant in Carlsbad, New Mexico. Radiological air emissions from the AMWTP may result from the retrieval, characterization, and treatment of transuranic waste, alpha-contaminated low-level mixed waste (alpha LLMW), and low-level mixed waste (LLMW).

In 2014, air emissions at the RWMC, which contributed at least 1% of the total estimated dose to the MEI, were primarily from activities associated with the ARP, the Drum Treatment Facility, and tritium releases from buried beryllium blocks. Table A-9 shows the results of calculations using the entire RWMC source term for 2013 (including the AMWTP) as a ground level release. According to these calculations, most of the fugitive releases would be deposited close to the RWMC and Am-241 could be detected within 7 years. The same radionuclide would be detectable at EBR-1 after 700 years. It is important to note that environmental surveillance is conducted by CWI as part of waste management operations within the RWMC and includes continual air sampling along the perimeter of the facility, as well as soil sampling within the waste disposal area on a biennial basis. These data are not discussed here.

Table A-9. Estimated time (years) to achieve build-up concentration in surface soil for 30 µm particles released continuously for 1 year at ground level from the Radioactive Waste Management Complex. The five shortest time periods are highlighted in yellow.

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
RWMC-GL	BEA-TRA	5.22E+03	4.80E+07	8.54E+04	5.40E+03	3.25E+07
RWMC-GL	BEA-CPP	4.52E+03	4.15E+07	7.39E+04	4.67E+03	2.82E+07
RWMC-GL	BEA-RWMC	6.58E+00	6.04E+04	1.08E+02	6.80E+00	4.10E+04
RWMC-GL	BEA-VAN	1.61E+03	1.48E+07	2.64E+04	1.67E+03	1.01E+07
RWMC-GL	BEA-IRC	4.68E+06	4.30E+10	7.65E+07	4.84E+06	2.92E+10
RWMC-GL	BEA-BLKFT	1.01E+07	9.31E+10	1.66E+08	1.05E+07	6.32E+10
RWMC-GL	BEA-SMC	1.97E+05	1.81E+09	3.22E+06	2.04E+05	1.23E+09
RWMC-GL	BEA-GATE	8.97E+04	8.24E+08	1.47E+06	9.27E+04	5.59E+08
RWMC-GL	BEA-ARA	1.10E+05	1.01E+09	1.80E+06	1.14E+05	6.88E+08
RWMC-GL	BEA-REST	1.66E+03	1.52E+07	2.71E+04	1.71E+03	1.03E+07
RWMC-GL	BEA-IF	4.37E+06	4.02E+10	7.15E+07	4.52E+06	2.73E+10
RWMC-GL	BEA-NRF	2.20E+04	2.02E+08	3.60E+05	2.28E+04	1.37E+08
RWMC-GL	BEA-RTC	6.25E+03	5.74E+07	1.02E+05	6.45E+03	3.89E+07
RWMC-GL	BEA-EBR	7.39E+02	6.78E+06	1.21E+04	7.64E+02	4.60E+06
RWMC-GL	BEA-MFC	1.91E+05	1.75E+09	3.11E+06	1.97E+05	1.19E+09
RWMC-GL	BEA-SUGAR	2.24E+06	2.05E+10	3.65E+07	2.31E+06	1.39E+10
RWMC-GL	BEA-PBF	2.87E+04	2.63E+08	4.69E+05	2.96E+04	1.79E+08
RWMC-GL	BEA-INTEC	5.27E+03	4.84E+07	8.62E+04	5.45E+03	3.29E+07
RWMC-GL	BEA-CFA	6.73E+03	6.18E+07	1.10E+05	6.95E+03	4.19E+07
RWMC-GL	BEA-EFS	9.14E+03	8.39E+07	1.49E+05	9.44E+03	5.69E+07
RWMC-GL	BEA-CRATE	2.39E+06	2.20E+10	3.91E+07	2.47E+06	1.49E+10
RWMC-GL	ESER-VAN	1.62E+03	1.48E+07	2.64E+04	1.67E+03	1.01E+07
RWMC-GL	ESER-CRA	2.39E+06	2.19E+10	3.91E+07	2.47E+06	1.49E+10
RWMC-GL	ESER-ARC	9.20E+05	8.45E+09	1.50E+07	9.51E+05	5.73E+09
RWMC-GL	ESER-SUG	2.24E+06	2.05E+10	3.65E+07	2.31E+06	1.39E+10
RWMC-GL	ESER-IDA	4.37E+06	4.02E+10	7.15E+07	4.52E+06	2.72E+10
RWMC-GL	ESER-DUB	1.02E+06	9.38E+09	1.67E+07	1.06E+06	6.36E+09
RWMC-GL	ESER-MON	3.63E+05	3.34E+09	5.94E+06	3.75E+05	2.26E+09

Table A-9. (continued).

SOURCE	SAMPLER	Am-241	Cs-137	Pu-238	Pu-239	Sr-90
RWMC-GL	ESER-FAA	7.19E+05	6.61E+09	1.18E+07	7.43E+05	4.48E+09
RWMC-GL	ESER-MAI	4.93E+04	4.52E+08	8.05E+05	5.09E+04	3.07E+08
RWMC-GL	ESER-EFS	9.13E+03	8.39E+07	1.49E+05	9.44E+03	5.69E+07
RWMC-GL	ESER-ATO	5.08E+05	4.66E+09	8.30E+06	5.25E+05	3.16E+09
RWMC-GL	ESER-MOU	1.01E+07	9.32E+10	1.66E+08	1.05E+07	6.32E+10
RWMC-GL	ESER-BLU	1.62E+06	1.49E+10	2.65E+07	1.68E+06	1.01E+10
RWMC-GL	ESER-TER	1.91E+05	1.76E+09	3.13E+06	1.98E+05	1.19E+09
RWMC-GL	ESER-HOW	2.95E+05	2.71E+09	4.83E+06	3.05E+05	1.84E+09

a. This assumes that the entire source term for the RWMC (including AMWTP) reported for 2012 is released at ground level. The source terms are 1.13E−04 Ci/yr for Am-241, 1.37e−7 Ci/yr for Cs-137, 2.86E−18 Ci/yr for Pu-238, 4.48E−17 Ci/yr for Pu-239, and 1.51E−07 Ci/yr for Sr-90.

A-3.5 Summary of Deposition Modeling Results

In most cases, detection of radionuclides of concern is not possible within INL Site boundaries for many, many years, assuming continuous releases from the facilities analyzed, with the exception of Am-241 in soil at the RWMC air monitor (BEA-RWMC). Releases from the ARP facilities could be detected within 7 years in the soil. INL Site releases are never detected at offsite locations. Based on the deposition modeling, it is apparent that soil sampling for routine monitoring of current air emissions from INL Site facilities is not necessary on an annual to 3-year basis, as recommended in DOE (2015). Radionuclides released from INL Site activities or accidental releases are much more likely to be observed in air monitor filters than in soil.

A-4 SAMPLING TECHNIQUES

Both ex-situ (physical soil sampling with laboratory analysis) and field measurements by in-situ gamma spectroscopy (ISGS) have been used at INL in the past and they have complementary roles in assessing radionuclide inventories in surface soils. The random analytical uncertainty in ISGS field methods can exceed that for ex situ measurements made in the controlled laboratory conditions. However, for ex-situ measurements, heterogeneous contamination can result in higher levels of random sampling uncertainty. At the same time, ex-situ techniques can detect radionuclides that ISGS cannot and ex-situ data can provide accurate depth profiles so that collocated ISGS data can be modelled with greater confidence. Additionally, because in situ measurements are substantially less costly, a greater number of measurements can be made potentially reducing the uncertainty on the mean over a larger area than is possible using ex situ methods alone.

Soil sampling with laboratory analysis has been conducted at locations outside the INL Site since the program was established in 1978 by RESL. The process described below is used to produce a relatively homogeneous sample from which gamma analysis and then a relatively small aliquot (10 g) may be drawn for radiochemical analyses. A standard 10-m square soil sampling grid is used to collect composite samples at each location. A core sampler 10 cm in diameter and 5 cm deep is driven into the soil at each corner and at the center of the grid for a total of five sub-samples (Figure 11).The five sub-samples are combined to generate a single 0–5 cm composite sample. This process is repeated at the same collection points to obtain a 5–10 cm depth composite sample. The composited samples are thoroughly mixed and passed through a 35 mesh (0.5 mm) sieve. A 500-mL Marinelli Beaker is filled with the sieved material for gamma analysis. Approximately 50-g aliquots are split from the composite samples and placed in pre-weighed 70-mL sample containers. These samples are sent to the radiochemistry laboratory for analysis of Am-241, plutonium isotopes and Sr-90.

The soil monitoring program also employs ISGS to identify gamma-emitting radionuclides in soil. ISGS is a sensitive and selective method for detecting manmade gamma-emitting radionuclides, particularly Cs-137. The major advantage of this method is a large number of analyses can be carried out in a relatively short time compared to the effort required for soil sampling, preparation, and analyses (NCRP 1999). By measuring a larger volume of soil, ISGS results are commonly less affected by small-scale sampling variability introduced by physical soil sampling. ISGS is particularly useful because Cs-137 is the most prevalent manmade radionuclide in surface soil and it is widely used as an indicator species for general contamination trends; however, only gamma-emitting radionuclides like Cs-137can be detected, precluding radionuclides like Sr-90 (a beta-emitting radionuclide) and Pu-239/240 (an alpha-emitting radionuclide). In addition, the detector usually cannot distinguish the location of the radionuclides in the soil (i.e., the horizontal or vertical distribution).

Because Cs-137 is the predominant anthropogenic radionuclide in the known radionuclide-contaminated soil areas at the INL Site, and because it is relatively easy to detect even at low concentrations using the in-situ instruments, ISGS soil surveillance focuses on Cs-137. NCRP (1999) states that the horizontal distribution can be assumed to be fairly uniformly distributed within the field of view and data from a limited number of soil samples can provide sufficient information of the depth profile to allow one to use ISGS as a primary means of charactering the concentration of soil in a contaminated site. Between 2006 and 2010, a series of studies were conducted to compare in-situ gamma analysis results with soil sampling and laboratory analysis at various onsite sampling locations. The methodology was that used by Walker (2000). For example, at 34 locations in 2007, 10 split-spoon samples were collected from a predetermined array centered at the in-situ location out to 30 ft. Each of the 10 split-spoon samples were removed and divided by 1-in. depth to form 12 composite samples. Each of these 1-in. composite samples from the 34 in-situ locations were then analyzed for gamma emitting radionuclides in the laboratory to determine the Cs-137 depth profiles for the in-situ measurement technique. These data are still used for today's in-situ measurements and data analysis.

ISGS technology is limited in the case of areas contaminated solely by transuranic (TRU) radionuclides or Sr-90. Transuranic radionuclides have very low-energy photon emissions so that low levels would be difficult to detect in the field, except in the case of unplanned releases with concentrations that are measureable with ISGS. Sr-90 cannot be detected with ISGS technology.

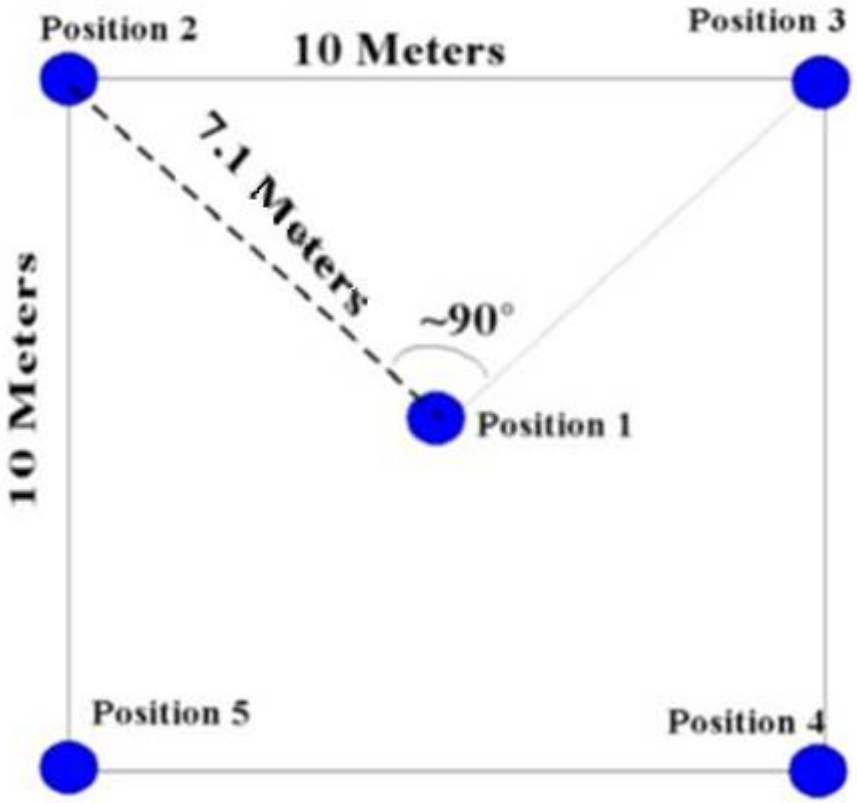

Figure A-16. Soil sampling grid.

Appendix B

Statistical Analysis Associated with Soil Monitoring Data Quality Objectives

The Data Quality Objectives (DQOs) reference a great deal of statistical concepts and techniques because background levels used to establish radionuclide inventory in the soils were computed using statistical methods. This section provides a detailed explanation of the methods used to obtain the background levels, justification for their selection, and information on how to use and update them. The primary statistical method that is used in these DQOs is upper tolerance limits (UTLs) to compute background levels. The following sections discuss each of these methods separately.

B-1. BACKGROUND LEVELS

Background levels were computed for each of the near facility and distant areas that are sampled under the monitoring program. Area-specific background levels are necessary for this program because radionuclide concentrations can vary widely in each area due to variation in natural radiation and localized activities. Thus, historical data obtained from each of the areas was used to compute a UTL for each area that can be used as a background level.

B-1.1 Use of Background Levels

The background level is computed using a 99%/95% UTL. The 99%/95% UTL is a value such that 99% of the data are less than the UTL with 95% confidence. Thus, a UTL computed using background data is designed to cover all but a small percentage of the background population measurements (EPA 2009). It is an appropriate measure for providing an upper threshold on measurements obtained from an area and is often used to construct a background level for the area. Individual measurements are compared to the UTL. If the UTL is exceeded, that measurement may indicate an unusually high concentration for that area.

Approximately 1% of the doses are expected to be greater than the UTL when there is no actual increase in dose. Therefore, when a measured concentration exceeds the UTL it should not be directly assumed that radionuclide concentrations have increased. Rather, the concentration should be compared to other concentrations in the area and to concentrations previously obtained from that sampling location to provide context. The UTL provides a threshold that allows identification of concentrations that may alert the monitoring program to a potential release, but an exceedance does not always indicate an increase in radionuclide concentration for that area.

It is important that background levels remain relevant to the area in which they describe. Therefore, UTLs should be updated approximately every 5 years to ensure the background levels remain relevant to current area radionuclide concentrations. Data should be carefully examined to ensure that the data used to construct the UTL are indicative of current site conditions.

B-1.2 Computation of Background Levels

UTLs were computed using ProUCL Version 5.0.0 (EPA 2013). The data were assessed to determine if they were normally distributed, gamma distributed, or did not have a discernable distribution (non-parametric). The appropriate UTL was selected based on the distribution of the data. The ProUCL Technical Guide (EPA 2013) contains the details on how UTLs are computed and selected. Data were also examined for outliers or other trends that may bias the UTL in a manner that is not indicative of the true background for the area. All data obtained from 1972 to 2014 were used to construct the UTLs unless data from those years are not available, or the data were deemed to be unusable due to quality issues. If the minimum detectable activity (MDA) for a sample was larger than the largest detected concentration it was removed from the data set. Data were obtained from RESL sampling activities (INEL 1994) and from other soil sampling results obtained under the soil monitoring program dating from 1972 to 2014.

UTLs require a minimum of 8 data points to be computed. Thus, areas where fewer than 8 dose measurements are available did not have background levels computed. UTLs will need to be computed for those areas once a minimum of 8 data points are available.

The UTLs for each of the near facility areas are listed in Tables B-1 through B-6. The UTLs and summary statistics for the distant regions are listed in Tables B-7 through B-16. The tables also lists how many points were used to compute the background level for that area and summary statistics. If sufficient data were not available to compute a UTL, it is noted on the table along with the number of measurements currently available for that area.

Table B-1. Summary statistics for data collected at ARA.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	93	10	<0.003	0.401	NA[b]	NA[b]	NA[b]	0.401c
Co-60	157	62	<0.00081	0.37	0.065	0.0604	Gamma	0.242
Cs-134	213	70	<0.0093	1.687	0.0862	0.146	Non-Parametric	1.687
Cs-134 (1 Outlier Removed)[d]	212	70	<0.0093	0.667	0.0754	0.0621	Non-Parametric	0.667
Cs-134 (2 Outliers Removed)[e]	211	70	<0.0093	0.306	0.0713	0.0383	Non-Parametric	0.306
Cs-137	432	95	<0.065	373	5.879	25.37	Non-Parametric	133
Eu-152	92	50	<0.0402	1.248	0.446	0.335	Non-Parametric	1.248
Pu-238	14	36	<0.0018	0.025	NA[b]	NA[b]	NA[b]	0.025[c]
Pu-239/240	13	100	0.009	0.047	0.0192	0.0105	Normal	0.0577
Sb-125	93	49	<0.0435	1.415	0.365	0.274	Non-Parametric	1.415
Sr-90	16	100	0.38	57	7.381	14.8	Non-Parametric	57
Sr-90 (1 Outlier Removed)[f]	15	100	0.38	22.3	4.073	6.853	Non-Parametric	22.3
U-234	192	46	<0.714	201.4	69.17	54.57	Non-Parametric	201.4
U-235	270	53	<0.063	3.7	0.934	0.895	Non-Parametric	3.677
U-238	246	47	<0.131	238.5	27.39	43.6	Non-Parametric	216.9

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
d. Outlier at ARA-37 in 2007
e. Outlier at ARA-65 in 2007
f. Outlier at 0°C 500 in 1977

Table B-2. Summary statistics for data collected at ATR.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	41	22	<0.002	0.49	NA[b]	NA[b]	NA[b]	0.49[c]
Co-60	102	84	<0.00278	66.4	1.806	8.523	Non-Parametric	66.4
Co-60 (1 Outlier Removed)[d]	101	84	<0.00278	40.3	1.046	4.822	Non-Parametric	40.3
Co-60 (2 Outliers Removed)[e]	100	84	<0.00278	18.2	0.578	2.179	Non-Parametric	18.2
Cs-134	63	60	<0.0117	0.172	0.0572	0.0393	Normal	0.167
Cs-137	181	100	0.0759	223	3.318	21.85	Non-Parametric	223
Eu-152	31	6	<0.066	0.775	NA[b]	NA[b]	NA[b]	0.775[c]
Pu-238	12	33	<0.003	0.009	0.00424	0.00196	Normal	0.0116
Pu-239/240	12	100	0.012	0.056	0.0261	0.0125	Normal	0.0728
Sb-125	33	12	<0.087	0.725	NA[b]	NA[b]	NA[b]	0.725[c]
Sb-125 (1 Outlier Removed)[f]	32	9	<0.087	0.218	NA[b]	NA[b]	NA[b]	0.218[c]
Sr-90	29	100	0.41	1.2	0.761	0.191	Normal	1.349
U-234	43	70	<2.277	195.3	108.5	53.74	Non-Parametric	195.3
U-235	90	34	<0.131	2.65	0.733	0.631	Gamma	1.284
U-238	82	27	<0.594	64.21	18.74	13.43	Gamma	66.59
U-238 (1 Outlier Removed)[g]	81	26	<0.594	34.68	5.409	8.339	Normal	28.13

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
d. Outlier at 4.3 in 1983.
e. Outlier at 4.2 in 1990.
f. Outlier at 2.3 in 2011.
g. Outlier at 8.2 in 2006.

Table B-3. Summary statistics for data collected at INTEC.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	204	12	<0.0041	0.9	NA[b]	NA[b]	NA[b]	0.9[c]
Am-241 (1 Outlier Removed)[d]	202	12	<0.0041	0.67	NA[b]	NA[b]	NA[b]	0.67[c]
Co-60	268	53	<0.000847	1.995	0.0619	0.191	Non-Parametric	1.1
Co-60 (1 Outlier Removed)[e]	267	53	<0.000847	1.1	0.0482	0.099	Non-Parametric	0.4
Co-60 (2 Outliers Removed)[f]	266	53	<0.000847	0.4	0.0407	0.0431	Non-Parametric	0.155
Co-60 (3 Outliers Removed)[g]	265	52	<0.000847	0.155	0.0381	0.0304	Non-Parametric	0.149
Cs-134	219	68	<0.0128	1.1	0.122	0.14	Non-Parametric	1.1
Cs-137	494	98	<0.00761	52.7	3.544	6.646	Non-Parametric	40
Eu-152	182	47	<0.0509	2.096	0.422	0.345	Non-Parametric	2.096
Pu-238	38	84	<0.0027	0.387	0.0529	0.0835	Non-Parametric	0.387
Pu-238 (1 Outlier Removed)[h]	37	84	<0.0027	0.255	0.0421	0.058	Non-Parametric	0.255
Pu-239/240	39	90	<0.003	0.73	0.0505	0.132	Non-Parametric	0.73
Pu-239/240 (1 Outlier Removed)[i]	38	89	<0.003	0.37	0.0306	0.0605	Non-Parametric	0.37
Pu-239/240 (2 Outliers Removed)[j]	35	94	<0.003	0.038	0.0194	0.00841	Normal	0.0445
Sb-125	181	44	<0.0606	1.492	0.373	0.222	Non-Parametric	1.492
Sb-125 (1 Outlier Removed)[k]	180	43	<0.0606	1.075	0.359	0.183	Gamma	1.331
Sr-90	11	100	0.39	10.6	2.966	3.098	Normal	14.9

Table B-3. (continued).

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Sr-90 (1 Outlier Removed)[l]	10	100	0.39	5.7	2.203	1.883	Normal	9.698
U-234	203	14	<6.501	669.5	NA[b]	NA[b]	NA[b]	669.5[c]
U-234 (1 Outlier Removed)[m]	119	21	<6.501	171	NA[b]	NA[b]	NA[b]	171[c]
U-235	311	43	<0.044	3.598	0.69	0.637	Non-Parametric	3.213
U-238	299	59	<0.237	256.3	15.62	37.22	Non-Parametric	227.9

ND = nondetect
a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
d. Outlier at B80 in 2007. An additional ND was removed because the MDA was higher than the next detected value.
e. Outlier at B69 in 2007.
f. Outlier at B37 in 1974.
g. Outlier at B38 in 1974.
h. Outlier at B96 in 1989.
i. Outlier at B96 in 1989.
j. Outlier at A17 in 1982. Two additional NDs were removed because the MDAs were higher than the next detected value.
k. Outlier at B69 in 2007.
l. Outlier at A46 in 1989.
m. Outlier at B36 in 2007. Forty-six additional NDs were removed because the MDAs were higher than the next detected value.

Table B-4. Summary statistics for data collected at MFC.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	9	44	<0.0042	0.008	NA[b]	NA[b]	NA[b]	0.008[c]
Co-60	51	31	<0.000939	0.203	0.0323	0.0548	Normal	0.188
Cs-134	87	61	<0.00905	0.131	0.0414	0.0275	Normal	0.116
Cs-137	156	98	<0.0523	1.99	0.455	0.37	Non-Parametric	1.99

Table B-4. (continued).

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Eu-152	38	8	<0.0449	0.276	NA[b]	NA[b]	NA[b]	0.276[c]
Eu-152 (1 Outlier Removed)[d]	37	5	<0.0449	0.145	NA[b]	NA[b]	NA[b]	0.145[c]
Pu-238	9	11	<0.0021	0.01	NA[b]	NA[b]	NA[b]	0.01[c]
Pu-239/240	9	100	0.009	0.032	0.0198	0.00698	Normal	0.0487
Sb-125	38	16	<0.0484	0.393	NA[b]	NA[b]	NA[b]	0.393[c]
Sb-125 (1 Outlier Removed)[e]	37	14	<0.0484	0.226	NA[b]	NA[b]	NA[b]	0.226[c]
Sr-90	9	100	0.45	0.74	0.578	0.0907	Normal	0.953
U-234	86	47	<6.782	328.9	81.52	72.2	Gamma	498.1
U-234 (1 Outlier Removed)[f]	81	48	<6.782	238.8	75.18	60.82	Gamma	411.8
U-235	101	38	<0.161	2.289	0.749	0.796	Non-Parametric	3.29
U-238	95	25	<1.18	164.5	29.58	34.12	Gamma	85.44
U-238 (1 Outliers Removed)[g]	92	25	<1.18	87.7	7.381	13.44	Normal	43.64
U-238 (3 Outliers Removed)[h]	91	24	<1.18	45.31	6.498	10.54	Normal	34.94

ND = nondetect

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
d. Outlier at EBRII-10 in 2013.
e. Outlier at EBRII-11 in 2013.
f. Outlier at TREAT-4 in 2007. Four additional NDs were removed because the MDAs were higher than the next detected value.
g. Outlier at TREAT-1 in 2010. Two additional NDs were removed because the MDAs were higher than the next detected value.
h. Outlier at TREAT-3 in 2010. Two additional NDs were removed because the MDAs were higher than the next detected value.

Table B-5. Summary statistics for data collected at RWMC.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	156	76	<0.00195	15.27	0.435	1.658	Non-Parametric	15.27
Am-241 (1 Outlier Removed)[b]	155	76	<0.00195	8.4	0.309	0.936	Non-Parametric	8.4
Co-60	165	16	<0.00242	53	NA[c]	NA[c]	NA[c]	53[d]
Cs-134	84	70	<0.0152	0.142	0.0488	0.0247	Normal	0.116
Cs-137	286	83	<0.0525	3.76	0.5	0.55	Non-Parametric	3.54
Eu-152	79	58	<0.0627	1.403	0.37	0.273	Non-Parametric	1.403
Pu-238	112	38	<0.0005	0.058	0.0093	0.0116	Non-Parametric	0.058
Pu-238 (2 Outliers Removed)[e]	109	38	<0.0005	0.02	0.00693	0.0041	Non-Parametric	0.02
Pu-239/240	112	96	<0.0027	2.57	0.09	0.263	Non-Parametric	2.57
Pu-239/240 (1 Outlier Removed)[f]	111	96	<0.0027	0.644	0.0668	0.106	Non-Parametric	0.644
Sb-125	86	53	<0.0897	0.672	0.2	0.133	Normal	0.561
Sr-90	20	100	0.36	2.52	0.861	0.488	Normal	2.47
Sr-90 (1 Outlier Removed)[g]	19	100	0.36	1.31	0.774	0.301	Normal	1.777
U-234	29	100	0.86	1.18	1.045	0.0671	Normal	1.252
U-235	98	82	<3.03	188.2	33.95	29.42	Non-Parametric	188.2

Table B-5. (continued).

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
U-238	216	81	<0.043	11.9	0.656	1.154	Non-Parametric	11.9
U-238 (1 Outlier Removed)[h]	215	80	<0.043	5.797	0.591	0.774	Non-Parametric	5.797

ND = nondetect
a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. Outlier at 2-4 in 2013.
c. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
d. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
e. Outlier at 5-1 in 1973 and 7-3 in 1974. An additional ND was removed because the MDA was higher than the next detected value.
f. Outlier at 5-1 in 1973.
g. Outlier at 3-2 in 1978.
h. Outlier at 5-4 in 2010.

Table B-6. Summary statistics for data collected at TAN.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	11	36	<0.003	0.086	NA[b]	NA[b]	NA[b]	0.086[c]
Am-241 (1 Outlier Removed)[d]	10	30	<0.003	0.029	NA[b]	NA[b]	NA[b]	0.029[c]
Co-60	47	28	<0.00306	0.21	NA[b]	NA[b]	NA[b]	0.21[c]
Co-60 (1 Outlier Removed)[e]	46	26	<0.00306	0.131	NA[b]	NA[b]	NA[b]	0.131[c]
Cs-134	62	65	<0.0144	0.108	0.0461	0.0251	Normal	0.116
Cs-137	135	99	<0.0164	23.8	0.879	2.443	Non-Parametric	23.8
Cs-137 (1 Outlier Removed)[f]	134	99	<0.0164	12.7	0.707	1.415	Non-Parametric	12.7
Eu-152	28	7	<0.0483	0.155	NA[b]	NA[b]	NA[b]	0.155[c]
Pu-238	11	18	<0.003	0.014	NA[b]	NA[b]	NA[b]	0.014[c]

Table B-6. (continued).

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Pu-239/240	11	100	0.008	0.029	0.0155	0.00712	Non-Parametric	0.029
Sb-125	28	11	<0.0747	0.804	NA[b]	NA[b]	NA[b]	0.804[c]
Sb-125 (1 Outlier Removed)[g]	27	7	<0.0747	0.686	NA[b]	NA[b]	NA[b]	0.686[c]
Sb-125 (2 Outliers Removed)[h]	26	4	<0.0747	0.267	NA[b]	NA[b]	NA[b]	0.267[c]
Sr-90	8	100	039	1.15	0.636	0.257	Normal	1.754
U-234	62	55	<5.891	413.9	64.66	71.75	Non-Parametric	413.9
U-234 (1 Outlier Removed)[i]	36	92	<5.891	111.3	54.07	37.17	Non-Parametric	111.3
U-235	83	40	<0.129	3.193	0.845	0.829	Non-Parametric	3.193
U-238	69	29	<1.368	111.4	NA[b]	NA[b]	NA[b]	111.4[c]
U-238 (1 Outlier Removed)[j]	68	28	<1.368	86.8	NA[b]	NA[b]	NA[b]	86.8[c]

ND = nondetect
a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
d. Outlier at TSF-6 in 1988.
e. Outlier at TSF-3 in 1981.
f. Outlier at TSF-3 in 2007.
g. Outlier at TSF-9 in 2014.
h. Outlier at L2-76 in 2011.
i. Outlier at TSF-8 in 2007. Twenty-five additional NDs were removed because the MDAs were higher than the next detected value.
j. Outlier at IET-8 in 2007.

Table B-7. Summary statistics for data collected at Atomic City.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	11	64	<0.00569	0.02	0.00919	0.00484	Normal	0.0278
Cs-137	21	95	<0.0788	0.81	0.349	0.203	Normal	1.012
Pu-238	10	80	<0.00211	0.014	0.00536	0.00406	Normal	0.0227
Pu-239/240	11	91	<0.011	0.041	0.0234	0.00881	Normal	0.0573
Sr-90	9	100	0.0453	0.42	0.225	0.123	Normal	0.734

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.

Table B-8. Summary statistics for data collected at Blackfoot.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	11	91	<0.00423	0.0209	0.00952	0.00498	Gamma	0.0405
Cs-137	20	100	0.0347	1.3	0.408	0.322	Gamma	2.697
Pu-238	12	67	<0.002	0.154	0.028	0.0512	Non-Parametric	0.154
Pu-239/240	12	92	<0.0019	0.0885	0.0228	0.0229	Gamma	0.239
Sr-90	11	91	<0.0115	0.27	0.0964	0.0783	Normal	0.398

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.

Table B- 9. Summary statistics for data collected at Butte City.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	11	82	<0.002	0.0942	0.0173	0.0291	Non-Parametric	0.0942
Cs-137	21	100	0.0698	0.96	0.373	0.268	Normal	1.248
Pu-238	11	73	<0.00166	0.0192	0.00835	0.00657	Normal	0.0337
Pu-239/240	10	80	<0.00261	0.03	0.0179	0.00771	Normal	0.0487
Sr-90	9	100	0.0448	0.31	0.177	0.177	Normal	0.56

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.

Table B-10. Summary statistics for data collected at Carey.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	10	60	<0.00913	0.0556	NA[b]	NA[b]	NA[b]	0.0556[c]
Cs-137	21	100	0.0876	0.759	0.347	0.189	Normal	0.963
Pu-238	11	82	<0.002	0.0336	0.0096	0.0091	Normal	0.0447
Pu-239/240	11	91	<0.00867	0.0442	0.0241	0.0112	Normal	0.0671
Sr-90	11	82	<0.0447	0.36	0.145	0.101	Normal	0.534

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.

Table B-11. Summary statistics for data collected at FAA.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	8	88	<0.00781	0.0227	0.013	0.00518	Normal	0.0356
Cs-137	22	95	<0.109	1.38	0.506	0.346	Normal	1.623
Pu-238	10	80	<0.0017	0.0517	0.0142	0.0151	Normal	0.0743
Pu-239/240	10	100	0.0124	0.0124	0.0284	0.0137	Normal	0.0829
Sr-90	11	91	<0.116	0.57	0.247	0.145	Normal	0.806

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.

Table B-12. Summary statistics for data collected at Howe.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	9	33	<0.00424	0.01	NA[b]	NA[b]	NA[b]	0.01[c]
Cs-137	22	100	0.074	0.525	0.264	0.135	Normal	0.7
Pu-238	9	44	<0.001	0.0119	NA[b]	NA[b]	NA[b]	0.0119[c]
Pu-239/240	9	89	<0.00561	0.02	0.0122	0.00559	Normal	0.0353
Sr-90	9	100	0.0204	0.35	0.157	0.124	Normal	0.67

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.

Table B-13. Summary statistics for data collected at Monteview.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	10	60	<0.00335	0.0194	NA[b]	NA[b]	NA[b]	0.0194[c]
Cs-137	22	100	0.1	1.11	0.357	0.219	Non-Parametric	1.11
Cs-137 (1 Outlier Removed)[d]	21	100	0.1	0.82	0.321	0.144	Gamma	0.986
Pu-238	10	80	<0.000619	0.0227	0.00685	0.00706	Normal	0.035
Pu-239/240	11	73	<0.000619	0.03	0.0152	0.00844	Normal	0.0477
Sr-90	9	89	<0.0297	0.17	0.0827	0.0447	Normal	0.268

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.
d. Outlier in 1996.

Table B-14. Summary statistics for data collected at Mud Lake.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	23	78	<0.00166	0.0875	0.00989	0.0198	Non-Parametric	0.0875
Cs-137	45	100	5.04E−02	0.59	0.236	0.134	Normal	0.624
Pu-238	21	57	<0.002	0.044	0.0115	0.0115	Gamma	0.0514
Pu-239/240	22	86	<0.00183	0.05	0.0143	0.0136	Gamma	0.0892
Sr-90	17	88	<0.0243	0.32	0.0872	0.0183	Normal	0.335

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.

Table B-15. Summary statistics for data collected at Blue Dome/Birch Creek Hydro.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	10	100	0.007	0.0268	0.0126	0.00673	Non-Parametric	0.0268
Cs-137	17	100	0.0839	1.3	0.494	0.319	Normal	1.583
Pu-238	11	45	<0.000617	0.0144	NA[b]	NA[b]	NA[b]	0.0144[c]
Pu-239/240	10	80	<0.012	0.043	0.025	0.0107	Normal	0.0677
Sr-90	9	100	0.023	0.52	0.266	0.156	Normal	0.911

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.
b. A minimum of 8 detects and 30% of the data detected are needed to estimate a mean, standard deviation, assess the distribution of the data, or compute a UTL.
c. Insufficient detected data are available to compute a UTL. The maximum detected value was used as the UTL.

Table B-16. Summary statistics for data collected at St. Anthony.

Radionuclide	N	Percent Detected	Minimum[a] (pCi/g)	Maximum (pCi/g)	Mean (pCi/g)	Standard Deviation (pCi/g)	Distribution of the Data	UTL (pCi/g)
Am-241	10	100	0.00543	0.0287	0.0125	0.00746	Normal	0.0422
Cs-137	21	100	0.0752	1.27	0.657	0.337	Normal	1.758
Pu-238	11	82	<0.00147	0.0657	0.0149	0.0184	Normal	0.0857
Pu-239/240	10	100	0.00147	0.06	0.0257	0.0175	Normal	0.0954
Sr-90	9	100	0.0432	0.56	0.242	0.17	Normal	0.948

a. Less than sign indicates that the actual minimum concentration is unknown, but it known to be less than a certain value.

Appendix C
Data Used for Baseline Inventory

Tables C-1 and C-2 contain the radionuclide measurements that were used to compute background levels used to establish a baseline inventory for near facility and distant sites.

Table C-1. Radionuclides concentrations in surface soils associated with ARA.

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	0° 250’	1977	0.01	0.002	0.006	—
Am-241	22.5° 250’	1977	0.02	0.002	0.006	—
Am-241	225° 500’	1977	0.002	0.005	0.015	U
Am-241	270° 1500’	1977	0.003	0.001	0.003	—
Am-241	270° 500’	1977	0.003	0.001	0.003	—
Am-241	45° 1500’	1977	0.004	0.001	0.003	—
Am-241	45° 250’	1977	0.005	0.003	0.009	U
Am-241	45° 2500’	1977	0.005	0.001	0.003	—
Am-241	45° 500’	1977	0.0054	0.0016	0.0048	—
Am-241	90° 500’	1977	0.008	0.002	0.006	—
Am-241	0° 1000’	1985	0.003	0.002	0.006	U
Am-241	22.5° 2500’	1985	0.006	0.003	0.009	U
Am-241	67.5° 2000’	1985	0.003	0.002	0.006	U
Am-241	67.5° 500’	1985	0	0.002	0.006	U
Am-241	ARA-0	2007	0.2213	0.0895	0.2685	U
Am-241	ARA-11	2007	0.401	0.126	0.378	—
Am-241	ARA-14	2007	0.1272	0.078	0.234	U
Am-241	ARA-19	2007	0.07257	0.0535	0.1605	U
Am-241	ARA-2	2007	0.1254	0.062	0.186	U
Am-241	ARA-21	2007	0.1662	0.063	0.189	U
Am-241	ARA-23	2007	0.2921	0.1105	0.3315	U
Am-241	ARA-24	2007	0.05789	0.03215	0.09645	U
Am-241	ARA-36	2007	0.2042	0.0885	0.2655	U
Am-241	ARA-37	2007	0.1176	0.08	0.24	U
Am-241	ARA-4	2007	0.1533	0.078	0.234	U
Am-241	ARA-43	2007	0.02696	0.057	0.171	U
Am-241	ARA-45	2007	0.07517	0.0525	0.1575	U
Am-241	ARA-46	2007	0	0.04055	0.12165	U
Am-241	ARA-47	2007	0.03163	0.0279	0.0837	U
Am-241	ARA-48	2007	0.1157	0.0715	0.2145	U
Am-241	ARA-49	2007	0.101	0.04885	0.14655	U
Am-241	ARA-5	2007	0.1349	0.0725	0.2175	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	ARA-51	2007	-0.01711	0.063	0.189	U
Am-241	ARA-56	2007	0.06139	0.0414	0.1242	U
Am-241	ARA-57	2007	0.06861	0.056	0.168	U
Am-241	ARA-58	2007	0.01031	0.059	0.177	U
Am-241	ARA-59	2007	0.07199	0.0585	0.1755	U
Am-241	ARA-6	2007	0.1231	0.071	0.213	U
Am-241	ARA-60	2007	0.002381	0.04195	0.12585	U
Am-241	ARA-65	2007	0.08867	0.05	0.15	U
Am-241	ARA-7	2007	0.05277	0.05	0.15	U
Am-241	ARA-73	2007	0.01521	0.081	0.243	U
Am-241	ARA-74	2007	0.0003457	0.03885	0.11655	U
Am-241	ARA-75	2007	0.113	0.072	0.216	U
Am-241	ARA-77	2007	0.04561	0.03855	0.11565	U
Am-241	ARA-1	2011	0.01294	0.071	0.213	U
Am-241	ARA-14	2011	0.04576	0.0701	0.2103	U
Am-241	ARA-2	2011	-0.02348	0.0767	0.2301	U
Am-241	ARA-24	2011	0.02742	0.0828	0.2484	U
Am-241	ARA-28	2011	0.01409	0.0622	0.1866	U
Am-241	ARA-29	2011	-0.01569	0.0462	0.1386	U
Am-241	ARA-31	2011	-0.02227	0.0599	0.1797	U
Am-241	ARA-32	2011	0.05305	0.0987	0.2961	U
Am-241	ARA-34	2011	0.0472	0.093	0.279	U
Am-241	ARA-38	2011	0.08759	0.0928	0.2784	U
Am-241	ARA-4	2011	-0.03804	0.0424	0.1272	U
Am-241	ARA-42	2011	0.06746	0.0953	0.2859	U
Am-241	ARA-43	2011	-0.04122	0.0537	0.1611	U
Am-241	ARA-47	2011	-0.001312	0.0591	0.1773	U
Am-241	ARA-50	2011	-0.04888	0.0822	0.2466	U
Am-241	ARA-51	2011	-0.003077	0.0543	0.1629	U
Am-241	ARA-62	2011	0.0171	0.0911	0.2733	U
Am-241	ARA-65	2011	0.1064	0.0881	0.2643	U
Am-241	ARA-74	2011	0.0043	0.0593	0.1779	U
Am-241	ARA-75	2011	0.107	0.0883	0.2649	U
Am-241	ARA-77	2011	0.06909	0.0569	0.1707	U
Am-241	ARA-9	2011	0.01591	0.041	0.123	U
Am-241	ARA-11	2012	0.07631	0.0821	0.2463	U
Am-241	ARA-16	2012	0.1188	0.0936	0.2808	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	ARA-31	2012	0.005208	0.0808	0.2424	U
Am-241	ARA-32	2012	-0.02262	0.0951	0.2853	U
Am-241	ARA-48	2012	0.007558	0.0451	0.1353	U
Am-241	ARA-53	2012	0.08028	0.0753	0.2259	U
Am-241	ARA-57	2012	0.1233	0.0799	0.2397	U
Am-241	ARA-58	2012	0.01109	0.0416	0.1248	U
Am-241	ARA-59	2012	0.09303	0.0709	0.2127	U
Am-241	ARA-60	2012	0.05766	0.0793	0.2379	U
Am-241	ARA-62	2012	-0.002745	0.0833	0.2499	U
Am-241	ARA-65	2012	-0.02205	0.045	0.135	U
Am-241	ARA-73	2012	0.03367	0.044	0.132	U
Am-241	ARA-31	2013	-0.01316	0.073	0.219	U
Am-241	ARA-32	2013	0.03202	0.058	0.174	U
Am-241	ARA-33	2013	0.02818	0.074	0.223	U
Am-241	ARA-40	2013	0.0345	0.065	0.196	U
Am-241	ARA-48	2013	0.04875	0.058	0.175	U
Am-241	ARA-65	2013	0.04136	0.057	0.17	U
Am-241	2 INCH AIR – ARA	2014	0.03432	0.116	0.348	U
Am-241	ARA-1	2014	-0.002003	0.0457	0.1371	U
Am-241	ARA-24	2014	-0.01891	0.0708	0.2124	U
Am-241	ARA-31	2014	0.08178	0.112	0.336	U
Am-241	ARA-32	2014	0.07562	0.0851	0.2553	U
Am-241	ARA-65	2014	0.1799	0.07	0.21	U
Am-241	ARA-71	2014	0.1069	0.0534	0.1602	U
Co-60	0° 250’	1977	0.37	0.06	0.18	—
Co-60	135° 250’	1977	0.043	0.014	0.042	—
Co-60	157° 1000’	1977	0.025	0.013	0.039	U
Co-60	202° 500’	1977	0.015	0.01	0.03	U
Co-60	22° 500’	1977	0.14	0.05	0.15	U
Co-60	225° 500’	1977	0.06	0.009	0.027	—
Co-60	292° 500’	1977	0.012	0.011	0.033	U
Co-60	337.5° 250’	1977	0.08	0.01	0.03	—
Co-60	45° 1000’	1977	0.021	0.011	0.033	U
Co-60	45° 250’	1977	0.16	0.04	0.12	—
Co-60	45° 5000’	1977	0.043	0.009	0.027	—
Co-60	67° 500’	1977	0.083	0.013	0.039	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	90° 250’	1977	0.3	0.015	0.045	—
Co-60	ARA-0	2006	0.1672	0.0326	0.0978	—
Co-60	ARA-1	2006	0.0186	0.003895	0.011685	—
Co-60	ARA-10	2006	0.1053	0.02955	0.08865	—
Co-60	ARA-13	2006	0.1696	0.0219	0.0657	—
Co-60	ARA-18	2006	0.06164	0.0154	0.0462	—
Co-60	ARA-2	2006	0.1849	0.0326	0.0978	—
Co-60	ARA-20	2006	0.06734	0.01215	0.03645	—
Co-60	ARA-26	2006	0.1102	0.02015	0.06045	—
Co-60	ARA-3	2006	0.06975	0.01375	0.04125	—
Co-60	ARA-30	2006	0.03297	0.00795	0.02385	—
Co-60	ARA-31	2006	0.05475	0.0121	0.0363	—
Co-60	ARA-32	2006	0.07927	0.01475	0.04425	—
Co-60	ARA-33	2006	0.1431	0.03655	0.10965	—
Co-60	ARA-34	2006	0.07441	0.0139	0.0417	—
Co-60	ARA-39	2006	0.08151	0.0146	0.0438	—
Co-60	ARA-4	2006	0.2281	0.0535	0.1605	—
Co-60	ARA-40	2006	0.04222	0.0097	0.0291	—
Co-60	ARA-41	2006	0.1021	0.0167	0.0501	—
Co-60	ARA-42	2006	0.06697	0.01125	0.03375	—
Co-60	ARA-43	2006	0.0596	0.0116	0.0348	—
Co-60	ARA-44	2006	0.03293	0.00625	0.01875	—
Co-60	ARA-48	2006	0.0596	0.0116	0.0348	—
Co-60	ARA-49	2006	0.06872	0.01365	0.04095	—
Co-60	ARA-5	2006	0.0784	0.0118	0.0354	—
Co-60	ARA-50	2006	0.05144	0.00765	0.02295	—
Co-60	ARA-51	2006	0.06972	0.01665	0.04995	—
Co-60	ARA-53	2006	0.061	0.01025	0.03075	—
Co-60	ARA-54	2006	0.0364	0.00645	0.01935	—
Co-60	ARA-55	2006	0.07131	0.016	0.048	—
Co-60	ARA-56	2006	0.07058	0.0133	0.0399	—
Co-60	ARA-57	2006	0.1612	0.03065	0.09195	—
Co-60	ARA-58	2006	0.04992	0.00885	0.02655	—
Co-60	ARA-59	2006	0.04369	0.00855	0.02565	—
Co-60	ARA-6	2006	0.1396	0.01855	0.05565	—
Co-60	ARA-60	2006	0.04132	0.008	0.024	—
Co-60	ARA-61	2006	0.08935	0.0148	0.0444	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	ARA-62	2006	0.0859	0.01655	0.04965	—
Co-60	ARA-63	2006	0.0007154	0.00032	0.00096	U
Co-60	ARA-65	2006	0.06494	0.01095	0.03285	—
Co-60	ARA-66	2006	0.08009	0.0167	0.0501	—
Co-60	ARA-67	2006	0.05132	0.01075	0.03225	—
Co-60	ARA-68	2006	0.1757	0.0311	0.0933	—
Co-60	ARA-69	2006	0.07075	0.0103	0.0309	—
Co-60	ARA-7	2006	0.0994	0.0223	0.0669	—
Co-60	ARA-70	2006	0.1109	0.01965	0.05895	—
Co-60	ARA-71	2006	0.03037	0.0097	0.0291	—
Co-60	ARA-72	2006	0.1068	0.01985	0.05955	—
Co-60	ARA-73	2006	0.03255	0.0075	0.0225	—
Co-60	ARA-74	2006	0.07171	0.01275	0.03825	—
Co-60	ARA-75	2006	0.06387	0.0103	0.0309	—
Co-60	ARA-76	2006	0.05846	0.01445	0.04335	—
Co-60	ARA-77	2006	0.02402	0.00625	0.01875	—
Co-60	ARA-8	2006	0.08591	0.0156	0.0468	—
Co-60	ARA-9	2006	0.1309	0.0139	0.0417	—
Co-60	ARA-0	2007	0.02313	0.00505	0.01515	—
Co-60	ARA-11	2007	0.01861	0.00472	0.01416	—
Co-60	ARA-12	2007	0.05611	0.0124	0.0372	—
Co-60	ARA-14	2007	0.009533	0.002725	0.008175	—
Co-60	ARA-15	2007	0.0157	0.003815	0.011445	—
Co-60	ARA-17	2007	0.01854	0.00469	0.01407	—
Co-60	ARA-19	2007	0.03212	0.00675	0.02025	—
Co-60	ARA-2	2007	0.01397	0.00367	0.01101	—
Co-60	ARA-21	2007	0.01706	0.00407	0.01221	—
Co-60	ARA-23	2007	0.0413	0.00835	0.02505	—
Co-60	ARA-24	2007	0.01183	0.00292	0.00876	—
Co-60	ARA-28	2007	0.04033	0.0074	0.0222	—
Co-60	ARA-29	2007	0.009198	0.00312	0.00936	U
Co-60	ARA-31	2007	0.03806	0.00865	0.02595	—
Co-60	ARA-32	2007	0.03456	0.00695	0.02085	—
Co-60	ARA-36	2007	0.0274	0.0062	0.0186	—
Co-60	ARA-37	2007	0.02591	0.0058	0.0174	—
Co-60	ARA-38	2007	0.006232	0.002495	0.007485	U
Co-60	ARA-4	2007	0.03237	0.00655	0.01965	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	ARA-42	2007	0.01697	0.004925	0.014775	—
Co-60	ARA-43	2007	0.02278	0.00437	0.01311	—
Co-60	ARA-45	2007	0.03343	0.00865	0.02595	—
Co-60	ARA-46	2007	0.01031	0.003105	0.009315	—
Co-60	ARA-47	2007	0.02455	0.0055	0.0165	—
Co-60	ARA-48	2007	0.02453	0.00735	0.02205	—
Co-60	ARA-49	2007	0.01348	0.00334	0.01002	—
Co-60	ARA-5	2007	0.02601	0.0054	0.0162	—
Co-60	ARA-50	2007	0.01078	0.002395	0.007185	—
Co-60	ARA-51	2007	0.01801	0.00615	0.01845	U
Co-60	ARA-52	2007	0.01407	0.00341	0.01023	—
Co-60	ARA-56	2007	0.02097	0.00462	0.01386	—
Co-60	ARA-57	2007	0.02345	0.006	0.018	—
Co-60	ARA-58	2007	0.01702	0.003855	0.011565	—
Co-60	ARA-6	2007	0.003777	0.002345	0.007035	U
Co-60	ARA-60	2007	0.01447	0.004625	0.013875	—
Co-60	ARA-65	2007	0.02401	0.00575	0.01725	—
Co-60	ARA-7	2007	0.01757	0.003915	0.011745	—
Co-60	ARA-73	2007	0.0173	0.00397	0.01191	—
Co-60	ARA-74	2007	0.01117	0.004935	0.014805	U
Co-60	ARA-75	2007	0.03548	0.0089	0.0267	—
Co-60	ARA-77	2007	0.006336	0.002835	0.008505	U
Co-60	ARA-1	2011	0.0002147	0.00236	0.00708	U
Co-60	ARA-14	2011	0.0004696	0.00126	0.00378	U
Co-60	ARA-16	2011	0.002014	0.00285	0.00855	U
Co-60	ARA-2	2011	-0.0003417	0.00229	0.00687	U
Co-60	ARA-24	2011	0.002039	0.00266	0.00798	U
Co-60	ARA-28	2011	-0.0008401	0.00436	0.01308	U
Co-60	ARA-29	2011	-0.001381	0.00223	0.00669	U
Co-60	ARA-31	2011	-0.0008192	0.00386	0.01158	U
Co-60	ARA-32	2011	-0.003255	0.00545	0.01635	U
Co-60	ARA-34	2011	-0.001067	0.00403	0.01209	U
Co-60	ARA-38	2011	0.002743	0.0045	0.0135	U
Co-60	ARA-4	2011	0.001196	0.00192	0.00576	U
Co-60	ARA-42	2011	-0.003101	0.00472	0.01416	U
Co-60	ARA-43	2011	-0.00002657	0.0036	0.0108	U
Co-60	ARA-47	2011	0.002008	0.00377	0.01131	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	ARA-50	2011	0.0001911	0.00286	0.00858	U
Co-60	ARA-51	2011	0.0001462	0.00502	0.01506	U
Co-60	ARA-62	2011	0.0009998	0.00281	0.00843	U
Co-60	ARA-65	2011	0.0007134	0.00221	0.00663	U
Co-60	ARA-74	2011	-0.002245	0.00415	0.01245	U
Co-60	ARA-75	2011	0.0003345	0.00435	0.01305	U
Co-60	ARA-77	2011	0.002575	0.00359	0.01077	U
Co-60	ARA-9	2011	0.0009574	0.00184	0.00552	U
Co-60	ARA-11	2012	0.0006428	0.00395	0.01185	U
Co-60	ARA-16	2012	-0.0002781	0.00544	0.01632	U
Co-60	ARA-31	2012	0.002699	0.0039	0.0117	U
Co-60	ARA-32	2012	0.0002451	0.00453	0.01359	U
Co-60	ARA-48	2012	0.004188	0.00394	0.01182	U
Co-60	ARA-53	2012	0.00116	0.00378	0.01134	U
Co-60	ARA-57	2012	0.003762	0.0043	0.0129	U
Co-60	ARA-58	2012	0.001196	0.00418	0.01254	U
Co-60	ARA-59	2012	-0.00008167	0.00332	0.00996	U
Co-60	ARA-60	2012	-0.002254	0.00407	0.01221	U
Co-60	ARA-62	2012	0.001208	0.00464	0.01392	U
Co-60	ARA-65	2012	0.001349	0.00356	0.01068	U
Co-60	ARA-73	2012	0.0001252	0.00423	0.01269	U
Co-60	ARA-31	2013	0.01054	0.0035	0.0105	—
Co-60	ARA-32	2013	0.0002091	0.000318	0.000953	U
Co-60	ARA-33	2013	0.003221	0.00074	0.00222	—
Co-60	ARA-40	2013	0.006411	0.002453	0.00736	U
Co-60	ARA-48	2013	-0.0000275	0.000315	0.000944	U
Co-60	ARA-65	2013	0.000277	0.00027	0.00081	U
Co-60	2 INCH AIR - ARA	2014	-0.0005734	0.00179	0.00537	U
Co-60	ARA-1	2014	0.001465	0.0014	0.0042	U
Co-60	ARA-24	2014	0.00001018	0.00102	0.00306	U
Co-60	ARA-31	2014	0.0001038	0.0014	0.0042	U
Co-60	ARA-32	2014	0.0001427	0.00112	0.00336	U
Co-60	ARA-65	2014	-0.0004769	0.0014	0.0042	U
Co-60	ARA-71	2014	-0.0005109	0.000661	0.001983	U
Cs-134	67° 500’	1977	0.14	0.03	0.09	—
Cs-134	90° 500’	1977	0.046	0.01	0.03	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	ARA-0	2007	0.1378	0.01505	0.04515	—
Cs-134	ARA-1	2007	0.03485	0.0025	0.0075	—
Cs-134	ARA-10	2007	0.05036	0.00835	0.02505	—
Cs-134	ARA-11	2007	0.1367	0.01505	0.04515	—
Cs-134	ARA-12	2007	0.04648	0.00525	0.01575	—
Cs-134	ARA-13	2007	0.006443	0.00815	0.02445	U
Cs-134	ARA-14	2007	0.1025	0.01115	0.03345	—
Cs-134	ARA-15	2007	0.1182	0.0129	0.0387	—
Cs-134	ARA-16	2007	0.1366	0.0204	0.0612	—
Cs-134	ARA-17	2007	0.08374	0.01175	0.03525	—
Cs-134	ARA-18	2007	0.0554	0.0101	0.0303	—
Cs-134	ARA-19	2007	0.1808	0.02205	0.06615	—
Cs-134	ARA-2	2007	0.1267	0.02355	0.07065	—
Cs-134	ARA-20	2007	0.05433	0.0097	0.0291	—
Cs-134	ARA-21	2007	0.09053	0.0123	0.0369	—
Cs-134	ARA-22	2007	0.0619	0.00782	0.02346	—
Cs-134	ARA-23	2007	0.09117	0.0108	0.0324	—
Cs-134	ARA-24	2007	0.1004	0.018	0.054	—
Cs-134	ARA-25	2007	0.07364	0.0121	0.0363	—
Cs-134	ARA-26	2007	0.04116	0.00719	0.02157	—
Cs-134	ARA-27	2007	0.0528	0.00754	0.02262	—
Cs-134	ARA-28	2007	0.08601	0.01535	0.04605	—
Cs-134	ARA-29	2007	0.1094	0.0109	0.0327	—
Cs-134	ARA-3	2007	0.07118	0.0114	0.0342	—
Cs-134	ARA-30	2007	0.04575	0.00618	0.01854	—
Cs-134	ARA-31	2007	0.3059	0.03645	0.10935	—
Cs-134	ARA-32	2007	0.1051	0.0109	0.0327	—
Cs-134	ARA-33	2007	0.03109	0.00645	0.01935	—
Cs-134	ARA-34	2007	0.0361	0.00567	0.01701	—
Cs-134	ARA-35	2007	0.05728	0.016	0.048	—
Cs-134	ARA-36	2007	0.0891	0.01365	0.04095	—
Cs-134	ARA-37	2007	1.687	0.1565	0.4695	—
Cs-134	ARA-38	2007	0.1271	0.015	0.045	—
Cs-134	ARA-39	2007	0.04376	0.0093	0.0279	—
Cs-134	ARA-4	2007	0.06495	0.0113	0.0339	—
Cs-134	ARA-40	2007	0.0553	0.0108	0.0324	——
Cs-134	ARA-41	2007	0.0558	0.00707	0.02121	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	ARA-42	2007	0.06382	0.00955	0.02865	—
Cs-134	ARA-43	2007	0.09555	0.0121	0.0363	—
Cs-134	ARA-44	2007	0.05398	0.00665	0.01995	—
Cs-134	ARA-45	2007	0.1082	0.0151	0.0453	—
Cs-134	ARA-46	2007	0.1337	0.01565	0.04695	—
Cs-134	ARA-47	2007	0.1407	0.0217	0.0651	—
Cs-134	ARA-48	2007	0.1028	0.0131	0.0393	—
Cs-134	ARA-49	2007	0.1072	0.01145	0.03435	—
Cs-134	ARA-5	2007	0.1125	0.014	0.042	—
Cs-134	ARA-50	2007	0.05309	0.0072	0.0216	—
Cs-134	ARA-51	2007	0.08249	0.01095	0.03285	—
Cs-134	ARA-52	2007	0.0497	0.00825	0.02475	—
Cs-134	ARA-53	2007	0.05168	0.0069	0.0207	—
Cs-134	ARA-54	2007	0.07459	0.0122	0.0366	—
Cs-134	ARA-55	2007	0.03102	0.0055	0.0165	—
Cs-134	ARA-56	2007	0.1154	0.013	0.039	—
Cs-134	ARA-57	2007	0.06439	0.0123	0.0369	—
Cs-134	ARA-58	2007	0.1115	0.017	0.051	—
Cs-134	ARA-59	2007	0.1103	0.01755	0.05265	—
Cs-134	ARA-6	2007	0.06572	0.0099	0.0297	—
Cs-134	ARA-60	2007	0.1354	0.0173	0.0519	—
Cs-134	ARA-61	2007	0.03989	0.00933	0.02799	—
Cs-134	ARA-62	2007	0.06257	0.00928	0.02784	—
Cs-134	ARA-63	2007	0.07209	0.0128	0.0384	—
Cs-134	ARA-65	2007	0.6668	0.121	0.363	—
Cs-134	ARA-66	2007	0.04994	0.00855	0.02565	—
Cs-134	ARA-67	2007	0.02802	0.00572	0.01716	—
Cs-134	ARA-68	2007	0.03591	0.00677	0.02031	—
Cs-134	ARA-69	2007	0.07437	0.0128	0.0384	—
Cs-134	ARA-7	2007	0.05345	0.0058	0.0174	—
Cs-134	ARA-70	2007	0.05034	0.00932	0.02796	—
Cs-134	ARA-71	2007	0.03086	0.00867	0.02601	—
Cs-134	ARA-72	2007	0.04523	0.00573	0.01719	—
Cs-134	ARA-73	2007	0.1384	0.016	0.048	—
Cs-134	ARA-74	2007	0.1283	0.015	0.045	—
Cs-134	ARA-75	2007	0.135	0.01385	0.04155	—
Cs-134	ARA-76	2007	0.04247	0.00829	0.02487	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	ARA-77	2007	0.1068	0.01295	0.03885	—
Cs-134	ARA-8	2007	0.06107	0.0105	0.0315	—
Cs-134	ARA-9	2007	0.04735	0.00965	0.02895	—
Cs-134	ARA-10	2009	0.02878	0.0099	0.0297	U
Cs-134	ARA-13	2009	0.002409	0.01255	0.03765	U
Cs-134	ARA-18	2009	0.02375	0.01045	0.03135	U
Cs-134	ARA-20	2009	0.01748	0.0096	0.0288	U
Cs-134	ARA-21	2009	0.01696	0.0114	0.0342	U
Cs-134	ARA-25	2009	0.01217	0.0051	0.0153	U
Cs-134	ARA-26	2009	0.008734	0.0109	0.0327	U
Cs-134	ARA-27	2009	0.01828	0.00454	0.01362	—
Cs-134	ARA-3	2009	0.02831	0.01675	0.05025	U
Cs-134	ARA-30	2009	0.03252	0.0196	0.0588	U
Cs-134	ARA-31	2009	0.01683	0.0087	0.0261	U
Cs-134	ARA-35	2009	0.02519	0.0114	0.0342	U
Cs-134	ARA-39	2009	-0.008447	0.01105	0.03315	U
Cs-134	ARA-40	2009	0.009578	0.00615	0.01845	U
Cs-134	ARA-44	2009	-0.02249	0.01325	0.03975	U
Cs-134	ARA-47	2009	0.01035	0.00715	0.02145	U
Cs-134	ARA-56	2009	0.003943	0.0031	0.0093	U
Cs-134	ARA-58	2009	0.03603	0.00575	0.01725	—
Cs-134	ARA-61	2009	-0.02965	0.01215	0.03645	U
Cs-134	ARA-62	2009	0.02241	0.0183	0.0549	U
Cs-134	ARA-63	2009	0.03051	0.0176	0.0528	U
Cs-134	ARA-67	2009	0.02668	0.0142	0.0426	U
Cs-134	ARA-68	2009	0.01774	0.0077	0.0231	U
Cs-134	ARA-69	2009	0.0007141	0.01255	0.03765	U
Cs-134	ARA-70	2009	0.02026	0.0087	0.0261	U
Cs-134	ARA-71	2009	0.0214	0.00875	0.02625	U
Cs-134	ARA-72	2009	0.01757	0.01375	0.04125	U
Cs-134	ARA-74	2009	-0.00406	0.0134	0.0402	U
Cs-134	ARA-75	2009	-0.006927	0.0133	0.0399	U
Cs-134	ARA-77	2009	0.02815	0.0054	0.0162	—
Cs-134	ARA-8	2009	0.01254	0.0145	0.0435	U
Cs-134	ARA-0	2010	0.003588	0.005	0.015	U
Cs-134	ARA-1	2010	0.174	0.0249	0.0747	—
Cs-134	ARA-11	2010	0.01054	0.00579	0.01737	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	ARA-12	2010	0.06383	0.00868	0.02604	—
Cs-134	ARA-14	2010	0.05387	0.00768	0.02304	—
Cs-134	ARA-15	2010	0.04957	0.00792	0.02376	—
Cs-134	ARA-16	2010	0.07601	0.013	0.039	—
Cs-134	ARA-17	2010	0.02711	0.00674	0.02022	—
Cs-134	ARA-19	2010	0.08229	0.0125	0.0375	—
Cs-134	ARA-2	2010	0.05579	0.00777	0.02331	—
Cs-134	ARA-21	2010	0.0326	0.00821	0.02463	—
Cs-134	ARA-22	2010	0.09117	0.0137	0.0411	—
Cs-134	ARA-23	2010	0.03971	0.0065	0.0195	—
Cs-134	ARA-24	2010	0.04705	0.00802	0.02406	—
Cs-134	ARA-27	2010	0.04713	0.00523	0.01569	—
Cs-134	ARA-28	2010	0.06926	0.0133	0.0399	—
Cs-134	ARA-29	2010	0.04325	0.0057	0.0171	—
Cs-134	ARA-31	2010	0.0734	0.0109	0.0327	—
Cs-134	ARA-32	2010	0.04751	0.00554	0.01662	—
Cs-134	ARA-34	2010	0.06969	0.0103	0.0309	—
Cs-134	ARA-35	2010	-0.004071	0.00523	0.01569	U
Cs-134	ARA-36	2010	0.04468	0.0102	0.0306	—
Cs-134	ARA-37	2010	0.06164	0.00971	0.02913	—
Cs-134	ARA-38	2010	0.05337	0.00727	0.02181	—
Cs-134	ARA-4	2010	0.0462	0.00922	0.02766	—
Cs-134	ARA-40	2010	0.04406	0.00696	0.02088	—
Cs-134	ARA-41	2010	0.05824	0.0328	0.0984	U
Cs-134	ARA-42	2010	0.05133	0.0062	0.0186	—
Cs-134	ARA-43	2010	0.009824	0.00275	0.00825	—
Cs-134	ARA-44	2010	0.05967	0.0103	0.0309	—
Cs-134	ARA-45	2010	0.1443	0.0249	0.0747	—
Cs-134	ARA-46	2010	0.04361	0.00692	0.02076	—
Cs-134	ARA-47	2010	0.04244	0.00559	0.01677	—
Cs-134	ARA-48	2010	0.04532	0.00641	0.01923	—
Cs-134	ARA-5	2010	0.04748	0.0069	0.0207	—
Cs-134	ARA-50	2010	0.03549	0.00544	0.01632	—
Cs-134	ARA-51	2010	0.1	0.0133	0.0399	—
Cs-134	ARA-52	2010	0.08762	0.0152	0.0456	—
Cs-134	ARA-53	2010	0.04774	0.00744	0.02232	—
Cs-134	ARA-54	2010	0.05725	0.00917	0.02751	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	ARA-55	2010	0.06347	0.0121	0.0363	—
Cs-134	ARA-56	2010	0.06608	0.00899	0.02697	—
Cs-134	ARA-57	2010	0.01827	0.00553	0.01659	—
Cs-134	ARA-58	2010	0.08448	0.0153	0.0459	—
Cs-134	ARA-59	2010	0.0368	0.00674	0.02022	—
Cs-134	ARA-6	2010	0.05869	0.0107	0.0321	—
Cs-134	ARA-60	2010	0.05732	0.00952	0.02856	—
Cs-134	ARA-65	2010	0.07861	0.0112	0.0336	—
Cs-134	ARA-7	2010	0.0629	0.0173	0.0519	
Cs-134	ARA-73	2010	0.05227	0.00797	0.02391	—
Cs-134	ARA-74	2010	0.07505	0.0221	0.0663	—
Cs-134	ARA-75	2010	0.06441	0.00997	0.02991	—
Cs-134	ARA-77	2010	0.1059	0.0167	0.0501	—
Cs-134	ARA-9	2010	0.05986	0.0092	0.0276	—
Cs-134	ARA-1	2011	-0.003997	0.0165	0.0495	U
Cs-134	ARA-14	2011	-0.00205	0.0105	0.0315	U
Cs-134	ARA-16	2011	0.00297	0.016	0.048	U
Cs-134	ARA-2	2011	0.004703	0.0128	0.0384	U
Cs-134	ARA-24	2011	-0.003188	0.00525	0.01575	U
Cs-134	ARA-28	2011	-0.0746	0.0108	0.0324	U
Cs-134	ARA-29	2011	-0.004136	0.0122	0.0366	U
Cs-134	ARA-31	2011	-0.01086	0.0154	0.0462	U
Cs-134	ARA-32	2011	-0.01427	0.0248	0.0744	U
Cs-134	ARA-34	2011	-0.002829	0.0177	0.0531	U
Cs-134	ARA-38	2011	0.00105	0.0225	0.0675	U
Cs-134	ARA-4	2011	-0.008226	0.0117	0.0351	U
Cs-134	ARA-42	2011	-0.01544	0.0118	0.0354	U
Cs-134	ARA-43	2011	-0.006347	0.02	0.06	U
Cs-134	ARA-47	2011	-0.00499	0.0214	0.0642	U
Cs-134	ARA-50	2011	-0.02878	0.0112	0.0336	U
Cs-134	ARA-51	2011	-0.01321	0.0137	0.0411	U
Cs-134	ARA-62	2011	-0.004405	0.0187	0.0561	U
Cs-134	ARA-65	2011	0.001224	0.0155	0.0465	U
Cs-134	ARA-74	2011	-0.08548	0.0102	0.0306	U
Cs-134	ARA-75	2011	-0.0007343	0.017	0.051	U
Cs-134	ARA-77	2011	-0.0444	0.0104	0.0312	U
Cs-134	ARA-9	2011	0.002184	0.00522	0.01566	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	ARA-11	2012	0.05365	0.00886	0.02658	—
Cs-134	ARA-16	2012	0.06425	0.0107	0.0321	—
Cs-134	ARA-31	2012	0.07447	0.0079	0.0237	—
Cs-134	ARA-32	2012	0.07669	0.00938	0.02814	—
Cs-134	ARA-48	2012	0.05646	0.00834	0.02502	—
Cs-134	ARA-53	2012	0.06261	0.00768	0.02304	—
Cs-134	ARA-57	2012	0.0554	0.00867	0.02601	—
Cs-134	ARA-58	2012	0.06722	0.00848	0.02544	—
Cs-134	ARA-59	2012	0.06266	0.00732	0.02196	—
Cs-134	ARA-60	2012	0.072	0.00801	0.02403	—
Cs-134	ARA-62	2012	0.06219	0.00913	0.02739	—
Cs-134	ARA-65	2012	0.04952	0.00755	0.02265	—
Cs-134	ARA-73	2012	0.01761	0.00747	0.02241	U
Cs-134	ARA-31	2013	0.07174	0.0168	0.0504	—
Cs-134	ARA-32	2013	0.0007087	0.00997	0.0299	U
Cs-134	ARA-33	2013	0.02681	0.0096	0.0288	U
Cs-134	ARA-40	2013	0.04153	0.0105	0.0316	—
Cs-134	ARA-48	2013	-0.03367	0.00663	0.0199	U
Cs-134	ARA-65	2013	0.0009309	0.0056	0.0168	U
Cs-134	2 INCH AIR - ARA	2014	0.01788	0.0167	0.0501	U
Cs-134	ARA-1	2014	0.05923	0.0125	0.0375	—
Cs-134	ARA-24	2014	0.04786	0.0108	0.0324	—
Cs-134	ARA-31	2014	0.02944	0.0145	0.0435	U
Cs-134	ARA-32	2014	0.04228	0.0102	0.0306	
Cs-134	ARA-65	2014	0.03176	0.0135	0.0405	U
Cs-134	ARA-71	2014	0.02232	0.00637	0.01911	—
Cs-137	0° 1000’	1977	25.6	0.8	2.4	—
Cs-137	0° 1500’	1977	5.5	0.2	0.6	—
Cs-137	0° 250’	1977	71	2	6	—
Cs-137	0° 2500’	1977	2.88	0.09	0.27	—
Cs-137	0° 500’	1977	373	11	33	—
Cs-137	112.5° 250’	1977	4.21	0.1	0.3	—
Cs-137	112° 1000’	1977	1.97	0.06	0.18	—
Cs-137	112° 2000’	1977	0.76	0.07	0.21	—
Cs-137	135° 1000’	1977	2.91	0.09	0.27	—
Cs-137	135° 250’	1977	67	1.5	4.5	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	135° 2500’	1977	0.81	0.03	0.09	—
Cs-137	157° 1000’	1977	8.5	0.3	0.9	—
Cs-137	157° 2000’	1977	1.6	0.1	0.3	—
Cs-137	157° 500’	1977	38	1	3	—
Cs-137	180° 1000’	1977	8.6	0.3	0.9	—
Cs-137	180° 1500’	1977	3.87	0.17	0.51	—
Cs-137	180° 2500’	1977	1.1	0.09	0.27	—
Cs-137	180° 500’	1977	30.4	0.9	2.7	—
Cs-137	202° 2000’	1977	5.46	0.17	0.51	—
Cs-137	202° 500’	1977	26.3	0.8	2.4	—
Cs-137	22.5° 250’	1977	35	1	3	—
Cs-137	22° 1000’	1977	11.6	0.4	1.2	—
Cs-137	22° 2000’	1977	2.98	0.09	0.27	—
Cs-137	22° 2500’	1977	2.16	0.07	0.21	—
Cs-137	22° 500’	1977	76	2	6	—
Cs-137	225° 1000’	1977	13.3	0.4	1.2	—
Cs-137	225° 2500’	1977	3.74	0.17	0.51	—
Cs-137	225° 500’	1977	56.6	1.7	5.1	—
Cs-137	247° 2000’	1977	1.77	0.06	0.18	—
Cs-137	247° 500’	1977	21.8	0.7	2.1	—
Cs-137	270° 1000’	1977	1.24	0.04	0.12	—
Cs-137	270° 1500’	1977	1.63	0.06	0.18	—
Cs-137	270° 2500’	1977	0.56	0.07	0.21	—
Cs-137	270° 500’	1977	26.2	0.8	2.4	—
Cs-137	292° 2000’	1977	7.5	0.3	0.9	—
Cs-137	292° 500’	1977	2.66	0.08	0.24	—
Cs-137	315° 1000’	1977	1.94	0.06	0.18	—
Cs-137	315° 1500’	1977	0.76	0.08	0.24	—
Cs-137	315° 250’	1977	1.64	0.06	0.18	—
Cs-137	315° 2500’	1977	0.91	0.08	0.24	—
Cs-137	315° 500’	1977	8.2	0.2	0.6	—
Cs-137	337.5° 250’	1977	29.6	0.9	2.7	—
Cs-137	337° 1000’	1977	44.1	1.3	3.9	—
Cs-137	337° 2000’	1977	1.49	0.05	0.15	—
Cs-137	45° 1000’	1977	16.7	0.5	1.5	—
Cs-137	45° 1500’	1977	17.6	0.5	1.5	—
Cs-137	45° 250’	1977	1.46	0.19	0.57	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	45° 2500’	1977	9.8	0.3	0.9	—
Cs-137	45° 500’	1977	109	3	9	—
Cs-137	45° 5000’	1977	2.13	0.07	0.21	—
Cs-137	67° 1000’	1977	121	4	12	—
Cs-137	67° 2000’	1977	30.5	0.9	2.7	—
Cs-137	67° 2500’	1977	5.95	0.19	0.57	—
Cs-137	67° 500’	1977	241	7	21	—
Cs-137	90° 1000’	1977	3.2	0.09	0.27	—
Cs-137	90° 1500’	1977	1.18	0.09	0.27	—
Cs-137	90° 250’	1977	9.3	0.2	0.6	—
Cs-137	90° 2500’	1977	0.99	0.08	0.24	—
Cs-137	90° 500’	1977	17.7	0.5	1.5	—
Cs-137	0° 1000’	1985	7.3	0.3	0.9	—
Cs-137	0° 2500’	1985	2.29	0.13	0.39	—
Cs-137	112.5° 1500’	1985	1.1	0.08	0.24	—
Cs-137	135° 2500’	1985	3.49	0.18	0.54	—
Cs-137	135° 2500’	1985	1.11	0.09	0.27	—
Cs-137	157.5° 2000’	1985	1.97	0.12	0.36	—
Cs-137	180° 1500’	1985	3.04	0.16	0.48	—
Cs-137	180° 2500’	1985	1.08	0.09	0.27	—
Cs-137	202.5° 1000’	1985	11.9	0.5	1.5	—
Cs-137	202.5° 2000’	1985	2.8	0.15	0.45	—
Cs-137	202.5° 3500’	1985	2.5	0.14	0.42	—
Cs-137	22.5° 1500’	1985	2.98	0.16	0.48	—
Cs-137	22.5° 2500’	1985	2.27	0.13	0.39	—
Cs-137	225° 2500’	1985	1.67	0.11	0.33	—
Cs-137	225° 500’	1985	46.8	1.8	5.4	—
Cs-137	247.5° 1500’	1985	2.04	0.12	0.36	—
Cs-137	270° 1000’	1985	2.7	0.15	0.45	—
Cs-137	270° 2000’	1985	0.76	0.07	0.21	—
Cs-137	292.5° 2000’	1985	7	0.3	0.9	—
Cs-137	292.5° 500’	1985	2.16	0.13	0.39	—
Cs-137	315° 2000’	1985	0.78	0.07	0.21	—
Cs-137	33.75° 2000’	1985	3.91	0.2	0.6	—
Cs-137	337..5° 1500’	1985	1.43	0.1	0.3	—
Cs-137	337.5° 2500’	1985	0.67	0.06	0.18	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	45° 1000’	1985	12.1	0.5	1.5	—
Cs-137	45° 2500’	1985	9.5	0.4	1.2	—
Cs-137	45° 3250’	1985	1.71	0.1	0.3	—
Cs-137	56.25° 2000’	1985	16.8	0.7	2.1	—
Cs-137	67.5° 2000’	1985	14.8	0.6	1.8	—
Cs-137	67.5° 500’	1985	133	5	15	—
Cs-137	90° 1000’	1985	2.75	0.15	0.45	—
Cs-137	90° 2000’	1985	1.16	0.09	0.27	—
Cs-137	112.5° 2000’	1991	0.95	0.07	0.21	—
Cs-137	135° 2500’	1991	1.02	0.07	0.21	—
Cs-137	157.5° 1500’	1991	2.3	0.11	0.33	—
Cs-137	157.5° 500’	1991	31.4	1.2	3.6	—
Cs-137	270° 1000’	1991	1.54	0.09	0.27	—
Cs-137	315° 2500’	1991	0.67	0.06	0.18	—
Cs-137	337.5° 1500’	1991	1.09	0.07	0.21	—
Cs-137	90° 2500’	1991	1.23	0.08	0.24	—
Cs-137	ARA-0	2006	7.334	0.1085	0.3255	—
Cs-137	ARA-1	2006	0.1086	0.00645	0.01935	—
Cs-137	ARA-10	2006	0.6276	0.0361	0.1083	—
Cs-137	ARA-11	2006	0.2194	23.45	70.35	U
Cs-137	ARA-12	2006	0.3869	23.2	69.6	U
Cs-137	ARA-13	2006	7.38	0.064	0.192	—
Cs-137	ARA-14	2006	0.1468	4.9	14.7	U
Cs-137	ARA-15	2006	0.8889	4	12	U
Cs-137	ARA-16	2006	0.4734	9.5	28.5	U
Cs-137	ARA-17	2006	1.647	2.1	6.3	U
Cs-137	ARA-18	2006	0.7294	0.0655	0.1965	—
Cs-137	ARA-19	2006	1.182	2.4	7.2	U
Cs-137	ARA-2	2006	2.24	0.056	0.168	—
Cs-137	ARA-20	2006	2.25	0.04005	0.12015	—
Cs-137	ARA-21	2006	4.441	1.25	3.75	—
Cs-137	ARA-22	2006	2.432	1.8	5.4	U
Cs-137	ARA-23	2006	0.06294	1.35	4.05	U
Cs-137	ARA-24	2006	0.9544	5.7	17.1	U
Cs-137	ARA-26	2006	8.426	0.092	0.276	—
Cs-137	ARA-27	2006	0.4941	3.4	10.2	U
Cs-137	ARA-28	2006	0.3807	2.8	8.4	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-29	2006	0.2388	8.95	26.85	U
Cs-137	ARA-3	2006	7.044	0.056	0.168	—
Cs-137	ARA-30	2006	7.678	0.0665	0.1995	—
Cs-137	ARA-31	2006	0.5219	0.04295	0.12885	—
Cs-137	ARA-32	2006	0.4751	0.0685	0.2055	—
Cs-137	ARA-33	2006	4.831	0.053	0.159	—
Cs-137	ARA-34	2006	0.3508	0.0855	0.2565	—
Cs-137	ARA-35	2006	0.9907	1.35	4.05	U
Cs-137	ARA-36	2006	0.3587	2.75	8.25	U
Cs-137	ARA-37	2006	0.2708	5.5	16.5	U
Cs-137	ARA-38	2006	0.1846	7.2	21.6	U
Cs-137	ARA-39	2006	4.301	0.0715	0.2145	—
Cs-137	ARA-4	2006	0.2372	0.02535	0.07605	—
Cs-137	ARA-40	2006	1.043	0.072	0.216	—
Cs-137	ARA-41	2006	0.4455	0.098	0.294	—
Cs-137	ARA-42	2006	0.2916	0.0645	0.1935	—
Cs-137	ARA-43	2006	1.299	0.0675	0.2025	—
Cs-137	ARA-44	2006	0.7157	0.0995	0.2985	—
Cs-137	ARA-45	2006	0.1394	7.9	23.7	U
Cs-137	ARA-46	2006	0.1102	7.55	22.65	U
Cs-137	ARA-47	2006	0.09029	9	27	U
Cs-137	ARA-48	2006	1.299	0.0675	0.2025	—
Cs-137	ARA-49	2006	0.4117	0.078	0.234	—
Cs-137	ARA-5	2006	1.475	0.0555	0.1665	—
Cs-137	ARA-50	2006	0.3242	0.0635	0.1905	—
Cs-137	ARA-51	2006	1.27	0.102	0.306	—
Cs-137	ARA-52	2006	0.08828	12.45	37.35	U
Cs-137	ARA-53	2006	0.179	0.051	0.153	—
Cs-137	ARA-54	2006	0.3886	0.0525	0.1575	—
Cs-137	ARA-55	2006	0.2129	0.0685	0.2055	—
Cs-137	ARA-56	2006	0.3101	0.09	0.27	—
Cs-137	ARA-57	2006	0.5972	0.0595	0.1785	—
Cs-137	ARA-58	2006	0.1957	0.065	0.195	—
Cs-137	ARA-59	2006	0.2239	0.059	0.177	—
Cs-137	ARA-6	2006	0.8341	0.04115	0.12345	—
Cs-137	ARA-60	2006	0.4089	0.093	0.279	—
Cs-137	ARA-61	2006	10.38	0.087	0.261	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-62	2006	8.113	0.071	0.213	—
Cs-137	ARA-63	2006	0.172	0.0076	0.0228	—
Cs-137	ARA-65	2006	1.009	0.0625	0.1875	—
Cs-137	ARA-66	2006	4.356	0.0895	0.2685	—
Cs-137	ARA-67	2006	2.878	0.069	0.207	—
Cs-137	ARA-68	2006	0.5706	0.0114	0.0342	—
Cs-137	ARA-69	2006	15.44	0.1075	0.3225	—
Cs-137	ARA-7	2006	0.8425	0.053	0.159	—
Cs-137	ARA-70	2006	5.905	0.0575	0.1725	—
Cs-137	ARA-71	2006	0.9692	0.0985	0.2955	—
Cs-137	ARA-72	2006	2.448	0.0805	0.2415	—
Cs-137	ARA-73	2006	0.5155	0.0905	0.2715	—
Cs-137	ARA-74	2006	0.3194	0.0925	0.2775	—
Cs-137	ARA-75	2006	0.4479	0.1025	0.3075	—
Cs-137	ARA-76	2006	17.31	0.1055	0.3165	—
Cs-137	ARA-77	2006	0.4814	0.119	0.357	—
Cs-137	ARA-8	2006	12.9	0.0945	0.2835	—
Cs-137	ARA-9	2006	0.7335	0.04925	0.14775	—
Cs-137	ARA-0	2007	2.756	0.01715	0.05145	—
Cs-137	ARA-1	2007	1.243	0.00271	0.00813	—
Cs-137	ARA-10	2007	0.2615	0.0105	0.0315	—
Cs-137	ARA-11	2007	0.2572	0.00456	0.01368	—
Cs-137	ARA-12	2007	0.3087	0.0082	0.0246	—
Cs-137	ARA-13	2007	4.453	0.0168	0.0504	—
Cs-137	ARA-14	2007	0.2814	0.0091	0.0273	—
Cs-137	ARA-15	2007	1.992	0.02045	0.06135	—
Cs-137	ARA-16	2007	0.649	0.00959	0.02877	—
Cs-137	ARA-17	2007	0.6889	0.01285	0.03855	—
Cs-137	ARA-18	2007	5.061	0.0298	0.0894	—
Cs-137	ARA-19	2007	0.4658	0.0196	0.0588	—
Cs-137	ARA-2	2007	0.8085	0.0222	0.0666	—
Cs-137	ARA-20	2007	1.032	0.0147	0.0441	—
Cs-137	ARA-21	2007	1.858	0.0167	0.0501	—
Cs-137	ARA-22	2007	1.029	0.0162	0.0486	—
Cs-137	ARA-23	2007	0.5455	0.0121	0.0363	—
Cs-137	ARA-24	2007	0.303	0.00489	0.01467	—
Cs-137	ARA-25	2007	2.48	0.0202	0.0606	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-26	2007	3.513	0.0222	0.0666	—
Cs-137	ARA-27	2007	1.943	0.0136	0.0408	—
Cs-137	ARA-28	2007	1.348	0.0096	0.0288	—
Cs-137	ARA-29	2007	0.7172	0.01205	0.03615	—
Cs-137	ARA-3	2007	3.337	0.0206	0.0618	—
Cs-137	ARA-30	2007	2.676	0.0169	0.0507	—
Cs-137	ARA-31	2007	0.9774	0.0218	0.0654	—
Cs-137	ARA-32	2007	0.7291	0.0202	0.0606	—
Cs-137	ARA-33	2007	1.798	0.0138	0.0414	—
Cs-137	ARA-34	2007	0.439	0.00659	0.01977	—
Cs-137	ARA-35	2007	2.687	0.0151	0.0453	—
Cs-137	ARA-36	2007	1.237	0.0135	0.0405	—
Cs-137	ARA-37	2007	0.6494	0.0137	0.0411	—
Cs-137	ARA-38	2007	0.6048	0.01175	0.03525	—
Cs-137	ARA-39	2007	1.218	0.0158	0.0474	—
Cs-137	ARA-4	2007	0.7505	0.0127	0.0381	—
Cs-137	ARA-40	2007	0.9159	0.0148	0.0444	—
Cs-137	ARA-41	2007	0.4337	0.00834	0.02502	—
Cs-137	ARA-42	2007	0.4162	0.0096	0.0288	—
Cs-137	ARA-43	2007	0.3697	0.00945	0.02835	—
Cs-137	ARA-44	2007	0.6785	0.00657	0.01971	—
Cs-137	ARA-45	2007	0.4444	0.0188	0.0564	—
Cs-137	ARA-46	2007	0.3773	0.01285	0.03855	—
Cs-137	ARA-47	2007	0.2996	0.0134	0.0402	—
Cs-137	ARA-48	2007	2.34	0.0259	0.0777	—
Cs-137	ARA-49	2007	0.2932	0.009	0.027	—
Cs-137	ARA-5	2007	0.5303	0.0131	0.0393	—
Cs-137	ARA-50	2007	0.2465	0.01555	0.04665	—
Cs-137	ARA-51	2007	1.686	0.02065	0.06195	—
Cs-137	ARA-52	2007	0.2448	0.01685	0.05055	—
Cs-137	ARA-53	2007	0.2443	0.0101	0.0303	—
Cs-137	ARA-54	2007	0.2271	0.0108	0.0324	—
Cs-137	ARA-55	2007	0.1676	0.0137	0.0411	—
Cs-137	ARA-56	2007	0.2312	0.008	0.024	—
Cs-137	ARA-57	2007	0.2256	0.0151	0.0453	—
Cs-137	ARA-58	2007	0.3719	0.01135	0.03405	—
Cs-137	ARA-59	2007	0.2553	0.013	0.039	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-6	2007	0.3158	0.01	0.03	—
Cs-137	ARA-60	2007	0.3157	0.00965	0.02895	—
Cs-137	ARA-61	2007	3.367	0.0233	0.0699	—
Cs-137	ARA-62	2007	3.339	0.0207	0.0621	—
Cs-137	ARA-63	2007	3.795	0.0206	0.0618	—
Cs-137	ARA-65	2007	1.868	0.0165	0.0495	—
Cs-137	ARA-66	2007	0.6005	0.00818	0.02454	—
Cs-137	ARA-67	2007	2.494	0.016	0.048	—
Cs-137	ARA-68	2007	1.693	0.0147	0.0441	—
Cs-137	ARA-69	2007	5.872	0.0205	0.0615	—
Cs-137	ARA-7	2007	0.2316	0.0071	0.0213	—
Cs-137	ARA-70	2007	2.523	0.0188	0.0564	—
Cs-137	ARA-71	2007	3.827	0.0186	0.0558	—
Cs-137	ARA-72	2007	0.9004	0.0138	0.0414	—
Cs-137	ARA-73	2007	0.8435	0.01345	0.04035	—
Cs-137	ARA-74	2007	0.434	0.01305	0.03915	—
Cs-137	ARA-75	2007	0.3964	0.0118	0.0354	—
Cs-137	ARA-76	2007	9.189	0.0308	0.0924	—
Cs-137	ARA-77	2007	0.2793	0.0104	0.0312	—
Cs-137	ARA-8	2007	5.04	0.0231	0.0693	—
Cs-137	ARA-9	2007	0.1999	0.00772	0.02316	—
Cs-137	ARA-0	2009	1.87	0.009	0.027	—
Cs-137	ARA-1	2009	0.8197	0.00635	0.01905	—
Cs-137	ARA-10	2009	0.2822	0.00945	0.02835	—
Cs-137	ARA-11	2009	0.2658	0.008	0.024	—
Cs-137	ARA-12	2009	0.296	0.0081	0.0243	—
Cs-137	ARA-13	2009	4.5	0.02855	0.08565	—
Cs-137	ARA-14	2009	0.2366	0.00595	0.01785	—
Cs-137	ARA-15	2009	1.533	0.0122	0.0366	—
Cs-137	ARA-16	2009	0.6973	0.0098	0.0294	—
Cs-137	ARA-17	2009	0.5257	0.0073	0.0219	—
Cs-137	ARA-18	2009	0.2576	0.01105	0.03315	—
Cs-137	ARA-19	2009	0.3758	0.0089	0.0267	—
Cs-137	ARA-2	2009	0.6175	0.00575	0.01725	—
Cs-137	ARA-20	2009	0.9695	0.01505	0.04515	—
Cs-137	ARA-21	2009	1.44	0.01175	0.03525	—
Cs-137	ARA-22	2009	0.6917	0.0072	0.0216	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-23	2009	0.4066	0.00845	0.02535	—
Cs-137	ARA-24	2009	0.06502	0.0063	0.0189	—
Cs-137	ARA-25	2009	1.995	0.0129	0.0387	—
Cs-137	ARA-26	2009	3.135	0.02285	0.06855	—
Cs-137	ARA-27	2009	1.378	0.007	0.021	—
Cs-137	ARA-28	2009	1.022	0.01065	0.03195	—
Cs-137	ARA-29	2009	0.5661	0.00845	0.02535	—
Cs-137	ARA-3	2009	2.931	0.024	0.072	—
Cs-137	ARA-30	2009	2.221	0.0192	0.0576	—
Cs-137	ARA-31	2009	0.8786	0.0102	0.0306	—
Cs-137	ARA-33	2009	2.463	0.0145	0.0435	—
Cs-137	ARA-34	2009	0.5281	0.00915	0.02745	—
Cs-137	ARA-35	2009	2.725	0.01505	0.04515	—
Cs-137	ARA-36	2009	0.9555	0.01035	0.03105	—
Cs-137	ARA-37	2009	0.5692	0.0051	0.0153	—
Cs-137	ARA-38	2009	0.4468	0.00785	0.02355	—
Cs-137	ARA-39	2009	1.199	0.01605	0.04815	—
Cs-137	ARA-4	2009	0.5201	0.00865	0.02595	—
Cs-137	ARA-40	2009	1.22	0.0109	0.0327	—
Cs-137	ARA-41	2009	0.7215	0.0098	0.0294	—
Cs-137	ARA-42	2009	0.4231	0.00845	0.02535	—
Cs-137	ARA-43	2009	0.2998	0.00615	0.01845	—
Cs-137	ARA-44	2009	0.7318	0.0093	0.0279	—
Cs-137	ARA-45	2009	0.3411	0.0045	0.0135	—
Cs-137	ARA-46	2009	0.2988	0.00245	0.00735	—
Cs-137	ARA-47	2009	0.2549	0.00915	0.02745	—
Cs-137	ARA-48	2009	1.786	0.01315	0.03945	—
Cs-137	ARA-49	2009	0.3155	0.00765	0.02295	—
Cs-137	ARA-5	2009	0.4513	0.00885	0.02655	—
Cs-137	ARA-50	2009	0.2252	0.004415	0.013245	—
Cs-137	ARA-51	2009	1.409	0.01345	0.04035	—
Cs-137	ARA-52	2009	0.1775	0.0069	0.0207	—
Cs-137	ARA-53	2009	0.2647	0.00795	0.02385	—
Cs-137	ARA-54	2009	0.07963	0.00313	0.00939	—
Cs-137	ARA-55	2009	0.1548	0.00505	0.01515	—
Cs-137	ARA-56	2009	0.1845	0.004765	0.014295	—
Cs-137	ARA-57	2009	0.06779	0.00411	0.01233	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-58	2009	0.2515	0.0064	0.0192	—
Cs-137	ARA-59	2009	0.2446	0.00486	0.01458	—
Cs-137	ARA-6	2009	0.2679	0.00775	0.02325	—
Cs-137	ARA-60	2009	0.2603	0.00835	0.02505	—
Cs-137	ARA-61	2009	2.919	0.0197	0.0591	—
Cs-137	ARA-62	2009	2.404	0.0193	0.0579	—
Cs-137	ARA-63	2009	3.792	0.0261	0.0783	—
Cs-137	ARA-65	2009	1.918	0.01265	0.03795	—
Cs-137	ARA-66	2009	0.6254	0.0095	0.0285	—
Cs-137	ARA-67	2009	2.348	0.0144	0.0432	—
Cs-137	ARA-68	2009	1.487	0.0114	0.0342	—
Cs-137	ARA-69	2009	5.458	0.03135	0.09405	—
Cs-137	ARA-7	2009	0.2192	0.0061	0.0183	—
Cs-137	ARA-70	2009	2.46	0.01895	0.05685	—
Cs-137	ARA-71	2009	3.578	0.0176	0.0528	—
Cs-137	ARA-72	2009	0.7575	0.0094	0.0282	—
Cs-137	ARA-73	2009	0.6822	0.00995	0.02985	—
Cs-137	ARA-74	2009	0.3511	0.00865	0.02595	—
Cs-137	ARA-75	2009	0.3299	0.0095	0.0285	—
Cs-137	ARA-76	2009	7.991	0.02455	0.07365	—
Cs-137	ARA-77	2009	0.2383	0.00785	0.02355	—
Cs-137	ARA-8	2009	4.877	0.0195	0.0585	—
Cs-137	ARA-9	2009	0.186	0.00715	0.02145	—
Cs-137	ARA-0	2010	2.271	0.0109	0.0327	—
Cs-137	ARA-1	2010	1.222	0.0145	0.0435	—
Cs-137	ARA-11	2010	0.254	0.00482	0.01446	—
Cs-137	ARA-12	2010	0.2568	0.00805	0.02415	—
Cs-137	ARA-14	2010	0.2518	0.00907	0.02721	—
Cs-137	ARA-15	2010	1.334	0.0153	0.0459	—
Cs-137	ARA-16	2010	0.6574	0.0141	0.0423	—
Cs-137	ARA-17	2010	0.5511	0.00959	0.02877	—
Cs-137	ARA-19	2010	0.4321	0.01	0.03	—
Cs-137	ARA-2	2010	0.3311	0.00304	0.00912	—
Cs-137	ARA-21	2010	1.38	0.00956	0.02868	—
Cs-137	ARA-22	2010	0.8731	0.0108	0.0324	—
Cs-137	ARA-23	2010	0.4366	0.00716	0.02148	—
Cs-137	ARA-24	2010	0.278	0.00816	0.02448	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-27	2010	0.8604	0.00653	0.01959	—
Cs-137	ARA-28	2010	1.22	0.0152	0.0456	—
Cs-137	ARA-29	2010	0.5318	0.0108	0.0324	—
Cs-137	ARA-31	2010	0.9442	0.0177	0.0531	—
Cs-137	ARA-32	2010	0.651	0.0067	0.0201	—
Cs-137	ARA-34	2010	0.532	0.00984	0.02952	—
Cs-137	ARA-35	2010	2.862	0.0115	0.0345	—
Cs-137	ARA-36	2010	0.99	0.0126	0.0378	—
Cs-137	ARA-37	2010	0.5538	0.00898	0.02694	—
Cs-137	ARA-38	2010	0.4045	0.00926	0.02778	—
Cs-137	ARA-4	2010	0.6033	0.0103	0.0309	—
Cs-137	ARA-40	2010	1.34	0.0115	0.0345	—
Cs-137	ARA-41	2010	0.6976	0.0118	0.0354	—
Cs-137	ARA-42	2010	0.3141	0.00948	0.02844	—
Cs-137	ARA-43	2010	0.2279	0.00348	0.01044	—
Cs-137	ARA-44	2010	0.7383	0.0122	0.0366	—
Cs-137	ARA-45	2010	0.418	0.0115	0.0345	—
Cs-137	ARA-46	2010	0.3035	0.014	0.042	—
Cs-137	ARA-47	2010	0.2303	0.00723	0.02169	—
Cs-137	ARA-48	2010	0.9946	0.00568	0.01704	—
Cs-137	ARA-5	2010	0.4013	0.0113	0.0339	——
Cs-137	ARA-50	2010	0.3074	0.00896	0.02688	—
Cs-137	ARA-51	2010	1.303	0.00901	0.02703	—
Cs-137	ARA-52	2010	0.2343	0.00945	0.02835	—
Cs-137	ARA-53	2010	0.2854	0.0115	0.0345	—
Cs-137	ARA-54	2010	0.2258	0.00851	0.02553	—
Cs-137	ARA-55	2010	0.2692	0.00842	0.02526	—
Cs-137	ARA-56	2010	0.2242	0.00948	0.02844	—
Cs-137	ARA-57	2010	0.2016	0.00898	0.02694	—
Cs-137	ARA-58	2010	0.3116	0.00894	0.02682	—
Cs-137	ARA-59	2010	0.2957	0.00842	0.02526	—
Cs-137	ARA-6	2010	0.3249	0.0101	0.0303	—
Cs-137	ARA-60	2010	0.2701	0.00941	0.02823	—
Cs-137	ARA-65	2010	1.805	0.0148	0.0444	—
Cs-137	ARA-7	2010	0.2017	0.00455	0.01365	—
Cs-137	ARA-73	2010	0.7083	0.0123	0.0369	—
Cs-137	ARA-74	2010	0.3772	0.00843	0.02529	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-75	2010	0.3813	0.011	0.033	—
Cs-137	ARA-77	2010	0.2462	0.0127	0.0381	—
Cs-137	ARA-9	2010	0.2106	0.0105	0.0315	—
Cs-137	ARA-1	2011	2.558	0.0203	0.0609	—
Cs-137	ARA-14	2011	0.297	0.00718	0.02154	—
Cs-137	ARA-16	2011	1.369	0.0148	0.0444	—
Cs-137	ARA-2	2011	1.054	0.0137	0.0411	—
Cs-137	ARA-24	2011	0.8482	0.0159	0.0477	—
Cs-137	ARA-28	2011	2.441	0.0218	0.0654	—
Cs-137	ARA-29	2011	0.6844	0.0087	0.0261	—
Cs-137	ARA-31	2011	2.064	0.0207	0.0621	—
Cs-137	ARA-32	2011	1.812	0.0257	0.0771	—
Cs-137	ARA-34	2011	1.546	0.0247	0.0741	—
Cs-137	ARA-38	2011	1.325	0.0242	0.0726	—
Cs-137	ARA-4	2011	0.6981	0.00939	0.02817	—
Cs-137	ARA-42	2011	1.061	0.0234	0.0702	—
Cs-137	ARA-43	2011	0.6363	0.0135	0.0405	—
Cs-137	ARA-47	2011	0.5158	0.0131	0.0393	—
Cs-137	ARA-50	2011	0.651	0.0145	0.0435	—
Cs-137	ARA-51	2011	3.622	0.0301	0.0903	—
Cs-137	ARA-62	2011	0.49	0.0127	0.0381	—
Cs-137	ARA-65	2011	4.678	0.0252	0.0756	—
Cs-137	ARA-71	2011	9.583	0.5	1.5	—
Cs-137	ARA-74	2011	0.7906	0.0147	0.0441	—
Cs-137	ARA-75	2011	0.9302	0.0163	0.0489	—
Cs-137	ARA-77	2011	0.4888	0.013	0.039	—
Cs-137	ARA-9	2011	0.2335	0.00679	0.02037	—
Cs-137	ARA-11	2012	0.2424	0.00986	0.02958	—
Cs-137	ARA-16	2012	0.4904	0.0112	0.0336	—
Cs-137	ARA-31	2012	1.253	0.0122	0.0366	—
Cs-137	ARA-32	2012	0.5818	0.00838	0.02514	—
Cs-137	ARA-48	2012	1.328	0.01	0.03	—
Cs-137	ARA-53	2012	0.2027	0.00516	0.01548	—
Cs-137	ARA-57	2012	0.08622	0.0062	0.0186	—
Cs-137	ARA-58	2012	0.3202	0.00784	0.02352	—
Cs-137	ARA-59	2012	0.2819	0.00809	0.02427	—
Cs-137	ARA-60	2012	0.2291	0.00805	0.02415	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ARA-62	2012	0.1267	0.00941	0.02823	—
Cs-137	ARA-65	2012	1.618	0.015	0.045	—
Cs-137	ARA-73	2012	0.5814	0.00702	0.02106	—
Cs-137	ARA-31	2013	0.8052	0.0119	0.0357	—
Cs-137	ARA-32	2013	0.2114	0.0038	0.0114	—
Cs-137	ARA-33	2013	0.2264	0.012166667	0.0365	—
Cs-137	ARA-40	2013	1.152	0.0156	0.0468	—
Cs-137	ARA-48	2013	0.542	0.0059	0.0177	—
Cs-137	ARA-65	2013	0.577	0.004633333	0.0139	—
Cs-137	2 INCH AIR - ARA	2014	0.3787	0.0146	0.0438	—
Cs-137	ARA-1	2014	0.8636	0.00883	0.02649	—
Cs-137	ARA-24	2014	0.31	0.012	0.036	—
Cs-137	ARA-31	2014	0.862	0.0152	0.0456	—
Cs-137	ARA-32	2014	0.1298	0.0065	0.0195	—
Cs-137	ARA-65	2014	1.639	0.0146	0.0438	—
Cs-137	ARA-71	2014	1.549	0.00767	0.02301	—
Eu-152	56.25° 2000’	1985	0.6	0.05	0.15	—
Eu-152	ARA-0	2007	0.1984	0.03685	0.11055	—
Eu-152	ARA-11	2007	1.017	0.08	0.24	—
Eu-152	ARA-12	2007	1.013	0.0675	0.2025	—
Eu-152	ARA-14	2007	0.2634	0.02895	0.08685	—
Eu-152	ARA-15	2007	0.3424	0.04625	0.13875	—
Eu-152	ARA-17	2007	0.418	0.04415	0.13245	—
Eu-152	ARA-19	2007	1.248	0.082	0.246	—
Eu-152	ARA-2	2007	0.8257	0.055	0.165	—
Eu-152	ARA-21	2007	0.2399	0.0279	0.0837	—
Eu-152	ARA-23	2007	0.2833	0.0344	0.1032	—
Eu-152	ARA-24	2007	0.2276	0.02705	0.08115	—
Eu-152	ARA-28	2007	0.3814	0.03805	0.11415	—
Eu-152	ARA-29	2007	0.2089	0.02915	0.08745	—
Eu-152	ARA-31	2007	0.622	0.059	0.177	—
Eu-152	ARA-32	2007	0.7504	0.052	0.156	—
Eu-152	ARA-36	2007	0.1301	0.02055	0.06165	—
Eu-152	ARA-37	2007	1.187	0.093	0.279	—
Eu-152	ARA-38	2007	0.2351	0.02745	0.08235	—
Eu-152	ARA-4	2007	0.2935	0.03015	0.09045	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	ARA-42	2007	0.4242	0.051	0.153	—
Eu-152	ARA-43	2007	0.221	0.02935	0.08805	—
Eu-152	ARA-45	2007	1.077	0.059	0.177	—
Eu-152	ARA-46	2007	0.2391	0.03305	0.09915	—
Eu-152	ARA-47	2007	0.3586	0.036	0.108	—
Eu-152	ARA-48	2007	0.1298	0.0341	0.1023	—
Eu-152	ARA-49	2007	0.184	0.0246	0.0738	—
Eu-152	ARA-5	2007	0.3412	0.04355	0.13065	—
Eu-152	ARA-50	2007	0.7454	0.068	0.204	—
Eu-152	ARA-51	2007	0.353	0.0404	0.1212	—
Eu-152	ARA-52	2007	0.3845	0.04515	0.13545	—
Eu-152	ARA-56	2007	0.2021	0.0259	0.0777	—
Eu-152	ARA-57	2007	1.217	0.076	0.228	—
Eu-152	ARA-58	2007	0.2532	0.0374	0.1122	—
Eu-152	ARA-59	2007	0.3171	0.03585	0.10755	—
Eu-152	ARA-6	2007	0.2392	0.02975	0.08925	—
Eu-152	ARA-60	2007	0.2893	0.03755	0.11265	—
Eu-152	ARA-65	2007	1.159	0.078	0.234	—
Eu-152	ARA-7	2007	0.2856	0.03405	0.10215	—
Eu-152	ARA-73	2007	0.209	0.02915	0.08745	—
Eu-152	ARA-74	2007	0.2633	0.03135	0.09405	—
Eu-152	ARA-75	2007	0.367	0.067	0.201	—
Eu-152	ARA-77	2007	0.2755	0.03	0.09	—
Eu-152	ARA-1	2011	-0.01441	0.0217	0.0651	U
Eu-152	ARA-14	2011	0.007048	0.0173	0.0519	U
Eu-152	ARA-16	2011	-0.002974	0.0315	0.0945	U
Eu-152	ARA-2	2011	0.0102	0.0202	0.0606	U
Eu-152	ARA-24	2011	0.0006984	0.0216	0.0648	U
Eu-152	ARA-28	2011	0.02575	0.0272	0.0816	U
Eu-152	ARA-29	2011	0.01154	0.017	0.051	U
Eu-152	ARA-31	2011	0.008125	0.0266	0.0798	U
Eu-152	ARA-32	2011	0.01698	0.0315	0.0945	U
Eu-152	ARA-34	2011	-0.0002467	0.0289	0.0867	U
Eu-152	ARA-38	2011	0.02879	0.0291	0.0873	U
Eu-152	ARA-4	2011	0.002729	0.0163	0.0489	U
Eu-152	ARA-42	2011	0.02726	0.0286	0.0858	U
Eu-152	ARA-43	2011	0.009126	0.0206	0.0618	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	ARA-47	2011	-0.01508	0.0257	0.0771	U
Eu-152	ARA-50	2011	0.01953	0.0245	0.0735	U
Eu-152	ARA-51	2011	0.01477	0.0288	0.0864	U
Eu-152	ARA-62	2011	0.01772	0.0231	0.0693	U
Eu-152	ARA-65	2011	-0.02214	0.0225	0.0675	U
Eu-152	ARA-74	2011	0.02667	0.0256	0.0768	U
Eu-152	ARA-75	2011	0.01495	0.0263	0.0789	U
Eu-152	ARA-77	2011	-0.005068	0.0252	0.0756	U
Eu-152	ARA-9	2011	0.0249	0.0143	0.0429	U
Eu-152	ARA-11	2012	0.009189	0.0258	0.0774	U
Eu-152	ARA-16	2012	-0.003108	0.0317	0.0951	U
Eu-152	ARA-31	2012	-0.008595	0.0247	0.0741	U
Eu-152	ARA-32	2012	-0.004131	0.0278	0.0834	U
Eu-152	ARA-48	2012	0.04203	0.0233	0.0699	U
Eu-152	ARA-53	2012	0.005979	0.023	0.069	U
Eu-152	ARA-57	2012	0.01051	0.0258	0.0774	U
Eu-152	ARA-58	2012	0.03904	0.0219	0.0657	U
Eu-152	ARA-59	2012	0.03	0.0222	0.0666	U
Eu-152	ARA-60	2012	0.01173	0.0244	0.0732	U
Eu-152	ARA-62	2012	0.01668	0.0269	0.0807	U
Eu-152	ARA-65	2012	0.0246	0.0217	0.0651	U
Eu-152	ARA-73	2012	0.03736	0.0224	0.0672	U
Eu-152	ARA-31	2013	0.1388	0.0311	0.0934	—
Eu-152	ARA-32	2013	0.01422	0.0156	0.0468	U
Eu-152	ARA-33	2013	0.1558	0.0251	0.0753	—
Eu-152	ARA-40	2013	0.1809	0.0357	0.107	—
Eu-152	ARA-48	2013	-0.001267	0.0161	0.0482	U
Eu-152	ARA-65	2013	0.008385	0.0148	0.0445	U
Eu-152	2 INCH AIR - ARA	2014	0.03905	0.0347	0.1041	U
Eu-152	ARA-1	2014	0.01375	0.0225	0.0675	U
Eu-152	ARA-24	2014	0.001474	0.0194	0.0582	U
Eu-152	ARA-31	2014	-0.01088	0.0317	0.0951	U
Eu-152	ARA-32	2014	0.02117	0.024	0.072	U
Eu-152	ARA-65	2014	0.0046	0.0307	0.0921	U
Eu-152	ARA-71	2014	0.01143	0.0134	0.0402	U
Pu-238	0° 250’	1977	0.024	0.003	0.009	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	22.5° 250’	1977	0.002	0.002	0.006	U
Pu-238	225° 500’	1977	0.004	0.001	0.003	—
Pu-238	270° 1500’	1977	0.0011	0.0006	0.0018	U
Pu-238	270° 500’	1977	0.0011	0.0006	0.0018	U
Pu-238	45° 1500’	1977	0.003	0.001	0.003	—
Pu-238	45° 250’	1977	0.004	0.001	0.003	—
Pu-238	45° 2500’	1977	0	0.001	0.003	U
Pu-238	45° 500’	1977	0.025	0.003	0.009	—
Pu-238	90° 500’	1977	0.001	0.001	0.003	U
Pu-238	0° 1000’	1985	0.0012	0.0013	0.0039	U
Pu-238	22.5° 2500’	1985	0.003	0.002	0.006	U
Pu-238	67.5° 2000’	1985	0.001	0.0013	0.0039	U
Pu-238	67.5° 500’	1985	0.002	0.002	0.006	U
Pu-239/240	0° 250’	1977	0.047	0.004	0.012	—
Pu-239/240	22.5° 250’	1977	0.022	0.003	0.009	—
Pu-239/240	225° 500’	1977	0.011	0.002	0.006	—
Pu-239/240	270° 500’	1977	0.012	0.002	0.006	—
Pu-239/240	45° 1500’	1977	0.015	0.002	0.006	—
Pu-239/240	45° 250’	1977	0.016	0.002	0.006	—
Pu-239/240	45° 2500’	1977	0.018	0.002	0.006	—
Pu-239/240	45° 500’	1977	0.033	0.003	0.009	—
Pu-239/240	90° 500’	1977	0.021	0.003	0.009	—
Pu-239/240	0° 1000’	1985	0.014	0.002	0.006	—
Pu-239/240	22.5° 2500’	1985	0.021	0.003	0.009	—
Pu-239/240	67.5° 2000’	1985	0.011	0.002	0.006	—
Pu-239/240	67.5° 500’	1985	0.009	0.002	0.006	—
Sb-125	270° 1000’	1977	0.1	0.04	0.12	U
Sb-125	315° 500’	1977	0.17	0.06	0.18	U
Sb-125	ARA-0	2007	0.4902	0.0655	0.1965	—
Sb-125	ARA-11	2007	1.01	0.1945	0.5835	—
Sb-125	ARA-12	2007	0.586	0.125	0.375	—
Sb-125	ARA-14	2007	0.1637	0.04075	0.12225	—
Sb-125	ARA-15	2007	0.226	0.03935	0.11805	—
Sb-125	ARA-17	2007	0.3805	0.06	0.18	—
Sb-125	ARA-19	2007	0.3985	0.1325	0.3975	—
Sb-125	ARA-2	2007	1.415	0.265	0.795	—
Sb-125	ARA-21	2007	0.1101	0.0437	0.1311	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	ARA-23	2007	0.2591	0.0635	0.1905	—
Sb-125	ARA-24	2007	0.2465	0.03725	0.11175	—
Sb-125	ARA-28	2007	0.3409	0.065	0.195	—
Sb-125	ARA-29	2007	0.2129	0.04375	0.13125	—
Sb-125	ARA-31	2007	0.5463	0.112	0.336	—
Sb-125	ARA-32	2007	0.6003	0.089	0.267	—
Sb-125	ARA-36	2007	0.2576	0.0474	0.1422	—
Sb-125	ARA-37	2007	0.6505	0.103	0.309	—
Sb-125	ARA-38	2007	0.3246	0.0455	0.1365	—
Sb-125	ARA-4	2007	0.2618	0.051	0.153	—
Sb-125	ARA-42	2007	0.3039	0.0481	0.1443	—
Sb-125	ARA-43	2007	0.192	0.0505	0.1515	—
Sb-125	ARA-45	2007	1.152	0.2085	0.6255	—
Sb-125	ARA-46	2007	0.2414	0.04565	0.13695	—
Sb-125	ARA-47	2007	0.3426	0.058	0.174	—
Sb-125	ARA-48	2007	0.2379	0.0464	0.1392	—
Sb-125	ARA-49	2007	0.2245	0.0424	0.1272	—
Sb-125	ARA-5	2007	0.2235	0.059	0.177	—
Sb-125	ARA-50	2007	0.531	0.093	0.279	—
Sb-125	ARA-51	2007	0.4702	0.062	0.186	—
Sb-125	ARA-52	2007	0.177	0.02645	0.07935	—
Sb-125	ARA-56	2007	0.1579	0.0341	0.1023	—
Sb-125	ARA-57	2007	0.6054	0.113	0.339	—
Sb-125	ARA-58	2007	0.3235	0.057	0.171	—
Sb-125	ARA-59	2007	0.3663	0.0745	0.2235	—
Sb-125	ARA-6	2007	0.2458	0.0332	0.0996	—
Sb-125	ARA-60	2007	0.1564	0.04535	0.13605	—
Sb-125	ARA-65	2007	0.5521	0.113	0.339	—
Sb-125	ARA-7	2007	0.2512	0.03995	0.11985	—
Sb-125	ARA-73	2007	0.2343	0.04715	0.14145	—
Sb-125	ARA-74	2007	0.1883	0.0487	0.1461	—
Sb-125	ARA-75	2007	0.0789	0.0309	0.0927	U
Sb-125	ARA-77	2007	0.2113	0.0351	0.1053	—
Sb-125	ARA-1	2011	0.0719	0.0295	0.0885	U
Sb-125	ARA-14	2011	-0.01036	0.0224	0.0672	U
Sb-125	ARA-16	2011	0.05636	0.0371	0.1113	U
Sb-125	ARA-2	2011	0.01497	0.0258	0.0774	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	ARA-24	2011	0.07952	0.0263	0.0789	—
Sb-125	ARA-28	2011	0.05066	0.0359	0.1077	U
Sb-125	ARA-29	2011	0.0232	0.0224	0.0672	U
Sb-125	ARA-31	2011	0.03403	0.0395	0.1185	U
Sb-125	ARA-32	2011	0.11	0.0422	0.1266	U
Sb-125	ARA-34	2011	-0.02466	0.0385	0.1155	U
Sb-125	ARA-38	2011	0.08144	0.04	0.12	U
Sb-125	ARA-4	2011	0.03117	0.022	0.066	U
Sb-125	ARA-42	2011	0.005976	0.0405	0.1215	U
Sb-125	ARA-43	2011	0.08471	0.0341	0.1023	U
Sb-125	ARA-47	2011	0.02753	0.0343	0.1029	U
Sb-125	ARA-50	2011	0.002701	0.0333	0.0999	U
Sb-125	ARA-51	2011	0.09535	0.0426	0.1278	U
Sb-125	ARA-62	2011	0.03584	0.0268	0.0804	U
Sb-125	ARA-65	2011	0.5495	0.031	0.093	—
Sb-125	ARA-74	2011	0.01884	0.0375	0.1125	U
Sb-125	ARA-75	2011	-0.003259	0.0385	0.1155	U
Sb-125	ARA-77	2011	0.03254	0.0352	0.1056	U
Sb-125	ARA-9	2011	0.1444	0.0253	0.0759	—
Sb-125	ARA-11	2012	0.01697	0.0317	0.0951	U
Sb-125	ARA-16	2012	0.02102	0.0433	0.1299	U
Sb-125	ARA-31	2012	-0.001805	0.0359	0.1077	U
Sb-125	ARA-32	2012	0.003851	0.0346	0.1038	U
Sb-125	ARA-48	2012	0.004137	0.0412	0.1236	U
Sb-125	ARA-53	2012	0.01073	0.0306	0.0918	U
Sb-125	ARA-57	2012	0.0003073	0.0343	0.1029	U
Sb-125	ARA-58	2012	0.002329	0.0309	0.0927	U
Sb-125	ARA-59	2012	0.01127	0.0295	0.0885	U
Sb-125	ARA-60	2012	0.03591	0.032	0.096	U
Sb-125	ARA-62	2012	0.01059	0.0255	0.0765	U
Sb-125	ARA-65	2012	0.0032	0.0384	0.1152	U
Sb-125	ARA-73	2012	-0.0146	0.034	0.102	U
Sb-125	ARA-31	2013	0.02805	0.039	0.117	U
Sb-125	ARA-32	2013	0.04352	0.0141	0.0424	—
Sb-125	ARA-33	2013	0.07421	0.0193	0.0578	—
Sb-125	ARA-40	2013	0.1355	0.0303	0.0908	—
Sb-125	ARA-48	2013	0.04925	0.0166	0.0497	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	ARA-65	2013	0.03836	0.0150	0.0451	U
Sb-125	2 INCH AIR - ARA	2014	-0.03332	0.0586	0.1758	U
Sb-125	ARA-1	2014	-0.1056	0.0436	0.1308	U
Sb-125	ARA-24	2014	0.02015	0.0456	0.1368	U
Sb-125	ARA-31	2014	-0.01094	0.0504	0.1512	U
Sb-125	ARA-32	2014	-0.1258	0.0397	0.1191	U
Sb-125	ARA-65	2014	-0.007183	0.0515	0.1545	U
Sb-125	ARA-71	2014	0.005412	0.0311	0.0933	U
Sr-90	0° 500’	1977	57	2	6	—
Sr-90	270° 500’	1977	0.41	0.05	0.15	—
Sr-90	0° 1000’	1985	2.23	0.11	0.33	—
Sr-90	135° 2500’	1985	0.62	0.06	0.18	—
Sr-90	135° 2500’	1985	0.45	0.06	0.18	—
Sr-90	180° 2500’	1985	0.46	0.06	0.18	—
Sr-90	202.5° 2000’	1985	0.93	0.07	0.21	—
Sr-90	22.5° 2500’	1985	0.74	0.07	0.21	—
Sr-90	225° 2500’	1985	0.68	0.07	0.21	—
Sr-90	225° 500’	1985	9.5	0.3	0.9	—
Sr-90	270° 1000’	1985	0.5	0.06	0.18	—
Sr-90	337.5° 2500’	1985	0.38	0.06	0.18	—
Sr-90	45° 1000’	1985	2.86	0.13	0.39	—
Sr-90	45° 2500’	1985	1.73	0.09	0.27	——
Sr-90	67.5° 2000’	1985	17.3	0.5	1.5	—
Sr-90	67.5° 500’	1985	22.3	0.7	2.1	—
U-233/234	0° 1000’	1985	1.01	0.04	0.12	—
U-233/234	22.5° 2500’	1985	0.94	0.03	0.09	—
U-233/234	67.5° 2000’	1985	0.91	0.03	0.09	—
U-233/234	67.5° 500’	1985	0.8	0.03	0.09	—
U-234	ARA-0	2007	75.62	26.5	79.5	U
U-234	ARA-1	2007	35.67	0.796	2.388	—
U-234	ARA-10	2007	77.86	2.79	8.37	—
U-234	ARA-11	2007	183.9	52.5	157.5	—
U-234	ARA-13	2007	13.61	3.05	9.15	—
U-234	ARA-14	2007	9.297	11.9	35.7	U
U-234	ARA-15	2007	71.52	19.15	57.45	—
U-234	ARA-16	2007	65.55	3.2	9.6	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	ARA-17	2007	39.43	33.25	99.75	U
U-234	ARA-18	2007	124.7	6.53	19.59	—
U-234	ARA-2	2007	31.83	12.2	36.6	U
U-234	ARA-20	2007	137.5	4.3	12.9	—
U-234	ARA-21	2007	32.59	21.4	64.2	U
U-234	ARA-22	2007	35.86	2.57	7.71	—
U-234	ARA-23	2007	67.37	31.85	95.55	U
U-234	ARA-24	2007	22.79	12.85	38.55	U
U-234	ARA-25	2007	151.3	4.55	13.65	—
U-234	ARA-26	2007	156	4.52	13.56	—
U-234	ARA-27	2007	43.75	2.6	7.8	—
U-234	ARA-28	2007	32.77	20.65	61.95	U
U-234	ARA-29	2007	62.55	41.05	123.15	U
U-234	ARA-3	2007	141.1	4.26	12.78	—
U-234	ARA-30	2007	140.9	4.21	12.63	—
U-234	ARA-31	2007	50.71	17.95	53.85	U
U-234	ARA-32	2007	74.43	28.5	85.5	U
U-234	ARA-33	2007	124.7	3.98	11.94	—
U-234	ARA-34	2007	114	3.72	11.16	—
U-234	ARA-35	2007	118.2	4.02	12.06	—
U-234	ARA-36	2007	13.21	18.05	54.15	U
U-234	ARA-37	2007	71.51	26.45	79.35	U
U-234	ARA-38	2007	29.17	25.25	75.75	U
U-234	ARA-39	2007	95.54	3.03	9.09	—
U-234	ARA-4	2007	18.64	20.9	62.7	U
U-234	ARA-40	2007	138	3.83	11.49	—
U-234	ARA-41	2007	134.3	3.88	11.64	—
U-234	ARA-42	2007	24.23	17.65	52.95	U
U-234	ARA-43	2007	39.56	17.3	51.9	U
U-234	ARA-44	2007	91.35	4.11	12.33	—
U-234	ARA-45	2007	40.48	12.8	38.4	—
U-234	ARA-46	2007	34.6	16.05	48.15	U
U-234	ARA-47	2007	37.31	11.1	33.3	—
U-234	ARA-48	2007	46.73	23.05	69.15	U
U-234	ARA-49	2007	25.42	12.4	37.2	U
U-234	ARA-5	2007	31.24	19.75	59.25	U
U-234	ARA-50	2007	13.69	8.2	24.6	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	ARA-51	2007	25.38	17.05	51.15	U
U-234	ARA-53	2007	76.61	3.91	11.73	—
U-234	ARA-54	2007	101.8	3.49	10.47	—
U-234	ARA-55	2007	98.67	3.52	10.56	—
U-234	ARA-56	2007	0.1117	12.85	38.55	U
U-234	ARA-57	2007	26.67	14.6	43.8	U
U-234	ARA-58	2007	-1.273	20.85	62.55	U
U-234	ARA-59	2007	21.51	10.55	31.65	U
U-234	ARA-6	2007	9.411	9.25	27.75	U
U-234	ARA-60	2007	1.539	11.25	33.75	U
U-234	ARA-61	2007	125.1	4.09	12.27	—
U-234	ARA-62	2007	149.2	4.36	13.08	—
U-234	ARA-63	2007	152.2	4.31	12.93	—
U-234	ARA-65	2007	86.97	26.5	79.5	—
U-234	ARA-66	2007	122.5	4.16	12.48	—
U-234	ARA-67	2007	121.9	3.89	11.67	—
U-234	ARA-68	2007	131	3.96	11.88	—
U-234	ARA-69	2007	155.2	4.4	13.2	—
U-234	ARA-7	2007	53.79	23.05	69.15	U
U-234	ARA-70	2007	143.6	4.2	12.6	—
U-234	ARA-71	2007	152.8	4.3	12.9	—
U-234	ARA-72	2007	99.44	4.15	12.45	—
U-234	ARA-73	2007	37	18.15	54.45	U
U-234	ARA-74	2007	59.06	22.5	67.5	U
U-234	ARA-75	2007	10.52	12.15	36.45	U
U-234	ARA-76	2007	201.4	5.18	15.54	—
U-234	ARA-77	2007	43.89	22.35	67.05	U
U-234	ARA-8	2007	186.6	4.8	14.4	—
U-234	ARA-9	2007	86.7	3.31	9.93	—
U-234	ARA-10	2009	1.289	4.275	12.825	U
U-234	ARA-13	2009	-1.396	4.65	13.95	U
U-234	ARA-18	2009	-0.8736	4.48	13.44	U
U-234	ARA-20	2009	3.315	5.35	16.05	U
U-234	ARA-21	2009	0	0.238	0.714	U
U-234	ARA-26	2009	-0.02759	5.9	17.7	U
U-234	ARA-27	2009	8.558	3.415	10.245	U
U-234	ARA-3	2009	29.3	17.6	52.8	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	ARA-30	2009	-1.539	9.05	27.15	U
U-234	ARA-35	2009	-2.809	6.45	19.35	U
U-234	ARA-36	2009	3.278	2.105	6.315	U
U-234	ARA-39	2009	0.3392	8.75	26.25	U
U-234	ARA-40	2009	2.467	1.885	5.655	U
U-234	ARA-43	2009	27.74	26.85	80.55	U
U-234	ARA-44	2009	-2.54	6.2	18.6	U
U-234	ARA-47	2009	-9.892	6.85	20.55	U
U-234	ARA-61	2009	-0.07304	0.301	0.903	U
U-234	ARA-62	2009	0.06726	0.447	1.341	U
U-234	ARA-63	2009	-1.779	12.05	36.15	U
U-234	ARA-65	2009	4.008	2.07	6.21	U
U-234	ARA-67	2009	-0.5938	4.59	13.77	U
U-234	ARA-68	2009	-4.266	6.55	19.65	U
U-234	ARA-69	2009	-11.66	13.25	39.75	U
U-234	ARA-70	2009	90.58	12.5	37.5	—
U-234	ARA-71	2009	2.427	6.2	18.6	U
U-234	ARA-72	2009	4.814	4.34	13.02	U
U-234	ARA-74	2009	-3.189	6.5	19.5	U
U-234	ARA-75	2009	-1.672	5.9	17.7	U
U-234	ARA-76	2009	18.4	5.85	17.55	—
U-234	ARA-77	2009	0.5842	4.805	14.415	U
U-234	ARA-8	2009	0.6721	5.25	15.75	U
U-234	ARA-0	2010	2.561	2.86	8.58	U
U-234	ARA-1	2010	18.31	1.75	5.25	—
U-234	ARA-11	2010	22.03	1.64	4.92	—
U-234	ARA-12	2010	109.8	3.74	11.22	—
U-234	ARA-14	2010	21.88	2.06	6.18	—
U-234	ARA-15	2010	114.8	3.85	11.55	—
U-234	ARA-16	2010	115.2	3.83	11.49	—
U-234	ARA-17	2010	15.34	1.69	5.07	—
U-234	ARA-19	2010	20.29	2.12	6.36	—
U-234	ARA-2	2010	7.034	2.22	6.66	—
U-234	ARA-21	2010	5.738	2.18	6.54	U
U-234	ARA-22	2010	21.8	2.12	6.36	—
U-234	ARA-23	2010	8.55	1.98	5.94	—
U-234	ARA-24	2010	109.6	3.67	11.01	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	ARA-27	2010	9.462	2.16	6.48	—
U-234	ARA-28	2010	29.52	2.15	6.45	—
U-234	ARA-29	2010	17.53	1.64	4.92	—
U-234	ARA-31	2010	39.7	2.33	6.99	—
U-234	ARA-32	2010	27.13	2.08	6.24	—
U-234	ARA-34	2010	37.58	2.26	6.78	—
U-234	ARA-35	2010	2.896	2.89	8.67	U
U-234	ARA-36	2010	29.62	2.05	6.15	—
U-234	ARA-37	2010	100	3.56	10.68	—
U-234	ARA-38	2010	97.28	3.56	10.68	—
U-234	ARA-4	2010	16.94	1.86	5.58	—
U-234	ARA-40	2010	30.01	2	6	—
U-234	ARA-41	2010	20.44	1.7	5.1	—
U-234	ARA-42	2010	4.18	1.95	5.85	U
U-234	ARA-43	2010	6.191	1.91	5.73	—
U-234	ARA-44	2010	19.39	1.63	4.89	—
U-234	ARA-46	2010	14.64	1.99	5.97	—
U-234	ARA-47	2010	2.664	1.97	5.91	U
U-234	ARA-48	2010	6.129	2.21	6.63	U
U-234	ARA-5	2010	107.1	3.78	11.34	—
U-234	ARA-50	2010	11.52	1.66	4.98	—
U-234	ARA-51	2010	9.755	2.13	6.39	—
U-234	ARA-52	2010	30.26	1.96	5.88	—
U-234	ARA-53	2010	26.65	2.1	6.3	—
U-234	ARA-54	2010	14.7	1.48	4.44	—
U-234	ARA-55	2010	22.38	1.89	5.67	—
U-234	ARA-56	2010	14.95	1.61	4.83	—
U-234	ARA-57	2010	19.68	2.03	6.09	—
U-234	ARA-58	2010	15.51	1.65	4.95	—
U-234	ARA-59	2010	16.85	1.47	4.41	—
U-234	ARA-6	2010	12.99	1.53	4.59	—
U-234	ARA-60	2010	29.57	2	6	—
U-234	ARA-65	2010	19.14	1.71	5.13	—
U-234	ARA-7	2010	28.13	1.97	5.91	—
U-234	ARA-73	2010	20.88	1.66	4.98	—
U-234	ARA-74	2010	20.4	1.68	5.04	—
U-234	ARA-75	2010	39.47	2.26	6.78	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	ARA-77	2010	26.85	1.99	5.97	—
U-234	ARA-9	2010	15.43	1.53	4.59	—
U-234	ARA-1	2011	-41.01	65.5	196.5	U
U-234	ARA-14	2011	15.15	50.7	152.1	U
U-234	ARA-2	2011	-43.79	53.2	159.6	U
U-234	ARA-24	2011	-3.921	61.3	183.9	U
U-234	ARA-29	2011	29.97	45.7	137.1	U
U-234	ARA-4	2011	20.76	37.8	113.4	U
U-234	ARA-43	2011	-49.67	59.5	178.5	U
U-234	ARA-47	2011	17.68	63.3	189.9	U
U-234	ARA-65	2011	-11.2	60.9	182.7	U
U-234	ARA-77	2011	8.652	61.8	185.4	U
U-234	ARA-9	2011	-1.56	37.6	112.8	U
U-234	ARA-11	2012	16.78	24.5	73.5	U
U-234	ARA-16	2012	5.204	30.1	90.3	U
U-234	ARA-31	2012	7.898	24.5	73.5	U
U-234	ARA-32	2012	6.701	26.7	80.1	U
U-234	ARA-48	2012	4.741	16.7	50.1	U
U-234	ARA-53	2012	18.51	21.8	65.4	U
U-234	ARA-57	2012	12.66	24.6	73.8	U
U-234	ARA-58	2012	-2.3	15.2	45.6	U
U-234	ARA-59	2012	1.838	22.1	66.3	U
U-234	ARA-60	2012	4.865	23.1	69.3	U
U-234	ARA-62	2012	3.379	26.3	78.9	U
U-234	ARA-65	2012	-7.62	16	48	U
U-234	ARA-73	2012	-7.701	15.3	45.9	U
U-234	ARA-31	2013	0.8604	32.0	96.1	U
U-234	ARA-32	2013	-19.62	44.3	133	U
U-234	ARA-33	2013	22.64	26.0	77.9	U
U-234	ARA-40	2013	46.54	41.3	124	U
U-234	ARA-48	2013	1.623	46	138	U
U-234	ARA-65	2013	20.68	39.7	119	U
U-234	ARA-1	2014	-3.863	47.4	142.2	U
U-234	ARA-24	2014	-60.49	60.5	181.5	U
U-234	ARA-32	2014	10.13	54.9	164.7	U
U-234	ARA-71	2014	-5.107	43.3	129.9	U
U-235	0° 1000’	1985	0.05	0.025	0.075	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	22.5° 2500’	1985	0.053	0.027	0.081	U
U-235	67.5° 2000’	1985	0.053	0.027	0.081	U
U-235	67.5° 500’	1985	0.043	0.021	0.063	U
U-235	ARA-0	2006	3.7	1.12	3.36	—
U-235	ARA-1	2006	0.3044	0.096	0.288	—
U-235	ARA-10	2006	1.017	0.43	1.29	U
U-235	ARA-13	2006	3.223	1.225	3.675	U
U-235	ARA-18	2006	1.328	0.685	2.055	U
U-235	ARA-2	2006	3.517	0.845	2.535	—
U-235	ARA-20	2006	-0.1246	0.935	2.805	U
U-235	ARA-26	2006	2.827	1.13	3.39	U
U-235	ARA-3	2006	3.541	1.11	3.33	—
U-235	ARA-30	2006	2.784	0.84	2.52	—
U-235	ARA-31	2006	1.998	0.4885	1.4655	—
U-235	ARA-32	2006	2.123	0.51	1.53	—
U-235	ARA-33	2006	0.8142	0.465	1.395	U
U-235	ARA-34	2006	1.415	0.4145	1.2435	—
U-235	ARA-39	2006	1.892	0.95	2.85	U
U-235	ARA-4	2006	2.419	0.69	2.07	—
U-235	ARA-40	2006	1.421	0.4345	1.3035	—
U-235	ARA-41	2006	0.5711	0.455	1.365	U
U-235	ARA-42	2006	0.846	0.455	1.365	U
U-235	ARA-43	2006	0.9046	0.3625	1.0875	U
U-235	ARA-44	2006	1.194	0.4615	1.3845	U
U-235	ARA-48	2006	0.9046	0.3625	1.0875	U
U-235	ARA-49	2006	1.285	0.6	1.8	U
U-235	ARA-5	2006	1.039	0.54	1.62	U
U-235	ARA-50	2006	0.4406	0.206	0.618	U
U-235	ARA-51	2006	2.011	0.61	1.83	—
U-235	ARA-53	2006	1.104	0.545	1.635	U
U-235	ARA-54	2006	1.273	0.3825	1.1475	—
U-235	ARA-55	2006	1.437	0.5	1.5	U
U-235	ARA-56	2006	1.176	0.4505	1.3515	U
U-235	ARA-57	2006	1.292	0.4235	1.2705	—
U-235	ARA-58	2006	0.2976	0.1785	0.5355	U
U-235	ARA-59	2006	1.672	0.4435	1.3305	—
U-235	ARA-6	2006	0.8321	0.52	1.56	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-60	2006	0.4217	0.395	1.185	U
U-235	ARA-61	2006	3.677	0.975	2.925	—
U-235	ARA-62	2006	0.8498	0.655	1.965	U
U-235	ARA-63	2006	0.8444	0.1465	0.4395	—
U-235	ARA-65	2006	1.871	0.635	1.905	U
U-235	ARA-66	2006	1.354	0.735	2.205	U
U-235	ARA-67	2006	2.579	0.81	2.43	—
U-235	ARA-68	2006	2.453	0.96	2.88	U
U-235	ARA-69	2006	2.06	1.04	3.12	U
U-235	ARA-7	2006	1.304	0.3495	1.0485	—
U-235	ARA-70	2006	3.591	0.815	2.445	—
U-235	ARA-71	2006	1.25	0.4865	1.4595	U
U-235	ARA-72	2006	1.468	0.78	2.34	U
U-235	ARA-73	2006	1.193	0.3595	1.0785	—
U-235	ARA-74	2006	0.8312	0.349	1.047	U
U-235	ARA-75	2006	1.903	0.44	1.32	—
U-235	ARA-76	2006	3.451	0.87	2.61	—
U-235	ARA-77	2006	0.2374	0.555	1.665	U
U-235	ARA-8	2006	2.402	1.08	3.24	U
U-235	ARA-9	2006	1.728	0.545	1.635	—
U-235	ARA-0	2007	0.264	0.0635	0.1905	—
U-235	ARA-1	2007	0.225	0.0234	0.0702	—
U-235	ARA-10	2007	0.09379	0.0498	0.1494	U
U-235	ARA-11	2007	0.4989	0.0955	0.2865	—
U-235	ARA-12	2007	0.6814	0.1085	0.3255	—
U-235	ARA-13	2007	0.3049	0.0768	0.2304	—
U-235	ARA-14	2007	0.3245	0.0765	0.2295	—
U-235	ARA-15	2007	0.3804	0.078	0.234	—
U-235	ARA-16	2007	0.9037	0.16	0.48	—
U-235	ARA-17	2007	0.3794	0.0595	0.1785	
U-235	ARA-18	2007	0.06535	0.102	0.306	U
U-235	ARA-19	2007	0.2998	0.0865	0.2595	—
U-235	ARA-2	2007	0.4862	0.111	0.333	—
U-235	ARA-20	2007	0.1057	0.0854	0.2562	U
U-235	ARA-21	2007	0.409	0.083	0.249	—
U-235	ARA-22	2007	0.2483	0.0755	0.2265	—
U-235	ARA-23	2007	0.3451	0.0565	0.1695	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-24	2007	0.2707	0.068	0.204	—
U-235	ARA-25	2007	0.3237	0.0965	0.2895	—
U-235	ARA-26	2007	0.1726	0.0844	0.2532	U
U-235	ARA-27	2007	0.1971	0.0798	0.2394	U
U-235	ARA-28	2007	0.4091	0.061	0.183	—
U-235	ARA-29	2007	0.307	0.065	0.195	—
U-235	ARA-3	2007	0.1224	0.0884	0.2652	U
U-235	ARA-30	2007	0.2025	0.0832	0.2496	U
U-235	ARA-31	2007	0.8034	0.1395	0.4185	—
U-235	ARA-32	2007	0.7664	0.1295	0.3885	—
U-235	ARA-33	2007	0.09769	0.0632	0.1896	U
U-235	ARA-34	2007	0.1316	0.0761	0.2283	U
U-235	ARA-35	2007	0.3291	0.0858	0.2574	—
U-235	ARA-36	2007	0.3953	0.084	0.252	—
U-235	ARA-37	2007	0.6191	0.1165	0.3495	—
U-235	ARA-38	2007	0.4962	0.087	0.261	—
U-235	ARA-39	2007	0.1526	0.057	0.171	U
U-235	ARA-4	2007	0.3477	0.088	0.264	—
U-235	ARA-40	2007	2.492	0.449	1.347	—
U-235	ARA-41	2007	1.568	0.323	0.969	—
U-235	ARA-42	2007	0.4177	0.063	0.189	—
U-235	ARA-43	2007	0.3537	0.07	0.21	—
U-235	ARA-44	2007	0.165	0.0775	0.2325	U
U-235	ARA-45	2007	0.4657	0.112	0.336	—
U-235	ARA-46	2007	0.3408	0.0785	0.2355	—
U-235	ARA-47	2007	0.3041	0.094	0.282	—
U-235	ARA-48	2007	0.3878	0.1135	0.3405	—
U-235	ARA-49	2007	0.589	0.1055	0.3165	—
U-235	ARA-5	2007	0.2645	0.0685	0.2055	—
U-235	ARA-50	2007	0.5514	0.0925	0.2775	—
U-235	ARA-51	2007	0.3657	0.0655	0.1965	—
U-235	ARA-52	2007	0.2532	0.04315	0.12945	—
U-235	ARA-53	2007	0.1365	0.0769	0.2307	U
U-235	ARA-54	2007	0.1679	0.0721	0.2163	U
U-235	ARA-55	2007	0.218	0.0633	0.1899	—
U-235	ARA-56	2007	0.3278	0.066	0.198	—
U-235	ARA-57	2007	2.472	0.54	1.62	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-58	2007	0.3358	0.0605	0.1815	—
U-235	ARA-59	2007	0.3217	0.0545	0.1635	—
U-235	ARA-6	2007	0.3015	0.0615	0.1845	—
U-235	ARA-60	2007	0.633	0.0885	0.2655	—
U-235	ARA-61	2007	0.08486	0.0697	0.2091	U
U-235	ARA-62	2007	0.194	0.0862	0.2586	U
U-235	ARA-63	2007	0.2113	0.0814	0.2442	U
U-235	ARA-65	2007	0.6562	0.1425	0.4275	—
U-235	ARA-66	2007	0.1626	0.0589	0.1767	U
U-235	ARA-67	2007	0.1892	0.0637	0.1911	U
U-235	ARA-68	2007	0.1867	0.0712	0.2136	U
U-235	ARA-69	2007	0.4761	0.0815	0.2445	—
U-235	ARA-7	2007	0.2918	0.057	0.171	—
U-235	ARA-70	2007	0.1675	0.0871	0.2613	U
U-235	ARA-71	2007	0.1547	0.0853	0.2559	U
U-235	ARA-72	2007	0.1596	0.0559	0.1677	U
U-235	ARA-73	2007	0.2323	0.0494	0.1482	—
U-235	ARA-74	2007	0.353	0.055	0.165	—
U-235	ARA-75	2007	0.4135	0.0665	0.1995	—
U-235	ARA-76	2007	0.2846	0.079	0.237	—
U-235	ARA-77	2007	0.5109	0.072	0.216	—
U-235	ARA-8	2007	0.4685	0.0824	0.2472	—
U-235	ARA-9	2007	0.2578	0.0599	0.1797	—
U-235	ARA-10	2009	0.2566	0.0845	0.2535	—
U-235	ARA-11	2009	0.1449	0.03525	0.10575	—
U-235	ARA-13	2009	0.09463	0.1055	0.3165	U
U-235	ARA-18	2009	0.25	0.083	0.249	—
U-235	ARA-19	2009	0.2339	0.0525	0.1575	—
U-235	ARA-2	2009	0.2225	0.0299	0.0897	—
U-235	ARA-20	2009	0.1642	0.091	0.273	U
U-235	ARA-21	2009	0.1169	0.0665	0.1995	U
U-235	ARA-25	2009	0.2908	0.0575	0.1725	—
U-235	ARA-26	2009	0.3346	0.102	0.306	—
U-235	ARA-27	2009	0.2253	0.057	0.171	—
U-235	ARA-29	2009	0.1577	0.149	0.447	U
U-235	ARA-3	2009	0.2331	0.1065	0.3195	U
U-235	ARA-30	2009	0.04459	0.087	0.261	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-35	2009	0.2065	0.07	0.21	U
U-235	ARA-39	2009	0.08117	0.097	0.291	U
U-235	ARA-44	2009	0.1364	0.0665	0.1995	U
U-235	ARA-45	2009	0.1492	0.02775	0.08325	—
U-235	ARA-47	2009	0.1605	0.0655	0.1965	U
U-235	ARA-61	2009	0.1312	0.094	0.282	U
U-235	ARA-62	2009	0.1536	0.092	0.276	U
U-235	ARA-63	2009	0.1097	0.111	0.333	U
U-235	ARA-67	2009	0.2288	0.0865	0.2595	U
U-235	ARA-68	2009	0.2738	0.0925	0.2775	U
U-235	ARA-69	2009	0.1834	0.119	0.357	U
U-235	ARA-70	2009	0.02346	0.0895	0.2685	U
U-235	ARA-71	2009	0.4508	0.107	0.321	—
U-235	ARA-72	2009	0.215	0.0845	0.2535	U
U-235	ARA-74	2009	0.163	0.0625	0.1875	U
U-235	ARA-75	2009	0.2248	0.064	0.192	—
U-235	ARA-77	2009	0.1379	0.0625	0.1875	U
U-235	ARA-8	2009	0.2027	0.104	0.312	U
U-235	ARA-0	2010	0.3073	0.0572	0.1716	—
U-235	ARA-1	2010	2.567	0.457	1.371	—
U-235	ARA-11	2010	2.113	0.322	0.966	—
U-235	ARA-12	2010	1.267	0.244	0.732	—
U-235	ARA-14	2010	1.081	0.252	0.756	—
U-235	ARA-15	2010	1.109	0.274	0.822	—
U-235	ARA-16	2010	0.9979	0.275	0.825	—
U-235	ARA-17	2010	2.902	0.614	1.842	—
U-235	ARA-19	2010	1.496	0.284	0.852	—
U-235	ARA-2	2010	0.9653	0.185	0.555	—
U-235	ARA-21	2010	1.45	0.652	1.956	U
U-235	ARA-22	2010	0.8477	0.213	0.639	—
U-235	ARA-23	2010	0.6273	0.142	0.426	—
U-235	ARA-24	2010	1.411	0.249	0.747	—
U-235	ARA-27	2010	1.105	0.203	0.609	—
U-235	ARA-28	2010	0.699	0.23	0.69	—
U-235	ARA-29	2010	0.2251	0.0435	0.1305	—
U-235	ARA-31	2010	0.6395	0.198	0.594	—
U-235	ARA-32	2010	2.552	0.454	1.362	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-34	2010	0.9072	0.266	0.798	—
U-235	ARA-35	2010	0.2218	0.0571	0.1713	
U-235	ARA-36	2010	0.4253	0.162	0.486	U
U-235	ARA-37	2010	1.003	0.208	0.624	—
U-235	ARA-38	2010	0.8838	0.182	0.546	—
U-235	ARA-4	2010	0.3338	0.0473	0.1419	—
U-235	ARA-40	2010	0.7294	0.187	0.561	—
U-235	ARA-41	2010	1.75	0.32	0.96	—
U-235	ARA-42	2010	3.265	0.531	1.593	—
U-235	ARA-43	2010	1.009	0.188	0.564	—
U-235	ARA-44	2010	0.1952	0.0469	0.1407	—
U-235	ARA-45	2010	0.8618	0.23	0.69	—
U-235	ARA-46	2010	0.2827	0.0583	0.1749	—
U-235	ARA-47	2010	0.6409	0.169	0.507	—
U-235	ARA-48	2010	1.207	0.203	0.609	—
U-235	ARA-5	2010	1.146	0.233	0.699	—
U-235	ARA-50	2010	1.238	0.22	0.66	—
U-235	ARA-51	2010	0.7514	0.664	1.992	U
U-235	ARA-52	2010	0.7545	0.218	0.654	—
U-235	ARA-53	2010	2.734	0.495	1.485	—
U-235	ARA-54	2010	0.3296	0.0545	0.1635	—
U-235	ARA-55	2010	1.479	0.222	0.666	—
U-235	ARA-56	2010	1.359	0.266	0.798	—
U-235	ARA-57	2010	0.2923	0.0585	0.1755	—
U-235	ARA-58	2010	0.9526	0.198	0.594	—
U-235	ARA-59	2010	0.8003	0.178	0.534	—
U-235	ARA-6	2010	0.572	0.17	0.51	—
U-235	ARA-60	2010	0.2824	0.0592	0.1776	——
U-235	ARA-65	2010	0.3153	0.0595	0.1785	—
U-235	ARA-7	2010	0.6565	0.164	0.492	—
U-235	ARA-73	2010	0.2906	0.0529	0.1587	—
U-235	ARA-74	2010	1.65	0.354	1.062	—
U-235	ARA-75	2010	0.2425	0.0432	0.1296	—
U-235	ARA-77	2010	0.3201	0.0528	0.1584	—
U-235	ARA-9	2010	0.3077	0.0528	0.1584	—
U-235	ARA-1	2011	0.1014	0.14	0.42	U
U-235	ARA-14	2011	-0.06507	0.101	0.303	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-16	2011	-0.01462	0.208	0.624	U
U-235	ARA-2	2011	-0.004737	0.111	0.333	U
U-235	ARA-24	2011	0.06232	0.139	0.417	U
U-235	ARA-28	2011	0.1959	0.174	0.522	U
U-235	ARA-29	2011	-0.004242	0.113	0.339	U
U-235	ARA-31	2011	0.07835	0.18	0.54	U
U-235	ARA-32	2011	-0.09388	0.195	0.585	U
U-235	ARA-34	2011	0.1824	0.176	0.528	U
U-235	ARA-38	2011	-0.01501	0.167	0.501	U
U-235	ARA-4	2011	-0.03097	0.106	0.318	U
U-235	ARA-42	2011	0.04697	0.18	0.54	U
U-235	ARA-43	2011	-0.1353	0.144	0.432	U
U-235	ARA-47	2011	0.1152	0.16	0.48	U
U-235	ARA-50	2011	0.02772	0.13	0.39	U
U-235	ARA-51	2011	-0.1392	0.184	0.552	U
U-235	ARA-62	2011	0.08036	0.151	0.453	U
U-235	ARA-65	2011	-0.0565	0.134	0.402	U
U-235	ARA-74	2011	0.1772	0.167	0.501	U
U-235	ARA-75	2011	0.1721	0.18	0.54	U
U-235	ARA-77	2011	0.04868	0.168	0.504	U
U-235	ARA-9	2011	0.08159	0.102	0.306	U
U-235	ARA-11	2012	0.03717	0.134	0.402	U
U-235	ARA-16	2012	0.1813	0.202	0.606	U
U-235	ARA-31	2012	-0.02503	0.146	0.438	U
U-235	ARA-32	2012	-0.0347	0.173	0.519	U
U-235	ARA-48	2012	0.04045	0.157	0.471	U
U-235	ARA-53	2012	0.01952	0.139	0.417	U
U-235	ARA-57	2012	0.06745	0.165	0.495	U
U-235	ARA-58	2012	0.06569	0.138	0.414	U
U-235	ARA-59	2012	-0.0213	0.139	0.417	U
U-235	ARA-60	2012	-0.01049	0.146	0.438	U
U-235	ARA-62	2012	-0.01719	0.167	0.501	U
U-235	ARA-65	2012	0.1006	0.137	0.411	U
U-235	ARA-73	2012	0.05427	0.14	0.42	U
U-235	ARA-31	2013	0.2439	0.0753	0.226	—
U-235	ARA-32	2013	0.04475	0.0967	0.29	U
U-235	ARA-33	2013	0.2517	0.0727	0.218	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	ARA-40	2013	0.2229	0.0887	0.266	U
U-235	ARA-48	2013	-0.01813	0.0917	0.275	U
U-235	ARA-65	2013	0.05423	0.099	0.297	U
U-235	2 INCH AIR - ARA	2014	0.157	0.221	0.663	U
U-235	ARA-1	2014	0.1201	0.147	0.441	U
U-235	ARA-24	2014	-0.07724	0.132	0.396	U
U-235	ARA-31	2014	-0.2694	0.201	0.603	U
U-235	ARA-32	2014	-0.05136	0.149	0.447	U
U-235	ARA-65	2014	-0.1635	0.197	0.591	U
U-235	ARA-71	2014	0.01738	0.113	0.339	U
U-238	0° 1000’	1985	1.04	0.04	0.12	—
U-238	22.5° 2500’	1985	1.06	0.04	0.12	—
U-238	67.5° 2000’	1985	1.01	0.04	0.12	—
U-238	67.5° 500’	1985	0.84	0.03	0.09	—
U-238	ARA-0	2006	74.69	13.05	39.15	—
U-238	ARA-1	2006	4.104	0.575	1.725	—
U-238	ARA-10	2006	40.84	7.25	21.75	—
U-238	ARA-11	2006	11.41	13.6	40.8	U
U-238	ARA-12	2006	123.2	14.6	43.8	—
U-238	ARA-13	2006	13.34	2.87	8.61	—
U-238	ARA-14	2006	4.105	27.9	83.7	U
U-238	ARA-15	2006	14.17	17.2	51.6	U
U-238	ARA-16	2006	11.68	16.45	49.35	U
U-238	ARA-17	2006	36.31	16.45	49.35	U
U-238	ARA-18	2006	17.56	2.725	8.175	—
U-238	ARA-19	2006	39.49	13.45	40.35	U
U-238	ARA-2	2006	21.73	5.9	17.7	—
U-238	ARA-20	2006	34.8	5.3	15.9	—
U-238	ARA-21	2006	72.06	18.9	56.7	—
U-238	ARA-22	2006	32.15	21.1	63.3	U
U-238	ARA-23	2006	2.708	15.5	46.5	U
U-238	ARA-24	2006	39.64	34.45	103.35	U
U-238	ARA-26	2006	19.06	4.525	13.575	—
U-238	ARA-27	2006	56.39	24.35	73.05	U
U-238	ARA-28	2006	13.61	22.8	68.4	U
U-238	ARA-29	2006	11.51	38.85	116.55	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	ARA-3	2006	29.33	5.1	15.3	—
U-238	ARA-30	2006	37.61	4.6	13.8	—
U-238	ARA-31	2006	13.02	2.335	7.005	—
U-238	ARA-32	2006	18.77	3.065	9.195	—
U-238	ARA-33	2006	17.44	2.805	8.415	—
U-238	ARA-34	2006	25.77	3.25	9.75	—
U-238	ARA-35	2006	21.31	19.25	57.75	U
U-238	ARA-36	2006	26.73	18.4	55.2	U
U-238	ARA-37	2006	9.371	34.1	102.3	U
U-238	ARA-38	2006	6.389	33.65	100.95	U
U-238	ARA-39	2006	23.42	3.44	10.32	—
U-238	ARA-4	2006	9.425	2.08	6.24	—
U-238	ARA-40	2006	7.211	1.495	4.485	—
U-238	ARA-41	2006	22.73	2.905	8.715	—
U-238	ARA-42	2006	9.002	3.27	9.81	U
U-238	ARA-43	2006	10.25	2.165	6.495	—
U-238	ARA-44	2006	15.43	3.625	10.875	—
U-238	ARA-45	2006	20.77	20.25	60.75	U
U-238	ARA-46	2006	33.98	19.85	59.55	U
U-238	ARA-48	2006	10.25	2.165	6.495	—
U-238	ARA-49	2006	18.84	2.385	7.155	—
U-238	ARA-5	2006	7.416	2.165	6.495	—
U-238	ARA-50	2006	11.74	1.525	4.575	—
U-238	ARA-51	2006	14.23	3.575	10.725	—
U-238	ARA-52	2006	46.64	20.75	62.25	U
U-238	ARA-53	2006	24.3	2.755	8.265	—
U-238	ARA-54	2006	10.72	2.15	6.45	—
U-238	ARA-55	2006	15.45	2.37	7.11	—
U-238	ARA-56	2006	11.72	1.755	5.265	—
U-238	ARA-57	2006	6.709	2.11	6.33	—
U-238	ARA-58	2006	14.65	2.835	8.505	—
U-238	ARA-59	2006	12.94	2.02	6.06	—
U-238	ARA-6	2006	56.14	8.75	26.25	—
U-238	ARA-60	2006	5.323	1.385	4.155	—
U-238	ARA-61	2006	26.73	3.08	9.24	—
U-238	ARA-62	2006	28.64	4.34	13.02	—
U-238	ARA-63	2006	0.05039	0.0437	0.1311	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	ARA-65	2006	7.193	1.645	4.935	—
U-238	ARA-66	2006	33.41	4.5	13.5	—
U-238	ARA-67	2006	40.85	4.6	13.8	—
U-238	ARA-68	2006	2.177	0.84	2.52	U
U-238	ARA-69	2006	27	4.485	13.455	—
U-238	ARA-7	2006	101.8	17.15	51.45	—
U-238	ARA-70	2006	23.29	3.005	9.015	—
U-238	ARA-71	2006	15.56	3.88	11.64	—
U-238	ARA-72	2006	13.13	3.53	10.59	—
U-238	ARA-73	2006	13.17	2.285	6.855	—
U-238	ARA-74	2006	10.37	2.495	7.485	—
U-238	ARA-75	2006	5.368	0.91	2.73	—
U-238	ARA-76	2006	20.51	3.22	9.66	—
U-238	ARA-77	2006	22.84	3.17	9.51	—
U-238	ARA-8	2006	22.26	3.09	9.27	—
U-238	ARA-9	2006	47.79	6.35	19.05	—
U-238	ARA-0	2007	1.962	0.4145	1.2435	—
U-238	ARA-1	2007	0	1.11	3.33	U
U-238	ARA-10	2007	0.0531	4.34	13.02	U
U-238	ARA-11	2007	10.18	1.405	4.215	—
U-238	ARA-12	2007	10.22	1.595	4.785	—
U-238	ARA-13	2007	0.5049	4.21	12.63	U
U-238	ARA-14	2007	0.664	0.414	1.242	U
U-238	ARA-15	2007	1.756	0.2715	0.8145	—
U-238	ARA-17	2007	3.929	0.54	1.62	—
U-238	ARA-18	2007	238.5	8.75	26.25	—
U-238	ARA-19	2007	4.543	0.635	1.905	—
U-238	ARA-2	2007	12.07	1.695	5.085	—
U-238	ARA-20	2007	0.2986	6.72	20.16	U
U-238	ARA-21	2007	2.87	0.54	1.62	—
U-238	ARA-22	2007	0	3.66	10.98	U
U-238	ARA-23	2007	3.48	0.535	1.605	—
U-238	ARA-24	2007	4.007	0.715	2.145	—
U-238	ARA-25	2007	0.09051	7.07	21.21	U
U-238	ARA-26	2007	0	7.04	21.12	U
U-238	ARA-27	2007	0	3.84	11.52	U
U-238	ARA-28	2007	4.035	0.585	1.755	—

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	ARA-29	2007	3.417	0.4735	1.4205	—
U-238	ARA-3	2007	0	6.28	18.84	U
U-238	ARA-30	2007	0	6.21	18.63	U
U-238	ARA-31	2007	3.395	0.525	1.575	—
U-238	ARA-32	2007	5.96	0.795	2.385	—
U-238	ARA-33	2007	0.1691	5.88	17.64	U
U-238	ARA-34	2007	0	5.5	16.5	U
U-238	ARA-35	2007	0	6.26	18.78	U
U-238	ARA-36	2007	1.273	0.3605	1.0815	—
U-238	ARA-37	2007	4.651	0.605	1.815	—
U-238	ARA-38	2007	3.992	0.4955	1.4865	—
U-238	ARA-39	2007	0	4.74	14.22	U
U-238	ARA-4	2007	2.174	0.4565	1.3695	—
U-238	ARA-41	2007	43.04	22.1	66.3	U
U-238	ARA-42	2007	1.948	0.515	1.545	—
U-238	ARA-43	2007	1.258	0.3735	1.1205	—
U-238	ARA-44	2007	156.7	5.89	17.67	—
U-238	ARA-45	2007	25.49	3.84	11.52	—
U-238	ARA-46	2007	1.92	0.423	1.269	—
U-238	ARA-47	2007	3.111	0.4335	1.3005	—
U-238	ARA-48	2007	1.035	0.452	1.356	U
U-238	ARA-49	2007	2.849	0.4265	1.2795	—
U-238	ARA-5	2007	2.898	0.535	1.605	—
U-238	ARA-50	2007	6.735	1.32	3.96	—
U-238	ARA-51	2007	2.745	0.775	2.325	—
U-238	ARA-52	2007	4.756	0.6	1.8	—
U-238	ARA-53	2007	137.5	5.57	16.71	—
U-238	ARA-54	2007	0.0795	5.16	15.48	U
U-238	ARA-55	2007	0	5.2	15.6	U
U-238	ARA-56	2007	2.821	0.4385	1.3155	—
U-238	ARA-57	2007	47.28	7.85	23.55	—
U-238	ARA-58	2007	1.568	0.371	1.113	—
U-238	ARA-59	2007	1.205	0.4585	1.3755	U
U-238	ARA-6	2007	2.371	0.414	1.242	—
U-238	ARA-60	2007	3.038	0.66	1.98	—
U-238	ARA-61	2007	0.01376	6.01	18.03	U
U-238	ARA-62	2007	0	6.85	20.55	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	ARA-63	2007	0.142	6.36	19.08	U
U-238	ARA-65	2007	9.811	1.655	4.965	—
U-238	ARA-66	2007	0	6.43	19.29	U
U-238	ARA-67	2007	0.03178	5.77	17.31	U
U-238	ARA-68	2007	0	5.86	17.58	U
U-238	ARA-69	2007	0.9461	6.51	19.53	U
U-238	ARA-7	2007	6.417	0.825	2.475	—
U-238	ARA-70	2007	0.08092	6.21	18.63	U
U-238	ARA-71	2007	0.08097	6.34	19.02	U
U-238	ARA-72	2007	148.5	5.99	17.97	—
U-238	ARA-73	2007	2.594	0.555	1.665	—
U-238	ARA-74	2007	3.007	0.466	1.398	—
U-238	ARA-75	2007	1.596	0.4005	1.2015	—
U-238	ARA-76	2007	0.1228	8.1	24.3	U
U-238	ARA-77	2007	1.499	0.3855	1.1565	—
U-238	ARA-8	2007	0	7.08	21.24	U
U-238	ARA-9	2007	0.1887	4.88	14.64	U
U-238	ARA-10	2009	-5.131	5.85	17.55	U
U-238	ARA-12	2009	141.2	48.3	144.9	U
U-238	ARA-13	2009	-5.523	7.2	21.6	U
U-238	ARA-18	2009	3.633	6	18	U
U-238	ARA-20	2009	3.621	7.35	22.05	U
U-238	ARA-21	2009	-10.28	8.45	25.35	U
U-238	ARA-26	2009	0.5363	7.6	22.8	U
U-238	ARA-27	2009	5.46	4.045	12.135	U
U-238	ARA-3	2009	-0.1902	24.6	73.8	U
U-238	ARA-30	2009	216.9	8.5	25.5	—
U-238	ARA-35	2009	-1.5	8.8	26.4	U
U-238	ARA-39	2009	3.96	13.8	41.4	U
U-238	ARA-44	2009	-0.00009768	8.95	26.85	U
U-238	ARA-47	2009	91.14	7.25	21.75	—
U-238	ARA-61	2009	189.6	8.35	25.05	—
U-238	ARA-62	2009	-33.6	12.45	37.35	U
U-238	ARA-63	2009	-2.881	15.6	46.8	U
U-238	ARA-67	2009	-3.669	5.9	17.7	U
U-238	ARA-68	2009	-8.346	9.3	27.9	U
U-238	ARA-69	2009	3.409	16.6	49.8	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	ARA-70	2009	76.38	7.75	23.25	—
U-238	ARA-71	2009	-8.285	9.65	28.95	U
U-238	ARA-72	2009	5.764	6.05	18.15	U
U-238	ARA-74	2009	-4.158	9.15	27.45	U
U-238	ARA-75	2009	-0.2417	7.9	23.7	U
U-238	ARA-77	2009	-12.23	8.25	24.75	U
U-238	ARA-8	2009	-0.6352	7.5	22.5	U
U-238	ARA-0	2010	4.936	4.09	12.27	U
U-238	ARA-11	2010	36.14	23.2	69.6	U
U-238	ARA-12	2010	34.4	21.8	65.4	U
U-238	ARA-14	2010	40.22	2.78	8.34	—
U-238	ARA-16	2010	43.17	22.7	68.1	U
U-238	ARA-19	2010	41.49	2.86	8.58	—
U-238	ARA-2	2010	4.877	3.03	9.09	U
U-238	ARA-22	2010	41.46	2.85	8.55	—
U-238	ARA-27	2010	25.69	21.4	64.2	U
U-238	ARA-28	2010	48.29	3.07	9.21	—
U-238	ARA-35	2010	3.533	4.13	12.39	U
U-238	ARA-50	2010	92.45	24.4	73.2	—
U-238	ARA-52	2010	17.83	13	39	U
U-238	ARA-53	2010	45.55	2.83	8.49	
U-238	ARA-7	2010	29.5	15.1	45.3	U
U-238	ARA-1	2011	0.9351	0.535	1.605	U
U-238	ARA-14	2011	0.5789	0.401	1.203	U
U-238	ARA-16	2011	0.8651	0.571	1.713	U
U-238	ARA-2	2011	0.852	0.453	1.359	U
U-238	ARA-24	2011	0.9776	0.509	1.527	U
U-238	ARA-28	2011	0.928	0.791	2.373	U
U-238	ARA-29	2011	0.5056	0.413	1.239	U
U-238	ARA-31	2011	1.228	0.791	2.373	U
U-238	ARA-32	2011	4.21	1.04	3.12	—
U-238	ARA-34	2011	1.262	0.822	2.466	U
U-238	ARA-38	2011	1.084	0.901	2.703	U
U-238	ARA-4	2011	0.4905	0.39	1.17	U
U-238	ARA-42	2011	0.8891	0.592	1.776	U
U-238	ARA-43	2011	1.018	0.714	2.142	U
U-238	ARA-47	2011	1.006	0.796	2.388	U

Table C-1. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	ARA-50	2011	1.086	0.686	2.058	U
U-238	ARA-51	2011	1.494	0.969	2.907	U
U-238	ARA-62	2011	0.9015	0.536	1.608	U
U-238	ARA-65	2011	3.237	0.692	2.076	—
U-238	ARA-71	2011	1.43	56.9	170.7	U
U-238	ARA-74	2011	1.595	0.758	2.274	U
U-238	ARA-75	2011	1.352	0.843	2.529	U
U-238	ARA-77	2011	1.086	0.757	2.271	U
U-238	ARA-9	2011	0.1793	0.384	1.152	U
U-238	ARA-11	2012	0.7769	0.798	2.394	U
U-238	ARA-16	2012	5.471	1.46	4.38	—
U-238	ARA-31	2012	0.7178	0.734	2.202	U
U-238	ARA-32	2012	1.679	0.866	2.598	U
U-238	ARA-48	2012	1.512	0.823	2.469	U
U-238	ARA-53	2012	0.9301	0.69	2.07	U
U-238	ARA-57	2012	1.477	0.803	2.409	U
U-238	ARA-58	2012	1.003	0.799	2.397	U
U-238	ARA-59	2012	0.00496	0.682	2.046	U
U-238	ARA-60	2012	0.7222	0.758	2.274	U
U-238	ARA-62	2012	0.9615	0.803	2.409	U
U-238	ARA-65	2012	1.128	0.694	2.082	U
U-238	ARA-73	2012	0.5955	0.739	2.217	U
U-238	ARA-31	2013	3.114	1.323	3.97	U
U-238	ARA-32	2013	0.813	0.387	1.16	U
U-238	ARA-33	2013	0.2643	1.15	3.45	U
U-238	ARA-40	2013	14.64	2.27	6.81	—
U-238	ARA-48	2013	0.6165	0.377	1.13	U
U-238	ARA-65	2013	0.4007	0.332	0.995	U
U-238	2 INCH AIR - ARA	2014	0.8957	1.03	3.09	U
U-238	ARA-1	2014	1.213	0.767	2.301	U
U-238	ARA-24	2014	0.5667	0.672	2.016	U
U-238	ARA-31	2014	0.8805	0.893	2.679	U
U-238	ARA-32	2014	1.35	0.692	2.076	U
U-238	ARA-65	2014	1.703	0.791	2.373	U
U-238	ARA-71	2014	1.92	0.576	1.728	—

Table C-2. Radionuclides concentrations in surface soils associated with ATR.

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	LP 0.3	1976	0.007	0.002	0.006	—
Am-241	LP -1.2	1976	0.0047	0.0015	0.0045	—
Am-241	LP 2.2	1976	0.0089	0.0017	0.0051	—
Am-241	LP 3.1	1976	0.002	0.0001	0.0003	—
Am-241	LP 3.2	1976	0.006	0.002	0.006	—
Am-241	LP 3.3	1976	0.0029	0.0012	0.0036	U
Am-241	LP 5.3	1976	0.0035	0.0013	0.0039	U
Am-241	LP 7.2	1976	0.011	0.002	0.006	—
Am-241	LP 8.2	1976	0.004	0.002	0.006	U
Am-241	A3.4	1977	0.007	0.002	0.006	—
Am-241	LP -2.2	1977	0.003	0.003	0.009	U
Am-241	LP 3.4	1977	0.004	0.002	0.006	U
Am-241	RTC.3	2011	-0.03042	0.0912	0.2736	U
Am-241	RTC-0.1	2011	0.06534	0.0633	0.1899	U
Am-241	RTC-1.1	2011	0.07889	0.0969	0.2907	U
Am-241	RTC-1.2	2011	0.4901	0.147	0.441	—
Am-241	RTC1.3	2011	0.02979	0.0997	0.2991	U
Am-241	RTC1.4	2011	0.05194	0.0597	0.1791	U
Am-241	RTC-2.2	2011	0.005518	0.0643	0.1929	U
Am-241	RTC2.3	2011	0.01608	0.0914	0.2742	U
Am-241	RTC-6.2	2011	0.03812	0.114	0.342	U
Am-241	RTC-6.4	2011	0.1187	0.101	0.303	U
Am-241	RTC-8.2	2011	-0.05202	0.0625	0.1875	U
Am-241	RTC-A1.2	2011	-0.002923	0.052	0.156	U
Am-241	RTC-A1.3	2011	-0.04303	0.0634	0.1902	U
Am-241	RTC-A2.2	2011	0.003935	0.0637	0.1911	U
Am-241	RTC-A2.3	2011	-0.01334	0.112	0.336	U
Am-241	RTC-A3.2	2011	-0.01533	0.0655	0.1965	U
Am-241	RTC-A3.4	2011	0.1223	0.118	0.354	U
Am-241	RTC-A3.5	2011	-0.00117	0.0685	0.2055	U
Am-241	RTC-A4.5	2011	0.07064	0.143	0.429	U
Am-241	RTC.3	2012	0.05038	0.0439	0.1317	U
Am-241	RTC-1.2	2012	0.1933	0.147	0.441	U
Am-241	RTC-2.2	2012	0.1131	0.1	0.3	U
Am-241	RTC-6.2	2012	0.3973	0.115	0.345	—
Am-241	RTC-6.4	2012	-0.0009055	0.0365	0.1095	U
Am-241	RTC-A2.2	2012	0.006511	0.0743	0.2229	U

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	RTC-A2.3	2012	0.01548	0.0824	0.2472	U
Am-241	RTC-A3.2	2012	-0.02406	0.0431	0.1293	U
Am-241	RTC-A3.4	2012	0.0006616	0.0517	0.1551	U
Am-241	RTC-A3.5	2012	0.04509	0.0906	0.2718	U
Co-60	LP 0.1	1976	0.19	0.011	0.033	—
Co-60	LP 0.3	1976	0.033	0.009	0.027	—
Co-60	LP 1.1	1976	0.02	0.008	0.024	U
Co-60	LP 1.2	1976	0.34	0.01	0.03	—
Co-60	LP -1.2	1976	0.09	0.01	0.03	—
Co-60	LP 2.1	1976	0.029	0.009	0.027	—
Co-60	LP 2.2	1976	0.48	0.02	0.06	—
Co-60	LP 2.3	1976	0.136	0.009	0.027	—
Co-60	LP 3.1	1976	0.17	0.01	0.03	—
Co-60	LP 3.2	1976	1.11	0.04	0.12	—
Co-60	LP 3.3	1976	0.27	0.002	0.006	—
Co-60	LP 4.1	1976	0.19	0.01	0.03	—
Co-60	LP 4.2	1976	1.1	0.04	0.12	—
Co-60	LP 4.3	1976	0.054	0.009	0.027	—
Co-60	LP 4.4	1976	0.026	0.009	0.027	U
Co-60	LP 5.2	1976	1.49	0.05	0.15	—
Co-60	LP 5.3	1976	0.2	0.01	0.03	—
Co-60	LP 6.2	1976	0.006	0.001	0.003	—
Co-60	LP 6.3	1976	0.1	0.01	0.03	—
Co-60	LP 7.2	1976	0.067	0.008	0.024	—
Co-60	LP1-2	1976	0.34	0.01	0.03	—
Co-60	LP2-2	1976	0.48	0.02	0.06	—
Co-60	LP3-2	1976	1.11	0.04	0.12	—
Co-60	LP4-2	1976	18.2	0.5	1.5	—
Co-60	LP5-2	1976	4	0.1	0.3	—
Co-60	LP6-2	1976	0.093	0.011	0.033	—
Co-60	A1.3	1977	0.056	0.011	0.033	—
Co-60	A2.2	1977	0.0297	0.01	0.03	U
Co-60	A3.2	1977	0.121	0.011	0.033	—
Co-60	A3.3	1977	0.0813	0.0088	0.0264	—
Co-60	A3.4	1977	0.14	0.012	0.036	—
Co-60	LP 1.4	1977	0.48	0.009	0.027	—
Co-60	LP -1.4	1977	0.027	0.008	0.024	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	LP 6.4	1977	0.45	0.009	0.027	—
Co-60	2.2	1983	1.32	0.11	0.33	—
Co-60	3.1	1983	0.13	0.04	0.12	—
Co-60	3.3	1983	0.26	0.06	0.18	—
Co-60	4.2	1983	66.4	2.6	7.8	—
Co-60	0.2	1990	0.31	0.05	0.15	—
Co-60	1.1	1990	0.31	0.04	0.12	—
Co-60	2.2	1990	1.96	0.11	0.33	—
Co-60	3.3	1990	0.23	0.05	0.15	—
Co-60	4.2	1990	40.3	1.5	4.5	—
Co-60	5.2	1990	7.8	0.3	0.9	—
Co-60	5.3	1990	0.3	0.05	0.15	—
Co-60	6.2	1990	0.48	0.05	0.15	—
Co-60	A1.3	1990	0.28	0.04	0.12	—
Co-60	RTC.3	2006	0.06351	0.01075	0.03225	—
Co-60	RTC-0.1	2006	0.1513	0.0126	0.0378	—
Co-60	RTC-1.1	2006	0.1416	0.013	0.039	—
Co-60	RTC-1.2	2006	0.2364	0.0406	0.1218	—
Co-60	RTC1.3	2006	0.1377	0.02185	0.06555	—
Co-60	RTC-1.3	2006	0.1158	0.025	0.07635	—
Co-60	RTC1.4	2006	0.1357	0.02375	0.07125	—
Co-60	RTC-2.2	2006	0.1095	0.0126	0.0378	—
Co-60	RTC2.3	2006	0.042	0.00725	0.02175	—
Co-60	RTC-2.3	2006	0.1387	0.02515	0.07545	—
Co-60	RTC-3.4	2006	0.04854	0.0103	0.0309	—
Co-60	RTC-6.2	2006	0.2049	0.0183	0.0549	—
Co-60	RTC-6.4	2006	0.05395	0.0091	0.0273	—
Co-60	RTC-8.2	2006	0.134	0.01935	0.05805	—
Co-60	RTC-A1.2	2006	0.03471	0.00675	0.02025	—
Co-60	RTC-A1.3	2006	0.095	0.01515	0.04545	—
Co-60	RTC-A2.2	2006	0.1169	0.020	0.06135	—
Co-60	RTC-A2.3	2006	0.06067	0.00955	0.02865	—
Co-60	RTC-A2.4	2006	0.04949	0.0071	0.0213	—
Co-60	RTC-A3.2	2006	0.0866	0.01815	0.05445	—
Co-60	RTC-A3.3	2006	0.04218	0.00705	0.02115	—
Co-60	RTC-A3.4	2006	0.1147	0.021	0.0621	—
Co-60	RTC-A3.5	2006	0.1094	0.015	0.045	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	RTC-A4.5	2006	0.1897	0.01555	0.04665	—
Co-60	RTC.3	2011	0.005069	0.00263	0.00789	U
Co-60	RTC-0.1	2011	0.09775	0.00789	0.02367	—
Co-60	RTC-1.1	2011	0.04789	0.00398	0.01194	—
Co-60	RTC-1.2	2011	0.06151	0.00703	0.02109	—
Co-60	RTC1.3	2011	0.01258	0.00499	0.01497	U
Co-60	RTC1.4	2011	0.01008	0.00499	0.01497	U
Co-60	RTC-2.2	2011	0.0371	0.00578	0.01734	—
Co-60	RTC2.3	2011	0.04756	0.00476	0.01428	—
Co-60	RTC-6.2	2011	0.09073	0.00769	0.02307	—
Co-60	RTC-6.4	2011	0.01139	0.0051	0.0153	U
Co-60	RTC-8.2	2011	0.04147	0.00765	0.02295	—
Co-60	RTC-A1.2	2011	0.008498	0.00332	0.00996	U
Co-60	RTC-A1.3	2011	0.02644	0.00519	0.01557	—
Co-60	RTC-A2.2	2011	0.002649	0.00442	0.01326	U
Co-60	RTC-A2.3	2011	0.007284	0.00522	0.01566	U
Co-60	RTC-A2.4	2011	0.005536	0.00255	0.00765	U
Co-60	RTC-A3.2	2011	0.006172	0.00442	0.01326	U
Co-60	RTC-A3.4	2011	0.0534	0.00685	0.02055	—
Co-60	RTC-A3.5	2011	0.02541	0.00489	0.01467	—
Co-60	RTC-A4.5	2011	0.06475	0.00757	0.02271	—
Co-60	RTC.3	2012	0.02559	0.00537	0.01611	—
Co-60	RTC-1.2	2012	0.04464	0.00809	0.02427	—
Co-60	RTC-2.2	2012	0.05277	0.00671	0.02013	—
Co-60	RTC-6.2	2012	0.1079	0.00879	0.02637	—
Co-60	RTC-6.4	2012	0.009474	0.00469	0.01407	U
Co-60	RTC-A2.2	2012	0.007701	0.00456	0.01368	U
Co-60	RTC-A2.3	2012	0.08023	0.00908	0.02724	—
Co-60	RTC-A3.2	2012	0.01536	0.0048	0.0144	—
Co-60	RTC-A3.4	2012	0.01319	0.00484	0.01452	U
Co-60	RTC-A3.5	2012	0.03358	0.00531	0.01593	—
Co-60	2 INCH AIR - TRA	2014	0.0002374	0.000928	0.002784	U
Cs-134	RTC.3	2007	0.1118	0.0158	0.0474	—
Cs-134	RTC-0.1	2007	0.01776	0.00507	0.01521	—
Cs-134	RTC-1.1	2007	0.01866	0.00841	0.02523	U
Cs-134	RTC-1.2	2007	0.1154	0.0146	0.0438	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	RTC1.3	2007	0.002544	0.0043	0.0129	U
Cs-134	RTC-1.3	2007	0.13	0.0208	0.0624	—
Cs-134	RTC1.4	2007	0.08755	0.0164	0.0492	—
Cs-134	RTC-2.2	2007	0.08189	0.0111	0.0333	—
Cs-134	RTC2.3	2007	0.07935	0.0136	0.0408	—
Cs-134	RTC-2.3	2007	0.1661	0.0207	0.0621	—
Cs-134	RTC-3.4	2007	0.04885	0.0087	0.0261	—
Cs-134	RTC-6.2	2007	0.06382	0.0157	0.0471	—
Cs-134	RTC-6.4	2007	0.09783	0.0176	0.0528	—
Cs-134	RTC-8.2	2007	0.1179	0.0145	0.0435	—
Cs-134	RTC-A1.2	2007	0.02392	0.00696	0.02088	—
Cs-134	RTC-A1.3	2007	0.06297	0.0126	0.0378	—
Cs-134	RTC-A2.2	2007	0.007519	0.0191	0.0573	U
Cs-134	RTC-A2.3	2007	0.1089	0.0168	0.0504	—
Cs-134	RTC-A2.4	2007	0.05306	0.00957	0.02871	—
Cs-134	RTC-A3.2	2007	0.1716	0.0219	0.0657	—
Cs-134	RTC-A3.3	2007	0.1249	0.0171	0.0513	—
Cs-134	RTC-A3.4	2007	0.1249	0.0134	0.0402	—
Cs-134	RTC-A3.5	2007	0.03875	0.0282	0.0846	U
Cs-134	RTC-A4.5	2007	0.03781	0.00768	0.02304	—
Cs-134	RTC-3.4	2008	0.1001	0.0132	0.0396	—
Cs-134	RTC-A3.3	2008	0.08253	0.0141	0.0423	—
Cs-134	RTC-A3.4	2008	0.02916	0.00773	0.02319	—
Cs-134	RTC1.4	2009	0.008943	0.003895	0.011685	U
Cs-134	RTC-A3.2	2009	0.04535	0.0068	0.0204	—
Cs-134	RTC-A3.5	2009	0.006815	0.004725	0.014175	U
Cs-134	RTC-8.2	2010	0.05283	0.00692	0.02076	—
Cs-134	RTC-A4.5	2010	0.0153	0.00322	0.00966	—
Cs-134	RTC.3	2011	-0.1121	0.00795	0.02385	U
Cs-134	RTC-0.1	2011	0.005431	0.0145	0.0435	U
Cs-134	RTC-1.1	2011	0.00798	0.0192	0.0576	U
Cs-134	RTC-1.2	2011	-0.001626	0.0258	0.0774	U
Cs-134	RTC1.3	2011	-0.003505	0.0253	0.0759	U
Cs-134	RTC1.4	2011	0.001093	0.0132	0.0396	U
Cs-134	RTC-2.2	2011	-0.007413	0.0236	0.0708	U
Cs-134	RTC2.3	2011	0.01064	0.0178	0.0534	U
Cs-134	RTC-6.2	2011	-0.004116	0.0241	0.0723	U

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	RTC-6.4	2011	-0.01676	0.025	0.075	U
Cs-134	RTC-8.2	2011	-0.006582	0.0145	0.0435	U
Cs-134	RTC-A1.2	2011	-0.001184	0.0213	0.0639	U
Cs-134	RTC-A1.3	2011	-0.002305	0.0226	0.0678	U
Cs-134	RTC-A2.2	2011	-0.01363	0.024	0.072	U
Cs-134	RTC-A2.3	2011	-0.01804	0.0332	0.0996	U
Cs-134	RTC-A2.4	2011	-0.001358	0.0126	0.0378	U
Cs-134	RTC-A3.2	2011	0.0021	0.0235	0.0705	U
Cs-134	RTC-A3.4	2011	0.0086	0.0248	0.0744	U
Cs-134	RTC-A3.5	2011	0.05303	0.0109	0.0327	—
Cs-134	RTC-A4.5	2011	0.002122	0.0245	0.0735	U
Cs-134	RTC.3	2012	0.05988	0.00899	0.02697	—
Cs-134	RTC-1.2	2012	0.07708	0.0131	0.0393	—
Cs-134	RTC-2.2	2012	0.0667	0.00998	0.02994	—
Cs-134	RTC-6.2	2012	0.02404	0.00704	0.02112	—
Cs-134	RTC-6.4	2012	0.08045	0.00898	0.02694	—
Cs-134	RTC-A2.2	2012	0.06831	0.00872	0.02616	—
Cs-134	RTC-A2.3	2012	0.05793	0.00993	0.02979	—
Cs-134	RTC-A3.2	2012	0.07143	0.00937	0.02811	—
Cs-134	RTC-A3.4	2012	0.07192	0.00995	0.02985	—
Cs-134	RTC-A3.5	2012	0.06206	0.00816	0.02448	—
Cs-134	2 INCH AIR - TRA	2014	0.03925	0.00944	0.02832	—
Cs-137	LP 0.1	1976	0.99	0.04	0.12	—
Cs-137	LP 0.3	1976	1.84	0.06	0.18	—
Cs-137	LP 1.1	1976	0.82	0.03	0.09	—
Cs-137	LP -1.1	1976	0.95	0.04	0.12	—
Cs-137	LP 1.2	1976	2.37	0.08	0.24	—
Cs-137	LP -1.2	1976	1.84	0.06	0.18	—
Cs-137	LP 1.3	1976	0.85	0.003	0.009	—
Cs-137	LP -1.3	1976	0.55	0.02	0.06	—
Cs-137	LP 2.1	1976	0.81	0.03	0.09	—
Cs-137	LP 2.2	1976	3	0.1	0.3	—
Cs-137	LP 2.3	1976	1.29	0.05	0.15	—
Cs-137	LP 3.1	1976	1.04	0.04	0.12	—
Cs-137	LP 3.2	1976	3.1	0.1	0.3	—
Cs-137	LP 3.3	1976	1.22	0.02	0.06	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	LP 4.1	1976	0.28	0.02	0.06	—
Cs-137	LP 4.2	1976	1.36	0.05	0.15	—
Cs-137	LP 4.3	1976	0.26	0.02	0.06	—
Cs-137	LP 4.4	1976	0.73	0.003	0.009	—
Cs-137	LP 5.2	1976	3.4	0.1	0.3	—
Cs-137	LP 5.3	1976	1.48	0.050	0.15	—
Cs-137	LP 6.2	1976	0.76	0.03	0.09	—
Cs-137	LP 6.3	1976	1.6	0.06	0.18	—
Cs-137	LP 7.2	1976	1.5	0.05	0.15	—
Cs-137	LP 7.3	1976	0.28	0.02	0.06	—
Cs-137	LP 8.2	1976	0.99	0.04	0.12	—
Cs-137	A1.3	1977	1.23	0.045	0.135	—
Cs-137	A2.2	1977	1.16	0.043	0.129	—
Cs-137	A2.3	1977	0.216	0.013	0.039	—
Cs-137	A2.4	1977	1.48	0.05	0.15	—
Cs-137	A2.5	1977	1.52	0.03	0.09	—
Cs-137	A3.2	1977	2.14	0.071	0.213	—
Cs-137	A3.3	1977	1.02	0.04	0.12	—
Cs-137	A3.4	1977	1.79	0.058	0.174	—
Cs-137	A3.5	1977	1.43	0.052	0.156	—
Cs-137	A4.5	1977	1.51	0.048	0.144	—
Cs-137	A5.5	1977	0.857	0.031	0.093	—
Cs-137	LP -1.3	1977	0.55	0.02	0.06	—
Cs-137	LP 1.4	1977	1.34	0.05	0.15	—
Cs-137	LP -1.4	1977	1.25	0.04	0.12	—
Cs-137	LP -2.2	1977	1.09	0.04	0.12	—
Cs-137	LP -2.3	1977	1.29	0.04	0.12	—
Cs-137	LP 3.4	1977	1.52	0.05	0.15	—
Cs-137	LP 6.4	1977	1.58	0.05	0.15	—
Cs-137	1.1	1983	1.5	0.010	0.03	—
Cs-137	-1.1	1983	1.15	0.08	0.24	—
Cs-137	-1.2	1983	1.26	0.09	0.27	—
Cs-137	2.2	1983	5.47	0.25	0.75	—
Cs-137	3.1	1983	0.86	0.08	0.24	—
Cs-137	3.3	1983	1.65	0.1	0.3	—
Cs-137	4.2	1983	192	7	21	—
Cs-137	6.4	1983	0.71	0.07	0.21	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	8.2	1983	0.75	0.07	0.21	—
Cs-137	A1.3	1984	0.81	0.07	0.21	—
Cs-137	A2.2	1984	1.05	0.08	0.24	—
Cs-137	A2.5	1984	0.7	0.07	0.21	—
Cs-137	A3.4	1984	1.02	0.08	0.24	—
Cs-137	A4.5	1984	0.67	0.07	0.21	—
Cs-137	0.2	1990	1.89	0.1	0.3	—
Cs-137	1.1	1990	1.85	0.1	0.3	—
Cs-137	1.3	1990	1.62	0.09	0.27	—
Cs-137	-1.3	1990	1.64	0.09	0.27	—
Cs-137	1.4	1990	0.84	0.07	0.21	—
Cs-137	2.2	1990	9.1	0.4	1.2	—
Cs-137	-2.2	1990	1.07	0.07	0.21	—
Cs-137	3.3	1990	1.75	0.1	0.3	—
Cs-137	3.4	1990	1.29	0.08	0.24	—
Cs-137	4.2	1990	223	8	24	—
Cs-137	5.2	1990	31.8	1.2	3.6	—
Cs-137	5.3	1990	3.11	0.15	0.45	—
Cs-137	6.2	1990	2.18	0.11	0.33	—
Cs-137	6.4	1990	1.29	0.09	0.27	—
Cs-137	A1.3	1990	2.1	0.11	0.33	—
Cs-137	A2.2	1990	0.86	0.07	0.21	—
Cs-137	A2.5	1990	0.55	0.05	0.15	—
Cs-137	A3.3	1990	0.63	0.06	0.18	—
Cs-137	A3.4	1990	0.54	0.05	0.15	—
Cs-137	A4.5	1990	0.6	0.06	0.18	—
Cs-137	RTC.3	2006	0.1834	0.00635	0.01905	—
Cs-137	RTC-0.1	2006	0.4068	0.0072	0.0216	—
Cs-137	RTC-1.1	2006	0.3454	0.00775	0.02325	—
Cs-137	RTC-1.2	2006	0.3943	0.003985	0.011955	—
Cs-137	RTC-1.3	2006	0.1406	0.0117	0.0351	—
Cs-137	RTC1.4	2006	0.1322	0.0061	0.0183	—
Cs-137	RTC-2.2	2006	0.3159	0.0099	0.0297	—
Cs-137	RTC2.3	2006	0.131	0.00401	0.01203	—
Cs-137	RTC-2.3	2006	0.2906	0.0068	0.0204	—
Cs-137	RTC-3.4	2006	0.2047	0.0084	0.0252	—
Cs-137	RTC-6.2	2006	0.3759	0.00895	0.02685	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RTC-6.4	2006	0.186	0.00875	0.02625	—
Cs-137	RTC-8.2	2006	0.1657	0.00795	0.02385	—
Cs-137	RTC-A1.2	2006	0.126	0.00411	0.01233	—
Cs-137	RTC-A1.3	2006	0.2044	0.00615	0.01845	—
Cs-137	RTC-A2.2	2006	0.1342	0.0054	0.0162	—
Cs-137	RTC-A2.3	2006	0.1321	0.0084	0.0252	—
Cs-137	RTC-A2.4	2006	0.07823	0.00338	0.01014	—
Cs-137	RTC-A3.2	2006	0.1438	0.00264	0.00792	—
Cs-137	RTC-A3.3	2006	0.1499	0.00735	0.02205	—
Cs-137	RTC-A3.4	2006	0.155	0.00855	0.02565	—
Cs-137	RTC-A3.5	2006	0.1149	0.0059	0.0177	—
Cs-137	RTC-A4.5	2006	0.1648	0.0126	0.0378	—
Cs-137	RTC.3	2007	0.6213	0.0244	0.0732	—
Cs-137	RTC-0.1	2007	0.7973	0.00887	0.02661	—
Cs-137	RTC-1.1	2007	0.8395	0.0262	0.0786	—
Cs-137	RTC-1.2	2007	1.047	0.0281	0.0843	—
Cs-137	RTC1.3	2007	0.421	0.0104	0.0312	—
Cs-137	RTC-1.3	2007	0.4638	0.0204	0.0612	—
Cs-137	RTC1.4	2007	0.4739	0.0226	0.0678	—
Cs-137	RTC-2.2	2007	0.747	0.0228	0.0684	—
Cs-137	RTC2.3	2007	0.7481	0.0212	0.0636	—
Cs-137	RTC-2.3	2007	0.542	0.0126	0.0378	—
Cs-137	RTC-3.4	2007	0.4543	0.0241	0.0723	—
Cs-137	RTC-6.2	2007	1.304	0.0246	0.0738	—
Cs-137	RTC-6.4	2007	0.4443	0.014	0.042	—
Cs-137	RTC-8.2	2007	0.3192	0.0129	0.0387	—
Cs-137	RTC-A1.2	2007	0.3767	0.0128	0.0384	—
Cs-137	RTC-A1.3	2007	0.4828	0.0254	0.0762	—
Cs-137	RTC-A2.2	2007	0.3406	0.00693	0.02079	—
Cs-137	RTC-A2.3	2007	0.222	0.00541	0.01623	—
Cs-137	RTC-A2.4	2007	0.2153	0.0191	0.0573	—
Cs-137	RTC-A3.2	2007	0.4117	0.0536	0.1608	—
Cs-137	RTC-A3.3	2007	0.3568	0.0183	0.0549	—
Cs-137	RTC-A3.4	2007	0.3845	0.0193	0.0579	—
Cs-137	RTC-A3.5	2007	0.308	0.025	0.075	—
Cs-137	RTC-A4.5	2007	0.3767	0.0252	0.0756	—
Cs-137	RTC-3.4	2008	0.3312	0.0119	0.0357	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RTC-A3.3	2008	0.2621	0.0139	0.0417	—
Cs-137	RTC-A3.4	2008	0.2235	0.00707	0.02121	—
Cs-137	RTC.3	2009	0.325	0.001805	0.005415	—
Cs-137	RTC-0.1	2009	0.6821	0.00885	0.02655	—
Cs-137	RTC-1.1	2009	0.5534	0.006	0.018	—
Cs-137	RTC-1.2	2009	0.5852	0.00935	0.02805	—
Cs-137	RTC1.3	2009	0.3254	0.0082	0.0246	—
Cs-137	RTC1.4	2009	0.288	0.00515	0.01545	—
Cs-137	RTC-2.2	2009	0.4329	0.00815	0.02445	—
Cs-137	RTC2.3	2009	0.543	0.00895	0.02685	—
Cs-137	RTC-2.3	2009	0.3139	0.00865	0.02595	—
Cs-137	RTC-3.4	2009	0.1997	0.00429	0.01287	—
Cs-137	RTC-6.2	2009	0.6389	0.0066	0.0198	—
Cs-137	RTC-6.4	2009	0.2483	0.00625	0.01875	—
Cs-137	RTC-8.2	2009	0.2058	0.00705	0.02115	—
Cs-137	RTC-A1.2	2009	0.2034	0.00436	0.01308	—
Cs-137	RTC-A1.3	2009	0.3257	0.0051	0.0153	—
Cs-137	RTC-A2.2	2009	0.1971	0.00665	0.01995	—
Cs-137	RTC-A2.3	2009	0.1746	0.00675	0.02025	—
Cs-137	RTC-A3.2	2009	0.2387	0.00765	0.02295	—
Cs-137	RTC-A3.3	2009	0.1699	0.00515	0.01545	—
Cs-137	RTC-A3.5	2009	0.1765	0.00815	0.02445	—
Cs-137	RTC-A4.5	2009	0.1734	0.00795	0.02385	—
Cs-137	RTC-8.2	2010	0.2398	0.016	0.048	—
Cs-137	RTC-A4.5	2010	0.1364	0.00148	0.00444	—
Cs-137	RTC.3	2011	0.8786	0.0144	0.0432	—
Cs-137	RTC-0.1	2011	1.878	0.023	0.069	—
Cs-137	RTC-1.1	2011	1.501	0.0194	0.0582	—
Cs-137	RTC-1.2	2011	1.751	0.0257	0.0771	—
Cs-137	RTC1.3	2011	0.8372	0.0212	0.0636	—
Cs-137	RTC1.4	2011	0.8556	0.0175	0.0525	—
Cs-137	RTC-2.2	2011	1.032	0.0161	0.0483	—
Cs-137	RTC2.3	2011	1.403	0.019	0.057	—
Cs-137	RTC-6.2	2011	1.738	0.0249	0.0747	—
Cs-137	RTC-6.4	2011	0.8259	0.0205	0.0615	—
Cs-137	RTC-8.2	2011	0.6268	0.0167	0.0501	—
Cs-137	RTC-A1.2	2011	0.4954	0.0118	0.0354	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RTC-A1.3	2011	0.7331	0.0124	0.0372	—
Cs-137	RTC-A2.2	2011	0.479	0.0134	0.0402	—
Cs-137	RTC-A2.3	2011	0.4508	0.0188	0.0564	—
Cs-137	RTC-A2.4	2011	0.155	0.00859	0.02577	—
Cs-137	RTC-A3.2	2011	0.5849	0.0141	0.0423	—
Cs-137	RTC-A3.4	2011	0.6499	0.0268	0.0804	—
Cs-137	RTC-A3.5	2011	0.3683	0.0134	0.0402	—
Cs-137	RTC-A4.5	2011	0.5039	0.0248	0.0744	—
Cs-137	RTC.3	2012	0.2552	0.00529	0.01587	—
Cs-137	RTC-1.2	2012	0.4285	0.0114	0.0342	—
Cs-137	RTC-2.2	2012	0.4863	0.00869	0.02607	—
Cs-137	RTC-6.2	2012	0.8307	0.00925	0.02775	—
Cs-137	RTC-6.4	2012	0.2566	0.00534	0.01602	—
Cs-137	RTC-A2.2	2012	0.2071	0.00771	0.02313	—
Cs-137	RTC-A2.3	2012	0.6036	0.00946	0.02838	—
Cs-137	RTC-A3.2	2012	0.1568	0.00633	0.01899	—
Cs-137	RTC-A3.4	2012	0.232	0.0091	0.0273	—
Cs-137	RTC-A3.5	2012	0.07696	0.00759	0.02277	—
Cs-137	2 INCH AIR - TRA	2014	0.07592	0.00754	0.02262	—
Eu-152	RTC.3	2011	0.01541	0.0242	0.0726	U
Eu-152	RTC-0.1	2011	0.0121	0.0275	0.0825	U
Eu-152	RTC-1.1	2011	0.02707	0.0245	0.0735	U
Eu-152	RTC-1.2	2011	0.03889	0.0316	0.0948	U
Eu-152	RTC1.3	2011	0.02213	0.0321	0.0963	U
Eu-152	RTC1.4	2011	0.01046	0.0261	0.0783	U
Eu-152	RTC-2.2	2011	0.0009363	0.028	0.084	U
Eu-152	RTC2.3	2011	0.002431	0.0237	0.0711	U
Eu-152	RTC-6.2	2011	0.01159	0.0331	0.0993	U
Eu-152	RTC-6.4	2011	0.04785	0.0264	0.0792	U
Eu-152	RTC-8.2	2011	0.0555	0.0287	0.0861	U
Eu-152	RTC-A1.2	2011	0.01452	0.0227	0.0681	U
Eu-152	RTC-A1.3	2011	0.03154	0.0267	0.0801	U
Eu-152	RTC-A2.2	2011	0.03046	0.0279	0.0837	U
Eu-152	RTC-A2.3	2011	0.02941	0.0332	0.0996	U
Eu-152	RTC-A2.4	2011	-0.006851	0.0371	0.1113	U
Eu-152	RTC-A3.2	2011	0.009706	0.0262	0.0786	U

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	RTC-A3.4	2011	0.627	0.0426	0.1278	—
Eu-152	RTC-A3.5	2011	0.06371	0.0271	0.0813	U
Eu-152	RTC-A4.5	2011	0.07326	0.0377	0.1131	U
Eu-152	RTC.3	2012	0.01806	0.0236	0.0708	U
Eu-152	RTC-1.2	2012	0.03193	0.0389	0.1167	U
Eu-152	RTC-2.2	2012	0.02902	0.0294	0.0882	U
Eu-152	RTC-6.2	2012	0.01269	0.025	0.075	U
Eu-152	RTC-6.4	2012	0.00002383	0.023	0.069	U
Eu-152	RTC-A2.2	2012	0.04105	0.0256	0.0768	U
Eu-152	RTC-A2.3	2012	0.01393	0.0281	0.0843	U
Eu-152	RTC-A3.2	2012	0.04328	0.0242	0.0726	U
Eu-152	RTC-A3.4	2012	0.02296	0.0243	0.0729	U
Eu-152	RTC-A3.5	2012	0.7753	0.0318	0.0954	—
Eu-152	2 INCH AIR - TRA	2014	0.001068	0.022	0.066	U
Pu-238	LP 0.3	1976	0.009	0.002	0.006	—
Pu-238	LP -1.2	1976	0.0069	0.0015	0.0045	—
Pu-238	LP 2.2	1976	0.0066	0.0014	0.0042	—
Pu-238	LP 3.1	1976	0.0033	0.0011	0.0033	—
Pu-238	LP 3.2	1976	0.003	0.002	0.006	U
Pu-238	LP 3.3	1976	0.004	0.002	0.006	U
Pu-238	LP 5.3	1976	0.005	0.002	0.006	U
Pu-238	LP 7.2	1976	0.0032	0.0014	0.0042	U
Pu-238	LP 8.2	1976	0.002	0.002	0.006	U
Pu-238	A3.4	1977	0.0026	0.0014	0.0042	U
Pu-238	LP -2.2	1977	0	0.001	0.003	U
Pu-238	LP 3.4	1977	0.0026	0.0012	0.0036	U
Pu-239/240	LP 0.3	1976	0.031	0.003	0.009	—
Pu-239/240	LP -1.2	1976	0.034	0.003	0.009	—
Pu-239/240	LP 2.2	1976	0.056	0.004	0.012	—
Pu-239/240	LP 3.1	1976	0.018	0.002	0.006	—
Pu-239/240	LP 3.2	1976	0.039	0.003	0.009	—
Pu-239/240	LP 3.3	1976	0.012	0.002	0.006	—
Pu-239/240	LP 5.3	1976	0.019	0.003	0.009	—
Pu-239/240	LP 7.2	1976	0.022	0.003	0.009	—
Pu-239/240	LP 8.2	1976	0.015	0.002	0.006	—
Pu-239/240	A3.4	1977	0.029	0.003	0.009	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	LP -2.2	1977	0.018	0.002	0.006	—
Pu-239/240	LP 3.4	1977	0.02	0.002	0.006	—
Sb-125	A3.2	1977	0.0869	0.034	0.102	U
Sb-125	A3.5	1977	0.218	0.048	0.144	—
Sb-125	RTC.3	2011	0.09469	0.0301	0.0903	—
Sb-125	RTC-0.1	2011	-0.06318	0.0445	0.1335	U
Sb-125	RTC-1.1	2011	0.07594	0.03200	0.096	U
Sb-125	RTC-1.2	2011	0.04583	0.0407	0.1221	U
Sb-125	RTC1.3	2011	0.08626	0.0403	0.1209	U
Sb-125	RTC1.4	2011	0.1805	0.0395	0.1185	—
Sb-125	RTC-2.2	2011	0.0267	0.0393	0.1179	U
Sb-125	RTC2.3	2011	0.7251	0.0316	0.0948	—
Sb-125	RTC-6.2	2011	0.08155	0.0461	0.1383	U
Sb-125	RTC-6.4	2011	0.09308	0.0384	0.1152	U
Sb-125	RTC-8.2	2011	-0.06156	0.0462	0.1386	U
Sb-125	RTC-A1.2	2011	0.03776	0.029	0.087	U
Sb-125	RTC-A1.3	2011	0.05835	0.03860	0.1158	U
Sb-125	RTC-A2.2	2011	0.04631	0.0379	0.1137	U
Sb-125	RTC-A2.3	2011	0.07528	0.0453	0.1359	U
Sb-125	RTC-A2.4	2011	-0.01462	0.0337	0.1011	U
Sb-125	RTC-A3.2	2011	0.06654	0.0397	0.1191	U
Sb-125	RTC-A3.4	2011	0.002491	0.0483	0.1449	U
Sb-125	RTC-A3.5	2011	0.03213	0.0408	0.1224	U
Sb-125	RTC-A4.5	2011	0.09604	0.0482	0.1446	U
Sb-125	RTC.3	2012	0.005981	0.0349	0.1047	U
Sb-125	RTC-1.2	2012	-0.01076	0.0537	0.1611	U
Sb-125	RTC-2.2	2012	0.0217	0.0393	0.1179	U
Sb-125	RTC-6.2	2012	-0.004582	0.0361	0.1083	U
Sb-125	RTC-6.4	2012	0.006869	0.0371	0.1113	U
Sb-125	RTC-A2.2	2012	-0.008378	0.0319	0.0957	U
Sb-125	RTC-A2.3	2012	-0.005957	0.0391	0.1173	U
Sb-125	RTC-A3.2	2012	0.0008879	0.0345	0.1035	U
Sb-125	RTC-A3.4	2012	0.001198	0.0351	0.1053	U
Sb-125	RTC-A3.5	2012	-0.003376	0.0325	0.0975	U
Sb-125	2 INCH AIR - TRA	2014	0.004974	0.0449	0.1347	U
Sr-90	LP 0.1	1976	0.62	0.06	0.18	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sr-90	LP -1.1	1976	0.62	0.06	0.18	—
Sr-90	LP 1.2	1976	1.01	0.06	0.18	—
Sr-90	LP -1.2	1976	0.9	0.06	0.18	—
Sr-90	LP 1.3	1976	0.5	0.05	0.15	—
Sr-90	LP 2.1	1976	0.64	0.05	0.15	—
Sr-90	LP 2.2	1976	0.97	0.06	0.18	—
Sr-90	LP 2.3	1976	0.87	0.06	0.18	—
Sr-90	LP 3.1	1976	0.58	0.05	0.15	—
Sr-90	LP 3.2	1976	0.98	0.06	0.18	—
Sr-90	LP 3.3	1976	0.67	0.07	0.21	—
Sr-90	LP 4.4	1976	0.6	0.01	0.03	—
Sr-90	LP 5.3	1976	0.69	0.05	0.15	—
Sr-90	LP 6.3	1976	0.66	0.05	0.15	—
Sr-90	LP 7.2	1976	0.71	0.05	0.15	—
Sr-90	LP 8.2	1976	0.41	0.04	0.12	—
Sr-90	A1.2	1977	0.68	0.05	0.15	—
Sr-90	A1.3	1977	0.63	0.05	0.15	—
Sr-90	A2.5	1977	0.81	0.06	0.18	—
Sr-90	A3.2	1977	0.93	0.06	0.18	—
Sr-90	A3.3	1977	0.7	0.05	0.15	—
Sr-90	A4.5	1977	0.86	0.06	0.18	—
Sr-90	LP 0.2	1977	0.61	0.05	0.15	—
Sr-90	LP 1.4	1977	0.89	0.06	0.18	—
Sr-90	LP -2.2	1977	0.84	0.06	0.18	—
Sr-90	LP -2.3	1977	0.72	0.05	0.15	—
Sr-90	LP 3.4	1977	1.17	0.07	0.21	—
Sr-90	LP 6.4	1977	1.2	0.01	0.03	—
Sr-90	8.2	1983	0.59	0.06	0.18	—
U-234	RTC.3	2007	45.15	2.65	7.95	—
U-234	RTC-0.1	2007	153	4.05	12.15	—
U-234	RTC-1.1	2007	143.5	4.02	12.06	—
U-234	RTC-1.2	2007	122.8	3.78	11.34	—
U-234	RTC1.3	2007	112.5	3	9	—
U-234	RTC-1.3	2007	147.9	4.02	12.06	—
U-234	RTC1.4	2007	149.2	4.06	12.18	—
U-234	RTC-2.2	2007	144	4.16	12.48	—
U-234	RTC2.3	2007	195.3	4.85	14.55	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	RTC-2.3	2007	47.72	2.64	7.92	—
U-234	RTC-3.4	2007	128.1	3.28	9.84	—
U-234	RTC-6.2	2007	43.22	2.82	8.46	—
U-234	RTC-6.4	2007	146.7	3.96	11.88	—
U-234	RTC-8.2	2007	157.2	4.02	12.06	—
U-234	RTC-A1.2	2007	29.53	2.29	6.87	—
U-234	RTC-A1.3	2007	146	3.97	11.91	—
U-234	RTC-A2.2	2007	114.3	3.71	11.13	—
U-234	RTC-A2.3	2007	145.9	3.97	11.91	—
U-234	RTC-A2.4	2007	68.37	2.42	7.26	—
U-234	RTC-A3.2	2007	154	4.24	12.72	—
U-234	RTC-A3.3	2007	157.5	4.09	12.27	—
U-234	RTC-A3.4	2007	123	3.82	11.46	—
U-234	RTC-A3.5	2007	152	4.07	12.21	—
U-234	RTC-A4.5	2007	139.1	4.02	12.06	—
U-234	RTC-3.4	2008	32.29	1.98	5.94	—
U-234	RTC-A3.3	2008	38.23	2.11	6.33	—
U-234	RTC-A3.4	2008	48.32	2.36	7.08	—
U-234	RTC.3	2009	2.277	0.73	2.19	—
U-234	RTC-A1.3	2009	6.974	3.99	11.97	U
U-234	RTC-8.2	2010	143.4	4.36	13.08	—
U-234	RTC-A4.5	2010	24.4	0.674	2.022	—
U-234	RTC-1.1	2011	13.39	52.7	158.1	U
U-234	RTC-A1.2	2011	-34.7	61.5	184.5	U
U-234	RTC.3	2012	-2.746	13.7	41.1	U
U-234	RTC-1.2	2012	9.593	37.1	111.3	U
U-234	RTC-2.2	2012	12.63	27.6	82.8	U
U-234	RTC-6.2	2012	19.64	24.2	72.6	U
U-234	RTC-6.4	2012	10.47	16.3	48.9	U
U-234	RTC-A2.2	2012	-3.014	25.4	76.2	U
U-234	RTC-A2.3	2012	7.015	27.8	83.4	U
U-234	RTC-A3.2	2012	-8.367	15.5	46.5	U
U-234	RTC-A3.4	2012	3.115	18	54	U
U-234	RTC-A3.5	2012	-35.05	26	78	U
U-235	A2.2	1977	0.195	0.092	0.276	U
U-235	A2.3	1977	0.131	0.015	0.045	—
U-235	RTC.3	2006	0.9055	0.291	0.873	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RTC-0.1	2006	0.9713	0.4495	1.3485	U
U-235	RTC-1.1	2006	0.9688	0.3925	1.1775	U
U-235	RTC-1.2	2006	2.65	0.65	1.95	—
U-235	RTC1.3	2006	1.444	0.62	1.86	U
U-235	RTC1.4	2006	1.927	0.8	2.4	U
U-235	RTC-2.2	2006	1.223	0.409	1.227	U
U-235	RTC2.3	2006	0.9813	0.4375	1.3125	U
U-235	RTC-2.3	2006	1.269	0.459	1.377	U
U-235	RTC-3.4	2006	2.369	0.4695	1.4085	—
U-235	RTC-6.2	2006	1.406	0.4315	1.2945	—
U-235	RTC-6.4	2006	1.248	0.429	1.287	U
U-235	RTC-8.2	2006	1.358	0.4365	1.3095	—
U-235	RTC-A1.2	2006	0.4553	0.1425	0.4275	—
U-235	RTC-A1.3	2006	0.7162	0.316	0.948	U
U-235	RTC-A2.2	2006	0.9894	0.59	1.77	U
U-235	RTC-A2.3	2006	1.373	0.387	1.161	—
U-235	RTC-A2.4	2006	1.567	0.665	1.995	U
U-235	RTC-A3.2	2006	1.456	0.555	1.665	U
U-235	RTC-A3.3	2006	0.9995	0.35	1.05	U
U-235	RTC-A3.4	2006	1.762	0.54	1.62	—
U-235	RTC-A3.5	2006	0.4339	0.3785	1.1355	U
U-235	RTC-A4.5	2006	2.217	0.77	2.31	U
U-235	RTC.3	2007	0.9139	0.127	0.381	—
U-235	RTC-0.1	2007	0.2985	0.1	0.3	U
U-235	RTC-1.1	2007	0.1771	0.0663	0.1989	U
U-235	RTC-1.2	2007	0.6334	0.11	0.33	—
U-235	RTC1.3	2007	0.4977	0.0934	0.2802	—
U-235	RTC-1.3	2007	0.1917	0.0878	0.2634	U
U-235	RTC1.4	2007	0.1173	0.0757	0.2271	U
U-235	RTC-2.2	2007	0.6459	0.127	0.381	—
U-235	RTC2.3	2007	0.3693	0.102	0.306	—
U-235	RTC-2.3	2007	0.5734	0.116	0.348	—
U-235	RTC-3.4	2007	0.1748	0.089	0.267	U
U-235	RTC-6.2	2007	0.3796	0.0978	0.2934	—
U-235	RTC-6.4	2007	0.2794	0.0842	0.2526	—
U-235	RTC-8.2	2007	0.677	0.116	0.348	—
U-235	RTC-A1.2	2007	0.1597	0.079	0.237	U

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RTC-A1.3	2007	0.6291	0.115	0.345	—
U-235	RTC-A2.2	2007	0.1401	0.0881	0.2643	U
U-235	RTC-A2.3	2007	0.2112	0.095	0.285	U
U-235	RTC-A2.4	2007	0.2275	0.0721	0.2163	—
U-235	RTC-A3.2	2007	0.4716	0.114	0.342	—
U-235	RTC-A3.3	2007	0.7601	0.0982	0.2946	—
U-235	RTC-A3.4	2007	0.3305	0.0999	0.2997	—
U-235	RTC-A3.5	2007	0.2081	0.0728	0.2184	U
U-235	RTC-A4.5	2007	0.4503	0.134	0.402	—
U-235	RTC-3.4	2008	0.1737	0.0716	0.2148	U
U-235	RTC-A3.3	2008	0.2766	0.0923	0.2769	U
U-235	RTC-A3.4	2008	0.1181	0.0816	0.2448	U
U-235	RTC.3	2009	0.1932	0.056	0.168	—
U-235	RTC-1.1	2009	0.221	0.0296	0.0888	—
U-235	RTC-1.2	2009	0.2174	0.055	0.165	—
U-235	RTC-8.2	2009	0.2465	0.0575	0.1725	—
U-235	RTC-A2.2	2009	0.2696	0.058	0.174	—
U-235	RTC-8.2	2010	1.103	0.226	0.678	—
U-235	RTC-A4.5	2010	0.2353	0.0192	0.0576	—
U-235	RTC.3	2011	-0.09157	0.154	0.462	U
U-235	RTC-0.1	2011	0.1115	0.185	0.555	U
U-235	RTC-1.1	2011	0.0441	0.151	0.453	U
U-235	RTC-1.2	2011	-0.0257	0.191	0.573	U
U-235	RTC1.3	2011	0.008094	0.201	0.603	U
U-235	RTC1.4	2011	0.1213	0.167	0.501	U
U-235	RTC-2.2	2011	0.1275	0.178	0.534	U
U-235	RTC2.3	2011	-0.01914	0.149	0.447	U
U-235	RTC-6.2	2011	0.2562	0.199	0.597	U
U-235	RTC-6.4	2011	-0.2428	0.18	0.54	U
U-235	RTC-8.2	2011	0.1096	0.196	0.588	U
U-235	RTC-A1.2	2011	0.1473	0.151	0.453	U
U-235	RTC-A1.3	2011	-0.01972	0.158	0.474	U
U-235	RTC-A2.2	2011	0.0798	0.175	0.525	U
U-235	RTC-A2.3	2011	0.1007	0.207	0.621	U
U-235	RTC-A2.4	2011	-0.07842	0.215	0.645	U
U-235	RTC-A3.2	2011	-0.08751	0.17	0.51	U
U-235	RTC-A3.4	2011	0.09186	0.195	0.585	U

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RTC-A3.5	2011	-0.01959	0.194	0.582	U
U-235	RTC-A4.5	2011	0.07577	0.227	0.681	U
U-235	RTC.3	2012	0.02181	0.134	0.402	U
U-235	RTC-1.2	2012	0.02846	0.247	0.741	U
U-235	RTC-2.2	2012	0.08543	0.18	0.54	U
U-235	RTC-6.2	2012	-0.03779	0.154	0.462	U
U-235	RTC-6.4	2012	0.03336	0.136	0.408	U
U-235	RTC-A2.2	2012	-0.03647	0.162	0.486	U
U-235	RTC-A2.3	2012	0.1996	0.183	0.549	U
U-235	RTC-A3.2	2012	0.0567	0.15	0.45	U
U-235	RTC-A3.4	2012	0.08665	0.167	0.501	U
U-235	RTC-A3.5	2012	0.1422	0.156	0.468	U
U-235	2 INCH AIR - TRA	2014	-0.07184	0.143	0.429	U
U-238	RTC.3	2006	12.52	1.365	4.095	—
U-238	RTC-0.1	2006	19.59	2.14	6.42	—
U-238	RTC-1.1	2006	18.75	3.195	9.585	—
U-238	RTC-1.2	2006	5.185	3.955	11.865	U
U-238	RTC1.3	2006	30.55	3.355	10.065	—
U-238	RTC-1.3	2006	24.53	4.48	13.44	—
U-238	RTC1.4	2006	23.39	2.94	8.82	—
U-238	RTC-2.2	2006	34.68	3.63	10.89	—
U-238	RTC2.3	2006	7.216	2.085	6.255	—
U-238	RTC-2.3	2006	4.501	1.39	4.17	—
U-238	RTC-3.4	2006	5.708	2.265	6.795	U
U-238	RTC-6.2	2006	22.9	2.465	7.395	—
U-238	RTC-6.4	2006	24.8	2.95	8.85	—
U-238	RTC-8.2	2006	64.21	12.25	36.75	—
U-238	RTC-A1.2	2006	7.786	2.165	6.495	—
U-238	RTC-A1.3	2006	16.09	2.065	6.195	—
U-238	RTC-A2.2	2006	13.78	1.66	4.98	—
U-238	RTC-A2.3	2006	16.77	2.195	6.585	—
U-238	RTC-A2.4	2006	5.576	1.04	3.12	—
U-238	RTC-A3.2	2006	5.006	1.215	3.645	—
U-238	RTC-A3.3	2006	19.66	2.165	6.495	—
U-238	RTC-A3.4	2006	23.14	2.875	8.625	—
U-238	RTC-A3.5	2006	15.18	2.455	7.365	—

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	RTC-A4.5	2006	12.6	5.7	17.1	U
U-238	RTC.3	2007	0	3.92	11.76	U
U-238	RTC-0.1	2007	0.3659	6.04	18.12	U
U-238	RTC-1.1	2007	0.2946	6	18	U
U-238	RTC-1.2	2007	0	5.99	17.97	U
U-238	RTC1.3	2007	0.1908	4.78	14.34	U
U-238	RTC-1.3	2007	0.2574	5.98	17.94	U
U-238	RTC1.4	2007	0.2194	6.04	18.12	U
U-238	RTC-2.2	2007	0.02662	6.57	19.71	U
U-238	RTC2.3	2007	0.2639	7.62	22.86	U
U-238	RTC-2.3	2007	0	3.93	11.79	U
U-238	RTC-3.4	2007	0.05795	5.21	15.63	U
U-238	RTC-6.2	2007	0.1963	4.03	12.09	U
U-238	RTC-6.4	2007	0.2015	5.91	17.73	U
U-238	RTC-8.2	2007	0.1292	6.02	18.06	U
U-238	RTC-A1.2	2007	0	3.37	10.11	U
U-238	RTC-A1.3	2007	0.089	5.93	17.79	U
U-238	RTC-A2.2	2007	0	5.88	17.64	U
U-238	RTC-A2.3	2007	0	5.92	17.76	U
U-238	RTC-A2.4	2007	0.09197	3.85	11.55	U
U-238	RTC-A3.2	2007	0	6.7	20.1	U
U-238	RTC-A3.3	2007	0.1634	6.09	18.27	U
U-238	RTC-A3.4	2007	0	6.03	18.09	U
U-238	RTC-A3.5	2007	0.09305	6.07	18.21	U
U-238	RTC-A4.5	2007	0	6.31	18.93	U
U-238	RTC-3.4	2008	0.559	0.278	0.834	U
U-238	RTC-A3.3	2008	0.4099	0.277	0.831	U
U-238	RTC-A3.4	2008	1.683	0.341	1.023	—
U-238	RTC.3	2011	0.9252	0.6	1.8	U
U-238	RTC-0.1	2011	1.351	1.02	3.06	U
U-238	RTC-1.1	2011	1.259	0.607	1.821	U
U-238	RTC-1.2	2011	0.7186	0.973	2.919	U
U-238	RTC1.3	2011	1.876	0.978	2.934	U
U-238	RTC1.4	2011	1.503	0.925	2.775	U
U-238	RTC-2.2	2011	1.573	0.826	2.478	U
U-238	RTC2.3	2011	0.9657	0.58	1.74	U
U-238	RTC-6.2	2011	-0.04248	0.979	2.937	U

Table C-2. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	RTC-6.4	2011	1.022	0.98	2.94	U
U-238	RTC-8.2	2011	1.705	1.04	3.12	U
U-238	RTC-A1.2	2011	0.9353	0.652	1.956	U
U-238	RTC-A1.3	2011	1.328	0.798	2.394	U
U-238	RTC-A2.2	2011	1.13	0.843	2.529	U
U-238	RTC-A2.3	2011	1.431	1.04	3.12	U
U-238	RTC-A2.4	2011	1.149	0.494	1.482	U
U-238	RTC-A3.2	2011	1.414	0.826	2.478	U
U-238	RTC-A3.4	2011	2.902	1.07	3.21	U
U-238	RTC-A3.5	2011	1.13	0.651	1.953	U
U-238	RTC-A4.5	2011	1.508	1.07	3.21	U
U-238	RTC.3	2012	2.095	0.816	2.448	U
U-238	RTC-1.2	2012	0.9104	1.19	3.57	U
U-238	RTC-2.2	2012	1.964	0.904	2.712	U
U-238	RTC-6.2	2012	0.7613	0.774	2.322	U
U-238	RTC-6.4	2012	0.9675	0.828	2.484	U
U-238	RTC-A2.2	2012	1.347	0.805	2.415	U
U-238	RTC-A2.3	2012	0.5758	0.887	2.661	U
U-238	RTC-A3.2	2012	0	0.198	0.594	U
U-238	RTC-A3.4	2012	1.145	0.877	2.631	U
U-238	RTC-A3.5	2012	0.1262	0.712	2.136	U
U-238	2 INCH AIR - TRA	2014	1.428	0.551	1.653	U

Table C-3. Radionuclides concentrations in surface soils associated with INTEC.

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	A118	1974	0.0036	0.0022	0.0066	U
Am-241	A120	1974	-0.0009	0.0009	0.0027	U
Am-241	A52	1974	0.0036	0.00135	0.00405	U
Am-241	A71	1974	0.0059	0.0013	0.0039	—
Am-241	A87	1974	0.005	0.0018	0.0054	U
Am-241	A91	1974	0.0018	0.0013	0.0039	U
Am-241	B117	1974	0.0054	0.0013	0.0039	—
Am-241	B120	1974	0.0045	0.004	0.012	U
Am-241	B5	1974	0.0068	0.0018	0.0054	—
Am-241	B61	1974	0.009	0.0032	0.0096	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	B79	1974	0.016	0.002	0.006	—
Am-241	B86	1974	-0.1	0	0	U
Am-241	B90	1974	0.0041	0.0022	0.0066	U
Am-241	C36	1974	0.006	0.002	0.006	—
Am-241	C46	1974	0.0023	0.0016	0.0048	U
Am-241	D47	1974	0.0041	0.0013	0.0039	—
Am-241	A-110	1982	0.015	0.003	0.009	—
Am-241	A-120	1982	0.012	0.003	0.009	—
Am-241	B-120	1982	0.014	0.003	0.009	—
Am-241	B-25	1982	0.011	0.002	0.006	—
Am-241	B-69	1982	0.016	0.003	0.009	—
Am-241	C-21	1982	0.007	0.003	0.009	U
Am-241	D-114	1982	0.026	0.003	0.009	—
Am-241	D-96	1982	0.007	0.002	0.006	—
Am-241	A108	1989	0.029	0.004	0.012	—
Am-241	A17	1989	0.007	0.002	0.006	—
Am-241	A66	1989	0.01	0.002	0.006	—
Am-241	B25	1989	0.008	0.002	0.006	—
Am-241	B90	1989	0.016	0.003	0.009	—
Am-241	B96	1989	0.035	0.004	0.012	—
Am-241	C48	1989	0.0026	0.0016	0.0048	U
Am-241	C79	1989	0.004	0.002	0.006	U
Am-241	D30	1989	0.0037	0.0013	0.0039	U
Am-241	D96	1989	0.0014	0.0016	0.0048	U
Am-241	A15	2007	0.06804	0.15	0.45	U
Am-241	A17	2007	-0.0643	0.102	0.306	U
Am-241	A27	2007	0.1325	0.0585	0.1755	U
Am-241	A28	2007	0.2065	0.1075	0.3225	U
Am-241	A38	2007	0.1352	0.0745	0.2235	U
Am-241	A4	2007	-0.06878	0.1045	0.3135	U
Am-241	A44	2007	0.1063	0.084	0.252	U
Am-241	A45	2007	0.06609	0.082	0.2445	U
Am-241	A47	2007	0.1804	0.1075	0.3225	U
Am-241	A48	2007	0.09976	0.0835	0.2505	U
Am-241	A49	2007	0.06879	0.0795	0.2385	U
Am-241	A5	2007	0.05341	0.02825	0.08475	U
Am-241	A50	2007	0.1743	0.076	0.228	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	A58	2007	0.04673	0.0496	0.1488	U
Am-241	A59	2007	0.01033	0.04625	0.13875	U
Am-241	A6	2007	0.1427	0.065	0.195	U
Am-241	A60	2007	0.1114	0.1055	0.3165	U
Am-241	A61	2007	0.1187	0.074	0.222	U
Am-241	A67	2007	0.1141	0.0795	0.2385	U
Am-241	A69	2007	0.3781	0.1695	0.5085	U
Am-241	A70	2007	0.07273	0.0463	0.1389	U
Am-241	A71	2007	0.1941	0.04685	0.14055	—
Am-241	A72	2007	0.09614	0.0715	0.2145	U
Am-241	B101	2007	0.1143	0.072	0.216	U
Am-241	B102	2007	0.1264	0.07	0.21	U
Am-241	B103	2007	0.1088	0.066	0.198	U
Am-241	B104	2007	0.01965	0.039	0.11745	U
Am-241	B105	2007	0.2345	0.087	0.261	U
Am-241	B14	2007	0.02149	0.0311	0.0933	U
Am-241	B17	2007	0.1611	0.0835	0.2505	U
Am-241	B25	2007	0.03616	0.056	0.168	U
Am-241	B26	2007	0.1273	0.104	0.312	U
Am-241	B28	2007	-0.01002	0.0785	0.2355	U
Am-241	B3	2007	0.08054	0.089	0.267	U
Am-241	B40	2007	-0.1091	0.166	0.498	U
Am-241	B47	2007	0.1002	0.195	0.585	U
Am-241	B48	2007	0.1517	0.087	0.261	U
Am-241	B50	2007	0.1383	0.095	0.285	U
Am-241	B51	2007	0.03342	0.1275	0.3825	U
Am-241	B52	2007	0.06706	0.0685	0.2055	U
Am-241	B59	2007	0.6702	0.1725	0.5175	—
Am-241	B60	2007	0.2608	0.1525	0.4575	U
Am-241	B61	2007	0.132	0.0605	0.1815	U
Am-241	B62	2007	0.05238	0.04515	0.13545	U
Am-241	B71	2007	0.4585	0.1475	0.4425	—
Am-241	B73	2007	0.02904	0.0815	0.2445	U
Am-241	B80	2007	0.9001	0.1985	0.5955	—
Am-241	B81	2007	0.1479	0.1185	0.3555	U
Am-241	B82	2007	0.1931	0.1405	0.4215	U
Am-241	B83	2007	0.05148	0.0474	0.1422	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	B88	2007	0.15	0.0785	0.2355	U
Am-241	B90	2007	-0.04847	0.094	0.282	U
Am-241	B93	2007	0.2399	0.0635	0.1905	—
Am-241	B94	2007	0.08205	0.093	0.279	U
Am-241	B95	2007	0.06123	0.1045	0.3135	U
Am-241	B99	2007	0.1238	0.09	0.27	U
Am-241	C14	2007	0.2261	0.0955	0.2865	U
Am-241	C15	2007	0.2863	0.111	0.333	U
Am-241	C37	2007	0.05351	0.1285	0.3855	U
Am-241	C46	2007	0.0476	0.03275	0.09825	U
Am-241	C48	2007	-0.07859	0.078	0.234	U
Am-241	C56	2007	0.1334	0.0765	0.2295	U
Am-241	C57	2007	0.1398	0.0595	0.1785	U
Am-241	D58	2007	0.1833	0.082	0.246	U
Am-241	D68	2007	0.159	0.102	0.306	U
Am-241	D69	2007	0.0446	0.04495	0.13485	U
Am-241	D80	2007	0.05021	0.103	0.309	U
Am-241	D89	2007	0.1919	0.0805	0.2415	U
Am-241	D90	2007	0.2088	0.0605	0.1815	—
Am-241	D91	2007	0.2014	0.085	0.255	U
Am-241	A15	2011	0.01596	0.0785	0.2355	U
Am-241	A16	2011	0.04304	0.0976	0.2928	U
Am-241	A17	2011	-0.002077	0.0579	0.1737	U
Am-241	A27	2011	-0.01936	0.107	0.321	U
Am-241	A28	2011	0.03814	0.0693	0.2079	U
Am-241	A38	2011	0.0784	0.104	0.312	U
Am-241	A39	2011	0.03364	0.102	0.306	U
Am-241	A4	2011	-0.01331	0.106	0.318	U
Am-241	A44	2011	0.0781	0.163	0.489	U
Am-241	A47	2011	-0.006958	0.118	0.354	U
Am-241	A49	2011	0.1063	0.122	0.366	U
Am-241	A50	2011	-0.01074	0.108	0.324	U
Am-241	A55	2011	0.1464	0.118	0.354	U
Am-241	A58	2011	0.05153	0.12	0.36	U
Am-241	A59	2011	0.01319	0.106	0.318	U
Am-241	A6	2011	-0.004171	0.062	0.186	U
Am-241	A61	2011	0.02828	0.115	0.345	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	A66	2011	-0.03881	0.0644	0.1932	U
Am-241	A69	2011	0.0275	0.12	0.36	U
Am-241	A70	2011	0.05056	0.102	0.306	U
Am-241	A72	2011	0.08474	0.11	0.33	U
Am-241	B101	2011	-0.002668	0.061	0.183	U
Am-241	B102	2011	0.06281	0.121	0.363	U
Am-241	B103	2011	-0.04662	0.118	0.354	U
Am-241	B104	2011	0.07609	0.0999	0.2997	U
Am-241	B106	2011	-0.00133	0.0706	0.2118	U
Am-241	B14	2011	0.02834	0.0756	0.2268	U
Am-241	B15	2011	-0.05507	0.0999	0.2997	U
Am-241	B17	2011	-0.001653	0.134	0.402	U
Am-241	B25	2011	-0.005495	0.0975	0.2925	U
Am-241	B28	2011	-0.001728	0.0971	0.2913	U
Am-241	B29	2011	0.1035	0.103	0.309	U
Am-241	B3	2011	0.01172	0.105	0.315	U
Am-241	B39	2011	0.02529	0.136	0.408	U
Am-241	B4	2011	0.07723	0.0692	0.2076	U
Am-241	B40	2011	-0.09726	0.127	0.381	U
Am-241	B47	2011	-0.03913	0.109	0.327	U
Am-241	B48	2011	-0.06353	0.131	0.393	U
Am-241	B50	2011	0.02622	0.097	0.291	U
Am-241	B52	2011	-0.005631	0.089	0.267	U
Am-241	B61	2011	-0.03311	0.0718	0.2154	U
Am-241	B62	2011	-0.05575	0.067	0.201	U
Am-241	B71	2011	-0.002432	0.195	0.585	U
Am-241	B73	2011	-0.02071	0.0687	0.2061	U
Am-241	B83	2011	0.04614	0.059	0.177	U
Am-241	B84	2011	-0.04101	0.0703	0.2109	U
Am-241	B89	2011	0.09178	0.129	0.387	U
Am-241	B90	2011	-0.009398	0.0779	0.2337	U
Am-241	B91	2011	-0.08238	0.151	0.453	U
Am-241	B92	2011	-0.03261	0.163	0.489	U
Am-241	B93	2011	0.1489	0.0984	0.2952	U
Am-241	B94	2011	-0.05024	0.0952	0.2856	U
Am-241	B99	2011	0.004382	0.0602	0.1806	U
Am-241	C15	2011	0.006492	0.0557	0.1671	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	C25	2011	-0.04044	0.115	0.345	U
Am-241	C37	2011	0.02541	0.0671	0.2013	U
Am-241	C46	2011	0.01323	0.0696	0.2088	U
Am-241	C48	2011	-0.0001466	0.0874	0.2622	U
Am-241	C56	2011	0.0575	0.067	0.201	U
Am-241	C57	2011	-0.008812	0.0665	0.1995	U
Am-241	D58	2011	0.00009982	0.0897	0.2691	U
Am-241	D68	2011	0.01191	0.0875	0.2625	U
Am-241	D89	2011	0.03372	0.105	0.315	U
Am-241	D91	2011	-0.08838	0.0602	0.1806	U
Am-241	A15	2012	0.005052	0.0875	0.2625	U
Am-241	A38	2012	0.05491	0.107	0.321	U
Am-241	A44	2012	0.05469	0.127	0.381	U
Am-241	A47	2012	0.1363	0.115	0.345	U
Am-241	A59	2012	0.08795	0.0935	0.2805	U
Am-241	A6	2012	0.1148	0.104	0.312	U
Am-241	A69	2012	0.3527	0.135	0.405	U
Am-241	A70	2012	-0.02921	0.0802	0.2406	U
Am-241	A72	2012	-0.03679	0.0553	0.1659	U
Am-241	B14	2012	0.01437	0.0571	0.1713	U
Am-241	B48	2012	0.007055	0.133	0.399	U
Am-241	B83	2012	0.002165	0.0933	0.2799	U
Am-241	C46	2012	0.01585	0.111	0.333	U
Am-241	C57	2012	-0.009905	0.1	0.3	U
Am-241	2 INCH AIR - INTEC	2013	0.01194	0.0803	0.241	U
Am-241	A47	2013	-0.05179	0.0917	0.275	U
Am-241	A49	2013	0.008678	0.0653	0.196	U
Am-241	A59	2013	-0.0009546	0.0657	0.197	U
Am-241	A71	2013	0.02736	0.0787	0.236	U
Am-241	A72	2013	0.03325	0.0637	0.191	U
Am-241	2 INCH AIR - CPP	2014	-0.01026	0.129	0.387	U
Am-241	2 INCH AIR - INTEC	2014	0.01929	0.0544	0.1632	U
Am-241	A38	2014	0.01513	0.0507	0.1521	U
Am-241	A47	2014	0.05181	0.104	0.312	U
Am-241	A58	2014	0.04227	0.0538	0.1614	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	A59	2014	0.06005	0.0941	0.2823	U
Am-241	B15	2014	0.1693	0.153	0.459	U
Am-241	B28	2014	0.0915	0.139	0.417	U
Am-241	B29	2014	0.4678	0.199	0.597	U
Am-241	B3	2014	0.09989	0.157	0.471	U
Am-241	B3	2014	-0.03795	0.0865	0.2595	U
Am-241	B4	2014	0.06915	0.0784	0.2352	U
Am-241	B40	2014	0.07699	0.0753	0.2259	U
Am-241	B50	2014	0.7642	0.28	0.84	U
Am-241	B52	2014	0.02817	0.106	0.318	U
Am-241	B52	2014	0.002643	0.124	0.372	U
Co-60	B37	1974	1.1	0.2	0.6	—
Co-60	B38	1974	0.4	0.1	0.3	—
Co-60	A16	2006	0.02893	0.0083	0.0249	—
Co-60	A17	2006	0.04218	0.01315	0.03945	—
Co-60	A27	2006	0.03882	0.00895	0.02685	—
Co-60	A28	2006	0.02672	0.0067	0.0201	—
Co-60	A38	2006	0.08766	0.01795	0.05385	—
Co-60	A39	2006	0.02192	0.00535	0.01605	—
Co-60	A4	2006	0.02008	0.004995	0.014985	—
Co-60	A44	2006	0.04218	0.01255	0.03765	—
Co-60	A45	2006	0.05951	0.01075	0.03225	—
Co-60	A48	2006	0.02178	0.0068	0.0204	—
Co-60	A49	2006	0.03222	0.00565	0.01695	—
Co-60	A5	2006	0.05834	0.01225	0.03675	—
Co-60	A50	2006	0.0359	0.01025	0.03075	—
Co-60	A55	2006	0.01498	0.00382	0.01146	—
Co-60	A58	2006	0.1275	0.02285	0.06855	—
Co-60	A59	2006	0.07712	0.01425	0.04275	—
Co-60	A6	2006	0.1554	0.02655	0.07965	—
Co-60	A61	2006	0.0447	0.0088	0.0264	—
Co-60	A66	2006	0.102	0.0228	0.0684	—
Co-60	A67	2006	0.02089	0.0063	0.0189	—
Co-60	A68	2006	0.06231	0.02015	0.06045	—
Co-60	A69	2006	0.04014	0.01215	0.03645	—
Co-60	A71	2006	0.03184	0.0088	0.0264	—
Co-60	A72	2006	0.1299	0.01925	0.05775	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	B100	2006	0.02708	0.0096	0.0288	U
Co-60	B101	2006	0.0291	0.00595	0.01785	—
Co-60	B102	2006	0.0379	0.00885	0.02655	—
Co-60	B103	2006	0.02392	0.00625	0.01875	—
Co-60	B104	2006	0.0926	0.018	0.054	—
Co-60	B105	2006	0.08389	0.01135	0.03405	—
Co-60	B106	2006	0.1136	0.01635	0.04905	—
Co-60	B14	2006	0.03625	0.01125	0.03375	—
Co-60	B15	2006	0.02796	0.00605	0.01815	—
Co-60	B17	2006	0.02607	0.00725	0.02175	—
Co-60	B25	2006	0.02563	0.00575	0.01725	—
Co-60	B26	2006	0.00941	0.0035	0.0105	U
Co-60	B28	2006	0.01984	0.00555	0.01665	—
Co-60	B29	2006	0.03217	0.0074	0.0222	—
Co-60	B3	2006	0.03025	0.0083	0.0249	—
Co-60	B36	2006	0.1341	0.0248	0.0744	—
Co-60	B37	2006	0.01897	0.00515	0.01545	—
Co-60	B39	2006	0.07522	0.014	0.042	—
Co-60	B4	2006	0.01442	0.00493	0.01479	U
Co-60	B40	2006	0.04728	0.009	0.02835	—
Co-60	B47	2006	0.05599	0.0069	0.0207	—
Co-60	B48	2006	0.03795	0.00615	0.01845	—
Co-60	B50	2006	0.02768	0.0074	0.0222	—
Co-60	B51	2006	0.1485	0.02625	0.07875	—
Co-60	B52	2006	0.02748	0.00995	0.02985	U
Co-60	B59	2006	0.1131	0.01565	0.04695	—
Co-60	B60	2006	0.05645	0.0103	0.0309	—
Co-60	B61	2006	0.02188	0.00725	0.02175	—
Co-60	B62	2006	0.07585	0.0212	0.0636	—
Co-60	B68	2006	0.02498	0.0073	0.0219	—
Co-60	B71	2006	0.01469	0.00505	0.01515	U
Co-60	B73	2006	0.03224	0.00835	0.02505	—
Co-60	B80	2006	0.05981	0.01575	0.04725	—
Co-60	B81	2006	0.03946	0.00625	0.01875	—
Co-60	B82	2006	0.02824	0.0059	0.0177	—
Co-60	B83	2006	0.01124	0.003935	0.011805	U
Co-60	B84	2006	0.05375	0.01345	0.04035	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	B88	2006	0.02135	0.00525	0.01575	—
Co-60	B90	2006	0.00752	0.00213	0.00639	—
Co-60	B91	2006	0.03287	0.0082	0.0246	—
Co-60	B92	2006	0.02446	0.00715	0.02145	—
Co-60	B93	2006	0.08499	0.0164	0.0492	—
Co-60	B94	2006	0.1307	0.0278	0.0834	—
Co-60	B95	2006	0.02725	0.0126	0.0378	U
Co-60	B99	2006	0.0709	0.01395	0.04185	—
Co-60	C14	2006	0.08567	0.01385	0.04155	—
Co-60	C15	2006	0.01426	0.0057	0.0171	U
Co-60	C25	2006	0.03824	0.0077	0.0231	—
Co-60	C36	2006	0.03566	0.00945	0.02835	—
Co-60	C37	2006	0.02251	0.00815	0.02445	U
Co-60	C46	2006	0.02261	0.0066	0.0198	—
Co-60	C47	2006	0.06422	0.013	0.039	—
Co-60	C48	2006	0.03878	0.011	0.0327	—
Co-60	C56	2006	0.02848	0.0093	0.0279	—
Co-60	C57	2006	0.04876	0.0105	0.0315	—
Co-60	D57	2006	0.0265	0.0074	0.0222	—
Co-60	D58	2006	0.01512	0.004675	0.014025	—
Co-60	D68	2006	0.005999	0.002845	0.008535	U
Co-60	D79	2006	0.01831	0.0062	0.0186	U
Co-60	D89	2006	0.02331	0.00655	0.01965	—
Co-60	A15	2007	0.02607	0.0061	0.0183	—
Co-60	A16	2007	0.02211	0.0065	0.0195	—
Co-60	A17	2007	0.01353	0.00315	0.00945	—
Co-60	A27	2007	0.01145	0.004425	0.013275	U
Co-60	A28	2007	0.01403	0.00349	0.01047	—
Co-60	A37	2007	0.009977	0.003135	0.009405	—
Co-60	A38	2007	0.009675	0.0034	0.0102	U
Co-60	A4	2007	0.01267	0.00244	0.00732	—
Co-60	A44	2007	0.01054	0.00305	0.00915	—
Co-60	A45	2007	0.01604	0.0038	0.0114	—
Co-60	A47	2007	0.003268	0.00326	0.00978	U
Co-60	A48	2007	0.01565	0.00404	0.01212	—
Co-60	A49	2007	0.01944	0.00465	0.01395	—
Co-60	A5	2007	0.02082	0.00565	0.01695	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	A50	2007	0.0146	0.003055	0.009165	—
Co-60	A55	2007	0.02679	0.00955	0.02865	U
Co-60	A58	2007	0.0137	0.00392	0.01176	—
Co-60	A59	2007	0.01218	0.00392	0.01176	—
Co-60	A6	2007	0.02109	0.0059	0.0177	—
Co-60	A60	2007	0.02003	0.004165	0.012495	—
Co-60	A61	2007	0.01074	0.00459	0.01377	U
Co-60	A67	2007	0.01897	0.0059	0.0177	—
Co-60	A69	2007	0.03645	0.00685	0.02055	—
Co-60	A70	2007	0.03195	0.009	0.027	—
Co-60	A71	2007	0.01033	0.00296	0.00888	—
Co-60	A72	2007	0.007218	0.0047	0.0141	U
Co-60	B101	2007	0.02231	0.00535	0.01605	—
Co-60	B102	2007	0.005028	0.004545	0.013635	U
Co-60	B103	2007	0.01485	0.003715	0.011145	—
Co-60	B104	2007	0.01459	0.00474	0.01422	—
Co-60	B105	2007	0.007294	0.003105	0.009315	U
Co-60	B14	2007	0.009919	0.00322	0.00966	—
Co-60	B17	2007	0.008609	0.003215	0.009645	U
Co-60	B25	2007	0.01355	0.004445	0.013335	—
Co-60	B26	2007	0.01748	0.003695	0.011085	—
Co-60	B28	2007	0.01878	0.004575	0.013725	—
Co-60	B29	2007	0.007089	0.003385	0.010155	U
Co-60	B3	2007	0.01592	0.00515	0.01545	—
Co-60	B4	2007	0.05333	0.0132	0.0396	—
Co-60	B40	2007	0.04053	0.01105	0.03315	—
Co-60	B47	2007	0.03652	0.0054	0.0162	—
Co-60	B48	2007	0.02455	0.004415	0.013245	—
Co-60	B50	2007	0.04717	0.00915	0.02745	—
Co-60	B51	2007	0.01839	0.00565	0.01695	—
Co-60	B52	2007	0.03245	0.00815	0.02445	—
Co-60	B59	2007	0.0355	0.00885	0.02655	—
Co-60	B60	2007	0.05791	0.0096	0.0288	—
Co-60	B61	2007	0.01402	0.00351	0.01053	—
Co-60	B62	2007	0.01194	0.003365	0.010095	—
Co-60	B69	2007	1.995	0.0192	0.0576	—
Co-60	B71	2007	0.05099	0.01115	0.03345	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	B73	2007	0.01735	0.00386	0.01158	—
Co-60	B80	2007	0.01352	0.0056	0.0168	U
Co-60	B81	2007	0.04813	0.01005	0.03015	—
Co-60	B82	2007	0.01342	0.00378	0.01134	—
Co-60	B83	2007	0.03325	0.007	0.021	—
Co-60	B88	2007	0.01325	0.00344	0.01032	—
Co-60	B89	2007	0.01348	0.003845	0.011535	—
Co-60	B90	2007	0.005214	0.003255	0.009765	U
Co-60	B92	2007	0.01441	0.00458	0.01374	—
Co-60	B93	2007	0.01193	0.003515	0.010545	—
Co-60	B94	2007	0.0005117	0.00665	0.01995	U
Co-60	B95	2007	0.009196	0.00186	0.00558	—
Co-60	B99	2007	0.03985	0.00735	0.02205	—
Co-60	C14	2007	0.02674	0.00695	0.02085	—
Co-60	C15	2007	0.02005	0.00805	0.02415	U
Co-60	C36	2007	0.02428	0.00585	0.01755	—
Co-60	C37	2007	0.03644	0.00805	0.02415	—
Co-60	C46	2007	0.02468	0.00585	0.01755	—
Co-60	C47	2007	0.0124	0.00423	0.01269	U
Co-60	C48	2007	0.02523	0.0062	0.0186	—
Co-60	C56	2007	0.02294	0.00505	0.01515	—
Co-60	C57	2007	0.0159	0.00445	0.01335	—
Co-60	D58	2007	0.01733	0.00383	0.01149	—
Co-60	D68	2007	0.02769	0.0077	0.0231	—
Co-60	D69	2007	0.02689	0.0063	0.0189	—
Co-60	D79	2007	0.0216	0.007	0.021	—
Co-60	D80	2007	0.006289	0.0024	0.0072	U
Co-60	D89	2007	0.01056	0.00333	0.00999	—
Co-60	D90	2007	0.0165	0.00397	0.01191	—
Co-60	D91	2007	0.009077	0.00415	0.01245	U
Co-60	A15	2011	0.002487	0.00274	0.00822	U
Co-60	A16	2011	-0.002467	0.00436	0.01308	U
Co-60	A17	2011	0.003452	0.00455	0.01365	U
Co-60	A27	2011	0.002232	0.0043	0.0129	U
Co-60	A28	2011	0.00366	0.0046	0.0138	U
Co-60	A38	2011	0.003989	0.00377	0.01131	U
Co-60	A39	2011	0.001858	0.00378	0.01134	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	A4	2011	0.001971	0.00474	0.01422	U
Co-60	A44	2011	0.03294	0.00573	0.01719	—
Co-60	A47	2011	0.00781	0.0052	0.0156	U
Co-60	A49	2011	0.001225	0.00514	0.01542	U
Co-60	A50	2011	0.002241	0.00534	0.01602	U
Co-60	A55	2011	0.001262	0.0043	0.0129	U
Co-60	A58	2011	0.003362	0.00345	0.01035	U
Co-60	A59	2011	-0.00008337	0.00352	0.01056	U
Co-60	A6	2011	0.0002505	0.00589	0.01767	U
Co-60	A61	2011	0.002682	0.00309	0.00927	U
Co-60	A66	2011	0.0008304	0.00533	0.01599	U
Co-60	A69	2011	0.005979	0.00474	0.01422	U
Co-60	A70	2011	-0.002624	0.00378	0.01134	U
Co-60	A72	2011	0.002688	0.00349	0.01047	U
Co-60	B101	2011	0.001451	0.00444	0.01332	U
Co-60	B102	2011	0.01897	0.00671	0.02013	U
Co-60	B103	2011	0.005821	0.00495	0.01485	U
Co-60	B104	2011	0.001895	0.00375	0.01125	U
Co-60	B106	2011	-0.001054	0.00436	0.01308	U
Co-60	B14	2011	0.003939	0.00552	0.01656	U
Co-60	B15	2011	-0.00109	0.00372	0.01116	U
Co-60	B17	2011	0.0006075	0.00159	0.00477	U
Co-60	B25	2011	0.003908	0.00526	0.01578	U
Co-60	B28	2011	0.001297	0.00364	0.01092	U
Co-60	B29	2011	-0.0002173	0.00495	0.01485	U
Co-60	B3	2011	-0.002371	0.00394	0.01182	U
Co-60	B39	2011	-0.0002005	0.00144	0.00432	U
Co-60	B4	2011	-0.001915	0.00449	0.01347	U
Co-60	B40	2011	0.0003215	0.00161	0.00483	U
Co-60	B47	2011	0.05543	0.00711	0.02133	—
Co-60	B48	2011	0.003104	0.00418	0.01254	U
Co-60	B50	2011	0.001956	0.00393	0.01179	U
Co-60	B52	2011	0.002192	0.00385	0.01155	U
Co-60	B61	2011	0.00137	0.00516	0.01548	U
Co-60	B62	2011	-0.0006257	0.00459	0.01377	U
Co-60	B71	2011	-0.000434	0.00351	0.01053	U
Co-60	B73	2011	0.0004195	0.00557	0.01671	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	B80	2011	0.01242	0.00442	0.01326	U
Co-60	B83	2011	0.00207	0.00405	0.01215	U
Co-60	B84	2011	0.003326	0.00555	0.01665	U
Co-60	B89	2011	-0.003933	0.00493	0.01479	U
Co-60	B90	2011	0.0006691	0.00441	0.01323	U
Co-60	B91	2011	0.001037	0.0042	0.0126	U
Co-60	B92	2011	0.002843	0.00339	0.01017	U
Co-60	B93	2011	0.003059	0.00351	0.01053	U
Co-60	B94	2011	0.00006901	0.00384	0.01152	U
Co-60	B99	2011	0.003785	0.00423	0.01269	U
Co-60	C15	2011	0.0004493	0.00459	0.01377	U
Co-60	C25	2011	-0.001734	0.00337	0.01011	U
Co-60	C37	2011	0.004336	0.00402	0.01206	U
Co-60	C46	2011	-0.001172	0.0040	0.01212	U
Co-60	C48	2011	-0.002664	0.00346	0.01038	U
Co-60	C56	2011	0.00602	0.00529	0.01587	U
Co-60	C57	2011	0.000615	0.00426	0.01278	U
Co-60	D58	2011	0.001286	0.00363	0.01089	U
Co-60	D68	2011	0.001274	0.00379	0.01137	U
Co-60	D89	2011	0.002224	0.00414	0.01242	U
Co-60	D91	2011	0.0001192	0.00514	0.01542	U
Co-60	A15	2012	0.001077	0.00413	0.01239	U
Co-60	A38	2012	0.002167	0.00461	0.01383	U
Co-60	A44	2012	0.0331	0.00534	0.01602	—
Co-60	A47	2012	0.01051	0.0045	0.0135	U
Co-60	A59	2012	0.001315	0.00422	0.01266	U
Co-60	A6	2012	0.0008794	0.00533	0.01599	U
Co-60	A69	2012	0.006386	0.00508	0.01524	U
Co-60	A70	2012	-0.001215	0.0041	0.0123	U
Co-60	A72	2012	-0.002314	0.00523	0.01569	U
Co-60	B14	2012	0.005959	0.00468	0.01404	U
Co-60	B48	2012	0.01007	0.00486	0.01458	U
Co-60	B83	2012	0.002842	0.00399	0.01197	U
Co-60	C46	2012	-0.00108	0.00483	0.01449	U
Co-60	C57	2012	-0.002414	0.00479	0.01437	U
Co-60	2 INCH AIR - INTEC	2013	0.009973	0.0033	0.01	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	A47	2013	-0.001489	0.00306	0.00918	U
Co-60	A49	2013	0.0002302	0.00028	0.000847	U
Co-60	A59	2013	0.000358	0.00309	0.00927	U
Co-60	A71	2013	0.00776	0.00297	0.00892	U
Co-60	A72	2013	0.00004954	0.00036	0.00107	U
Co-60	2 INCH AIR - CPP	2014	0.0006881	0.00121	0.00363	U
Co-60	2 INCH AIR - INTEC	2014	0.00107	0.00126	0.00378	U
Co-60	A38	2014	-0.0004377	0.0014	0.0042	U
Co-60	A47	2014	-0.0001923	0.00129	0.00387	U
Co-60	A58	2014	0.000498	0.00136	0.00408	U
Co-60	A59	2014	-0.0009825	0.00151	0.00453	U
Co-60	B15	2014	0.001186	0.00246	0.00738	U
Co-60	B28	2014	0.0005723	0.0012	0.0036	U
Co-60	B29	2014	0.001195	0.00106	0.00318	U
Co-60	B3	2014	0.0002284	0.000668	0.002004	U
Co-60	B3	2014	-0.0002563	0.00209	0.00627	U
Co-60	B4	2014	-0.0005574	0.000806	0.002418	U
Co-60	B40	2014	0.00005314	0.000887	0.002661	U
Co-60	B50	2014	0.00001053	0.00109	0.00327	U
Co-60	B52	2014	0.001077	0.00175	0.00525	U
Co-60	B52	2014	0.0006405	0.00113	0.00339	U
Cs-134	A36	1974	1.1	0.2	0.6	—
Cs-134	A37	1974	0.6	0.2	0.6	—
Cs-134	A46	1974	0.6	0.1	0.3	—
Cs-134	A47	1974	0.3	0.1	0.3	—
Cs-134	A48	1974	0.5	0.1	0.3	—
Cs-134	B25	1974	0.6	0.2	0.6	—
Cs-134	B37	1974	0.4	0.1	0.3	—
Cs-134	B5	1974	0.2	0.06	0.18	—
Cs-134	B76	1974	0.8	0.2	0.6	—
Cs-134	B-120	1982	0.1	0.06	0.18	U
Cs-134	A15	2007	0.07047	0.01395	0.04185	—
Cs-134	A16	2007	0.1	0.01035	0.03105	—
Cs-134	A17	2007	0.1059	0.015	0.045	—
Cs-134	A27	2007	0.08698	0.01035	0.03105	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	A28	2007	0.1338	0.01735	0.05205	—
Cs-134	A37	2007	0.1068	0.0163	0.0489	—
Cs-134	A38	2007	0.12	0.0196	0.0588	—
Cs-134	A39	2007	0.1096	0.0183	0.0549	—
Cs-134	A4	2007	0.07081	0.00865	0.02595	—
Cs-134	A44	2007	0.04801	0.0058	0.0174	—
Cs-134	A45	2007	0.1188	0.0185	0.0555	—
Cs-134	A47	2007	0.09184	0.01045	0.03135	—
Cs-134	A48	2007	0.1335	0.01685	0.05055	—
Cs-134	A49	2007	0.1548	0.0198	0.0594	—
Cs-134	A5	2007	0.142	0.0182	0.0546	—
Cs-134	A50	2007	0.1235	0.0144	0.0432	—
Cs-134	A55	2007	0.08063	0.012	0.036	—
Cs-134	A56	2007	0.05898	0.0108	0.0324	—
Cs-134	A58	2007	0.1013	0.0129	0.0387	—
Cs-134	A59	2007	0.09886	0.01	0.03	—
Cs-134	A6	2007	0.08253	0.0104	0.0312	—
Cs-134	A60	2007	0.07276	0.0106	0.0318	—
Cs-134	A61	2007	0.1156	0.01565	0.04695	—
Cs-134	A66	2007	0.1298	0.0172	0.0516	—
Cs-134	A67	2007	0.0916	0.0122	0.0366	—
Cs-134	A68	2007	0.06147	0.00881	0.02643	—
Cs-134	A69	2007	0.1458	0.0198	0.0594	—
Cs-134	A70	2007	0.1187	0.01385	0.04155	—
Cs-134	A71	2007	0.1357	0.01585	0.04755	—
Cs-134	A72	2007	0.08464	0.0152	0.0456	—
Cs-134	B100	2007	0.1397	0.0166	0.0498	—
Cs-134	B101	2007	0.1017	0.0122	0.0366	—
Cs-134	B102	2007	0.08446	0.0118	0.0354	—
Cs-134	B103	2007	0.0769	0.0086	0.0258	—
Cs-134	B104	2007	0.1444	0.0158	0.0474	—
Cs-134	B105	2007	0.09322	0.01105	0.03315	—
Cs-134	B106	2007	0.03704	0.00895	0.02685	—
Cs-134	B14	2007	0.125	0.0157	0.0471	—
Cs-134	B15	2007	0.07921	0.00888	0.02664	—
Cs-134	B17	2007	0.1427	0.01715	0.05145	—
Cs-134	B25	2007	0.1699	0.01815	0.05445	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	B26	2007	0.08375	0.0114	0.0342	—
Cs-134	B28	2007	0.1313	0.0157	0.0471	—
Cs-134	B29	2007	0.3521	0.0615	0.1845	—
Cs-134	B3	2007	0.1229	0.0172	0.0516	—
Cs-134	B36	2007	0.06584	0.0126	0.0378	—
Cs-134	B37	2007	0.05998	0.00803	0.02409	—
Cs-134	B39	2007	0.09937	0.0134	0.0402	—
Cs-134	B4	2007	0.0873	0.01005	0.03015	—
Cs-134	B40	2007	0.1497	0.01565	0.04695	—
Cs-134	B47	2007	0.09062	0.0149	0.0447	—
Cs-134	B48	2007	0.0575	0.01125	0.03375	—
Cs-134	B50	2007	0.1034	0.01815	0.05445	—
Cs-134	B51	2007	0.07774	0.018	0.054	—
Cs-134	B52	2007	0.0876	0.0098	0.0294	—
Cs-134	B59	2007	0.2955	0.02915	0.08745	—
Cs-134	B60	2007	0.3795	0.0291	0.0873	—
Cs-134	B61	2007	0.0664	0.01315	0.03945	—
Cs-134	B62	2007	0.07682	0.01225	0.03675	—
Cs-134	B69	2007	0.2775	0.0765	0.2295	—
Cs-134	B71	2007	0.2276	0.02455	0.07365	—
Cs-134	B73	2007	0.1635	0.0173	0.0519	—
Cs-134	B80	2007	0.1449	0.01985	0.05955	—
Cs-134	B81	2007	0.1199	0.01745	0.05235	—
Cs-134	B82	2007	0.07056	0.0144	0.0432	—
Cs-134	B83	2007	0.1141	0.0139	0.0417	—
Cs-134	B84	2007	0.0923	0.0143	0.0429	—
Cs-134	B88	2007	0.1663	0.01635	0.04905	—
Cs-134	B89	2007	0.09183	0.01255	0.03765	—
Cs-134	B90	2007	0.1074	0.01665	0.04995	—
Cs-134	B91	2007	0.0481	0.0069	0.0207	—
Cs-134	B92	2007	0.102	0.0118	0.0354	—
Cs-134	B93	2007	0.07183	0.00955	0.02865	—
Cs-134	B94	2007	0.08766	0.0096	0.0288	—
Cs-134	B95	2007	0.04935	0.00965	0.02895	—
Cs-134	B99	2007	0.09587	0.01305	0.03915	—
Cs-134	C14	2007	0.07217	0.0127	0.0381	—
Cs-134	C15	2007	0.07853	0.00935	0.02805	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	C25	2007	0.04077	0.00741	0.02223	—
Cs-134	C36	2007	0.08481	0.0114	0.0342	—
Cs-134	C37	2007	0.1669	0.01875	0.05625	—
Cs-134	C46	2007	0.07452	0.0096	0.0288	—
Cs-134	C47	2007	0.1065	0.01305	0.03915	—
Cs-134	C48	2007	0.13	0.0141	0.0423	—
Cs-134	C56	2007	0.1021	0.0111	0.0333	—
Cs-134	C57	2007	0.07234	0.01395	0.04185	—
Cs-134	D57	2007	0.05067	0.00754	0.02262	—
Cs-134	D58	2007	0.1409	0.01465	0.04395	—
Cs-134	D68	2007	0.1293	0.01895	0.05685	—
Cs-134	D69	2007	0.1068	0.01355	0.04065	—
Cs-134	D79	2007	0.0981	0.0148	0.0444	—
Cs-134	D80	2007	0.08197	0.01015	0.03045	—
Cs-134	D89	2007	0.1001	0.01055	0.03165	—
Cs-134	D90	2007	0.1101	0.0139	0.0417	—
Cs-134	D91	2007	0.1006	0.0125	0.0375	—
Cs-134	B104	2008	0.03616	0.00588	0.01764	—
Cs-134	A50	2009	0.007494	0.00428	0.01284	U
Cs-134	A27	2010	0.0526	0.0105	0.0315	—
Cs-134	A28	2010	0.03638	0.0118	0.0354	—
Cs-134	A38	2010	0.06152	0.00959	0.02877	—
Cs-134	A39	2010	0.04226	0.00415	0.01245	—
Cs-134	A49	2010	0.05003	0.0076	0.0228	—
Cs-134	A50	2010	0.03721	0.0107	0.0321	—
Cs-134	A59	2010	0.05724	0.0139	0.0417	—
Cs-134	A60	2010	0.03871	0.00781	0.02343	—
Cs-134	A61	2010	0.05064	0.0063	0.0189	—
Cs-134	A71	2010	0.03527	0.0105	0.0315	—
Cs-134	A72	2010	0.0814	0.0113	0.0339	—
Cs-134	A15	2011	-0.01394	0.0112	0.0336	U
Cs-134	A16	2011	0.007038	0.0131	0.0393	U
Cs-134	A17	2011	0.01711	0.0167	0.0501	U
Cs-134	A27	2011	-0.001129	0.0107	0.0321	U
Cs-134	A28	2011	0.0006597	0.0248	0.0744	U
Cs-134	A38	2011	-0.005745	0.0173	0.0519	U
Cs-134	A39	2011	-0.0005636	0.0139	0.0417	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	A4	2011	-0.007031	0.0141	0.0423	U
Cs-134	A44	2011	-0.001563	0.024	0.072	U
Cs-134	A47	2011	-0.003504	0.0251	0.0753	U
Cs-134	A49	2011	0.002134	0.0257	0.0771	U
Cs-134	A50	2011	-0.0114	0.0263	0.0789	U
Cs-134	A55	2011	-0.003762	0.014	0.042	U
Cs-134	A58	2011	-0.0084	0.0145	0.0435	U
Cs-134	A59	2011	0.004225	0.0255	0.0765	U
Cs-134	A6	2011	-0.02617	0.0154	0.0462	U
Cs-134	A61	2011	-0.01099	0.0118	0.0354	U
Cs-134	A66	2011	-0.01043	0.0147	0.0441	U
Cs-134	A69	2011	-0.005644	0.0226	0.0678	U
Cs-134	A70	2011	0.002402	0.0245	0.0735	U
Cs-134	A72	2011	0.002162	0.0117	0.0351	U
Cs-134	B101	2011	0.003715	0.0238	0.0714	U
Cs-134	B102	2011	-0.009781	0.0236	0.0708	U
Cs-134	B103	2011	-0.006791	0.0237	0.0711	U
Cs-134	B104	2011	-0.018	0.0131	0.0393	U
Cs-134	B106	2011	0.001978	0.0264	0.0792	U
Cs-134	B14	2011	-0.02135	0.0159	0.0477	U
Cs-134	B15	2011	-0.0002064	0.0121	0.0363	U
Cs-134	B17	2011	-0.02687	0.00962	0.02886	U
Cs-134	B25	2011	-0.02834	0.0191	0.0573	U
Cs-134	B28	2011	-0.01044	0.0119	0.0357	U
Cs-134	B29	2011	-0.003382	0.0136	0.0408	U
Cs-134	B3	2011	-0.01778	0.0135	0.0405	U
Cs-134	B39	2011	-0.009049	0.00947	0.02841	U
Cs-134	B4	2011	-0.07655	0.0151	0.0453	U
Cs-134	B40	2011	-0.001086	0.00998	0.02994	U
Cs-134	B47	2011	-0.009866	0.0186	0.0558	U
Cs-134	B48	2011	-0.003563	0.0144	0.0432	U
Cs-134	B50	2011	-0.01777	0.0133	0.0399	U
Cs-134	B52	2011	-0.001545	0.0127	0.0381	U
Cs-134	B61	2011	0.0006328	0.0171	0.0513	U
Cs-134	B62	2011	0.01328	0.025	0.075	U
Cs-134	B71	2011	-0.009664	0.0202	0.0606	U
Cs-134	B73	2011	0.01321	0.0114	0.0342	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	B80	2011	-0.005139	0.0205	0.0615	U
Cs-134	B83	2011	0.009197	0.0253	0.0759	U
Cs-134	B84	2011	-0.01913	0.0145	0.0435	U
Cs-134	B89	2011	0.0491	0.0139	0.0417	—
Cs-134	B90	2011	-0.02797	0.016	0.048	U
Cs-134	B91	2011	0.00005192	0.0194	0.0582	U
Cs-134	B92	2011	-0.04093	0.0121	0.0363	U
Cs-134	B93	2011	-0.000725	0.0115	0.0345	U
Cs-134	B94	2011	-0.02201	0.0114	0.0342	U
Cs-134	B99	2011	-0.0007449	0.0235	0.0705	U
Cs-134	C15	2011	0.0007147	0.0132	0.0396	U
Cs-134	C25	2011	-0.03956	0.00914	0.02742	U
Cs-134	C37	2011	-0.0171	0.0256	0.0768	U
Cs-134	C46	2011	-0.2347	0.0169	0.0507	U
Cs-134	C48	2011	-0.002039	0.0208	0.0624	U
Cs-134	C56	2011	-0.01419	0.014	0.042	U
Cs-134	C57	2011	-0.01414	0.0105	0.0315	U
Cs-134	D58	2011	-0.008843	0.0117	0.0351	U
Cs-134	D68	2011	-0.01207	0.0239	0.0717	U
Cs-134	D89	2011	-0.00247	0.0189	0.0567	U
Cs-134	D91	2011	-0.009981	0.0135	0.0405	U
Cs-134	A15	2012	0.07316	0.00847	0.02541	—
Cs-134	A38	2012	0.06792	0.00974	0.02922	—
Cs-134	A44	2012	0.0706	0.00897	0.02691	—
Cs-134	A47	2012	0.05849	0.00883	0.02649	—
Cs-134	A59	2012	0.07781	0.00835	0.02505	—
Cs-134	A6	2012	0.07395	0.0101	0.0303	—
Cs-134	A69	2012	0.06467	0.01	0.03	—
Cs-134	A70	2012	0.07268	0.0081	0.0243	—
Cs-134	A72	2012	0.07116	0.01	0.03	—
Cs-134	B14	2012	0.01813	0.00747	0.02241	U
Cs-134	B48	2012	0.06781	0.00999	0.02997	—
Cs-134	B83	2012	0.06728	0.00803	0.02409	—
Cs-134	C46	2012	0.05312	0.00965	0.02895	—
Cs-134	C57	2012	0.07259	0.0092	0.0276	—
Cs-134	2 INCH AIR - INTEC	2013	0.05303	0.0125	0.0374	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	A47	2013	0.06732	0.0129	0.0387	—
Cs-134	A49	2013	-0.006587	0.0113	0.0339	U
Cs-134	A59	2013	0.08837	0.0167	0.0502	—
Cs-134	A71	2013	0.05974	0.013	0.039	—
Cs-134	A72	2013	0.01927	0.0059	0.0178	—
Cs-134	2 INCH AIR - CPP	2014	0.04829	0.0116	0.0348	—
Cs-134	2 INCH AIR - INTEC	2014	0.04165	0.0124	0.0372	—
Cs-134	A38	2014	0.05365	0.0138	0.0414	—
Cs-134	A47	2014	0.04106	0.0133	0.0399	—
Cs-134	A58	2014	0.05459	0.0139	0.0417	—
Cs-134	A59	2014	0.07062	0.0121	0.0363	—
Cs-134	B15	2014	0.03674	0.0242	0.0726	U
Cs-134	B28	2014	0.04318	0.0118	0.0354	—
Cs-134	B29	2014	0.04242	0.012	0.036	—
Cs-134	B3	2014	0.0376	0.0211	0.0633	U
Cs-134	B3	2014	0.03359	0.00787	0.02361	—
Cs-134	B4	2014	0.04311	0.00629	0.01887	—
Cs-134	B40	2014	0.03528	0.00802	0.02406	—
Cs-134	B50	2014	0.04071	0.013	0.039	—
Cs-134	B52	2014	0.07505	0.015	0.045	—
Cs-134	B52	2014	0.01826	0.0151	0.0453	U
Cs-137	A105	1974	6.8	0.3	0.9	—
Cs-137	A116	1974	1.32	0.5	1.5	U
Cs-137	A36	1974	32.6	0.6	1.8	—
Cs-137	A37	1974	26.6	0.5	1.5	—
Cs-137	A45	1974	14.7	0.4	1.2	—
Cs-137	A46	1974	31.1	0.5	1.5	—
Cs-137	A47	1974	17.6	0.4	1.2	—
Cs-137	A48	1974	22.3	0.5	1.5	—
Cs-137	A5	1974	9.8	0.4	1.2	—
Cs-137	B115	1974	5.3	0.3	0.9	—
Cs-137	B120	1974	1.3	0.1	0.3	—
Cs-137	B14	1974	18	4	12	—
Cs-137	B25	1974	31.9	0.6	1.8	—
Cs-137	B26	1974	11.2	0.4	1.2	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B37	1974	21.5	0.5	1.5	—
Cs-137	B38	1974	12.7	0.4	1.2	—
Cs-137	B47	1974	31.3	0.6	1.8	—
Cs-137	B49	1974	19.8	0.5	1.5	—
Cs-137	B5	1974	3.8	0.1	0.3	—
Cs-137	B59	1974	40	0.6	1.8	—
Cs-137	B60	1974	18.6	0.4	1.2	—
Cs-137	B66	1974	52.7	0.5	1.5	—
Cs-137	B67	1974	11.3	0.3	0.9	—
Cs-137	B70	1974	17.7	0.5	1.5	—
Cs-137	B72	1974	9.4	0.3	0.9	—
Cs-137	B76	1974	2.7	0.2	0.6	—
Cs-137	B78	1974	34.1	0.6	1.8	—
Cs-137	B80	1974	16.1	0.4	1.2	—
Cs-137	B82	1974	19.7	0.5	1.5	—
Cs-137	B89	1974	12.5	0.4	1.2	—
Cs-137	B90	1974	11	0.3	0.9	—
Cs-137	B92	1974	23.3	0.5	1.5	—
Cs-137	B94	1974	16.1	0.4	1.2	—
Cs-137	C100	1974	1.8	0.27	0.81	—
Cs-137	C117	1974	1.1	0.2	0.6	—
Cs-137	C12a	1974	12.4	0.4	1.2	—
Cs-137	C14	1974	2.7	0.2	0.6	—
Cs-137	C25	1974	4.3	0.2	0.6	—
Cs-137	C26	1974	2.5	0.2	0.6	—
Cs-137	C31	1974	2.3	0.2	0.6	—
Cs-137	C45	1974	4	0.2	0.6	—
Cs-137	C49	1974	3.7	0.2	0.6	—
Cs-137	D40	1974	1.2	0.1	0.3	—
Cs-137	D58	1974	2.6	0.2	0.6	—
Cs-137	A-110	1982	2.54	0.12	0.36	—
Cs-137	A-115	1982	7.5	0.13	0.39	—
Cs-137	A-120	1982	3.71	0.16	0.48	—
Cs-137	A-17	1982	7.9	0.29	0.87	—
Cs-137	A-44	1982	7.6	0.3	0.9	—
Cs-137	A-46	1982	27.4	0.9	2.7	—
Cs-137	A-48	1982	21.7	0.7	2.1	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	A-72	1982	8.78	0.32	0.96	—
Cs-137	A-90	1982	5.76	0.22	0.66	—
Cs-137	B-115	1982	8.3	0.3	0.9	—
Cs-137	B-120	1982	1.89	0.11	0.33	—
Cs-137	B-25	1982	37.1	1.2	3.6	—
Cs-137	B-27	1982	4.14	0.18	0.54	—
Cs-137	B-4	1982	4.6	0.2	0.6	—
Cs-137	B-48	1982	24.3	0.82	2.46	—
Cs-137	B-52	1982	4.7	0.2	0.6	—
Cs-137	B-69	1982	19.6	0.07	0.21	—
Cs-137	B-83	1982	13.7	0.5	1.5	—
Cs-137	B-89	1982	5.8	0.2	0.6	—
Cs-137	C-114	1982	1.71	0.1	0.3	—
Cs-137	C-14	1982	4.4	0.2	0.6	—
Cs-137	C-21	1982	1.7	0.1	0.3	—
Cs-137	C-48	1982	2.35	0.12	0.36	—
Cs-137	C-85	1982	1.1	0.09	0.27	—
Cs-137	D-114	1982	3.01	0.14	0.42	—
Cs-137	D-49	1982	1.83	0.1	0.3	—
Cs-137	D-57	1982	4.18	0.18	0.54	—
Cs-137	D-78	1982	6.7	0.3	0.9	—
Cs-137	D-96	1982	0.88	0.07	0.21	—
Cs-137	A108	1989	6.2	0.3	0.9	—
Cs-137	A115	1989	9.9	0.4	1.2	—
Cs-137	A17	1989	4.53	0.21	0.63	—
Cs-137	A36	1989	37.8	1.4	4.2	—
Cs-137	A46	1989	14.9	0.6	1.8	—
Cs-137	A52	1989	5.9	0.3	0.9	—
Cs-137	A66	1989	3.31	0.15	0.45	—
Cs-137	A72	1989	9.9	0.4	1.2	—
Cs-137	A8	1989	1.89	0.11	0.33	—
Cs-137	A90	1989	3.26	0.16	0.48	—
Cs-137	B115	1989	4.14	0.16	0.48	—
Cs-137	B119	1989	6.8	0.3	0.9	—
Cs-137	B18	1989	2.71	0.15	0.45	—
Cs-137	B25	1989	22.2	0.9	2.7	—
Cs-137	B5	1989	4.61	0.2	0.6	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B52	1989	2.52	0.12	0.36	—
Cs-137	B70	1989	7.9	0.3	0.9	—
Cs-137	B73	1989	4.88	0.21	0.63	—
Cs-137	B90	1989	5.9	0.3	0.9	—
Cs-137	B96	1989	9.2	0.2	0.6	—
Cs-137	C114	1989	2.02	0.12	0.36	—
Cs-137	C40	1989	0.85	0.08	0.24	—
Cs-137	C48	1989	1.55	0.09	0.27	—
Cs-137	C79	1989	2.11	0.12	0.36	—
Cs-137	C96	1989	1.75	1.1	3.3	U
Cs-137	D30	1989	1.69	0.09	0.27	—
Cs-137	D37	1989	2.84	0.14	0.42	—
Cs-137	D63	1989	1.06	0.09	0.27	—
Cs-137	D92	1989	1.91	0.12	0.36	—
Cs-137	D96	1989	0.89	0.07	0.21	—
Cs-137	A15	2006	1.162	0.0106	0.0318	—
Cs-137	A16	2006	0.8737	0.00805	0.02415	—
Cs-137	A17	2006	0.6244	0.0067	0.0201	—
Cs-137	A27	2006	1.02	0.01105	0.03315	—
Cs-137	A28	2006	0.4925	0.0063	0.0189	—
Cs-137	A38	2006	0.962	0.01195	0.03585	—
Cs-137	A39	2006	1.143	0.0074	0.0222	—
Cs-137	A4	2006	0.6364	0.0068	0.0204	—
Cs-137	A44	2006	0.5795	0.0062	0.0186	—
Cs-137	A45	2006	1.47	0.0102	0.0306	—
Cs-137	A47	2006	2.289	0.01075	0.03225	—
Cs-137	A48	2006	2.666	0.0109	0.0327	—
Cs-137	A49	2006	1.901	0.00815	0.02445	—
Cs-137	A5	2006	0.2011	0.00795	0.02385	—
Cs-137	A50	2006	2.064	0.01205	0.03615	—
Cs-137	A55	2006	0.629	0.0052	0.0156	—
Cs-137	A56	2006	0.2694	0.00453	0.01359	—
Cs-137	A58	2006	1.743	0.0127	0.0381	—
Cs-137	A59	2006	1.639	0.0122	0.0366	—
Cs-137	A6	2006	0.2498	0.00605	0.01815	—
Cs-137	A61	2006	1.46	0.0089	0.0267	—
Cs-137	A66	2006	0.6147	0.01025	0.03075	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	A67	2006	0.3901	0.0105	0.0315	—
Cs-137	A68	2006	0.5643	0.0077	0.0231	—
Cs-137	A69	2006	0.9628	0.0084	0.0252	—
Cs-137	A70	2006	1.144	0.00645	0.01935	—
Cs-137	A71	2006	1.158	0.0081	0.0243	—
Cs-137	A72	2006	1.397	0.0171	0.0513	—
Cs-137	B100	2006	0.3913	0.0081	0.0243	—
Cs-137	B101	2006	0.4751	0.004785	0.014355	—
Cs-137	B102	2006	0.2786	0.003345	0.010035	—
Cs-137	B103	2006	0.02748	0.003385	0.010155	—
Cs-137	B104	2006	0.784	0.0098	0.0294	—
Cs-137	B105	2006	0.6936	0.00965	0.02895	—
Cs-137	B106	2006	0.6116	0.0083	0.0249	—
Cs-137	B14	2006	1.435	0.0103	0.0309	—
Cs-137	B15	2006	0.5403	0.00545	0.01635	—
Cs-137	B17	2006	0.3234	0.00387	0.01161	—
Cs-137	B25	2006	2.659	0.01225	0.03675	—
Cs-137	B26	2006	0.7709	0.0062	0.0186	—
Cs-137	B28	2006	0.3476	0.00412	0.01236	—
Cs-137	B29	2006	0.2993	0.00349	0.01047	—
Cs-137	B3	2006	1.076	0.01075	0.03225	—
Cs-137	B36	2006	2.301	0.01345	0.04035	—
Cs-137	B37	2006	0.8525	0.008	0.024	—
Cs-137	B39	2006	0.5066	0.01075	0.03225	—
Cs-137	B4	2006	0.4512	0.0037	0.0111	—
Cs-137	B40	2006	0.3954	0.00575	0.01725	—
Cs-137	B47	2006	1.747	0.01	0.03	—
Cs-137	B48	2006	1.373	0.00695	0.02085	—
Cs-137	B50	2006	0.4518	0.004335	0.013005	—
Cs-137	B51	2006	0.3459	0.003335	0.010005	—
Cs-137	B52	2006	0.3007	0.00515	0.01545	—
Cs-137	B59	2006	0.1425	0.00595	0.01785	—
Cs-137	B60	2006	0.136	0.00665	0.01995	—
Cs-137	B61	2006	0.6369	0.0054	0.0162	—
Cs-137	B62	2006	0.4835	0.0069	0.0207	—
Cs-137	B71	2006	0.6154	0.0062	0.0186	—
Cs-137	B73	2006	0.499	0.0063	0.0189	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B80	2006	0.6458	0.00775	0.02325	—
Cs-137	B81	2006	0.5445	0.0057	0.0171	—
Cs-137	B82	2006	0.188	0.00444	0.01332	—
Cs-137	B83	2006	0.9389	0.0067	0.0201	—
Cs-137	B84	2006	0.4988	0.00805	0.02415	—
Cs-137	B88	2006	0.462	0.0065	0.0195	—
Cs-137	B89	2006	0.4841	0.00491	0.01473	—
Cs-137	B90	2006	0.5428	0.0056	0.0168	—
Cs-137	B91	2006	0.6455	0.00525	0.01575	—
Cs-137	B92	2006	0.7188	0.00455	0.01365	—
Cs-137	B93	2006	0.8962	0.01165	0.03495	—
Cs-137	B94	2006	0.7178	0.0082	0.0246	—
Cs-137	B95	2006	0.7867	0.00955	0.02865	—
Cs-137	B99	2006	0.3959	0.01125	0.03375	—
Cs-137	C14	2006	0.8078	0.01245	0.03735	—
Cs-137	C15	2006	0.3282	0.00459	0.01377	—
Cs-137	C25	2006	0.4583	0.00535	0.01605	—
Cs-137	C36	2006	0.3184	0.00318	0.00954	—
Cs-137	C37	2006	0.3376	0.00735	0.02205	—
Cs-137	C46	2006	0.5585	0.00585	0.01755	—
Cs-137	C47	2006	0.4458	0.0065	0.0195	—
Cs-137	C48	2006	0.2746	0.009	0.027	—
Cs-137	C56	2006	0.5547	0.00605	0.01815	—
Cs-137	C57	2006	0.3477	0.0064	0.0192	—
Cs-137	D57	2006	0.4091	0.00765	0.02295	—
Cs-137	D58	2006	0.3591	0.004755	0.014265	—
Cs-137	D68	2006	0.3745	0.00565	0.01695	—
Cs-137	D69	2006	0.2646	2.45	7.35	U
Cs-137	D79	2006	0.4763	0.00625	0.01875	—
Cs-137	D80	2006	0.2384	1.7	5.1	U
Cs-137	D89	2006	0.5785	0.00625	0.01875	—
Cs-137	D90	2006	0.4577	1.35	4.05	U
Cs-137	D91	2006	0.2763	1.65	4.95	U
Cs-137	A15	2007	2.165	0.0155	0.0465	—
Cs-137	A16	2007	1.203	0.0115	0.0345	—
Cs-137	A17	2007	1.025	0.01115	0.03345	—
Cs-137	A27	2007	1.375	0.0123	0.0369	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	A28	2007	1.423	0.0176	0.0528	—
Cs-137	A37	2007	4.497	0.0178	0.0534	—
Cs-137	A38	2007	1.349	0.01295	0.03885	—
Cs-137	A39	2007	1.458	0.0124	0.0372	—
Cs-137	A4	2007	1.101	0.00735	0.02205	—
Cs-137	A44	2007	1.747	0.01385	0.04155	—
Cs-137	A45	2007	2.387	0.01495	0.04485	—
Cs-137	A47	2007	3.833	0.0129	0.0387	—
Cs-137	A48	2007	4.826	0.02115	0.06345	—
Cs-137	A49	2007	3.398	0.01715	0.05145	—
Cs-137	A5	2007	0.5418	0.00865	0.02595	—
Cs-137	A50	2007	1.914	0.0241	0.0723	—
Cs-137	A55	2007	1.127	0.01125	0.03375	—
Cs-137	A56	2007	0.6982	0.0079	0.0237	—
Cs-137	A58	2007	2.829	0.01945	0.05835	—
Cs-137	A59	2007	2.849	0.01125	0.03375	—
Cs-137	A6	2007	0.6309	0.01095	0.03285	—
Cs-137	A60	2007	2.349	0.0156	0.0468	—
Cs-137	A61	2007	2.288	0.01435	0.04305	—
Cs-137	A66	2007	0.9702	0.0202	0.0606	—
Cs-137	A67	2007	1.565	0.0159	0.0477	—
Cs-137	A68	2007	1.405	0.0203	0.0609	—
Cs-137	A69	2007	2.406	0.0179	0.0537	—
Cs-137	A70	2007	2.304	0.01795	0.05385	—
Cs-137	A71	2007	1.918	0.0143	0.0429	—
Cs-137	A72	2007	2.176	0.01495	0.04485	—
Cs-137	B100	2007	0.7727	0.0119	0.0357	—
Cs-137	B101	2007	0.8	0.01455	0.04365	—
Cs-137	B102	2007	0.6156	0.0121	0.0363	—
Cs-137	B103	2007	0.0531	0.006	0.018	—
Cs-137	B104	2007	1.35	0.013	0.039	—
Cs-137	B105	2007	1.249	0.01715	0.05145	—
Cs-137	B106	2007	1.263	0.0168	0.0504	—
Cs-137	B14	2007	2.306	0.01645	0.04935	—
Cs-137	B15	2007	0.9534	0.011	0.033	—
Cs-137	B17	2007	0.7011	0.0132	0.0396	—
Cs-137	B25	2007	4.33	0.0211	0.0633	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B26	2007	1.401	0.01295	0.03885	—
Cs-137	B28	2007	0.6992	0.0097	0.0291	—
Cs-137	B29	2007	0.4985	0.01135	0.03405	—
Cs-137	B3	2007	1.749	0.01325	0.03975	—
Cs-137	B36	2007	4.74	0.0248	0.0744	—
Cs-137	B37	2007	1.543	0.0223	0.0669	—
Cs-137	B39	2007	0.6256	0.00774	0.02322	—
Cs-137	B4	2007	0.859	0.01295	0.03885	—
Cs-137	B40	2007	0.6985	0.01045	0.03135	—
Cs-137	B47	2007	3.383	0.0171	0.0513	—
Cs-137	B48	2007	2.074	0.01025	0.03075	—
Cs-137	B50	2007	1.098	0.012	0.036	—
Cs-137	B51	2007	0.8647	0.0164	0.0492	—
Cs-137	B52	2007	0.478	0.0101	0.0303	—
Cs-137	B59	2007	0.01488	0.00367	0.01101	—
Cs-137	B60	2007	0.1857	0.01045	0.03135	—
Cs-137	B61	2007	1.186	0.0121	0.0363	—
Cs-137	B62	2007	0.8465	0.01345	0.04035	—
Cs-137	B69	2007	50.3	0.092	0.276	—
Cs-137	B71	2007	0.9012	0.0215	0.0645	—
Cs-137	B73	2007	0.9943	0.0141	0.0423	—
Cs-137	B80	2007	0.08106	0.00895	0.02685	—
Cs-137	B81	2007	0.7352	0.0152	0.0456	—
Cs-137	B82	2007	0.5103	0.02685	0.08055	—
Cs-137	B83	2007	1.762	0.01345	0.04035	—
Cs-137	B84	2007	1.148	0.0123	0.0369	—
Cs-137	B88	2007	0.8258	0.0103	0.0309	—
Cs-137	B89	2007	0.8762	0.0128	0.0384	—
Cs-137	B90	2007	1.139	0.013	0.039	—
Cs-137	B91	2007	1.156	0.0132	0.0396	—
Cs-137	B92	2007	1.301	0.0207	0.0621	—
Cs-137	B93	2007	1.702	0.00915	0.02745	—
Cs-137	B94	2007	1.22	0.0085	0.0255	—
Cs-137	B95	2007	1.368	0.0096	0.0288	—
Cs-137	B99	2007	0.5841	0.0073	0.0219	—
Cs-137	C14	2007	1.289	0.0159	0.0477	—
Cs-137	C15	2007	0.587	0.01185	0.03555	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	C25	2007	0.564	0.00762	0.02286	—
Cs-137	C36	2007	0.557	0.0076	0.0228	—
Cs-137	C37	2007	0.6352	0.01455	0.04365	—
Cs-137	C46	2007	0.9699	0.01415	0.04245	—
Cs-137	C47	2007	0.6083	0.00965	0.02895	—
Cs-137	C48	2007	0.4108	0.01125	0.03375	—
Cs-137	C56	2007	0.9796	0.0098	0.0294	—
Cs-137	C57	2007	0.5979	0.01395	0.04185	—
Cs-137	D57	2007	0.6723	0.0125	0.0375	—
Cs-137	D58	2007	0.5828	0.0115	0.0345	—
Cs-137	D68	2007	0.5814	0.0083	0.0249	—
Cs-137	D69	2007	0.4874	0.0134	0.0402	—
Cs-137	D79	2007	0.7343	0.0127	0.0381	—
Cs-137	D80	2007	0.4145	0.0077	0.0231	—
Cs-137	D89	2007	0.8544	0.01075	0.03225	—
Cs-137	D90	2007	0.7343	0.0122	0.0366	—
Cs-137	D91	2007	0.5111	0.01085	0.03255	—
Cs-137	B104	2008	1.18	0.00824	0.02472	—
Cs-137	A15	2009	1.784	0.01225	0.03675	—
Cs-137	A16	2009	1.048	0.00975	0.02925	—
Cs-137	A17	2009	0.8989	0.0102	0.0306	—
Cs-137	A27	2009	1.268	0.0109	0.0327	—
Cs-137	A28	2009	1.329	0.01165	0.03495	—
Cs-137	A38	2009	1.496	0.01065	0.03195	—
Cs-137	A39	2009	1.645	0.01155	0.03465	—
Cs-137	A4	2009	0.7845	0.0116	0.0348	—
Cs-137	A44	2009	1.544	0.0079	0.0237	—
Cs-137	A45	2009	1.935	0.0085	0.0255	—
Cs-137	A47	2009	3.471	0.01545	0.04635	—
Cs-137	A48	2009	3.763	0.01145	0.03435	—
Cs-137	A49	2009	2.91	0.0138	0.0414	—
Cs-137	A5	2009	0.457	0.00745	0.02235	—
Cs-137	A50	2009	1.832	0.00835	0.02505	—
Cs-137	A55	2009	0.9924	0.0069	0.0207	—
Cs-137	A56	2009	0.3895	0.0061	0.0183	—
Cs-137	A58	2009	2.078	0.01175	0.03525	—
Cs-137	A59	2009	2.358	0.00945	0.02835	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	A6	2009	0.5842	0.0083	0.0249	—
Cs-137	A60	2009	1.809	0.00865	0.02595	—
Cs-137	A61	2009	2.174	0.0092	0.0276	—
Cs-137	A66	2009	0.1531	0.004885	0.014655	—
Cs-137	A67	2009	1.273	0.00725	0.02175	—
Cs-137	A68	2009	0.7407	0.0088	0.0264	—
Cs-137	A69	2009	1.107	0.00935	0.02805	—
Cs-137	A70	2009	1.704	0.01065	0.03195	—
Cs-137	A71	2009	1.54	0.00785	0.02355	—
Cs-137	A72	2009	2.032	0.009	0.027	—
Cs-137	B100	2009	0.6571	0.009	0.027	—
Cs-137	B101	2009	0.6523	0.00745	0.02235	—
Cs-137	B102	2009	0.3548	0.0076	0.0228	—
Cs-137	B103	2009	0.06502	0.0063	0.0189	—
Cs-137	B104	2009	0.9738	0.0088	0.0264	—
Cs-137	B105	2009	1.061	0.0089	0.0267	—
Cs-137	B106	2009	0.7588	0.00855	0.02565	—
Cs-137	B14	2009	2.004	0.009	0.027	—
Cs-137	B15	2009	0.9596	0.00995	0.02985	—
Cs-137	B25	2009	3.462	0.01155	0.03465	—
Cs-137	B26	2009	1.243	0.01025	0.03075	—
Cs-137	B28	2009	0.6255	0.00885	0.02655	—
Cs-137	B29	2009	0.4637	0.0062	0.0186	—
Cs-137	B3	2009	1.283	0.00945	0.02835	—
Cs-137	B36	2009	3.129	0.0155	0.0465	—
Cs-137	B37	2009	1.276	0.01055	0.03165	—
Cs-137	B39	2009	0.6985	0.00915	0.02745	—
Cs-137	B4	2009	0.8977	0.01015	0.03045	—
Cs-137	B40	2009	0.4846	0.00565	0.01695	—
Cs-137	B47	2009	2.751	0.01455	0.04365	—
Cs-137	B48	2009	1.957	0.0123	0.0369	—
Cs-137	B50	2009	0.7595	0.00905	0.02715	—
Cs-137	B51	2009	0.761	0.00985	0.02955	—
Cs-137	B52	2009	0.3804	0.0064	0.0192	—
Cs-137	B59	2009	0.04894	0.00347	0.01041	—
Cs-137	B60	2009	0.07562	0.003995	0.011985	—
Cs-137	B61	2009	1	0.0092	0.0276	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B62	2009	0.6813	0.0066	0.0198	—
Cs-137	B71	2009	0.6848	0.00665	0.01995	—
Cs-137	B73	2009	0.433	0.00775	0.02325	—
Cs-137	B80	2009	1.531	0.0082	0.0246	—
Cs-137	B81	2009	1.035	0.0103	0.0309	—
Cs-137	B82	2009	0.3318	0.0071	0.0213	—
Cs-137	B83	2009	1.478	0.00775	0.02325	—
Cs-137	B84	2009	0.8224	0.00915	0.02745	—
Cs-137	B88	2009	0.007609	0.000665	0.001995	—
Cs-137	B89	2009	0.733	0.00895	0.02685	—
Cs-137	B90	2009	0.9998	0.00995	0.02985	—
Cs-137	B91	2009	1.115	0.0071	0.0213	—
Cs-137	B92	2009	1.303	0.01015	0.03045	—
Cs-137	B93	2009	1.496	0.008	0.024	—
Cs-137	B94	2009	1.025	0.00745	0.02235	—
Cs-137	B95	2009	1.026	0.0091	0.0273	—
Cs-137	B99	2009	0.6179	0.00695	0.02085	—
Cs-137	C14	2009	1.018	0.00685	0.02055	—
Cs-137	C15	2009	0.5243	0.0061	0.0183	—
Cs-137	C25	2009	0.5976	0.0092	0.0276	—
Cs-137	C36	2009	0.598	0.0078	0.0234	—
Cs-137	C37	2009	0.4815	0.00835	0.02505	—
Cs-137	C46	2009	0.9883	0.0071	0.0213	—
Cs-137	C47	2009	0.6329	0.00795	0.02385	—
Cs-137	C48	2009	0.2824	0.00595	0.01785	—
Cs-137	C56	2009	0.8222	0.0092	0.0276	—
Cs-137	C57	2009	0.4852	0.003825	0.011475	—
Cs-137	D58	2009	0.443	0.00725	0.02175	—
Cs-137	D68	2009	0.5744	0.00825	0.02475	—
Cs-137	D69	2009	0.42	0.00785	0.02355	—
Cs-137	D79	2009	0.6882	0.0063	0.0189	—
Cs-137	D80	2009	0.3584	0.0056	0.0168	—
Cs-137	D89	2009	0.7213	0.009	0.027	—
Cs-137	D91	2009	0.3931	0.0051	0.0153	—
Cs-137	A27	2010	1.364	0.0104	0.0312	—
Cs-137	A28	2010	1.076	0.00562	0.01686	—
Cs-137	A38	2010	1.439	0.0121	0.0363	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	A39	2010	1.499	0.00969	0.02907	—
Cs-137	A49	2010	2.281	0.0127	0.0381	—
Cs-137	A50	2010	1.727	0.0131	0.0393	—
Cs-137	A59	2010	2.16	0.0143	0.0429	—
Cs-137	A60	2010	1.588	0.0116	0.0348	—
Cs-137	A61	2010	2.171	0.0134	0.0402	—
Cs-137	A71	2010	1.293	0.0171	0.0513	—
Cs-137	A72	2010	2.002	0.0142	0.0426	—
Cs-137	A15	2011	2.215	0.0222	0.0666	—
Cs-137	A16	2011	3.202	0.0267	0.0801	—
Cs-137	A17	2011	2.471	0.0223	0.0669	—
Cs-137	A27	2011	4.5	0.0341	0.1023	—
Cs-137	A28	2011	3.261	0.0251	0.0753	—
Cs-137	A38	2011	4.313	0.0278	0.0834	—
Cs-137	A39	2011	5.001	0.0352	0.1056	—
Cs-137	A4	2011	2.405	0.0273	0.0819	—
Cs-137	A44	2011	5.507	0.0312	0.0936	—
Cs-137	A47	2011	10.97	0.0499	0.1497	—
Cs-137	A49	2011	9.795	0.0481	0.1443	—
Cs-137	A50	2011	6.151	0.041	0.123	—
Cs-137	A55	2011	3.778	0.0293	0.0879	—
Cs-137	A58	2011	8.052	0.0409	0.1227	—
Cs-137	A59	2011	7.374	0.0353	0.1059	—
Cs-137	A6	2011	1.925	0.0235	0.0705	—
Cs-137	A61	2011	7.384	0.0322	0.0966	—
Cs-137	A66	2011	2.324	0.0253	0.0759	—
Cs-137	A69	2011	4.196	0.0324	0.0972	—
Cs-137	A70	2011	5.512	0.0309	0.0927	—
Cs-137	A72	2011	6.859	0.0295	0.0885	—
Cs-137	B101	2011	2.016	0.0206	0.0618	—
Cs-137	B102	2011	0.251	0.0123	0.0369	—
Cs-137	B103	2011	0.2188	0.0186	0.0558	—
Cs-137	B104	2011	3.312	0.0249	0.0747	—
Cs-137	B106	2011	2.43	0.0224	0.0672	—
Cs-137	B14	2011	6.787	0.0398	0.1194	—
Cs-137	B15	2011	2.644	0.0227	0.0681	—
Cs-137	B17	2011	0.006682	0.006	0.018	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B25	2011	12.68	0.0534	0.1602	—
Cs-137	B28	2011	1.878	0.0198	0.0594	—
Cs-137	B29	2011	1.569	0.0257	0.0771	—
Cs-137	B3	2011	4.241	0.028	0.084	—
Cs-137	B39	2011	0.0004929	0.00568	0.01704	U
Cs-137	B4	2011	2.352	0.0207	0.0621	—
Cs-137	B40	2011	0.0004997	0.00623	0.01869	U
Cs-137	B47	2011	8.087	0.0436	0.1308	—
Cs-137	B48	2011	6.631	0.0393	0.1179	—
Cs-137	B50	2011	2.643	0.0254	0.0762	—
Cs-137	B52	2011	1.264	0.0173	0.0519	—
Cs-137	B61	2011	3.992	0.0314	0.0942	—
Cs-137	B62	2011	1.954	0.0205	0.0615	—
Cs-137	B71	2011	1.709	0.02	0.06	—
Cs-137	B73	2011	2.898	0.0276	0.0828	—
Cs-137	B80	2011	0.2095	0.0199	0.0597	—
Cs-137	B83	2011	4.241	0.0277	0.0831	—
Cs-137	B84	2011	2.639	0.0268	0.0804	—
Cs-137	B89	2011	2.681	0.0312	0.0936	—
Cs-137	B90	2011	3.343	0.0315	0.0945	—
Cs-137	B91	2011	3.896	0.0308	0.0924	—
Cs-137	B92	2011	4.218	0.0237	0.0711	—
Cs-137	B93	2011	4.949	0.0274	0.0822	—
Cs-137	B94	2011	3.304	0.0249	0.0747	—
Cs-137	B99	2011	1.642	0.0191	0.0573	—
Cs-137	C15	2011	1.498	0.019	0.057	—
Cs-137	C25	2011	1.87	0.0181	0.0543	—
Cs-137	C37	2011	1.041	0.0145	0.0435	—
Cs-137	C46	2011	2.944	0.0238	0.0714	—
Cs-137	C48	2011	1.197	0.015	0.045	—
Cs-137	C56	2011	3.446	0.0295	0.0885	—
Cs-137	C57	2011	1.599	0.0189	0.0567	—
Cs-137	D58	2011	1.46	0.0181	0.0543	—
Cs-137	D68	2011	0.01088	0.00996	0.02988	U
Cs-137	D89	2011	2.933	0.03	0.09	—
Cs-137	D91	2011	1.375	0.0207	0.0621	—
Cs-137	A15	2012	2.087	0.0132	0.0396	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	A38	2012	1.238	0.00842	0.02526	—
Cs-137	A44	2012	1.769	0.0132	0.0396	—
Cs-137	A47	2012	2.724	0.0136	0.0408	—
Cs-137	A59	2012	2.522	0.0136	0.0408	—
Cs-137	A6	2012	0.6699	0.0106	0.0318	—
Cs-137	A69	2012	0.9396	0.011	0.033	—
Cs-137	A70	2012	1.989	0.012	0.036	—
Cs-137	A72	2012	1.439	0.0108	0.0324	—
Cs-137	B14	2012	1.925	0.0115	0.0345	—
Cs-137	B48	2012	2.088	0.0131	0.0393	—
Cs-137	B83	2012	1.366	0.0107	0.0321	—
Cs-137	C46	2012	0.6768	0.0098	0.0294	—
Cs-137	C57	2012	0.5333	0.00807	0.02421	—
Cs-137	D68	2012	0.5367	1.3	3.9	U
Cs-137	2 INCH AIR - INTEC	2013	0.2726	0.0133	0.0398	—
Cs-137	A47	2013	3.721	0.0189	0.0566	—
Cs-137	A49	2013	0.9745	0.0050	0.0149	—
Cs-137	A59	2013	2.624	0.018	0.054	—
Cs-137	A71	2013	1.681	0.016	0.048	—
Cs-137	A72	2013	0.7715	0.0049	0.0146	—
Cs-137	2 INCH AIR - CPP	2014	0.9737	0.00974	0.02922	—
Cs-137	2 INCH AIR - INTEC	2014	0.1601	0.00466	0.01398	—
Cs-137	A38	2014	1.28	0.00976	0.02928	—
Cs-137	A47	2014	3.536	0.0225	0.0675	—
Cs-137	A58	2014	2.298	0.0127	0.0381	—
Cs-137	A59	2014	3.19	0.0193	0.0579	—
Cs-137	B15	2014	0.7498	0.0137	0.0411	—
Cs-137	B28	2014	0.6065	0.0152	0.0456	—
Cs-137	B29	2014	0.4371	0.0136	0.0408	—
Cs-137	B3	2014	1.447	0.0278	0.0834	—
Cs-137	B3	2014	1.23	0.00602	0.01806	—
Cs-137	B4	2014	0.6929	0.00947	0.02841	—
Cs-137	B40	2014	0.5079	0.00884	0.02652	—
Cs-137	B50	2014	0.8812	0.0161	0.0483	—
Cs-137	B52	2014	0.7312	0.0195	0.0585	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	B52	2014	0.4379	0.0172	0.0516	—
Eu-152	A15	2007	0.6259	0.0489	0.1467	—
Eu-152	A16	2007	0.3066	0.0358	0.1074	—
Eu-152	A17	2007	0.2771	0.0311	0.0933	—
Eu-152	A27	2007	0.4524	0.0665	0.1995	—
Eu-152	A28	2007	0.3364	0.03685	0.11055	—
Eu-152	A37	2007	0.2955	0.052	0.156	—
Eu-152	A38	2007	0.2886	0.0355	0.1065	—
Eu-152	A4	2007	0.1603	0.0225	0.0675	—
Eu-152	A44	2007	0.3065	0.04385	0.13155	—
Eu-152	A45	2007	0.4514	0.05	0.15	—
Eu-152	A47	2007	0.2437	0.0295	0.0885	—
Eu-152	A48	2007	0.4937	0.051	0.153	—
Eu-152	A49	2007	0.2854	0.051	0.153	—
Eu-152	A5	2007	0.2967	0.0399	0.1197	—
Eu-152	A50	2007	1.482	0.111	0.333	—
Eu-152	A55	2007	0.5748	0.052	0.156	—
Eu-152	A58	2007	0.3638	0.03815	0.11445	—
Eu-152	A59	2007	0.1887	0.0271	0.0813	—
Eu-152	A6	2007	0.3102	0.03365	0.10095	—
Eu-152	A60	2007	0.3034	0.0515	0.1545	—
Eu-152	A61	2007	0.2991	0.0333	0.0999	—
Eu-152	A67	2007	0.2509	0.0333	0.0999	—
Eu-152	A69	2007	0.1944	0.0374	0.1122	—
Eu-152	A70	2007	0.4256	0.0494	0.1482	—
Eu-152	A71	2007	0.2254	0.0446	0.1338	—
Eu-152	A72	2007	0.5999	0.059	0.177	—
Eu-152	B101	2007	0.3486	0.04235	0.12705	—
Eu-152	B102	2007	0.4176	0.0401	0.1203	—
Eu-152	B103	2007	0.3564	0.0347	0.1041	—
Eu-152	B104	2007	0.2406	0.03105	0.09315	—
Eu-152	B105	2007	0.3637	0.03875	0.11625	—
Eu-152	B14	2007	0.2535	0.0352	0.1056	—
Eu-152	B17	2007	0.2643	0.02965	0.08895	—
Eu-152	B25	2007	0.3228	0.0535	0.1605	—
Eu-152	B26	2007	0.3901	0.0414	0.1242	—
Eu-152	B28	2007	0.1499	0.03455	0.10365	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	B29	2007	0.3365	0.0392	0.1176	—
Eu-152	B3	2007	0.2449	0.0368	0.1104	—
Eu-152	B4	2007	0.5645	0.0665	0.1995	—
Eu-152	B40	2007	0.3171	0.0477	0.1431	—
Eu-152	B47	2007	0.3746	0.0575	0.1725	—
Eu-152	B48	2007	0.5597	0.0725	0.2175	—
Eu-152	B50	2007	0.3408	0.0448	0.1344	—
Eu-152	B51	2007	0.2556	0.0339	0.1017	—
Eu-152	B52	2007	0.322	0.03645	0.10935	—
Eu-152	B59	2007	1.283	0.1075	0.3225	—
Eu-152	B60	2007	1.719	0.12	0.36	—
Eu-152	B61	2007	0.6259	0.0765	0.2295	—
Eu-152	B62	2007	0.3486	0.04235	0.12705	—
Eu-152	B69	2007	2.096	0.263	0.789	—
Eu-152	B71	2007	1.688	0.113	0.339	—
Eu-152	B73	2007	0.292	0.03715	0.11145	—
Eu-152	B80	2007	0.5678	0.079	0.237	—
Eu-152	B81	2007	0.845	0.0965	0.2895	—
Eu-152	B82	2007	0.3791	0.0488	0.1464	—
Eu-152	B83	2007	0.2684	0.0351	0.1053	—
Eu-152	B88	2007	0.3422	0.0408	0.1224	—
Eu-152	B89	2007	0.2397	0.0312	0.0936	—
Eu-152	B90	2007	0.3043	0.035	0.105	—
Eu-152	B92	2007	0.5616	0.0655	0.1965	—
Eu-152	B93	2007	0.2397	0.0311	0.0933	—
Eu-152	B94	2007	0.2374	0.0283	0.0849	—
Eu-152	B95	2007	0.1966	0.0227	0.0681	—
Eu-152	B99	2007	0.2398	0.0417	0.1251	—
Eu-152	C14	2007	0.2399	0.04015	0.12045	—
Eu-152	C15	2007	0.3611	0.051	0.153	—
Eu-152	C36	2007	0.3994	0.04845	0.14535	—
Eu-152	C37	2007	0.9008	0.069	0.207	—
Eu-152	C46	2007	0.3345	0.04845	0.14535	—
Eu-152	C47	2007	0.3839	0.04705	0.14115	—
Eu-152	C48	2007	0.1481	0.02705	0.08115	—
Eu-152	C56	2007	0.5915	0.0855	0.2565	—
Eu-152	C57	2007	0.3849	0.0635	0.1905	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	D58	2007	0.2344	0.02945	0.08835	—
Eu-152	D68	2007	0.3918	0.0445	0.1335	—
Eu-152	D69	2007	0.2658	0.0371	0.1113	—
Eu-152	D79	2007	0.314	0.0385	0.1155	—
Eu-152	D80	2007	0.2023	0.0296	0.0888	—
Eu-152	D89	2007	0.3309	0.03905	0.11715	—
Eu-152	D90	2007	0.5425	0.0705	0.2115	—
Eu-152	D91	2007	0.3087	0.03455	0.10365	—
Eu-152	A15	2011	0.003547	0.0243	0.0729	U
Eu-152	A16	2011	0.03537	0.0318	0.0954	U
Eu-152	A17	2011	0.0373	0.0289	0.0867	U
Eu-152	A27	2011	0.05231	0.0319	0.0957	U
Eu-152	A28	2011	-0.003045	0.0288	0.0864	U
Eu-152	A38	2011	0.04439	0.0312	0.0936	U
Eu-152	A39	2011	0.02731	0.0343	0.1029	U
Eu-152	A4	2011	0.004367	0.0319	0.0957	U
Eu-152	A44	2011	0.0495	0.0357	0.1071	U
Eu-152	A47	2011	0.02045	0.0399	0.1197	U
Eu-152	A49	2011	0.008224	0.0363	0.1089	U
Eu-152	A50	2011	0.01526	0.0368	0.1104	U
Eu-152	A55	2011	0.02868	0.031	0.093	U
Eu-152	A58	2011	0.001434	0.0343	0.1029	U
Eu-152	A59	2011	0.005663	0.0322	0.0966	U
Eu-152	A6	2011	0.03772	0.0265	0.0795	U
Eu-152	A61	2011	0.006908	0.031	0.093	U
Eu-152	A66	2011	0.09174	0.0297	0.0891	—
Eu-152	A69	2011	-0.01187	0.034	0.102	U
Eu-152	A70	2011	-0.01581	0.0294	0.0882	U
Eu-152	A72	2011	-0.05117	0.0298	0.0894	U
Eu-152	B101	2011	0.0162	0.0297	0.0891	U
Eu-152	B102	2011	-0.01858	0.0332	0.0996	U
Eu-152	B103	2011	0.01613	0.0317	0.0951	U
Eu-152	B104	2011	-0.03272	0.0318	0.0954	U
Eu-152	B106	2011	0.003659	0.0304	0.0912	U
Eu-152	B14	2011	0.05833	0.0339	0.1017	U
Eu-152	B15	2011	-0.01682	0.0331	0.0993	U
Eu-152	B17	2011	-0.07519	0.0217	0.0651	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	B25	2011	0.03906	0.0403	0.1209	U
Eu-152	B28	2011	0.007721	0.0316	0.0948	U
Eu-152	B29	2011	0.03066	0.0315	0.0945	U
Eu-152	B3	2011	0.001218	0.034	0.102	U
Eu-152	B39	2011	-0.08723	0.0219	0.0657	U
Eu-152	B4	2011	0.003829	0.0289	0.0867	U
Eu-152	B40	2011	-0.0762	0.0209	0.0627	U
Eu-152	B47	2011	0.03013	0.046	0.138	U
Eu-152	B48	2011	0.002985	0.0411	0.1233	U
Eu-152	B50	2011	0.01985	0.0309	0.0927	U
Eu-152	B52	2011	-0.03506	0.0318	0.0954	U
Eu-152	B61	2011	0.04174	0.0323	0.0969	U
Eu-152	B62	2011	0.004623	0.0288	0.0864	U
Eu-152	B71	2011	0.01483	0.0407	0.1221	U
Eu-152	B73	2011	0.05174	0.0317	0.0951	U
Eu-152	B80	2011	0.02425	0.0698	0.2094	U
Eu-152	B83	2011	0.03608	0.0312	0.0936	U
Eu-152	B84	2011	0.005122	0.0326	0.0978	U
Eu-152	B89	2011	0.001161	0.0338	0.1014	U
Eu-152	B90	2011	0.04061	0.0328	0.0984	U
Eu-152	B91	2011	0.01448	0.0401	0.1203	U
Eu-152	B92	2011	0.03623	0.0374	0.1122	U
Eu-152	B93	2011	0.05885	0.0304	0.0912	U
Eu-152	B94	2011	-0.001849	0.0319	0.0957	U
Eu-152	B99	2011	0.02519	0.0288	0.0864	U
Eu-152	C15	2011	0.01417	0.0289	0.0867	U
Eu-152	C25	2011	0.04829	0.0291	0.0873	U
Eu-152	C37	2011	0.004199	0.0289	0.0867	U
Eu-152	C46	2011	0.02195	0.0236	0.0708	U
Eu-152	C48	2011	0.005796	0.0282	0.0846	U
Eu-152	C56	2011	0.01381	0.0308	0.0924	U
Eu-152	C57	2011	-0.01231	0.0274	0.0822	U
Eu-152	D58	2011	0.009544	0.0267	0.0801	U
Eu-152	D68	2011	-0.03775	0.0329	0.0987	U
Eu-152	D89	2011	0.02699	0.0315	0.0945	U
Eu-152	D91	2011	0.01728	0.0255	0.0765	U
Eu-152	A15	2012	0.05855	0.0291	0.0873	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	A38	2012	0.01167	0.0283	0.0849	U
Eu-152	A44	2012	0.03056	0.0333	0.0999	U
Eu-152	A47	2012	0.02021	0.0329	0.0987	U
Eu-152	A59	2012	-0.009103	0.0267	0.0801	U
Eu-152	A6	2012	0.03136	0.0286	0.0858	U
Eu-152	A69	2012	0.03053	0.0304	0.0912	U
Eu-152	A70	2012	0.006673	0.0268	0.0804	U
Eu-152	A72	2012	0.02897	0.028	0.084	U
Eu-152	B14	2012	0.02654	0.0275	0.0825	U
Eu-152	B48	2012	0.007149	0.0345	0.1035	U
Eu-152	B83	2012	0.02991	0.0268	0.0804	U
Eu-152	C46	2012	0.01685	0.0302	0.0906	U
Eu-152	C57	2012	0.01068	0.0291	0.0873	U
Eu-152	2 INCH AIR - INTEC	2013	0.1429	0.0327	0.098	—
Eu-152	A47	2013	0.3031	0.042	0.126	—
Eu-152	A49	2013	0.005708	0.0176	0.0527	U
Eu-152	A59	2013	0.229	0.0393	0.118	—
Eu-152	A71	2013	0.2423	0.041	0.123	—
Eu-152	A72	2013	0.0001521	0.0170	0.0509	U
Eu-152	2 INCH AIR - CPP	2014	-0.02874	0.0325	0.0975	U
Eu-152	2 INCH AIR - INTEC	2014	0.01944	0.0249	0.0747	U
Eu-152	A38	2014	0.02179	0.0263	0.0789	U
Eu-152	A47	2014	-0.01113	0.0303	0.0909	U
Eu-152	A58	2014	0.02631	0.0262	0.0786	U
Eu-152	A59	2014	0.004343	0.0277	0.0831	U
Eu-152	B15	2014	0.008766	0.0465	0.1395	U
Eu-152	B28	2014	0.004446	0.0291	0.0873	U
Eu-152	B29	2014	0.001111	0.0277	0.0831	U
Eu-152	B3	2014	0.06007	0.023	0.069	U
Eu-152	B3	2014	0.01607	0.0498	0.1494	U
Eu-152	B4	2014	0.009103	0.0187	0.0561	U
Eu-152	B40	2014	0.04558	0.0204	0.0612	U
Eu-152	B50	2014	0.009252	0.0284	0.0852	U
Eu-152	B52	2014	-0.01747	0.036	0.108	U
Eu-152	B52	2014	-0.02322	0.0298	0.0894	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	A118	1974	0.013	0.0018	0.0054	—
Pu-238	A120	1974	0.0072	0.0027	0.0081	U
Pu-238	A52	1974	0.019	0.0009	0.0027	—
Pu-238	A71	1974	0.034	0.003	0.009	—
Pu-238	A87	1974	0.009	0.0022	0.0066	—
Pu-238	A91	1974	0.0068	0.0009	0.0027	—
Pu-238	B117	1974	0.025	0.0013	0.0039	—
Pu-238	B120	1974	0.018	0.0018	0.0054	—
Pu-238	B5	1974	0.0095	0.0014	0.0042	—
Pu-238	B61	1974	0.024	0.0018	0.0054	—
Pu-238	B79	1974	0.185	0.005	0.015	—
Pu-238	B86	1974	0.0041	0.004	0.012	U
Pu-238	B90	1974	0.032	0.0014	0.0042	—
Pu-238	C36	1974	0.0063	0.0027	0.0081	U
Pu-238	C46	1974	0.007	0.0022	0.0066	—
Pu-238	D47	1974	0.015	0.004	0.012	—
Pu-238	A-110	1982	0.008	0.002	0.006	—
Pu-238	A-120	1982	0.017	0.002	0.006	—
Pu-238	A-17	1982	0.043	0.004	0.012	—
Pu-238	A-48	1982	0.112	0.007	0.021	—
Pu-238	B-120	1982	0.0043	0.0012	0.0036	—
Pu-238	B-27	1982	0.015	0.003	0.009	—
Pu-238	B-48	1982	0.092	0.006	0.018	—
Pu-238	B-52	1982	0.014	0.002	0.006	—
Pu-238	B-69	1982	0.135	0.007	0.021	—
Pu-238	C-21	1982	0.011	0.002	0.006	—
Pu-238	D-114	1982	0.255	0.011	0.033	—
Pu-238	D-57	1982	0.019	0.004	0.012	—
Pu-238	D-96	1982	0.0011	0.0009	0.0027	U
Pu-238	A108	1989	0.074	0.004	0.012	—
Pu-238	A66	1989	0.01	0.002	0.006	—
Pu-238	B25	1989	0.056	0.003	0.009	—
Pu-238	B90	1989	0.029	0.003	0.009	—
Pu-238	B96	1989	0.387	0.017	0.051	—
Pu-238	C48	1989	0.0037	0.0013	0.0039	U
Pu-238	C79	1989	0.01	0.002	0.006	—
Pu-238	D30	1989	0.0045	0.0015	0.0045	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	D96	1989	0.0011	0.001	0.003	U
Pu-239/240	A118	1974	0.011	0.0018	0.0054	—
Pu-239/240	A120	1974	0.0086	0.0018	0.0054	—
Pu-239/240	A52	1974	0.026	0.0014	0.0042	—
Pu-239/240	A71	1974	0.024	0.0023	0.0069	—
Pu-239/240	A87	1974	0.0099	0.0036	0.0108	U
Pu-239/240	A91	1974	0.0135	0.0009	0.0027	—
Pu-239/240	B117	1974	0.018	0.0009	0.0027	—
Pu-239/240	B120	1974	0.016	0.0018	0.0054	—
Pu-239/240	B5	1974	0.021	0.0023	0.0069	—
Pu-239/240	B61	1974	0.026	0.0018	0.0054	—
Pu-239/240	B79	1974	0.049	0.03	0.09	U
Pu-239/240	B86	1974	0.023	0.0045	0.0135	—
Pu-239/240	B90	1974	0.035	0.0014	0.0042	—
Pu-239/240	C36	1974	0.016	0.0036	0.0108	—
Pu-239/240	C46	1974	0.016	0.003	0.009	—
Pu-239/240	D47	1974	0.023	0.004	0.012	—
Pu-239/240	A-110	1982	0.02	0.002	0.006	—
Pu-239/240	A-120	1982	0.017	0.002	0.006	—
Pu-239/240	A-17	1982	0.37	0.004	0.012	—
Pu-239/240	A-48	1982	0.022	0.044	0.132	U
Pu-239/240	B-120	1982	0.0017	0.001	0.003	U
Pu-239/240	B-27	1982	0.009	0.003	0.009	—
Pu-239/240	B-48	1982	0.014	0.004	0.012	—
Pu-239/240	B-52	1982	0.032	0.003	0.009	—
Pu-239/240	B-69	1982	0.037	0.004	0.012	—
Pu-239/240	C-21	1982	0.026	0.003	0.009	—
Pu-239/240	D-114	1982	0.038	0.003	0.009	—
Pu-239/240	D-57	1982	0.009	0.003	0.009	—
Pu-239/240	D-96	1982	0.013	0.002	0.006	—
Pu-239/240	A108	1989	0.025	0.002	0.006	—
Pu-239/240	A17	1989	0.018	0.003	0.009	—
Pu-239/240	A66	1989	0.017	0.002	0.006	—
Pu-239/240	B25	1989	0.03	0.003	0.009	—
Pu-239/240	B90	1989	0.023	0.003	0.009	—
Pu-239/240	B96	1989	0.73	0.005	0.015	—
Pu-239/240	C48	1989	0.0099	0.0015	0.0045	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	C79	1989	0.018	0.002	0.006	—
Pu-239/240	D30	1989	0.021	0.002	0.006	—
Pu-239/240	D96	1989	0.015	0.002	0.006	—
Sb-125	A15	2007	0.4699	0.0955	0.2865	—
Sb-125	A16	2007	0.387	0.059	0.177	—
Sb-125	A17	2007	0.3045	0.0505	0.1515	—
Sb-125	A27	2007	0.58	0.0875	0.2625	—
Sb-125	A28	2007	0.1308	0.058	0.174	U
Sb-125	A37	2007	0.468	0.1095	0.3285	—
Sb-125	A38	2007	0.2803	0.062	0.186	—
Sb-125	A4	2007	0.1576	0.04275	0.12825	—
Sb-125	A44	2007	0.5998	0.103	0.309	—
Sb-125	A45	2007	0.1683	0.04445	0.13335	—
Sb-125	A47	2007	0.3291	0.0525	0.1575	—
Sb-125	A48	2007	0.5109	0.083	0.249	—
Sb-125	A49	2007	0.3688	0.062	0.186	—
Sb-125	A5	2007	0.2178	0.068	0.204	—
Sb-125	A50	2007	0.5153	0.0795	0.2385	—
Sb-125	A55	2007	0.3285	0.051	0.153	—
Sb-125	A58	2007	0.1921	0.0625	0.1875	—
Sb-125	A59	2007	0.3146	0.04025	0.12075	—
Sb-125	A6	2007	0.2959	0.0484	0.1452	—
Sb-125	A60	2007	0.4206	0.0835	0.2505	—
Sb-125	A61	2007	0.5059	0.1	0.3	—
Sb-125	A67	2007	0.09461	0.0735	0.2205	U
Sb-125	A69	2007	0.09751	0.055	0.165	U
Sb-125	A70	2007	0.4739	0.0705	0.2115	—
Sb-125	A71	2007	0.1516	0.04205	0.12615	—
Sb-125	A72	2007	0.2183	0.0585	0.1755	—
Sb-125	B101	2007	0.34	0.0555	0.1665	—
Sb-125	B102	2007	0.3989	0.078	0.234	—
Sb-125	B103	2007	0.3027	0.04375	0.13125	—
Sb-125	B104	2007	0.3399	0.051	0.153	—
Sb-125	B105	2007	0.3386	0.054	0.162	—
Sb-125	B14	2007	0.4713	0.0825	0.2475	—
Sb-125	B17	2007	0.2961	0.062	0.186	—
Sb-125	B25	2007	0.2267	0.094	0.282	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	B26	2007	0.3765	0.077	0.231	—
Sb-125	B28	2007	0.2839	0.0471	0.1413	—
Sb-125	B29	2007	0.1823	0.0745	0.2235	U
Sb-125	B3	2007	0.4507	0.0815	0.2445	—
Sb-125	B4	2007	0.3181	0.0545	0.1635	—
Sb-125	B40	2007	0.344	0.0685	0.2055	—
Sb-125	B47	2007	0.3501	0.093	0.279	—
Sb-125	B50	2007	0.1197	0.064	0.192	U
Sb-125	B51	2007	0.3114	0.0685	0.2055	—
Sb-125	B52	2007	0.1564	0.04425	0.13275	—
Sb-125	B59	2007	0.7193	0.162	0.486	—
Sb-125	B60	2007	1.075	0.168	0.504	—
Sb-125	B61	2007	0.3815	0.0605	0.1815	—
Sb-125	B62	2007	0.2139	0.04055	0.12165	—
Sb-125	B69	2007	1.492	0.3825	1.1475	—
Sb-125	B71	2007	0.7765	0.1225	0.3675	—
Sb-125	B73	2007	0.275	0.04605	0.13815	—
Sb-125	B80	2007	0.2825	0.098	0.294	U
Sb-125	B81	2007	0.2304	0.0665	0.1995	—
Sb-125	B82	2007	0.3594	0.0545	0.1635	—
Sb-125	B83	2007	0.2257	0.0488	0.1464	—
Sb-125	B88	2007	0.2338	0.0458	0.1374	—
Sb-125	B89	2007	0.3111	0.055	0.165	—
Sb-125	B90	2007	0.173	0.0615	0.1845	U
Sb-125	B92	2007	0.3521	0.0545	0.1635	—
Sb-125	B93	2007	0.2379	0.052	0.156	—
Sb-125	B94	2007	0.1729	0.0384	0.1152	—
Sb-125	B95	2007	0.06979	0.0314	0.0942	U
Sb-125	B99	2007	0.2918	0.066	0.198	—
Sb-125	C14	2007	0.187	0.0505	0.1515	—
Sb-125	C15	2007	0.3681	0.0755	0.2265	—
Sb-125	C36	2007	0.4606	0.1015	0.3045	—
Sb-125	C37	2007	0.4863	0.097	0.291	—
Sb-125	C46	2007	0.8255	0.163	0.489	—
Sb-125	C47	2007	0.3578	0.058	0.174	—
Sb-125	C48	2007	0.1973	0.058	0.174	—
Sb-125	C56	2007	0.3822	0.053	0.159	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	C57	2007	0.3826	0.112	0.336	—
Sb-125	D58	2007	0.08303	0.03335	0.10005	U
Sb-125	D68	2007	0.5758	0.0795	0.2385	—
Sb-125	D69	2007	0.3163	0.054	0.162	—
Sb-125	D79	2007	0.3849	0.0655	0.1965	—
Sb-125	D80	2007	0.03939	0.0432	0.1296	U
Sb-125	D89	2007	0.259	0.07	0.21	—
Sb-125	D90	2007	0.2649	0.03575	0.10725	—
Sb-125	D91	2007	0.2252	0.062	0.186	—
Sb-125	A15	2011	0.1502	0.0343	0.1029	—
Sb-125	A16	2011	-0.04523	0.0444	0.1332	U
Sb-125	A17	2011	0.07291	0.0418	0.1254	U
Sb-125	A27	2011	0.07812	0.0448	0.1344	U
Sb-125	A28	2011	0.039	0.0438	0.1314	U
Sb-125	A38	2011	-0.04674	0.0497	0.1491	U
Sb-125	A39	2011	0.06301	0.045	0.135	U
Sb-125	A4	2011	-0.06104	0.0449	0.1347	U
Sb-125	A44	2011	0.09478	0.0464	0.1392	U
Sb-125	A47	2011	-0.06306	0.0603	0.1809	U
Sb-125	A49	2011	0.02381	0.0577	0.1731	U
Sb-125	A50	2011	-0.02806	0.0546	0.1638	U
Sb-125	A55	2011	-0.06385	0.0475	0.1425	U
Sb-125	A58	2011	-0.09493	0.0482	0.1446	U
Sb-125	A59	2011	-0.08614	0.0476	0.1428	U
Sb-125	A6	2011	-0.08628	0.047	0.141	U
Sb-125	A61	2011	-0.1221	0.0434	0.1302	U
Sb-125	A66	2011	-0.04631	0.0488	0.1464	U
Sb-125	A69	2011	0.07454	0.0491	0.1473	U
Sb-125	A70	2011	0.7707	0.0451	0.1353	—
Sb-125	A72	2011	0.1031	0.0421	0.1263	U
Sb-125	B101	2011	0.05686	0.0412	0.1236	U
Sb-125	B102	2011	0.001085	0.0451	0.1353	U
Sb-125	B103	2011	0.1289	0.0428	0.1284	—
Sb-125	B104	2011	-0.01511	0.0458	0.1374	U
Sb-125	B106	2011	0.03967	0.0426	0.1278	U
Sb-125	B14	2011	-0.0839	0.0523	0.1569	U
Sb-125	B15	2011	0.06217	0.0524	0.1572	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	B17	2011	-0.02418	0.0296	0.0888	U
Sb-125	B25	2011	-0.1133	0.062	0.186	U
Sb-125	B28	2011	0.07748	0.0439	0.1317	U
Sb-125	B29	2011	-0.02098	0.0445	0.1335	U
Sb-125	B3	2011	0.04709	0.0469	0.1407	U
Sb-125	B39	2011	0.06593	0.0298	0.0894	U
Sb-125	B4	2011	0.07309	0.0427	0.1281	U
Sb-125	B40	2011	0.1056	0.0293	0.0879	—
Sb-125	B47	2011	0.2983	0.0633	0.1899	—
Sb-125	B48	2011	0.1007	0.0586	0.1758	U
Sb-125	B50	2011	-0.07444	0.0472	0.1416	U
Sb-125	B52	2011	0.1024	0.041	0.123	U
Sb-125	B61	2011	-0.04446	0.0499	0.1497	U
Sb-125	B62	2011	0.0682	0.0421	0.1263	U
Sb-125	B71	2011	0.02447	0.0495	0.1485	U
Sb-125	B73	2011	-0.06905	0.0504	0.1512	U
Sb-125	B80	2011	0.0328	0.0802	0.2406	U
Sb-125	B83	2011	0.002016	0.0468	0.1404	U
Sb-125	B84	2011	0.1419	0.0498	0.1494	U
Sb-125	B89	2011	0.06551	0.045	0.135	U
Sb-125	B90	2011	0.08206	0.0507	0.1521	U
Sb-125	B91	2011	0.01732	0.0505	0.1515	U
Sb-125	B92	2011	-0.03329	0.0459	0.1377	U
Sb-125	B93	2011	-0.04603	0.0439	0.1317	U
Sb-125	B94	2011	0.1205	0.0491	0.1473	U
Sb-125	B99	2011	0.0895	0.039	0.117	U
Sb-125	C15	2011	0.1154	0.0412	0.1236	U
Sb-125	C25	2011	-0.04459	0.0387	0.1161	U
Sb-125	C37	2011	0.07752	0.0384	0.1152	U
Sb-125	C46	2011	-0.04241	0.0422	0.1266	U
Sb-125	C48	2011	0.1093	0.0371	0.1113	U
Sb-125	C56	2011	-0.06699	0.0488	0.1464	U
Sb-125	C57	2011	0.04079	0.0403	0.1209	U
Sb-125	D58	2011	0.03935	0.0462	0.1386	U
Sb-125	D68	2011	0.8069	0.0436	0.1308	—
Sb-125	D89	2011	-0.0625	0.0454	0.1362	U
Sb-125	D91	2011	-0.01864	0.0457	0.1371	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	A15	2012	-0.01218	0.0434	0.1302	U
Sb-125	A38	2012	0.0223	0.0468	0.1404	U
Sb-125	A44	2012	0.02173	0.0469	0.1407	U
Sb-125	A47	2012	-0.002232	0.0441	0.1323	U
Sb-125	A59	2012	-0.02327	0.0438	0.1314	U
Sb-125	A6	2012	-0.01663	0.0448	0.1344	U
Sb-125	A69	2012	0.003527	0.0453	0.1359	U
Sb-125	A70	2012	0.02388	0.0413	0.1239	U
Sb-125	A72	2012	-0.03608	0.0417	0.1251	U
Sb-125	B14	2012	0.04581	0.044	0.132	U
Sb-125	B48	2012	0.007959	0.0509	0.1527	U
Sb-125	B83	2012	0.02706	0.0367	0.1101	U
Sb-125	C46	2012	-0.03563	0.0432	0.1296	U
Sb-125	C57	2012	0.01837	0.0397	0.1191	U
Sb-125	2 INCH AIR - INTEC	2013	0.009235	0.038	0.114	U
Sb-125	A47	2013	0.2984	0.069666667	0.209	—
Sb-125	A49	2013	0.063	0.0172	0.0515	—
Sb-125	A59	2013	0.07963	0.043	0.129	U
Sb-125	A71	2013	0.4467	0.07	0.21	—
Sb-125	A72	2013	0.06063	0.0182	0.0545	—
Sb-125	2 INCH AIR - CPP	2014	-0.01203	0.058	0.174	U
Sb-125	2 INCH AIR - INTEC	2014	-0.1965	0.0474	0.1422	U
Sb-125	A38	2014	-0.1559	0.0489	0.1467	U
Sb-125	A47	2014	0.004347	0.0648	0.1944	U
Sb-125	A58	2014	-0.02004	0.0515	0.1545	U
Sb-125	A59	2014	0.001388	0.0609	0.1827	U
Sb-125	B15	2014	-0.2591	0.0861	0.2583	U
Sb-125	B28	2014	-0.01773	0.0465	0.1395	U
Sb-125	B29	2014	-0.1412	0.0474	0.1422	U
Sb-125	B3	2014	0.02008	0.0316	0.0948	U
Sb-125	B3	2014	-0.08612	0.0818	0.2454	U
Sb-125	B4	2014	-0.04469	0.0312	0.0936	U
Sb-125	B40	2014	-0.01734	0.0311	0.0933	U
Sb-125	B50	2014	0.001923	0.0492	0.1476	U
Sb-125	B52	2014	-0.0355	0.054	0.162	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	B52	2014	-0.03901	0.0616	0.1848	U
Sr-90	B-52	1982	3	0.16	0.48	—
Sr-90	A46	1989	10.6	0.3	0.9	—
Sr-90	A52	1989	3.43	0.15	0.45	—
Sr-90	A90	1989	1.04	0.08	0.24	—
Sr-90	B119	1989	4.6	0.2	0.6	—
Sr-90	B52	1989	1.35	0.09	0.27	—
Sr-90	B70	1989	5.7	0.2	0.6	—
Sr-90	C40	1989	0.48	0.05	0.15	—
Sr-90	C96	1989	0.45	0.05	0.15	—
Sr-90	D37	1989	1.59	0.09	0.27	—
Sr-90	D63	1989	0.39	0.06	0.18	—
U-233/234	A-17	1982	1.07	0.03	0.09	—
U-233/234	A-48	1982	1.05	0.03	0.09	—
U-233/234	B-27	1982	1.09	0.03	0.09	—
U-233/234	B-48	1982	1.02	0.03	0.09	—
U-233/234	D-57	1982	1.04	0.03	0.09	—
U-234	A15	2007	27.41	16.15	48.45	U
U-234	A16	2007	52.12	23.45	70.35	U
U-234	A17	2007	34.55	23.95	71.85	U
U-234	A27	2007	51.58	45	135	U
U-234	A28	2007	49.08	27.75	83.25	U
U-234	A38	2007	71.59	51.5	154.5	U
U-234	A39	2007	146.8	4.2	12.6	—
U-234	A4	2007	44.31	33.9	101.7	U
U-234	A45	2007	15.64	15.1	45.3	U
U-234	A47	2007	60.34	43.95	131.85	U
U-234	A48	2007	45.9	22.15	66.45	U
U-234	A49	2007	28.07	13.2	39.6	U
U-234	A5	2007	24.24	12.35	37.05	U
U-234	A50	2007	63.1	23.6	70.8	U
U-234	A56	2007	118	4.76	14.28	—
U-234	A58	2007	54.09	19.35	58.05	U
U-234	A59	2007	0.1791	30.05	90.15	U
U-234	A6	2007	43.09	20.1	60.3	U
U-234	A60	2007	25.85	17.3	51.9	U
U-234	A61	2007	56.17	23.85	71.55	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	A66	2007	91.86	3.82	11.46	—
U-234	A67	2007	58.24	25.95	77.85	U
U-234	A68	2007	45.75	2.24	6.72	—
U-234	A69	2007	35.42	29.75	89.25	U
U-234	A70	2007	11.38	14.55	43.65	U
U-234	A71	2007	50.26	23.5	70.5	U
U-234	A72	2007	21.97	16.25	48.75	U
U-234	B100	2007	42.8	2.05	6.15	—
U-234	B102	2007	61.61	45.2	135.6	U
U-234	B103	2007	48.7	44	132	U
U-234	B104	2007	39.13	27.7	83.1	U
U-234	B105	2007	61.67	23.1	69.3	U
U-234	B106	2007	146.6	4.32	12.96	—
U-234	B14	2007	57.99	25.8	77.4	U
U-234	B15	2007	153.9	4.41	13.23	—
U-234	B17	2007	38.36	18.6	55.8	U
U-234	B25	2007	43.57	32.9	98.7	U
U-234	B28	2007	78.53	34.05	102.15	U
U-234	B29	2007	85.05	45.7	137.1	U
U-234	B3	2007	44.8	25	75	U
U-234	B36	2007	669.5	9.38	28.14	—
U-234	B37	2007	251.1	5.22	15.66	—
U-234	B39	2007	49.86	2.16	6.48	—
U-234	B40	2007	-61.54	37.05	111.15	U
U-234	B47	2007	24.6	26.2	78.6	U
U-234	B48	2007	27.41	16.95	50.85	U
U-234	B50	2007	66.73	31.4	94.2	U
U-234	B51	2007	25.41	23.45	70.35	U
U-234	B52	2007	65.7	23	69	U
U-234	B59	2007	288.2	139	417	U
U-234	B60	2007	38.75	22.25	66.75	U
U-234	B61	2007	21.68	16.7	50.1	U
U-234	B62	2007	30.02	14.55	43.65	U
U-234	B71	2007	141.2	130.5	391.5	U
U-234	B73	2007	32.34	17.65	52.95	U
U-234	B80	2007	122.4	88.5	265.5	U
U-234	B81	2007	186.2	66	198	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	B82	2007	62.02	35.35	106.05	U
U-234	B83	2007	51.06	22.45	67.35	U
U-234	B84	2007	48.14	2.77	8.31	—
U-234	B88	2007	31.09	19.85	59.55	U
U-234	B90	2007	31.06	17.6	52.8	U
U-234	B91	2007	211.4	4.77	14.31	—
U-234	B92	2007	73.92	47.95	143.85	U
U-234	B93	2007	26.91	28.05	84.15	U
U-234	B94	2007	28.54	29.15	87.45	U
U-234	B95	2007	21.65	39.2	117.6	U
U-234	B99	2007	67.56	23.85	71.55	U
U-234	C14	2007	10.11	12.9	38.7	U
U-234	C15	2007	42.23	15.45	46.35	U
U-234	C25	2007	119.1	3.41	10.23	—
U-234	C36	2007	54.47	46.15	138.45	U
U-234	C37	2007	43.93	25.7	77.1	U
U-234	C46	2007	17.89	11.95	35.85	U
U-234	C47	2007	18.62	18	54	U
U-234	C48	2007	38.4	17.85	53.55	U
U-234	C56	2007	48.13	18.1	54.3	U
U-234	C57	2007	11.89	10.65	31.95	U
U-234	D57	2007	128.6	4.74	14.22	—
U-234	D58	2007	19.2	18.3	54.9	U
U-234	D68	2007	100.3	43.95	131.85	U
U-234	D69	2007	37.55	21.2	63.6	U
U-234	D80	2007	2.228	24.55	73.65	U
U-234	D89	2007	91.56	46.95	140.85	U
U-234	D90	2007	57.9	26.1	78.3	U
U-234	D91	2007	13.79	26.5	79.5	U
U-234	B104	2008	11.26	2.38	7.14	—
U-234	A50	2009	3.374	2.92	8.76	U
U-234	A56	2009	52.08	4.415	13.245	—
U-234	A61	2009	6.501	2.135	6.405	—
U-234	A27	2010	31.9	2.32	6.96	—
U-234	A28	2010	11.18	2.44	7.32	—
U-234	A38	2010	38.48	2.39	7.17	—
U-234	A39	2010	10.61	2.44	7.32	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	A49	2010	171	4.71	14.13	—
U-234	A50	2010	30.59	2.05	6.15	—
U-234	A59	2010	169.7	4.65	13.95	—
U-234	A60	2010	162.2	4.51	13.53	—
U-234	A61	2010	21.53	2.01	6.03	—
U-234	A71	2010	157.1	4.45	13.35	—
U-234	A72	2010	25.97	1.98	5.94	—
U-234	A15	2011	33.04	68	204	U
U-234	A16	2011	-25.38	86.2	258.6	U
U-234	A17	2011	6.172	71.7	215.1	U
U-234	A27	2011	51.44	88.9	266.7	U
U-234	A28	2011	15.65	80.9	242.7	U
U-234	A38	2011	62.58	95.8	287.4	U
U-234	A39	2011	-69.89	88.8	266.4	U
U-234	A4	2011	0.02796	80.3	240.9	U
U-234	A44	2011	-56.46	108	324	U
U-234	A47	2011	61.19	109	327	U
U-234	A49	2011	-18.9	104	312	U
U-234	A50	2011	-20.64	90.1	270.3	U
U-234	A55	2011	-45.07	85	255	U
U-234	A58	2011	-29.32	96.3	288.9	U
U-234	A59	2011	-9.235	102	306	U
U-234	A6	2011	-32.3	78.2	234.6	U
U-234	A61	2011	-11.62	90.1	270.3	U
U-234	A66	2011	-34.97	79	237	U
U-234	A69	2011	-42.61	95.8	287.4	U
U-234	A70	2011	24.66	95.7	287.1	U
U-234	A72	2011	-91.68	89.4	268.2	U
U-234	B101	2011	-19.27	81	243	U
U-234	B102	2011	-0.8537	92.3	276.9	U
U-234	B103	2011	-20.79	84.7	254.1	U
U-234	B104	2011	-29.13	92.1	276.3	U
U-234	B106	2011	4.515	80.5	241.5	U
U-234	B14	2011	-21.67	88.3	264.9	U
U-234	B15	2011	20.8	96.7	290.1	U
U-234	B17	2011	-682.8	75.3	225.9	U
U-234	B25	2011	9.596	105	315	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	B28	2011	-41.74	91.5	274.5	U
U-234	B29	2011	8.661	77.4	232.2	U
U-234	B3	2011	18.14	95.7	287.1	U
U-234	B39	2011	-656	75.2	225.6	U
U-234	B4	2011	-6.493	65.9	197.7	U
U-234	B40	2011	-609.7	72.4	217.2	U
U-234	B47	2011	5.614	131	393	U
U-234	B48	2011	4.054	93	279	U
U-234	B50	2011	45.95	90.7	272.1	U
U-234	B52	2011	5.59	89.6	268.8	U
U-234	B61	2011	-36.87	82.4	247.2	U
U-234	B62	2011	-82.5	64	192	U
U-234	B71	2011	-92.5	125	375	U
U-234	B73	2011	-33.58	82.4	247.2	U
U-234	B80	2011	37.79	219	657	U
U-234	B83	2011	-13.68	87.1	261.3	U
U-234	B84	2011	3.254	81.7	245.1	U
U-234	B89	2011	-57.88	96.2	288.6	U
U-234	B90	2011	-3.418	90.7	272.1	U
U-234	B91	2011	-6.68	111	333	U
U-234	B92	2011	0	2.5	7.5	U
U-234	B93	2011	-54.37	96.5	289.5	U
U-234	B94	2011	-74.32	93.4	280.2	U
U-234	B99	2011	-21.49	77.1	231.3	U
U-234	C15	2011	-30.29	77.2	231.6	U
U-234	C25	2011	0	2.5	7.5	U
U-234	C37	2011	24.59	76	228	U
U-234	C46	2011	51.02	78.8	236.4	U
U-234	C48	2011	-55.83	81.2	243.6	U
U-234	C56	2011	4.68	79.7	239.1	U
U-234	C57	2011	-61.33	76.1	228.3	U
U-234	D58	2011	81.29	86.5	259.5	U
U-234	D68	2011	6.438	84.3	252.9	U
U-234	D89	2011	-57.67	81.6	244.8	U
U-234	D91	2011	2.935	71.1	213.3	U
U-234	A15	2012	2.155	28	84	U
U-234	A38	2012	13.12	30	90	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	A44	2012	5.236	37.5	112.5	U
U-234	A47	2012	7.307	33.8	101.4	U
U-234	A59	2012	-6.879	27.4	82.2	U
U-234	A6	2012	8.129	29.5	88.5	U
U-234	A69	2012	-6.341	29.5	88.5	U
U-234	A70	2012	15.81	26.2	78.6	U
U-234	A72	2012	3.75	19.2	57.6	U
U-234	B14	2012	11.94	19.1	57.3	U
U-234	B48	2012	11.9	37.7	113.1	U
U-234	B83	2012	17.59	27	81	U
U-234	C46	2012	29.36	31.4	94.2	U
U-234	C57	2012	23.36	28.5	85.5	U
U-234	D68	2012	-11.79	141	423	U
U-234	2 INCH AIR - INTEC	2013	31.99	46.33	139	U
U-234	A47	2013	30.39	53	159	U
U-234	A49	2013	-6.576	50	150	U
U-234	A59	2013	38.79	49.67	149	U
U-234	A71	2013	63.39	46.67	140	U
U-234	A72	2013	-42.7	49.67	149	U
U-234	2 INCH AIR - CPP	2014	-0.6581	92.3	276.9	U
U-234	2 INCH AIR - INTEC	2014	-19.62	66.2	198.6	U
U-234	A38	2014	-23.89	54	162	U
U-234	A47	2014	-99.97	86.6	259.8	U
U-234	A58	2014	1.449	64.8	194.4	U
U-234	A59	2014	-24.39	70.2	210.6	U
U-234	B15	2014	-34.51	127	381	U
U-234	B28	2014	-82.15	80.1	240.3	U
U-234	B29	2014	-66.69	81.6	244.8	U
U-234	B3	2014	2.907	56.4	169.2	U
U-234	B3	2014	1.222	128	384	U
U-234	B4	2014	-66.66	59.3	177.9	U
U-234	B40	2014	-16.41	48.6	145.8	U
U-234	B50	2014	-56.98	72.4	217.2	U
U-234	B52	2014	44.45	101	303	U
U-234	B52	2014	-2.955	81.4	244.2	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	A-17	1982	0.047	0.004	0.012	—
U-235	A-48	1982	0.045	0.004	0.012	—
U-235	B-27	1982	0.044	0.004	0.012	—
U-235	B-48	1982	0.052	0.004	0.012	—
U-235	D-57	1982	0.05	0.004	0.012	—
U-235	A15	2006	0.6971	0.3185	0.9555	U
U-235	A16	2006	0.748	0.331	0.993	U
U-235	A17	2006	0.7792	0.29	0.87	U
U-235	A27	2006	3.598	1.045	3.135	
U-235	A38	2006	1.245	0.4905	1.4715	U
U-235	A39	2006	0.6763	0.256	0.768	U
U-235	A4	2006	1.042	0.321	0.963	—
U-235	A44	2006	3.213	0.67	2.01	—
U-235	A45	2006	2.627	0.58	1.74	—
U-235	A47	2006	0.5419	0.277	0.831	U
U-235	A48	2006	0.5509	0.505	1.515	U
U-235	A49	2006	0.7308	0.3245	0.9735	U
U-235	A5	2006	1.809	0.4705	1.4115	
U-235	A50	2006	0.667	0.3075	0.9225	U
U-235	A55	2006	2.046	0.965	2.895	U
U-235	A56	2006	0.6461	0.201	0.603	—
U-235	A58	2006	0.5763	0.321	0.963	U
U-235	A59	2006	1.293	0.77	2.31	U
U-235	A6	2006	1.539	0.725	2.175	U
U-235	A60	2006	0.5229	0.273	0.819	U
U-235	A61	2006	0.7248	0.296	0.888	U
U-235	A66	2006	1.076	0.309	0.927	—
U-235	A67	2006	0.06303	0.252	0.756	U
U-235	A68	2006	1.259	0.3695	1.1085	—
U-235	A69	2006	1.874	0.4975	1.4925	—
U-235	A70	2006	1.099	0.32	0.96	—
U-235	A71	2006	0.7007	0.222	0.666	—
U-235	A72	2006	2.065	0.74	2.22	U
U-235	B100	2006	0.9297	0.55	1.65	U
U-235	B101	2006	0.7183	0.343	1.029	U
U-235	B102	2006	0.6917	0.2355	0.7065	U
U-235	B103	2006	0.6311	0.205	0.615	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	B104	2006	2.334	0.835	2.505	U
U-235	B105	2006	2.533	0.845	2.535	U
U-235	B106	2006	1.787	0.785	2.355	U
U-235	B14	2006	0.3772	0.286	0.858	U
U-235	B15	2006	0.8869	0.333	0.999	U
U-235	B17	2006	0.4303	0.197	0.591	U
U-235	B25	2006	0.8632	0.381	1.143	U
U-235	B26	2006	1.622	0.7	2.1	U
U-235	B28	2006	0.612	0.24	0.72	U
U-235	B29	2006	0.2968	0.1755	0.5265	U
U-235	B3	2006	0.3781	0.1715	0.5145	U
U-235	B37	2006	0.9305	0.3165	0.9495	U
U-235	B39	2006	0.6913	0.431	1.293	U
U-235	B4	2006	0.7949	0.2965	0.8895	U
U-235	B40	2006	0.8485	0.451	1.353	U
U-235	B47	2006	0.5313	0.3935	1.1805	U
U-235	B48	2006	0.5135	0.269	0.807	U
U-235	B50	2006	0.8828	0.267	0.801	—
U-235	B51	2006	2.585	0.83	2.49	—
U-235	B52	2006	0.3783	0.2225	0.6675	U
U-235	B59	2006	1.38	0.625	1.875	U
U-235	B60	2006	2.056	0.81	2.43	U
U-235	B61	2006	0.7765	0.274	0.822	U
U-235	B62	2006	2.087	0.615	1.845	—
U-235	B68	2006	0.8642	0.269	0.807	—
U-235	B71	2006	0.6706	0.2795	0.8385	U
U-235	B73	2006	0.908	0.282	0.846	—
U-235	B80	2006	0.9926	0.2585	0.7755	—
U-235	B82	2006	0.542	0.213	0.639	U
U-235	B83	2006	0.4498	0.1935	0.5805	U
U-235	B84	2006	1.267	0.44	1.32	U
U-235	B88	2006	0.6823	0.2345	0.7035	U
U-235	B89	2006	0.9346	0.2255	0.6765	—
U-235	B90	2006	0.9743	0.2615	0.7845	—
U-235	B91	2006	0.7511	0.2425	0.7275	—
U-235	B92	2006	0.3874	0.1385	0.4155	U
U-235	B93	2006	0.3805	0.309	0.927	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	B94	2006	0.5707	0.157	0.471	—
U-235	B95	2006	0.873	0.478	1.434	U
U-235	B99	2006	1.54	0.625	1.875	U
U-235	C14	2006	1.46	0.419	1.257	—
U-235	C15	2006	0.6277	0.237	0.711	U
U-235	C25	2006	0.8578	0.239	0.717	—
U-235	C36	2006	0.5823	0.274	0.822	U
U-235	C37	2006	0.5325	0.29	0.87	U
U-235	C46	2006	0.2893	0.1355	0.4065	U
U-235	C47	2006	0.9989	0.2975	0.8925	—
U-235	C48	2006	1.941	0.3825	1.1475	—
U-235	C56	2006	0.6166	0.2285	0.6855	U
U-235	C57	2006	0.1177	0.1885	0.5655	U
U-235	D57	2006	0.4149	0.1645	0.4935	U
U-235	D58	2006	0.149	0.2945	0.8835	U
U-235	D68	2006	0.3785	0.149	0.447	U
U-235	D79	2006	0.5198	0.271	0.813	U
U-235	D89	2006	0.3561	0.223	0.669	U
U-235	A15	2007	0.1771	0.1005	0.3015	U
U-235	A16	2007	0.4949	0.089	0.267	—
U-235	A17	2007	0.3208	0.065	0.195	—
U-235	A27	2007	0.7617	0.1035	0.3105	—
U-235	A28	2007	0.1407	0.0655	0.1965	U
U-235	A37	2007	0.5521	0.095	0.285	—
U-235	A38	2007	0.519	0.099	0.297	—
U-235	A39	2007	2.445	0.775	2.325	—
U-235	A4	2007	0.367	0.0635	0.1905	—
U-235	A44	2007	0.446	0.089	0.267	—
U-235	A45	2007	0.4142	0.107	0.321	—
U-235	A47	2007	0.2877	0.078	0.234	—
U-235	A48	2007	0.4143	0.0825	0.2475	—
U-235	A49	2007	0.5015	0.1215	0.3645	—
U-235	A5	2007	0.2732	0.0585	0.1755	—
U-235	A50	2007	0.7695	0.1205	0.3615	—
U-235	A55	2007	0.338	0.0765	0.2295	—
U-235	A56	2007	0.2126	0.0745	0.2235	U
U-235	A58	2007	0.4495	0.084	0.252	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	A59	2007	0.4933	0.071	0.213	—
U-235	A6	2007	0.3269	0.0935	0.2805	—
U-235	A60	2007	0.395	0.092	0.276	—
U-235	A61	2007	0.3648	0.076	0.228	—
U-235	A66	2007	0.6074	0.126	0.378	—
U-235	A67	2007	0.4883	0.0825	0.2475	—
U-235	A68	2007	0.2115	0.0561	0.1683	—
U-235	A69	2007	0.5061	0.0905	0.2715	—
U-235	A70	2007	0.3957	0.0885	0.2655	—
U-235	A71	2007	0.3662	0.06	0.18	—
U-235	A72	2007	0.5647	0.0945	0.2835	—
U-235	B100	2007	0.4348	0.119	0.357	—
U-235	B101	2007	0.5545	0.0985	0.2955	—
U-235	B102	2007	0.2766	0.0765	0.2295	—
U-235	B103	2007	0.3226	0.0615	0.1845	—
U-235	B104	2007	0.2852	0.0675	0.2025	—
U-235	B105	2007	0.4564	0.078	0.234	—
U-235	B106	2007	0.2984	0.0902	0.2706	—
U-235	B14	2007	0.3958	0.0805	0.2415	—
U-235	B15	2007	0.08805	0.0863	0.2589	U
U-235	B17	2007	0.4698	0.1185	0.3555	—
U-235	B25	2007	0.6958	0.1205	0.3615	—
U-235	B26	2007	0.3198	0.0685	0.2055	—
U-235	B28	2007	0.4174	0.082	0.246	—
U-235	B29	2007	0.395	0.0665	0.1995	—
U-235	B3	2007	0.2994	0.067	0.201	—
U-235	B36	2007	0.1974	0.134	0.402	U
U-235	B37	2007	0.1534	0.104	0.312	U
U-235	B39	2007	0.5098	0.105	0.315	—
U-235	B4	2007	0.3311	0.0635	0.1905	—
U-235	B40	2007	0.2605	0.0725	0.2175	—
U-235	B47	2007	0.2554	0.105	0.315	U
U-235	B48	2007	0.4649	0.1005	0.3015	—
U-235	B50	2007	0.4151	0.085	0.255	—
U-235	B51	2007	0.3564	0.0915	0.2745	—
U-235	B52	2007	0.3965	0.0825	0.2475	—
U-235	B59	2007	0.7715	0.193	0.579	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	B60	2007	0.3831	0.1355	0.4065	U
U-235	B61	2007	0.335	0.069	0.207	—
U-235	B62	2007	0.3771	0.076	0.228	—
U-235	B69	2007	2.13	0.59	1.77	—
U-235	B71	2007	1.155	0.306	0.918	—
U-235	B73	2007	0.5803	0.0965	0.2895	—
U-235	B80	2007	0.6156	0.188	0.564	—
U-235	B81	2007	0.8973	0.158	0.474	—
U-235	B82	2007	0.4686	0.112	0.336	—
U-235	B83	2007	0.478	0.0835	0.2505	—
U-235	B84	2007	0.3433	0.105	0.315	—
U-235	B88	2007	0.334	0.0885	0.2655	—
U-235	B89	2007	0.3594	0.063	0.189	—
U-235	B90	2007	0.847	0.1215	0.3645	—
U-235	B91	2007	0.1925	0.0976	0.2928	U
U-235	B92	2007	0.4645	0.0965	0.2895	—
U-235	B93	2007	0.2385	0.0755	0.2265	—
U-235	B94	2007	0.4266	0.063	0.189	—
U-235	B95	2007	0.4837	0.0735	0.2205	—
U-235	B99	2007	0.4056	0.0615	0.1845	—
U-235	C14	2007	0.4413	0.0745	0.2235	—
U-235	C15	2007	0.4921	0.084	0.252	—
U-235	C25	2007	0.6816	0.0566	0.1698	—
U-235	C36	2007	0.3463	0.061	0.183	—
U-235	C37	2007	0.7227	0.136	0.408	—
U-235	C46	2007	0.4238	0.0785	0.2355	—
U-235	C47	2007	0.2272	0.03915	0.11745	—
U-235	C48	2007	0.3434	0.061	0.183	—
U-235	C56	2007	0.5037	0.091	0.273	—
U-235	C57	2007	0.3116	0.0825	0.2475	—
U-235	D57	2007	0.1511	0.093	0.279	U
U-235	D58	2007	0.2563	0.0735	0.2205	—
U-235	D68	2007	0.4013	0.0675	0.2025	—
U-235	D69	2007	0.4855	0.082	0.246	—
U-235	D79	2007	0.4144	0.079	0.237	—
U-235	D80	2007	0.3145	0.051	0.153	—
U-235	D89	2007	0.274	0.061	0.183	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	D90	2007	0.3755	0.0645	0.1935	—
U-235	D91	2007	0.4974	0.09	0.27	—
U-235	B104	2008	0.3771	0.0539	0.1617	—
U-235	A48	2009	0.3171	0.0555	0.1665	—
U-235	A56	2009	0.2614	0.0545	0.1635	—
U-235	A6	2009	0.1757	0.0337	0.1011	—
U-235	A61	2009	0.3313	0.0435	0.1305	—
U-235	B60	2009	0.1477	0.11	0.33	U
U-235	B61	2009	0.2297	0.0464	0.1392	—
U-235	B91	2009	0.1949	0.11	0.33	U
U-235	B95	2009	0.1025	0.0462	0.1386	U
U-235	B99	2009	0.2436	0.1455	0.4365	U
U-235	C57	2009	0.09418	0.0224	0.0672	—
U-235	D69	2009	0.4454	0.3515	1.0545	U
U-235	A27	2010	2.251	0.461	1.383	—
U-235	A28	2010	0.3919	0.0624	0.1872	—
U-235	A38	2010	1.545	0.259	0.777	—
U-235	A39	2010	0.4258	0.0629	0.1887	—
U-235	A49	2010	1.654	0.32	0.96	—
U-235	A50	2010	1.918	0.393	1.179	—
U-235	A59	2010	1.253	0.355	1.065	—
U-235	A60	2010	1.57	0.605	1.815	U
U-235	A61	2010	0.3067	0.0577	0.1731	—
U-235	A71	2010	1.977	0.299	0.897	—
U-235	A72	2010	0.4088	0.0705	0.2115	—
U-235	A15	2011	0.003743	0.152	0.456	U
U-235	A16	2011	-0.000168	0.197	0.591	U
U-235	A17	2011	-0.1077	0.193	0.579	U
U-235	A27	2011	0.1241	0.204	0.612	U
U-235	A28	2011	-0.245	0.196	0.588	U
U-235	A38	2011	0.1106	0.221	0.663	U
U-235	A39	2011	0.3114	0.216	0.648	U
U-235	A4	2011	0.1595	0.203	0.609	U
U-235	A44	2011	-0.1187	0.247	0.741	U
U-235	A47	2011	0.05201	0.257	0.771	U
U-235	A49	2011	-0.07648	0.227	0.681	U
U-235	A50	2011	0.06955	0.228	0.684	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	A55	2011	0.1932	0.218	0.654	U
U-235	A58	2011	0.03477	0.221	0.663	U
U-235	A59	2011	0.07666	0.24	0.72	U
U-235	A6	2011	0.01434	0.193	0.579	U
U-235	A61	2011	0.1075	0.205	0.615	U
U-235	A66	2011	0.1333	0.196	0.588	U
U-235	A69	2011	0.08206	0.225	0.675	U
U-235	A70	2011	0.3643	0.223	0.669	U
U-235	A72	2011	-0.0497	0.191	0.573	U
U-235	B101	2011	-0.1143	0.196	0.588	U
U-235	B102	2011	0.03978	0.199	0.597	U
U-235	B103	2011	0.1057	0.209	0.627	U
U-235	B104	2011	0.01241	0.211	0.633	U
U-235	B106	2011	0.1003	0.197	0.591	U
U-235	B14	2011	0.006411	0.219	0.657	U
U-235	B15	2011	0.01087	0.227	0.681	U
U-235	B17	2011	-1.142	0.141	0.423	U
U-235	B25	2011	0.049	0.276	0.828	U
U-235	B28	2011	0.2206	0.215	0.645	U
U-235	B29	2011	0.122	0.204	0.612	U
U-235	B3	2011	-0.06869	0.228	0.684	U
U-235	B39	2011	-0.03755	0.151	0.453	U
U-235	B4	2011	-0.0266	0.199	0.597	U
U-235	B40	2011	-0.7093	0.132	0.396	U
U-235	B47	2011	-0.123	0.321	0.963	U
U-235	B48	2011	-0.1567	0.274	0.822	U
U-235	B50	2011	0.03868	0.22	0.66	U
U-235	B52	2011	0.01064	0.21	0.63	U
U-235	B61	2011	0.0907	0.211	0.633	U
U-235	B62	2011	-0.1407	0.181	0.543	U
U-235	B71	2011	0.01922	0.273	0.819	U
U-235	B73	2011	-0.02559	0.208	0.624	U
U-235	B80	2011	-0.04135	0.457	1.371	U
U-235	B83	2011	0.05741	0.205	0.615	U
U-235	B84	2011	0.1127	0.193	0.579	U
U-235	B89	2011	0.2615	0.228	0.684	U
U-235	B90	2011	0.02923	0.223	0.669	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	B91	2011	-0.04882	0.237	0.711	U
U-235	B92	2011	0.1684	0.243	0.729	U
U-235	B93	2011	0.03608	0.207	0.621	U
U-235	B94	2011	0.07089	0.211	0.633	U
U-235	B99	2011	-0.09455	0.176	0.528	U
U-235	C15	2011	0.003122	0.197	0.591	U
U-235	C25	2011	-0.07595	0.17	0.51	U
U-235	C37	2011	-0.1713	0.19	0.57	U
U-235	C46	2011	0.05409	0.2	0.6	U
U-235	C48	2011	0.0219	0.182	0.546	U
U-235	C56	2011	0.123	0.203	0.609	U
U-235	C57	2011	-0.1136	0.194	0.582	U
U-235	D58	2011	0.1753	0.209	0.627	U
U-235	D68	2011	0.2098	0.215	0.645	U
U-235	D89	2011	-0.1083	0.201	0.603	U
U-235	D91	2011	0.03054	0.196	0.588	U
U-235	A15	2012	-0.2335	0.181	0.543	U
U-235	A38	2012	0.08405	0.205	0.615	U
U-235	A44	2012	0.07117	0.212	0.636	U
U-235	A47	2012	0.1659	0.202	0.606	U
U-235	A59	2012	0.1268	0.18	0.54	U
U-235	A6	2012	0.02305	0.197	0.591	U
U-235	A69	2012	0.09558	0.186	0.558	U
U-235	A70	2012	-0.07803	0.157	0.471	U
U-235	A72	2012	0.05924	0.172	0.516	U
U-235	B14	2012	0.1552	0.182	0.546	U
U-235	B48	2012	-0.1167	0.227	0.681	U
U-235	B83	2012	0.1371	0.172	0.516	U
U-235	C46	2012	-0.1986	0.185	0.555	U
U-235	C57	2012	0.01066	0.179	0.537	U
U-235	2 INCH AIR - INTEC	2013	0.1353	0.0907	0.272	U
U-235	A47	2013	0.3093	0.0923	0.277	—
U-235	A49	2013	0.07798	0.118	0.354	U
U-235	A59	2013	0.1169	0.0787	0.236	U
U-235	A71	2013	0.226	0.097	0.291	U
U-235	A72	2013	0.04812	0.111	0.333	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	2 INCH AIR - CPP	2014	0.1003	0.21	0.63	U
U-235	2 INCH AIR - INTEC	2014	-0.0003003	0.157	0.471	U
U-235	A38	2014	0.1309	0.168	0.504	U
U-235	A47	2014	0.04593	0.201	0.603	U
U-235	A58	2014	-0.1163	0.16	0.48	U
U-235	A59	2014	0.05051	0.175	0.525	U
U-235	B15	2014	-0.04836	0.281	0.843	U
U-235	B28	2014	0.1246	0.18	0.54	U
U-235	B29	2014	-0.2247	0.175	0.525	U
U-235	B3	2014	0.007732	0.142	0.426	U
U-235	B3	2014	-0.1627	0.312	0.936	U
U-235	B4	2014	0.007249	0.125	0.375	U
U-235	B40	2014	0.06826	0.127	0.381	U
U-235	B50	2014	-0.1199	0.191	0.573	U
U-235	B52	2014	0.06692	0.185	0.555	U
U-235	B52	2014	-0.1665	0.23	0.69	U
U-238	A-17	1982	1.17	0.08	0.24	—
U-238	A-48	1982	1.07	0.03	0.09	—
U-238	B-27	1982	1.12	0.03	0.09	—
U-238	B-48	1982	1.12	0.03	0.09	—
U-238	D-57	1982	1.06	0.03	0.09	—
U-238	A15	2006	11.2	1.35	4.05	—
U-238	A17	2006	14.85	1.705	5.115	—
U-238	A27	2006	17.18	2.515	7.545	—
U-238	A28	2006	6.302	1.685	5.055	—
U-238	A38	2006	87.87	14.55	43.65	—
U-238	A39	2006	6.107	1.195	3.585	—
U-238	A4	2006	12.46	1.89	5.67	—
U-238	A44	2006	10.58	2.59	7.77	—
U-238	A45	2006	26.42	2.92	8.76	—
U-238	A47	2006	7.643	1.125	3.375	—
U-238	A48	2006	38.71	3.505	10.515	—
U-238	A49	2006	3.597	1.12	3.36	—
U-238	A50	2006	1.685	0.55	1.65	—
U-238	A55	2006	4.132	0.885	2.655	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	A56	2006	6.358	1.805	5.415	—
U-238	A58	2006	28.32	3.755	11.265	—
U-238	A59	2006	30.02	4.245	12.735	—
U-238	A6	2006	29.2	4.57	13.71	—
U-238	A60	2006	11.13	2.97	8.91	—
U-238	A61	2006	4.273	1.13	3.39	—
U-238	A66	2006	15.72	2.855	8.565	—
U-238	A67	2006	5.861	1.35	4.05	—
U-238	A68	2006	38.7	11.25	33.75	—
U-238	A69	2006	43.49	5.65	16.95	—
U-238	A70	2006	5.237	1.24	3.72	—
U-238	A71	2006	4.416	1.11	3.33	—
U-238	A72	2006	19.04	2.58	7.74	—
U-238	B100	2006	12.48	2.665	7.995	—
U-238	B101	2006	5.334	1.56	4.68	—
U-238	B102	2006	12.93	1.455	4.365	—
U-238	B103	2006	3.208	0.83	2.49	—
U-238	B104	2006	31.24	3.65	10.95	—
U-238	B105	2006	30.38	3.815	11.445	—
U-238	B106	2006	9.476	2.14	6.42	—
U-238	B14	2006	10.92	2.065	6.195	—
U-238	B15	2006	3.995	1.38	4.14	U
U-238	B17	2006	7.839	1.615	4.845	—
U-238	B25	2006	6.298	1.565	4.695	—
U-238	B28	2006	2.588	1.02	3.06	U
U-238	B29	2006	4.933	1.265	3.795	—
U-238	B3	2006	3.777	1.065	3.195	—
U-238	B36	2006	19.95	3.525	10.575	—
U-238	B37	2006	3.374	1.11	3.33	—
U-238	B39	2006	32.01	3.25	9.75	—
U-238	B4	2006	4.82	1.065	3.195	—
U-238	B40	2006	4.319	1.27	3.81	—
U-238	B47	2006	3.95	0.89	2.67	—
U-238	B48	2006	5.035	1.15	3.45	—
U-238	B50	2006	5.029	1.26	3.78	—
U-238	B51	2006	38.58	5.1	15.3	—
U-238	B52	2006	4.2	1.27	3.81	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	B59	2006	20.11	2.74	8.22	—
U-238	B60	2006	13.78	3.065	9.195	—
U-238	B61	2006	3.691	1.125	3.375	—
U-238	B62	2006	22.16	3.06	9.18	—
U-238	B68	2006	16.45	2.52	7.56	—
U-238	B71	2006	5.148	1.515	4.545	—
U-238	B73	2006	4.596	1.32	3.96	—
U-238	B80	2006	6.485	1.525	4.575	—
U-238	B81	2006	21.19	2.81	8.43	—
U-238	B83	2006	1.43	0.75	2.25	U
U-238	B84	2006	8.415	2.225	6.675	—
U-238	B88	2006	7.901	1.355	4.065	—
U-238	B89	2006	6.846	1.41	4.23	—
U-238	B90	2006	3.056	0.895	2.685	—
U-238	B91	2006	4.118	1.04	3.12	—
U-238	B92	2006	15.15	4.885	14.655	—
U-238	B93	2006	10.28	2.295	6.885	—
U-238	B94	2006	21.84	2.955	8.865	—
U-238	B95	2006	17.62	2.81	8.43	—
U-238	B99	2006	18.65	3.795	11.385	—
U-238	C14	2006	17.79	2.61	7.83	—
U-238	C25	2006	6.052	1.075	3.225	—
U-238	C36	2006	2.649	0.955	2.865	U
U-238	C37	2006	3.558	2.34	7.02	U
U-238	C46	2006	7.97	1.65	4.95	—
U-238	C47	2006	6.358	1.68	5.04	—
U-238	C48	2006	53.98	8.25	24.75	—
U-238	C56	2006	12.72	1.8	5.4	—
U-238	C57	2006	8.384	1.465	4.395	—
U-238	D57	2006	10.4	1.385	4.155	—
U-238	D58	2006	7	1.885	5.655	—
U-238	D68	2006	6.265	1.465	4.395	—
U-238	D69	2006	5.261	17.45	52.35	U
U-238	D79	2006	2.224	0.835	2.505	U
U-238	D80	2006	2.82	24.6	73.8	U
U-238	D89	2006	3.012	1.315	3.945	U
U-238	D90	2006	6.38	24.2	72.6	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	D91	2006	25.1	13.5	40.5	U
U-238	A15	2007	3.887	0.565	1.695	—
U-238	A16	2007	3.09	0.635	1.905	—
U-238	A17	2007	2.434	0.494	1.482	—
U-238	A27	2007	4.882	1.36	4.08	—
U-238	A28	2007	2.94	1.48	4.44	U
U-238	A37	2007	5.6	0.68	2.04	—
U-238	A38	2007	5.457	0.66	1.98	—
U-238	A4	2007	2.771	0.3915	1.1745	—
U-238	A44	2007	4.353	0.54	1.62	—
U-238	A45	2007	1.9	0.53	1.59	—
U-238	A47	2007	3.026	0.565	1.695	—
U-238	A48	2007	2.119	0.56	1.68	—
U-238	A49	2007	1.806	0.49	1.47	—
U-238	A5	2007	2.967	0.52	1.56	—
U-238	A50	2007	10.12	1.795	5.385	—
U-238	A55	2007	6.125	1.25	3.75	—
U-238	A56	2007	196.5	6.81	20.43	—
U-238	A58	2007	1.842	0.53	1.59	—
U-238	A59	2007	1.93	0.413	1.239	—
U-238	A6	2007	3.503	0.73	2.19	—
U-238	A60	2007	1.491	0.505	1.515	U
U-238	A61	2007	5.344	1.195	3.585	—
U-238	A66	2007	27.79	5.88	17.64	—
U-238	A67	2007	4.119	0.51	1.53	—
U-238	A68	2007	0	3.22	9.66	U
U-238	A69	2007	1.2	0.254	0.762	—
U-238	A70	2007	3.607	0.555	1.665	—
U-238	A71	2007	1.495	0.4465	1.3395	—
U-238	A72	2007	5.69	1.19	3.57	—
U-238	B100	2007	0	2.97	8.91	U
U-238	B101	2007	4.368	0.625	1.875	—
U-238	B102	2007	1.359	0.371	1.113	—
U-238	B103	2007	4.958	1.135	3.405	—
U-238	B104	2007	3.449	0.525	1.575	—
U-238	B105	2007	1.98	0.492	1.476	—
U-238	B106	2007	0	6.78	20.34	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	B14	2007	2.096	0.525	1.575	—
U-238	B15	2007	0.2061	6.52	19.56	U
U-238	B17	2007	2.285	0.429	1.287	—
U-238	B25	2007	3.438	0.635	1.905	—
U-238	B26	2007	6.299	1.015	3.045	—
U-238	B28	2007	2.303	0.464	1.392	—
U-238	B29	2007	3.029	0.74	2.22	—
U-238	B3	2007	1.978	0.479	1.437	—
U-238	B36	2007	0.2472	14.7	44.1	U
U-238	B37	2007	0.06451	7.36	22.08	U
U-238	B39	2007	0	2.98	8.94	U
U-238	B4	2007	6.47	0.915	2.745	—
U-238	B40	2007	4.306	0.575	1.725	—
U-238	B47	2007	4.232	0.815	2.445	—
U-238	B48	2007	2.084	0.755	2.265	U
U-238	B50	2007	3.523	0.595	1.785	—
U-238	B51	2007	2.084	0.4645	1.3935	—
U-238	B52	2007	2.261	0.4725	1.4175	—
U-238	B59	2007	7.509	1.2	3.6	—
U-238	B60	2007	5.834	0.72	2.16	—
U-238	B61	2007	2.245	0.615	1.845	—
U-238	B62	2007	2.426	0.4475	1.3425	—
U-238	B69	2007	26.07	4.4	13.2	—
U-238	B71	2007	7.433	2.305	6.915	—
U-238	B73	2007	2.963	0.4875	1.4625	—
U-238	B80	2007	4.922	1.26	3.78	—
U-238	B81	2007	5.663	1.175	3.525	—
U-238	B82	2007	7.286	2.215	6.645	—
U-238	B83	2007	1.688	0.468	1.404	—
U-238	B84	2007	0	3.87	11.61	U
U-238	B88	2007	2.322	0.54	1.62	—
U-238	B89	2007	3.811	0.555	1.665	—
U-238	B90	2007	4.314	0.56	1.68	—
U-238	B91	2007	0.2158	7.11	21.33	U
U-238	B92	2007	10.24	1.735	5.205	—
U-238	B93	2007	2.346	0.423	1.269	—
U-238	B94	2007	3.775	0.4535	1.3605	—

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	B95	2007	1.864	0.3895	1.1685	—
U-238	B99	2007	3.528	0.464	1.392	—
U-238	C14	2007	1.728	0.4575	1.3725	—
U-238	C15	2007	1.776	0.545	1.635	—
U-238	C25	2007	0	5.34	16.02	U
U-238	C36	2007	3.914	0.99	2.97	—
U-238	C37	2007	3.419	0.54	1.62	—
U-238	C46	2007	5.097	1.165	3.495	—
U-238	C47	2007	1.938	0.505	1.515	—
U-238	C48	2007	2.229	0.458	1.374	—
U-238	C56	2007	8.541	1.185	3.555	—
U-238	C57	2007	6.741	0.94	2.82	—
U-238	D57	2007	256.3	6.4	19.2	—
U-238	D58	2007	3.214	0.471	1.413	—
U-238	D68	2007	4.749	1.15	3.45	—
U-238	D69	2007	4.032	0.565	1.695	—
U-238	D79	2007	8.366	1.29	3.87	—
U-238	D80	2007	3.58	0.4205	1.2615	—
U-238	D89	2007	0.7828	0.59	1.77	U
U-238	D90	2007	5.648	1.175	3.525	—
U-238	D91	2007	1.17	0.4295	1.2885	U
U-238	B104	2008	0.3476	0.352	1.056	U
U-238	A56	2009	159.2	5.9	17.7	—
U-238	A58	2009	227.9	6.4	19.2	—
U-238	B28	2009	5.966	2.92	8.76	U
U-238	B52	2009	168.7	5.7	17.1	—
U-238	C36	2009	4.508	3.985	11.955	U
U-238	D89	2009	201.9	5.95	17.85	—
U-238	A27	2010	3.48	3.28	9.84	U
U-238	A38	2010	72.4	29.9	89.7	U
U-238	A15	2011	-0.06192	0.667	2.001	U
U-238	A16	2011	1.119	0.895	2.685	U
U-238	A17	2011	0.8349	0.847	2.541	U
U-238	A27	2011	2.694	0.818	2.454	—
U-238	A28	2011	0.7497	0.9	2.7	U
U-238	A38	2011	1.192	0.76	2.28	U
U-238	A39	2011	1.049	0.765	2.295	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	A4	2011	1.077	0.901	2.703	U
U-238	A44	2011	0.9637	0.704	2.112	U
U-238	A47	2011	1.624	0.969	2.907	U
U-238	A49	2011	1.731	0.973	2.919	U
U-238	A50	2011	1.122	1.03	3.09	U
U-238	A55	2011	1.391	0.858	2.574	U
U-238	A58	2011	3.608	0.973	2.919	—
U-238	A59	2011	0.06416	0.601	1.803	U
U-238	A6	2011	1.235	1.02	3.06	U
U-238	A61	2011	1.536	0.679	2.037	U
U-238	A66	2011	2.165	1.02	3.06	U
U-238	A69	2011	0.06245	1.08	3.24	U
U-238	A70	2011	-0.15	0.744	2.232	U
U-238	A72	2011	0.9638	0.704	2.112	U
U-238	B101	2011	0	0.165	0.495	U
U-238	B102	2011	0.02632	0.837	2.511	U
U-238	B103	2011	1.652	0.993	2.979	U
U-238	B104	2011	1.051	0.74	2.22	U
U-238	B106	2011	-0.4582	0.741	2.223	U
U-238	B14	2011	2.242	0.989	2.967	U
U-238	B15	2011	1.683	0.735	2.205	U
U-238	B17	2011	-0.1816	0.325	0.975	U
U-238	B25	2011	2.469	1.03	3.09	U
U-238	B28	2011	0.9426	0.764	2.292	U
U-238	B29	2011	0.7047	0.923	2.769	U
U-238	B3	2011	1.237	0.757	2.271	U
U-238	B39	2011	0.07115	0.313	0.939	U
U-238	B4	2011	1.208	0.89	2.67	U
U-238	B40	2011	0.07269	0.309	0.927	U
U-238	B47	2011	1.131	1.07	3.21	U
U-238	B48	2011	-1.442	0.721	2.163	U
U-238	B50	2011	1.169	0.754	2.262	U
U-238	B52	2011	1.937	0.774	2.322	U
U-238	B61	2011	0.5297	0.996	2.988	U
U-238	B62	2011	1.644	0.856	2.568	U
U-238	B71	2011	3.152	1.24	3.72	U
U-238	B73	2011	0.8414	1.04	3.12	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	B80	2011	1.174	0.918	2.754	U
U-238	B83	2011	0.6996	0.848	2.544	U
U-238	B84	2011	1.652	1.05	3.15	U
U-238	B89	2011	1.008	0.987	2.961	U
U-238	B90	2011	0.1244	0.94	2.82	U
U-238	B91	2011	4.457	1.26	3.78	—
U-238	B92	2011	1.306	0.705	2.115	U
U-238	B93	2011	1.65	0.679	2.037	U
U-238	B94	2011	1.24	0.716	2.148	U
U-238	B99	2011	0.4358	0.836	2.508	U
U-238	C15	2011	1.464	0.896	2.688	U
U-238	C25	2011	1.209	0.68	2.04	U
U-238	C37	2011	1.385	0.861	2.583	U
U-238	C46	2011	0.5959	0.849	2.547	U
U-238	C48	2011	2.807	0.865	2.595	—
U-238	C56	2011	2.205	1	3	U
U-238	C57	2011	-0.1158	0.803	2.409	U
U-238	D58	2011	1.608	0.728	2.184	U
U-238	D68	2011	0.8694	0.66	1.98	U
U-238	D89	2011	1.87	0.898	2.694	U
U-238	D91	2011	1.771	0.985	2.955	U
U-238	A15	2012	0.6126	0.77	2.31	U
U-238	A38	2012	1.178	0.894	2.682	U
U-238	A44	2012	1.052	0.831	2.493	U
U-238	A47	2012	1.085	0.791	2.373	U
U-238	A59	2012	5.564	1.44	4.32	—
U-238	A6	2012	1.027	0.954	2.862	U
U-238	A69	2012	1.349	0.927	2.781	U
U-238	A70	2012	4.204	1.08	3.24	—
U-238	A72	2012	-0.003106	0.925	2.775	U
U-238	B14	2012	0.9848	0.844	2.532	U
U-238	B48	2012	1.024	0.847	2.541	U
U-238	B83	2012	1.701	0.743	2.229	U
U-238	C46	2012	1.05	0.896	2.688	U
U-238	C57	2012	1.666	0.84	2.52	U
U-238	D68	2012	1.423	62.7	188.1	U

Table C-3. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	2 INCH AIR - INTEC	2013	16.27	2.37	7.11	—
U-238	A47	2013	18.51	2.58	7.74	—
U-238	A49	2013	0.6332	0.393	1.18	U
U-238	A59	2013	8.914	2.64	7.92	—
U-238	A71	2013	1.496	1.463	4.39	U
U-238	A72	2013	0	0.079	0.237	U
U-238	2 INCH AIR - CPP	2014	1.469	0.751	2.253	U
U-238	2 INCH AIR - INTEC	2014	1.481	0.791	2.373	U
U-238	A38	2014	1.146	0.872	2.616	U
U-238	A47	2014	0.0555	0.795	2.385	U
U-238	A58	2014	1.242	0.846	2.538	U
U-238	A59	2014	0.799	0.761	2.283	U
U-238	B15	2014	0.4685	1.51	4.53	U
U-238	B28	2014	0.8406	0.722	2.166	U
U-238	B29	2014	0.8999	0.726	2.178	U
U-238	B3	2014	2.22	0.588	1.764	—
U-238	B3	2014	1.849	1.28	3.84	U
U-238	B4	2014	1.298	0.507	1.521	U
U-238	B40	2014	0.1386	0.441	1.323	U
U-238	B50	2014	0.6392	0.703	2.109	U
U-238	B52	2014	1.79	1.02	3.06	U
U-238	B52	2014	0.9798	0.898	2.694	U

Table C-4. Radionuclides concentrations in surface soils associated with MFC.

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	EBRII-11	1978	0.005	0.002	0.006	U
Am-241	EBRII-15	1978	0.007	0.002	0.006	—
Am-241	EBRII-17	1978	0.0038	0.0014	0.0042	U
Am-241	EBRII-3	1978	0.006	0.002	0.006	—
Am-241	EBRII-5	1978	0.008	0.002	0.006	—
Am-241	EBRII-7	1978	0.003	0.002	0.006	U
Am-241	EBRII-8	1978	0.008	0.002	0.006	—
Am-241	TREAT-1	1978	0.003	0.002	0.006	U
Am-241	TREAT-3	1978	0.003	0.002	0.006	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	EBRII-10	2006	0.1576	0.01495	0.04485	—
Co-60	EBRII-11	2006	0.05625	0.00975	0.02925	—
Co-60	EBRII-12	2006	0.06537	0.0097	0.0291	—
Co-60	EBRII-13	2006	0.1235	0.01875	0.05625	—
Co-60	EBRII-15	2006	0.0942	0.0166	0.0498	—
Co-60	EBRII-16	2006	0.03889	0.01015	0.03045	—
Co-60	EBRII-17	2006	0.05783	0.01	0.03	—
Co-60	EBRII-3	2006	0.04879	0.00975	0.02925	—
Co-60	EBRII-4	2006	0.11	0.0165	0.0495	—
Co-60	EBRII-5	2006	0.05757	0.01145	0.03435	—
Co-60	EBRII-6	2006	0.1668	0.0226	0.0678	—
Co-60	EBRII-9	2006	0.07287	0.0157	0.0471	—
Co-60	TRT-4	2006	0.1478	0.0238	0.0714	—
Co-60	EBRII-1	2011	0.0001081	0.00323	0.00969	U
Co-60	EBRII-10	2011	-0.00458	0.00498	0.01494	U
Co-60	EBRII-11	2011	0.000353	0.00343	0.01029	U
Co-60	EBRII-12	2011	0.001386	0.00362	0.01086	U
Co-60	EBRII-13	2011	0.003404	0.00395	0.01185	U
Co-60	EBRII-15	2011	0.004332	0.00255	0.00765	U
Co-60	EBRII-16	2011	0.001018	0.00273	0.00819	U
Co-60	EBRII-17	2011	-0.002603	0.00495	0.01485	U
Co-60	EBRII-2	2011	0.002239	0.00384	0.01152	U
Co-60	EBRII-3	2011	-0.00319	0.00498	0.01494	U
Co-60	EBRII-4	2011	0.003925	0.00358	0.01074	U
Co-60	EBRII-6	2011	-0.001269	0.00302	0.00906	U
Co-60	TRT-1	2011	0.001164	0.00426	0.01278	U
Co-60	TRT-2	2011	0.171	0.00914	0.02742	—
Co-60	TRT-3	2011	0.006177	0.00431	0.01293	U
Co-60	TRT-4	2011	0.002969	0.00381	0.01143	U
Co-60	EBRII-10	2012	0.0004873	0.00461	0.01383	U
Co-60	EBRII-11	2012	0.2029	0.00996	0.02988	—
Co-60	EBRII-12	2012	-0.001485	0.00402	0.01206	U
Co-60	EBRII-16	2012	-0.0002159	0.00373	0.01119	U
Co-60	EBRII-2	2012	0.003298	0.0042	0.0126	U
Co-60	EBRII-4	2012	0.005677	0.00431	0.01293	U
Co-60	TRT-1	2012	-0.003682	0.00417	0.01251	U
Co-60	TRT-3	2012	-0.001169	0.00476	0.01428	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	EBRII-10	2013	0.002182	0.00203	0.00609	U
Co-60	EBRII-11	2013	-0.0008988	0.00298	0.00895	U
Co-60	EBRII-13	2013	-0.0005521	0.00291	0.00872	U
Co-60	TRT-1	2013	-0.00001731	0.000313	0.000939	U
Co-60	2 INCH AIR - MFC	2014	0.001358	0.00133	0.00399	U
Co-60	EBRII-10	2014	0.0004599	0.001	0.00423	U
Co-60	EBRII-11	2014	0.00004946	0.00104	0.00312	U
Co-60	EBRII-2	2014	-0.000839	0.00146	0.00438	U
Co-60	EBRII-4	2014	0.0001278	0.001	0.003	U
Co-60	EBRII-6	2014	0.0008236	0.00118	0.00354	U
Co-60	TRT-1	2014	0.0009356	0.00104	0.00312	U
Co-60	TRT-2	2014	0.04528	0.00673	0.02019	—
Co-60	TRT-3	2014	-0.0002747	0.00138	0.00414	U
Co-60	TRT-4	2014	-0.0008663	0.0014	0.0042	U
Cs-134	EBRII-1	2007	0.08104	0.013	0.039	—
Cs-134	EBRII-10	2007	0.05185	0.0116	0.0348	—
Cs-134	EBRII-11	2007	0.05354	0.00978	0.02934	—
Cs-134	EBRII-12	2007	0.05822	0.0101	0.0303	—
Cs-134	EBRII-13	2007	0.06	0.0102	0.0306	—
Cs-134	EBRII-15	2007	0.1154	0.0158	0.0474	—
Cs-134	EBRII-16	2007	0.04471	0.00718	0.02154	—
Cs-134	EBRII-17	2007	0.07171	0.0115	0.0345	—
Cs-134	EBRII-2	2007	0.02023	0.0124	0.0372	U
Cs-134	EBRII-3	2007	-0.002703	0.00884	0.02652	U
Cs-134	EBRII-4	2007	0.03837	0.0103	0.0309	—
Cs-134	EBRII-5	2007	0.09657	0.0197	0.0591	—
Cs-134	EBRII-6	2007	0.06696	0.0161	0.0483	—
Cs-134	EBRII-9	2007	0.1089	0.0186	0.0558	—
Cs-134	TRT-1	2007	0.002874	0.00532	0.01596	U
Cs-134	TRT-2	2007	0.05962	0.00949	0.02847	—
Cs-134	TRT-3	2007	0.08241	0.0133	0.0399	—
Cs-134	TRT-4	2007	0.01644	0.00438	0.01314	—
Cs-134	EBRII-10	2008	0.04136	0.0066	0.0198	—
Cs-134	EBRII-11	2008	0.04345	0.00675	0.02025	—
Cs-134	EBRII-12	2008	0.01091	0.00347	0.01041	—
Cs-134	EBRII-13	2008	0.04279	0.0063	0.0189	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	EBRII-15	2008	0.01154	0.00374	0.01122	—
Cs-134	EBRII-16	2008	0.02039	0.0066	0.0198	—
Cs-134	EBRII-17	2008	0.03779	0.004985	0.014955	—
Cs-134	EBRII-2	2008	0.03963	0.0062	0.0186	—
Cs-134	EBRII-3	2008	0.03042	0.00373	0.01119	—
Cs-134	EBRII-4	2008	0.05204	0.0075	0.0225	—
Cs-134	EBRII-6	2008	0.007699	0.00415	0.01245	U
Cs-134	TRT-1	2008	0.003791	0.003015	0.009045	U
Cs-134	TRT-2	2008	0.02446	0.00855	0.02565	U
Cs-134	TRT-3	2008	0.02797	0.00492	0.01476	—
Cs-134	TRT-4	2008	0.005213	0.00318	0.00954	U
Cs-134	EBRII-1	2009	0.03004	0.0115	0.0345	U
Cs-134	EBRII-10	2009	0.02502	0.0106	0.0318	U
Cs-134	EBRII-12	2009	0.01979	0.00695	0.02085	U
Cs-134	EBRII-5	2009	0.02546	0.0099	0.0297	U
Cs-134	EBRII-9	2009	0.01068	0.00795	0.02385	U
Cs-134	EBRII-10	2010	0.08851	0.0117	0.0351	—
Cs-134	EBRII-11	2010	0.07067	0.00894	0.02682	—
Cs-134	EBRII-15	2010	0.1311	0.016	0.048	—
Cs-134	EBRII-16	2010	0.02532	0.00316	0.00948	—
Cs-134	EBRII-17	2010	0.01602	0.00468	0.01404	—
Cs-134	EBRII-6	2010	0.07914	0.0103	0.0309	—
Cs-134	EBRII-9	2010	0.05522	0.00963	0.02889	—
Cs-134	TRT-1	2010	0.04768	0.00758	0.02274	—
Cs-134	TRT-2	2010	0.04346	0.00607	0.01821	—
Cs-134	TRT-3	2010	0.06777	0.0105	0.0315	—
Cs-134	TRT-4	2010	0.007767	0.00351	0.01053	U
Cs-134	EBRII-1	2011	0.006905	0.0126	0.0378	U
Cs-134	EBRII-10	2011	-0.015	0.0238	0.0714	U
Cs-134	EBRII-11	2011	-0.001254	0.0209	0.0627	U
Cs-134	EBRII-12	2011	-0.005638	0.021	0.0642	U
Cs-134	EBRII-13	2011	0.007308	0.022	0.066	U
Cs-134	EBRII-15	2011	0.01363	0.0178	0.0534	U
Cs-134	EBRII-16	2011	-0.002191	0.0189	0.0567	U
Cs-134	EBRII-17	2011	0.006725	0.0235	0.0705	U
Cs-134	EBRII-2	2011	-0.002124	0.022	0.066	U
Cs-134	EBRII-3	2011	0.0001688	0.0238	0.0714	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	EBRII-4	2011	-0.02237	0.0208	0.0624	U
Cs-134	EBRII-6	2011	0.001182	0.0101	0.0303	U
Cs-134	TRT-1	2011	-0.07424	0.00944	0.02832	U
Cs-134	TRT-2	2011	0.01309	0.0239	0.0717	U
Cs-134	TRT-3	2011	-0.004559	0.024	0.072	U
Cs-134	TRT-4	2011	-0.07314	0.00883	0.02649	U
Cs-134	EBRII-10	2012	0.02174	0.00769	0.02307	U
Cs-134	EBRII-11	2012	0.05849	0.0085	0.0255	—
Cs-134	EBRII-12	2012	0.0584	0.00771	0.02313	—
Cs-134	EBRII-16	2012	0.05815	0.00763	0.02289	—
Cs-134	EBRII-2	2012	0.05079	0.00866	0.02598	—
Cs-134	EBRII-4	2012	0.05636	0.008	0.024	—
Cs-134	TRT-1	2012	0.0726	0.00927	0.02781	—
Cs-134	TRT-3	2012	0.06514	0.00914	0.02742	—
Cs-134	EBRII-10	2013	0.04883	0.00913	0.0274	—
Cs-134	EBRII-11	2013	0.05736	0.0136	0.0408	—
Cs-134	EBRII-13	2013	0.08978	0.0135	0.0406	—
Cs-134	TRT-1	2013	-0.003819	0.0109	0.0328	U
Cs-134	2 INCH AIR - MFC	2014	0.02482	0.0133	0.0399	U
Cs-134	EBRII-10	2014	0.04194	0.0147	0.0441	U
Cs-134	EBRII-11	2014	0.03639	0.0107	0.0321	—
Cs-134	EBRII-2	2014	0.06079	0.0109	0.0327	—
Cs-134	EBRII-4	2014	0.04228	0.0102	0.0306	—
Cs-134	EBRII-6	2014	0.03755	0.0124	0.0372	—
Cs-134	TRT-1	2014	0.04104	0.0081	0.0243	—
Cs-134	TRT-2	2014	0.0462	0.0133	0.0399	—
Cs-134	TRT-3	2014	0.04441	0.0132	0.0396	—
Cs-134	TRT-4	2014	0.03858	0.0141	0.0423	U
Cs-137	EBRII-1	1978	1.14	0.085	0.255	—
Cs-137	EBRII-10	1978	1.31	0.089	0.267	—
Cs-137	EBRII-11	1978	1.05	0.083	0.249	—
Cs-137	EBRII-12	1978	0.601	0.057	0.171	—
Cs-137	EBRII-13	1978	0.906	0.066	0.198	—
Cs-137	EBRII-14	1978	0.872	0.072	0.216	—
Cs-137	EBRII-15	1978	1.18	0.088	0.264	—
Cs-137	EBRII-16	1978	1.19	0.075	0.225	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	EBRII-17	1978	0.671	0.0660	0.198	—
Cs-137	EBRII-2	1978	0.85	0.074	0.222	—
Cs-137	EBRII-3	1978	0.921	0.072	0.216	—
Cs-137	EBRII-4	1978	0.944	0.080	0.24	—
Cs-137	EBRII-5	1978	0.956	0.084	0.252	—
Cs-137	EBRII-6	1978	0.828	0.065	0.195	—
Cs-137	EBRII-7	1978	1.12	0.089	0.267	—
Cs-137	EBRII-8	1978	1.21	0.085	0.255	—
Cs-137	EBRII-9	1978	0.72	0.07	0.21	—
Cs-137	TREAT-1	1978	0.737	0.073	0.219	—
Cs-137	TREAT-2	1978	0.854	0.074	0.222	—
Cs-137	TREAT-3	1978	0.732	0.063	0.189	—
Cs-137	TREAT-4	1978	0.772	0.076	0.228	—
Cs-137	EBRII-10	1986	0.78	0.08	0.24	—
Cs-137	EBRII-11	1986	1.26	0.1	0.3	—
Cs-137	EBRII-12	1986	0.57	0.07	0.21	—
Cs-137	EBRII-13	1986	0.55	0.07	0.21	—
Cs-137	EBRII-14	1986	1.13	0.09	0.27	—
Cs-137	EBRII-15	1986	1.25	0.1	0.3	—
Cs-137	EBRII-16	1986	-0.02	0.05	0.15	U
Cs-137	EBRII-17	1986	1.17	0.09	0.27	—
Cs-137	EBRII-2	1986	0.81	0.08	0.24	—
Cs-137	EBRII-3	1986	0.74	0.08	0.24	—
Cs-137	EBRII-4	1986	0.15	0.05	0.15	—
Cs-137	EBRII-5	1986	0.67	0.0700	0.21	—
Cs-137	EBRII-6	1986	1.23	0.09	0.27	—
Cs-137	EBRII-9	1986	0.62	0.07	0.21	—
Cs-137	TREAT-1	1986	0.97	0.08	0.24	—
Cs-137	TREAT-2	1986	0.21	0.05	0.15	—
Cs-137	TREAT-3	1986	0.71	0.0700	0.21	—
Cs-137	TREAT-4	1986	0.52	0.07	0.21	—
Cs-137	ANL-10	1993	0.48	0.06	0.18	—
Cs-137	ANL-11	1993	1.99	0.11	0.33	—
Cs-137	ANL-12	1993	-0.04	0.04	0.12	U
Cs-137	ANL-13	1993	0.62	0.06	0.18	—
Cs-137	ANL-14	1993	0.73	0.06	0.18	—
Cs-137	ANL-15	1993	0.66	0.0600	0.18	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	ANL-16	1993	1.64	0.01	0.03	—
Cs-137	ANL-17	1993	0.83	0.07	0.21	—
Cs-137	ANL-2	1993	1.29	0.08	0.24	—
Cs-137	ANL-3	1993	0.68	0.0600	0.18	—
Cs-137	ANL-4	1993	0.34	0.05	0.15	—
Cs-137	ANL-5	1993	0.95	0.07	0.21	—
Cs-137	ANL-6	1993	0.6	0.06	0.18	—
Cs-137	ANL-9	1993	0.55	0.06	0.18	—
Cs-137	TREAT-1	1993	0.38	0.05	0.15	—
Cs-137	TREAT-2	1993	0.09	0.04	0.12	U
Cs-137	TREAT-3	1993	0.49	0.05	0.15	—
Cs-137	TREAT-4	1993	0.41	0.05	0.15	—
Cs-137	EBRII-1	2007	0.2268	0.00892	0.02676	—
Cs-137	EBRII-10	2007	0.215	0.0132	0.0396	—
Cs-137	EBRII-11	2007	0.2238	0.00822	0.02466	—
Cs-137	EBRII-12	2007	0.1615	0.0141	0.0423	—
Cs-137	EBRII-13	2007	0.2122	0.011	0.033	—
Cs-137	EBRII-15	2007	0.2252	0.00835	0.02505	—
Cs-137	EBRII-16	2007	0.1775	0.00611	0.01833	—
Cs-137	EBRII-17	2007	0.1324	0.00538	0.01614	—
Cs-137	EBRII-2	2007	0.1363	0.00845	0.02535	—
Cs-137	EBRII-3	2007	0.1848	0.017	0.051	—
Cs-137	EBRII-4	2007	0.1333	0.0144	0.0432	—
Cs-137	EBRII-5	2007	0.239	0.0116	0.0348	—
Cs-137	EBRII-6	2007	0.2255	0.0083	0.0249	—
Cs-137	EBRII-9	2007	0.1289	0.00766	0.02298	—
Cs-137	TRT-1	2007	0.1197	0.0105	0.0315	—
Cs-137	TRT-2	2007	0.2437	0.00791	0.02373	—
Cs-137	TRT-3	2007	0.2056	0.0143	0.0429	—
Cs-137	TRT-4	2007	0.1577	0.00901	0.02703	—
Cs-137	EBRII-1	2008	0.2014	0.00515	0.01545	—
Cs-137	EBRII-10	2008	0.1926	0.0058	0.0174	—
Cs-137	EBRII-11	2008	0.2647	0.0056	0.0168	—
Cs-137	EBRII-12	2008	0.1411	0.004225	0.012675	—
Cs-137	EBRII-13	2008	0.2148	0.00615	0.01845	—
Cs-137	EBRII-15	2008	0.2112	0.006	0.0165	—
Cs-137	EBRII-16	2008	0.191	0.00635	0.01905	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	EBRII-17	2008	0.1553	0.00464	0.01392	—
Cs-137	EBRII-2	2008	0.1205	0.003515	0.010545	—
Cs-137	EBRII-3	2008	0.1272	0.00414	0.01242	—
Cs-137	EBRII-4	2008	0.1023	0.003295	0.009885	—
Cs-137	EBRII-6	2008	0.2181	0.00705	0.02115	—
Cs-137	EBRII-9	2008	0.1421	0.0056	0.0168	—
Cs-137	TRT-1	2008	0.09886	0.002745	0.008235	—
Cs-137	TRT-2	2008	0.2612	0.0082	0.0246	—
Cs-137	TRT-3	2008	0.1974	0.0076	0.0228	—
Cs-137	TRT-4	2008	0.1349	0.004095	0.012285	—
Cs-137	EBRII-1	2009	0.2814	0.00585	0.01755	—
Cs-137	EBRII-10	2009	0.2547	0.0095	0.0285	—
Cs-137	EBRII-11	2009	0.3112	0.0098	0.0294	—
Cs-137	EBRII-12	2009	0.1878	0.00865	0.02595	—
Cs-137	EBRII-13	2009	0.2443	0.0059	0.0177	—
Cs-137	EBRII-15	2009	0.2716	0.00575	0.01725	—
Cs-137	EBRII-16	2009	0.2215	0.00805	0.02415	—
Cs-137	EBRII-17	2009	0.1905	0.0083	0.0249	—
Cs-137	EBRII-5	2009	0.2751	0.01005	0.03015	—
Cs-137	EBRII-6	2009	0.2571	0.0059	0.0177	—
Cs-137	EBRII-9	2009	0.2137	0.00995	0.02985	—
Cs-137	TRT-1	2009	0.1619	0.0055	0.0165	—
Cs-137	TRT-2	2009	0.4195	0.00705	0.02115	—
Cs-137	TRT-3	2009	0.1975	0.00153	0.00459	—
Cs-137	TRT-4	2009	0.1812	0.00635	0.01905	—
Cs-137	EBRII-10	2010	0.3749	0.0166	0.0498	—
Cs-137	EBRII-11	2010	0.3064	0.00935	0.02805	—
Cs-137	EBRII-15	2010	0.2537	0.00875	0.02625	—
Cs-137	EBRII-16	2010	0.2284	0.00666	0.01998	—
Cs-137	EBRII-17	2010	0.1562	0.0074	0.0222	—
Cs-137	EBRII-6	2010	0.2831	0.00553	0.01659	—
Cs-137	EBRII-9	2010	0.2498	0.011	0.033	—
Cs-137	TRT-1	2010	0.1833	0.0101	0.0303	—
Cs-137	TRT-2	2010	0.3813	0.00872	0.02616	—
Cs-137	TRT-3	2010	0.1407	0.011	0.0315	—
Cs-137	TRT-4	2010	0.2135	0.00784	0.02352	—
Cs-137	EBRII-1	2011	0.54	0.0154	0.0462	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	EBRII-10	2011	0.5708	0.0203	0.0609	—
Cs-137	EBRII-11	2011	0.5376	0.0128	0.0384	—
Cs-137	EBRII-12	2011	0.4818	0.0125	0.0375	—
Cs-137	EBRII-13	2011	0.5337	0.011	0.033	—
Cs-137	EBRII-15	2011	0.6565	0.0133	0.0399	—
Cs-137	EBRII-16	2011	0.5303	0.0132	0.0396	—
Cs-137	EBRII-17	2011	0.4457	0.0153	0.0459	—
Cs-137	EBRII-2	2011	0.3065	0.0122	0.0366	—
Cs-137	EBRII-3	2011	0.4099	0.0144	0.0432	—
Cs-137	EBRII-4	2011	0.1374	0.0103	0.0309	—
Cs-137	EBRII-6	2011	0.5188	0.0157	0.0471	—
Cs-137	TRT-1	2011	0.4226	0.0122	0.0366	—
Cs-137	TRT-2	2011	0.9707	0.0258	0.0774	—
Cs-137	TRT-3	2011	0.2931	0.0125	0.0375	—
Cs-137	TRT-4	2011	0.1712	0.0106	0.0318	—
Cs-137	EBRII-10	2012	0.1389	0.00373	0.01119	—
Cs-137	EBRII-11	2012	0.2248	0.00548	0.01644	—
Cs-137	EBRII-12	2012	0.2016	0.00704	0.02112	—
Cs-137	EBRII-16	2012	0.1457	0.00526	0.01578	—
Cs-137	EBRII-2	2012	0.1393	0.006	0.01938	—
Cs-137	EBRII-4	2012	0.09864	0.00432	0.01296	—
Cs-137	TRT-1	2012	0.142	0.00786	0.02358	—
Cs-137	TRT-3	2012	0.1926	0.00522	0.01566	—
Cs-137	EBRII-10	2013	0.1459	0.00993	0.0298	—
Cs-137	EBRII-11	2013	0.2687	0.0176	0.0528	—
Cs-137	EBRII-13	2013	0.2252	0.0111	0.0332	—
Cs-137	TRT-1	2013	0.05232	0.00383	0.0115	—
Cs-137	2 INCH AIR - MFC	2014	0.05601	0.00411	0.01233	—
Cs-137	EBRII-10	2014	0.1451	0.0108	0.0324	—
Cs-137	EBRII-11	2014	0.233	0.00916	0.02748	—
Cs-137	EBRII-2	2014	0.1299	0.00839	0.02517	—
Cs-137	EBRII-4	2014	0.1154	0.00578	0.01734	—
Cs-137	EBRII-6	2014	0.1806	0.00471	0.01413	—
Cs-137	TRT-1	2014	0.2261	0.0113	0.0339	—
Cs-137	TRT-2	2014	0.4927	0.00771	0.02313	—
Cs-137	TRT-3	2014	0.156	0.00475	0.01425	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	TRT-4	2014	0.1447	0.00915	0.02745	
Eu-152	EBRII-1	2011	-0.01225	0.0241	0.0723	U
Eu-152	EBRII-10	2011	0.008298	0.0304	0.0912	U
Eu-152	EBRII-11	2011	0.01887	0.0255	0.0765	U
Eu-152	EBRII-12	2011	0.01672	0.0245	0.0735	U
Eu-152	EBRII-13	2011	0.02235	0.0257	0.0771	U
Eu-152	EBRII-15	2011	0.002671	0.0235	0.0705	U
Eu-152	EBRII-16	2011	0.008703	0.0243	0.0729	U
Eu-152	EBRII-17	2011	0.04236	0.0299	0.0897	U
Eu-152	EBRII-2	2011	0.01011	0.0257	0.0771	U
Eu-152	EBRII-3	2011	0.02089	0.0276	0.0828	U
Eu-152	EBRII-4	2011	0.04107	0.0245	0.0735	U
Eu-152	EBRII-6	2011	-0.0115	0.0273	0.0819	U
Eu-152	TRT-1	2011	0.0106	0.0254	0.0762	U
Eu-152	TRT-2	2011	0.07093	0.0407	0.1221	U
Eu-152	TRT-3	2011	-0.000007952	0.0379	0.1137	U
Eu-152	TRT-4	2011	0.02157	0.0453	0.1359	U
Eu-152	EBRII-10	2012	0.01293	0.0263	0.0789	U
Eu-152	EBRII-11	2012	0.04599	0.0221	0.0663	U
Eu-152	EBRII-12	2012	0.01712	0.0224	0.0672	U
Eu-152	EBRII-16	2012	0.01687	0.0223	0.0669	U
Eu-152	EBRII-2	2012	0.01452	0.0254	0.0762	U
Eu-152	EBRII-4	2012	0.01045	0.022	0.066	U
Eu-152	TRT-1	2012	0.02634	0.026	0.078	U
Eu-152	TRT-3	2012	0.01165	0.0266	0.0798	U
Eu-152	EBRII-10	2013	0.2761	0.036	0.108	—
Eu-152	EBRII-11	2013	0.1451	0.0314	0.0941	—
Eu-152	EBRII-13	2013	0.1446	0.0329	0.0987	—
Eu-152	TRT-1	2013	0.005333	0.0150	0.0449	U
Eu-152	2 INCH AIR - MFC	2014	-0.0235	0.0308	0.0924	U
Eu-152	EBRII-10	2014	-0.01835	0.0264	0.0792	U
Eu-152	EBRII-11	2014	-0.003838	0.0244	0.0732	U
Eu-152	EBRII-2	2014	-0.01183	0.0229	0.0687	U
Eu-152	EBRII-4	2014	0.02117	0.024	0.072	U
Eu-152	EBRII-6	2014	0.02967	0.0246	0.0738	U
Eu-152	TRT-1	2014	0.01435	0.0224	0.0672	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	TRT-2	2014	0.02076	0.0254	0.0762	U
Eu-152	TRT-3	2014	0.01815	0.0274	0.0822	U
Eu-152	TRT-4	2014	-0.05088	0.0457	0.1371	U
Pu-238	EBRII-11	1978	0.0004	0.0009	0.0027	U
Pu-238	EBRII-15	1978	0.0013	0.001	0.003	U
Pu-238	EBRII-17	1978	0.01	0.002	0.006	—
Pu-238	EBRII-3	1978	0.0011	0.001	0.003	U
Pu-238	EBRII-5	1978	0.0007	0.0009	0.0027	U
Pu-238	EBRII-7	1978	0.0006	0.001	0.003	U
Pu-238	EBRII-8	1978	0.0018	0.001	0.003	U
Pu-238	TREAT-1	1978	0.0007	0.0007	0.0021	U
Pu-238	TREAT-3	1978	0.0008	0.0007	0.0021	U
Pu-239/240	EBRII-11	1978	0.019	0.003	0.009	—
Pu-239/240	EBRII-15	1978	0.026	0.003	0.009	—
Pu-239/240	EBRII-17	1978	0.009	0.002	0.006	—
Pu-239/240	EBRII-3	1978	0.019	0.003	0.009	—
Pu-239/240	EBRII-5	1978	0.022	0.003	0.009	—
Pu-239/240	EBRII-7	1978	0.023	0.003	0.009	—
Pu-239/240	EBRII-8	1978	0.032	0.003	0.009	—
Pu-239/240	TREAT-1	1978	0.015	0.002	0.006	—
Pu-239/240	TREAT-3	1978	0.013	0.002	0.006	—
Sb-125	EBRII-1	2011	-0.09004	0.0355	0.1065	U
Sb-125	EBRII-10	2011	-0.06733	0.0437	0.1311	U
Sb-125	EBRII-11	2011	0.05013	0.0346	0.1038	U
Sb-125	EBRII-12	2011	0.03962	0.035	0.105	U
Sb-125	EBRII-13	2011	0.04783	0.0374	0.1122	U
Sb-125	EBRII-15	2011	0.1051	0.0264	0.0792	—
Sb-125	EBRII-16	2011	0.08654	0.0329	0.0987	U
Sb-125	EBRII-17	2011	0.06741	0.04	0.12	U
Sb-125	EBRII-2	2011	0.05414	0.0312	0.0936	U
Sb-125	EBRII-3	2011	0.03951	0.043	0.129	U
Sb-125	EBRII-4	2011	0.03633	0.0352	0.1056	U
Sb-125	EBRII-6	2011	0.214	0.0316	0.0948	—
Sb-125	TRT-1	2011	0.008143	0.0352	0.1056	U
Sb-125	TRT-2	2011	0.09314	0.0486	0.1458	U
Sb-125	TRT-3	2011	-0.02426	0.0481	0.1443	U
Sb-125	TRT-4	2011	-0.0157	0.0546	0.1638	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	EBRII-10	2012	0.03198	0.0348	0.1044	U
Sb-125	EBRII-11	2012	0.001256	0.0348	0.1044	U
Sb-125	EBRII-12	2012	-0.004069	0.0289	0.0867	U
Sb-125	EBRII-16	2012	-0.01808	0.0285	0.0855	U
Sb-125	EBRII-2	2012	-0.01158	0.033	0.099	U
Sb-125	EBRII-4	2012	0.01805	0.0252	0.0756	U
Sb-125	TRT-1	2012	-0.01512	0.0361	0.1083	U
Sb-125	TRT-3	2012	0.00008154	0.0359	0.1077	U
Sb-125	EBRII-10	2013	0.1831	0.0403	0.121	—
Sb-125	EBRII-11	2013	0.3933	0.0613	0.184	—
Sb-125	EBRII-13	2013	0.2261	0.0443	0.133	—
Sb-125	TRT-1	2013	0.04844	0.0135	0.0405	—
Sb-125	2 INCH AIR - MFC	2014	0.02261	0.0499	0.1497	U
Sb-125	EBRII-10	2014	-0.01579	0.0505	0.1515	U
Sb-125	EBRII-11	2014	-0.1543	0.0423	0.1269	U
Sb-125	EBRII-2	2014	-0.1268	0.045	0.135	U
Sb-125	EBRII-4	2014	-0.1258	0.0397	0.1191	U
Sb-125	EBRII-6	2014	-0.03506	0.0448	0.1344	U
Sb-125	TRT-1	2014	-0.1017	0.0415	0.1245	U
Sb-125	TRT-2	2014	-0.1452	0.0484	0.1452	U
Sb-125	TRT-3	2014	-0.1274	0.0495	0.1485	U
Sb-125	TRT-4	2014	-0.003347	0.0637	0.1911	U
Sr-90	EBRII-11	1978	0.66	0.05	0.15	—
Sr-90	EBRII-15	1978	0.64	0.05	0.15	—
Sr-90	EBRII-17	1978	0.48	0.04	0.12	—
Sr-90	EBRII-3	1978	0.45	0.04	0.12	—
Sr-90	EBRII-5	1978	0.53	0.05	0.15	—
Sr-90	EBRII-7	1978	0.56	0.05	0.15	—
Sr-90	EBRII-8	1978	0.58	0.05	0.15	—
Sr-90	TREAT-1	1978	0.74	0.05	0.15	—
Sr-90	TREAT-3	1978	0.56	0.05	0.15	—
U-234	EBRII-1	2007	144.1	4.05	12.15	—
U-234	EBRII-10	2007	123.3	3.75	11.25	—
U-234	EBRII-11	2007	152.1	4.01	12.03	—
U-234	EBRII-12	2007	34.9	3.65	10.95	—
U-234	EBRII-13	2007	120.5	3.92	11.76	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	EBRII-15	2007	60.3	2.92	8.76	—
U-234	EBRII-16	2007	75.02	2.75	8.25	—
U-234	EBRII-17	2007	0	3.42	10.26	U
U-234	EBRII-2	2007	133.2	3.9	11.7	—
U-234	EBRII-3	2007	123.3	3.84	11.52	—
U-234	EBRII-4	2007	76.29	3.35	10.05	—
U-234	EBRII-5	2007	192.2	4.62	13.86	—
U-234	EBRII-6	2007	134.4	4.26	12.78	—
U-234	EBRII-9	2007	134.3	3.72	11.16	—
U-234	TRT-1	2007	133	3.93	11.79	—
U-234	TRT-2	2007	186.2	4.68	14.04	—
U-234	TRT-3	2007	238.8	5.23	15.69	—
U-234	TRT-4	2007	328.9	6.64	19.92	—
U-234	EBRII-10	2008	28.1	1.71	5.13	—
U-234	EBRII-11	2008	27.18	1.75	5.25	—
U-234	EBRII-12	2008	15.59	2.565	7.695	—
U-234	EBRII-13	2008	22.12	2.25	6.75	—
U-234	EBRII-15	2008	9.163	2.635	7.905	—
U-234	EBRII-16	2008	23.63	2.09	6.27	—
U-234	EBRII-17	2008	7.772	2.5	7.5	—
U-234	EBRII-2	2008	15.72	2.125	6.375	—
U-234	EBRII-3	2008	3.874	2.345	7.035	U
U-234	EBRII-4	2008	20.1	2.115	6.345	—
U-234	EBRII-6	2008	30.19	1.805	5.415	—
U-234	TRT-1	2008	15.61	2.595	7.785	—
U-234	TRT-2	2008	37.03	2.395	7.185	—
U-234	TRT-3	2008	50.14	2.74	8.22	—
U-234	TRT-4	2008	0	3.865	11.595	U
U-234	EBRII-1	2009	-4.816	2.82	8.46	U
U-234	EBRII-10	2009	-0.5302	2.895	8.685	U
U-234	EBRII-12	2009	2.552	5.95	17.85	U
U-234	EBRII-13	2009	5.912	2.46	7.38	U
U-234	EBRII-5	2009	-1.419	7.3	21.9	U
U-234	EBRII-9	2009	1.283	6.35	19.05	U
U-234	TRT-2	2009	6.44	2.945	8.835	U
U-234	TRT-4	2009	8.025	3.71	11.13	U
U-234	EBRII-10	2010	40.25	2.33	6.99	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	EBRII-11	2010	57.83	2.84	8.52	—
U-234	EBRII-15	2010	12.3	2.31	6.93	—
U-234	EBRII-16	2010	40.33	2.17	6.51	—
U-234	EBRII-17	2010	6.782	2.07	6.21	—
U-234	EBRII-6	2010	40.06	2.4	7.2	—
U-234	EBRII-9	2010	92.51	3.28	9.84	—
U-234	TRT-1	2010	95.38	4.44	13.32	—
U-234	TRT-3	2010	44.39	3.04	9.12	—
U-234	TRT-4	2010	137.9	4.52	13.56	—
U-234	EBRII-1	2011	10.31	73.6	220.8	U
U-234	EBRII-10	2011	-0.5349	72.4	217.2	U
U-234	EBRII-11	2011	-17.54	62.5	187.5	U
U-234	EBRII-12	2011	-21.25	66	198	U
U-234	EBRII-13	2011	31.99	66.5	199.5	U
U-234	EBRII-15	2011	40.66	58.4	175.2	U
U-234	EBRII-16	2011	-66.2	72.6	217.8	U
U-234	EBRII-17	2011	-42.4	77.2	231.6	U
U-234	EBRII-2	2011	22.77	67.2	201.6	U
U-234	EBRII-3	2011	-36.86	80.3	240.9	U
U-234	EBRII-4	2011	-2.58	67.4	202.2	U
U-234	EBRII-6	2011	2.353	74	222	U
U-234	TRT-1	2011	-7.458	68.5	205.5	U
U-234	TRT-3	2011	-44.36	108	324	U
U-234	EBRII-10	2012	9.61	26.1	78.3	U
U-234	EBRII-11	2012	14.68	16.3	48.9	U
U-234	EBRII-12	2012	12.45	22.6	67.8	U
U-234	EBRII-16	2012	-4.269	21.6	64.8	U
U-234	EBRII-2	2012	17.34	24.2	72.6	U
U-234	EBRII-4	2012	9.5	15.3	45.9	U
U-234	TRT-1	2012	17.22	25.3	75.9	U
U-234	TRT-3	2012	-3.504	20.7	62.1	U
U-234	EBRII-10	2013	3.689	31.13	93.4	U
U-234	EBRII-11	2013	36.51	42.33	127	U
U-234	EBRII-13	2013	84.44	35.67	107	U
U-234	TRT-1	2013	-0.7145	39.33	118	U
U-234	2 INCH AIR - MFC	2014	-51.56	87.3	261.9	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	EBRII-10	2014	-26.91	84.6	253.8	U
U-234	EBRII-11	2014	66.28	62.4	187.2	U
U-234	EBRII-2	2014	25.73	59.1	177.3	U
U-234	EBRII-4	2014	10.13	54.9	164.7	U
U-234	EBRII-6	2014	29.62	63.7	191.1	U
U-234	TRT-1	2014	-48.9	65.9	197.7	U
U-234	TRT-2	2014	-20.41	65.7	197.1	U
U-234	TRT-3	2014	-0.06759	64.5	193.5	U
U-235	EBRII-10	2006	0.1011	0.224	0.672	U
U-235	EBRII-11	2006	1.118	0.318	0.954	—
U-235	EBRII-12	2006	0.6175	0.237	0.711	U
U-235	EBRII-13	2006	0.9659	0.755	2.265	U
U-235	EBRII-15	2006	2.189	0.645	1.935	
U-235	EBRII-16	2006	0.7855	0.277	0.831	U
U-235	EBRII-17	2006	1.431	0.352	1.056	—
U-235	EBRII-3	2006	3.29	0.71	2.13	—
U-235	EBRII-4	2006	1.592	0.52	1.56	—
U-235	EBRII-5	2006	1.398	0.4225	1.2675	—
U-235	EBRII-6	2006	1.885	0.74	2.22	U
U-235	EBRII-9	2006	2.046	0.635	1.905	—
U-235	EBRII-1	2007	0.1872	0.108	0.324	U
U-235	EBRII-10	2007	0.4	0.107	0.321	—
U-235	EBRII-11	2007	0.428	0.121	0.363	—
U-235	EBRII-12	2007	0.1269	0.0658	0.1974	U
U-235	EBRII-13	2007	0.3005	0.0977	0.2931	—
U-235	EBRII-15	2007	0.2798	0.0881	0.2643	—
U-235	EBRII-16	2007	0.07988	0.0605	0.1815	U
U-235	EBRII-17	2007	0.06915	0.0585	0.1755	U
U-235	EBRII-2	2007	0.2425	0.0967	0.2901	U
U-235	EBRII-3	2007	0.2854	0.0978	0.2934	U
U-235	EBRII-4	2007	0.2876	0.0942	0.2826	—
U-235	EBRII-5	2007	0.3074	0.1	0.3	—
U-235	EBRII-6	2007	0.3338	0.103	0.309	—
U-235	EBRII-9	2007	0.2883	0.0623	0.1869	—
U-235	TRT-1	2007	0.4693	0.108	0.324	—
U-235	TRT-2	2007	0.1302	0.0942	0.2826	U
U-235	TRT-3	2007	0.0951	0.0823	0.2469	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	TRT-4	2007	0.5554	0.165	0.495	—
U-235	EBRII-10	2008	0.09696	0.06	0.18	U
U-235	EBRII-11	2008	0.1669	0.0725	0.2175	U
U-235	EBRII-12	2008	0.2367	0.057	0.171	—
U-235	EBRII-13	2008	0.09426	0.0675	0.2025	U
U-235	EBRII-15	2008	0.1744	0.0675	0.2025	U
U-235	EBRII-16	2008	0.1173	0.055	0.165	U
U-235	EBRII-17	2008	0.2603	0.055	0.165	—
U-235	EBRII-2	2008	0.1863	0.04245	0.12735	—
U-235	EBRII-3	2008	0.2203	0.0645	0.1935	—
U-235	EBRII-4	2008	0.1224	0.0535	0.1605	U
U-235	EBRII-6	2008	0.1945	0.073	0.219	U
U-235	TRT-1	2008	0.09809	0.062	0.186	U
U-235	TRT-2	2008	0.1318	0.0685	0.2055	U
U-235	TRT-3	2008	0.1912	0.0885	0.2655	U
U-235	TRT-4	2008	0.3587	0.1125	0.3375	—
U-235	EBRII-1	2009	0.2908	0.063	0.189	—
U-235	EBRII-10	2009	0.07384	0.062	0.186	U
U-235	EBRII-11	2009	0.2166	0.04895	0.14685	—
U-235	EBRII-12	2009	0.1495	0.0685	0.2055	U
U-235	EBRII-5	2009	0.1936	0.077	0.231	U
U-235	EBRII-9	2009	0.2331	0.0695	0.2085	—
U-235	TRT-3	2009	0.1906	0.0625	0.1875	—
U-235	EBRII-10	2010	0.9797	0.236	0.708	—
U-235	EBRII-11	2010	2.279	0.763	2.289	U
U-235	EBRII-15	2010	0.2182	0.0434	0.1302	—
U-235	EBRII-16	2010	0.2051	0.0353	0.1059	—
U-235	EBRII-17	2010	0.2279	0.0483	0.1449	—
U-235	EBRII-6	2010	0.2819	0.0607	0.1821	—
U-235	EBRII-9	2010	0.2655	0.0479	0.1437	—
U-235	TRT-1	2010	0.9286	0.261	0.783	—
U-235	TRT-2	2010	1.471	0.337	1.011	—
U-235	TRT-3	2010	1.287	0.276	0.828	—
U-235	TRT-4	2010	2.998	0.818	2.454	—
U-235	EBRII-1	2011	0.09718	0.167	0.501	U
U-235	EBRII-10	2011	0.1761	0.189	0.567	U
U-235	EBRII-11	2011	-0.1681	0.169	0.507	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	EBRII-12	2011	0.08963	0.16	0.48	U
U-235	EBRII-13	2011	-0.008613	0.175	0.525	U
U-235	EBRII-15	2011	-0.03967	0.149	0.447	U
U-235	EBRII-16	2011	0.1535	0.167	0.501	U
U-235	EBRII-17	2011	0.2327	0.185	0.555	U
U-235	EBRII-2	2011	0.01813	0.166	0.498	U
U-235	EBRII-3	2011	-0.01375	0.172	0.516	U
U-235	EBRII-4	2011	0.1078	0.17	0.51	U
U-235	EBRII-6	2011	-0.03526	0.158	0.474	U
U-235	TRT-1	2011	-0.1246	0.147	0.441	U
U-235	TRT-2	2011	0.4271	0.226	0.678	U
U-235	TRT-3	2011	0.0281	0.225	0.675	U
U-235	TRT-4	2011	-0.1017	0.327	0.981	U
U-235	EBRII-10	2012	-0.002216	0.164	0.492	U
U-235	EBRII-11	2012	0.106	0.147	0.441	U
U-235	EBRII-12	2012	-0.05327	0.143	0.429	U
U-235	EBRII-16	2012	0.06877	0.14	0.42	U
U-235	EBRII-2	2012	-0.06067	0.16	0.48	U
U-235	EBRII-4	2012	0.03299	0.136	0.408	U
U-235	TRT-1	2012	0.07728	0.158	0.474	U
U-235	TRT-3	2012	0.02424	0.168	0.504	U
U-235	EBRII-10	2013	0.3074	0.089	0.267	—
U-235	EBRII-11	2013	0.3676	0.0907	0.272	—
U-235	EBRII-13	2013	0.1954	0.0877	0.263	U
U-235	TRT-1	2013	0.07505	0.096	0.289	U
U-235	2 INCH AIR - MFC	2014	-0.04416	0.2	0.6	U
U-235	EBRII-10	2014	-0.05775	0.196	0.588	U
U-235	EBRII-11	2014	0.042	0.146	0.438	U
U-235	EBRII-2	2014	0.0553	0.139	0.417	U
U-235	EBRII-4	2014	-0.05136	0.149	0.447	U
U-235	EBRII-6	2014	0.1013	0.152	0.456	U
U-235	TRT-1	2014	0.02438	0.14	0.42	U
U-235	TRT-2	2014	0.008722	0.16	0.48	U
U-235	TRT-3	2014	-0.155	0.177	0.531	U
U-235	TRT-4	2014	-0.03618	0.294	0.882	U
U-238	EBRII-10	2006	19.24	3.21	9.63	—

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	EBRII-11	2006	14.97	3.295	9.885	—
U-238	EBRII-12	2006	16.92	2.75	8.25	—
U-238	EBRII-13	2006	21.59	2.82	8.46	—
U-238	EBRII-15	2006	40.33	4.665	13.995	—
U-238	EBRII-16	2006	16.18	2.21	6.63	—
U-238	EBRII-17	2006	17.08	2.675	8.025	—
U-238	EBRII-3	2006	22.36	3.515	10.545	—
U-238	EBRII-4	2006	30.09	3.78	11.34	—
U-238	EBRII-5	2006	3.921	1.145	3.435	—
U-238	EBRII-6	2006	28.91	3.715	11.145	—
U-238	EBRII-9	2006	14.78	2.965	8.895	—
U-238	TRT-4	2006	24.79	3.34	10.02	—
U-238	EBRII-1	2007	0	6.3900	19.17	U
U-238	EBRII-10	2007	0.1916	5.95	17.85	U
U-238	EBRII-11	2007	0	5.98	17.94	U
U-238	EBRII-12	2007	0	5.28	15.84	U
U-238	EBRII-13	2007	0.06509	6.12	18.36	U
U-238	EBRII-15	2007	0.2582	4.49	13.47	U
U-238	EBRII-16	2007	0	4.3	12.9	U
U-238	EBRII-17	2007	0	4.7	14.1	U
U-238	EBRII-2	2007	0.0491	6.19	18.57	U
U-238	EBRII-3	2007	0	6.02	18.06	U
U-238	EBRII-4	2007	2.036	4.79	14.37	U
U-238	EBRII-5	2007	0.2443	6.89	20.67	U
U-238	EBRII-6	2007	0	6.5	19.5	U
U-238	EBRII-9	2007	0	5.58	16.74	U
U-238	TRT-1	2007	0.219	6.24	18.72	U
U-238	TRT-2	2007	0.1496	7.38	22.14	U
U-238	TRT-3	2007	0.3932	8.28	24.84	U
U-238	TRT-4	2007	0	10.4	31.2	U
U-238	EBRII-10	2008	0	2.395	7.185	U
U-238	EBRII-11	2008	0	2.4200	7.26	U
U-238	EBRII-12	2008	0	3.6000	10.8	U
U-238	EBRII-13	2008	45.31	3.035	9.105	—
U-238	EBRII-15	2008	0.3261	3.66	10.98	U
U-238	EBRII-16	2008	34.39	2.865	8.595	—
U-238	EBRII-17	2008	5.383	3.415	10.245	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	EBRII-2	2008	37.58	2.85	8.55	—
U-238	EBRII-3	2008	5.168	3.305	9.915	U
U-238	EBRII-4	2008	38.94	2.855	8.565	—
U-238	EBRII-6	2008	0	2.505	7.515	U
U-238	TRT-1	2008	7.391	3.72	11.16	U
U-238	TRT-2	2008	0	3.64	10.92	U
U-238	TRT-3	2008	0.1232	3.98	11.94	U
U-238	TRT-4	2008	0	5.45	16.35	U
U-238	EBRII-1	2009	5.703	4.47	13.41	U
U-238	EBRII-10	2009	0.3258	2.985	8.955	U
U-238	EBRII-12	2009	5.237	8.5	25.5	U
U-238	EBRII-5	2009	-0.09104	10.4	31.2	U
U-238	EBRII-9	2009	-0.4916	8.9	26.7	U
U-238	TRT-4	2009	9.657	5.05	15.15	U
U-238	EBRII-10	2010	18.25	14.1	42.3	U
U-238	TRT-1	2010	164.5	6.09	18.27	—
U-238	TRT-2	2010	32.81	32.5	97.5	U
U-238	TRT-3	2010	87.7	4.1	12.3	—
U-238	TRT-4	2010	123.6	46.1	138.3	U
U-238	EBRII-1	2011	-0.03709	0.642	1.926	U
U-238	EBRII-10	2011	1.096	0.991	2.973	U
U-238	EBRII-11	2011	0.8392	0.75	2.25	U
U-238	EBRII-12	2011	1.204	0.733	2.199	U
U-238	EBRII-13	2011	-0.2632	0.788	2.364	U
U-238	EBRII-15	2011	1.009	0.616	1.848	U
U-238	EBRII-16	2011	1.456	0.621	1.863	U
U-238	EBRII-17	2011	1.329	0.942	2.826	U
U-238	EBRII-2	2011	0.973	0.822	2.466	U
U-238	EBRII-3	2011	1.289	0.957	2.871	U
U-238	EBRII-4	2011	0.8758	0.746	2.238	U
U-238	EBRII-6	2011	0.02149	0.628	1.884	U
U-238	TRT-1	2011	0.844	0.746	2.238	U
U-238	TRT-2	2011	3.826	1.08	3.24	—
U-238	TRT-3	2011	2.269	0.93	2.79	U
U-238	TRT-4	2011	1.364	0.738	2.214	U
U-238	EBRII-10	2012	1.594	0.861	2.583	U
U-238	EBRII-11	2012	0.8505	0.847	2.541	U

Table C-4. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	EBRII-12	2012	2.582	0.659	1.977	—
U-238	EBRII-16	2012	0.74	0.67	2.01	U
U-238	EBRII-2	2012	1.634	0.786	2.358	U
U-238	EBRII-4	2012	0.3506	0.786	2.358	U
U-238	TRT-1	2012	1.213	0.832	2.496	U
U-238	TRT-3	2012	1.967	0.859	2.577	U
U-238	EBRII-10	2013	8.648	2.093	6.28	—
U-238	EBRII-11	2013	1.855	1.717	5.15	U
U-238	EBRII-13	2013	11.87	2.45	7.35	—
U-238	TRT-1	2013	0.4803	0.393	1.18	U
U-238	2 INCH AIR - MFC	2014	0.5867	0.851	2.553	U
U-238	EBRII-10	2014	1.052	0.934	2.802	U
U-238	EBRII-11	2014	1.361	0.72	2.16	U
U-238	EBRII-2	2014	0.8123	0.845	2.535	U
U-238	EBRII-4	2014	3.412	1.11	3.33	—
U-238	EBRII-6	2014	1.07	0.813	2.439	U
U-238	TRT-1	2014	1.229	0.688	2.064	U
U-238	TRT-2	2014	1.135	0.855	2.565	U
U-238	TRT-3	2014	1.824	0.864	2.592	U
U-238	TRT-4	2014	1.677	0.92	2.76	U

Table C-5. Radionuclides concentrations in surface soils associated with RWMC.

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	2-3	1972	1.84	0.09	0.27	—
Am-241	2-4	1972	1.14	0.27	0.81	—
Am-241	2-5	1972	0.0094	0.140	0.42	U
Am-241	3-1	1972	0.025	0.003	0.009	—
Am-241	3-2	1972	0.194	0.009	0.027	—
Am-241	3-3	1972	0.716	0.036	0.108	—
Am-241	3-4	1972	0.39	0.018	0.054	—
Am-241	3-5	1972	0.185	0.00675	0.02025	—
Am-241	2-6	1973	0.346	0.009	0.027	—
Am-241	2-7	1973	0.019	0.002	0.006	—
Am-241	2-8	1973	0.024	0.003	0.009	—
Am-241	3-6	1973	0.095	0.00450	0.0135	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	3-7	1973	0.059	0.00225	0.00675	—
Am-241	3-8	1973	0.009	0.0027	0.0081	—
Am-241	4-1	1973	0.176	0.0045	0.0135	—
Am-241	4-2	1973	0.114	0.009	0.027	—
Am-241	4-3	1973	0.059	0.00225	0.00675	—
Am-241	4-4	1973	0.021	0.00155	0.00465	—
Am-241	4-5	1973	0.02	0.0027	0.0081	—
Am-241	5-1	1973	8.4	0.315	0.945	—
Am-241	5-2	1973	2.16	0.09	0.27	—
Am-241	5-3	1973	0.33	0.009	0.027	—
Am-241	5-4	1973	0.126	0.009	0.027	—
Am-241	10-1	1974	0.0095	0.0018	0.0054	—
Am-241	5-10	1974	0.009	0.0011	0.0033	—
Am-241	5-11	1974	0.004	0.0018	0.0054	U
Am-241	5-12	1974	0.0054	0.00045	0.00135	—
Am-241	5-13	1974	0.121	0.0045	0.0135	—
Am-241	5-14	1974	0.027	0.0018	0.0054	—
Am-241	5-5	1974	0.207	0.018	0.054	—
Am-241	5-6	1974	0.049	0.00225	0.00675	—
Am-241	5-7	1974	0.034	0.004	0.012	—
Am-241	5-8	1974	0.086	0.0045	0.0135	—
Am-241	6-1	1974	0.04	0.009	0.027	—
Am-241	6-2	1974	0.037	0.004	0.012	—
Am-241	6-3	1974	0.144	0.014	0.042	—
Am-241	6-4	1974	0.037	0.0036	0.0108	—
Am-241	6-5	1974	0.0072	0.0018	0.0054	—
Am-241	6-6	1974	0.004	0.0007	0.0021	—
Am-241	7-1	1974	0.018	0.0045	0.0135	—
Am-241	7-2	1974	0.014	0.0018	0.0054	—
Am-241	7-3	1974	0.104	0.00225	0.00675	—
Am-241	7-5	1974	0.0117	0.003	0.009	—
Am-241	7-6	1974	0.006	0.0009	0.0027	—
Am-241	8-1	1974	0.059	0.00225	0.00675	—
Am-241	8-2	1974	0.022	0.0009	0.0027	—
Am-241	8-3	1974	0.012	0.0007	0.0021	—
Am-241	8-4	1974	0.006	0.0009	0.0027	—
Am-241	9-1	1974	0.0049	0.0009	0.0027	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	9-7	1974	0.011	0.0011	0.0033	—
Am-241	10-1	1978	0.009	0.002	0.006	—
Am-241	2-3	1978	0.283	0.007	0.021	—
Am-241	2-5	1978	0.065	0.004	0.012	—
Am-241	2-7	1978	0.011	0.001	0.003	—
Am-241	3-2	1978	0.02	0.01	0.03	U
Am-241	3-6	1978	0.013	0.002	0.006	—
Am-241	3-8	1978	0.009	0.001	0.003	—
Am-241	4-1	1978	0.141	0.007	0.021	—
Am-241	4-3	1978	0.02	0.003	0.009	—
Am-241	4-5	1978	0.009	0.003	0.009	—
Am-241	4-A	1978	0.007	0.0005	0.0015	—
Am-241	4-B	1978	0.022	0.004	0.012	—
Am-241	4-C	1978	0.022	0.003	0.009	—
Am-241	5-11	1978	0.005	0.0005	0.0015	—
Am-241	5-13	1978	0.125	0.003	0.009	—
Am-241	5-15	1978	0.0003	0.00065	0.00195	U
Am-241	5-5	1978	0.177	0.004	0.012	—
Am-241	5-7	1978	0.0066	0.001	0.003	—
Am-241	5-8	1978	0.055	0.002	0.006	—
Am-241	6-1	1978	0.013	0.002	0.006	—
Am-241	6-3	1978	0.026	0.003	0.009	—
Am-241	6-5	1978	0.008	0.002	0.006	—
Am-241	6-7	1978	0.004	0.0005	0.0015	—
Am-241	7-2	1978	0.026	0.003	0.009	—
Am-241	7-4	1978	0.026	0.003	0.009	—
Am-241	7-6	1978	0.005	0.001	0.003	—
Am-241	7-A	1978	0.02	0.003	0.009	—
Am-241	8-1	1978	0.002	0.001	0.003	U
Am-241	8-3	1978	0.019	0.003	0.009	—
Am-241	8-5	1978	0.006	0.0005	0.0015	—
Am-241	8-A	1978	0.032	0.003	0.009	—
Am-241	8-B	1978	0.011	0.0015	0.0045	—
Am-241	8-C	1978	0.004	0.001	0.003	—
Am-241	9-A	1978	0.003	0.001	0.003	—
Am-241	10-1	1985	0.014	0.003	0.009	—
Am-241	2-4	1985	0.63	0.03	0.09	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	3-1	1985	0.017	0.003	0.009	—
Am-241	3-4	1985	0.47	0.02	0.06	—
Am-241	3-7	1985	0.016	0.003	0.009	—
Am-241	4-2	1985	0.056	0.0025	0.0075	—
Am-241	4-4	1985	0.018	0.003	0.009	—
Am-241	4-A	1985	0	0.001	0.003	U
Am-241	4-B	1985	0.01	0.003	0.009	—
Am-241	4-C	1985	0.012	0.003	0.009	—
Am-241	5-10	1985	0.009	0.0015	0.0045	—
Am-241	5-15	1985	0.009	0.0015	0.0045	—
Am-241	5-5	1985	0.289	0.0065	0.0195	—
Am-241	5-7	1985	0.024	0.003	0.009	—
Am-241	6-1	1985	0.046	0.004	0.012	—
Am-241	7-3	1985	0.037	0.004	0.012	—
Am-241	7-5	1985	0.002	0.002	0.006	U
Am-241	7-7	1985	0.004	0.001	0.003	—
Am-241	7-A	1985	0.007	0.0015	0.0045	—
Am-241	8-1	1985	0.004	0.0020	0.006	U
Am-241	8-2	1985	0.009	0.0015	0.0045	—
Am-241	8-5	1985	0.005	0.00100	0.003	—
Am-241	8-C	1985	0.002	0.002	0.006	U
Am-241	9-A	1985	0.004	0.000666667	0.002	—
Am-241	RWMC 10-1	2007	0.09503	0.0055	0.0165	—
Am-241	RWMC 3-1	2007	0.5608	0.0061	0.0183	—
Am-241	RWMC 5-12	2007	0.2003	0.00458	0.01374	—
Am-241	RWMC 5-15	2007	0.121	0.03865	0.11595	—
Am-241	RWMC 5-4	2007	0.2734	0.004735	0.014205	—
Am-241	RWMC 6-1	2007	0.1107	0.0403	0.1209	U
Am-241	RWMC 6-9	2007	0.008619	0.00462	0.01386	U
Am-241	RWMC 8-1	2007	0.01002	0.0283	0.0849	U
Am-241	RWMC 10-1	2011	0.005838	0.0997	0.2991	U
Am-241	RWMC 2-4	2011	0.8083	0.138	0.414	—
Am-241	RWMC 2-6	2011	0.4427	0.107	0.321	—
Am-241	RWMC 2-8	2011	-0.00124	0.0939	0.2817	U
Am-241	RWMC 3-4	2011	0.3027	0.077	0.231	—
Am-241	RWMC 3-6	2011	0.0676	0.095	0.2862	U
Am-241	RWMC 3-8	2011	0.000711	0.0908	0.2724	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	RWMC 4-1	2011	0.3328	0.124	0.372	U
Am-241	RWMC 4-5	2011	0.0893	0.09260	0.2778	U
Am-241	RWMC 5-12	2011	-0.09897	0.0788	0.2364	U
Am-241	RWMC 5-4	2011	1.141	0.118	0.354	—
Am-241	RWMC 5-7	2011	0.06677	0.0952	0.2856	U
Am-241	RWMC 6-1	2011	0.02223	0.0915	0.2745	U
Am-241	RWMC 6-3	2011	0.0541	0.0931	0.2793	U
Am-241	RWMC 6-7	2011	0.04536	0.101	0.303	U
Am-241	RWMC 7-2	2011	0.2367	0.0938	0.2814	U
Am-241	RWMC 8-1	2011	0.06851	0.0983	0.2949	U
Am-241	RWMC 8-5	2011	0.01418	0.0936	0.2808	U
Am-241	RWMC 9-1	2011	0.04978	0.0944	0.2832	U
Am-241	5-14	2012	0.0018	0.069	0.207	U
Am-241	RWMC 2-4	2012	0.72	0.129	0.387	—
Am-241	RWMC 3-4	2012	0.9458	0.128	0.384	—
Am-241	RWMC 4-1	2012	0.4169	0.123	0.369	—
Am-241	RWMC 5-4	2012	0.003658	0.0468	0.1404	U
Am-241	RWMC 6-1	2012	0.01275	0.0423	0.1269	U
Am-241	RWMC 8-1	2012	0.04549	0.0714	0.2142	U
Am-241	2 INCH AIR - RWMC	2013	0.02098	0.228	0.684	U
Am-241	2 INCH AIR - RWMC	2013	0.02098	0.076	0.228	U
Am-241	RWMC 2-4	2013	15.27	0.249	0.747	—
Am-241	RWMC 3-5	2013	0.04307	0.072666667	0.218	U
Am-241	RWMC 5-7	2013	0.05765	0.0301	0.0903	U
Am-241	5-9	2014	0.0023	0.0156	0.0468	U
Am-241	7-B	2014	0.003	0.000735	0.002205	—
Am-241	RWMC 2-4	2014	2.809	0.355	1.065	—
Am-241	RWMC 2-4	2014	0.5722	0.127	0.381	—
Am-241	RWMC 3-4	2014	0.9339	0.168	0.504	—
Am-241	RWMC 4-1	2014	0.8144	0.228	0.684	—
Am-241	RWMC 5-4	2014	4.152	0.144	0.432	—
Am-241	RWMC 6-1	2014	0.7373	0.228	0.684	—
Am-241	RWMC 6-3	2014	0.09979	0.102	0.306	U
Co-60	2-3	1972	0.75	0.020	0.06	—
Co-60	2-4	1972	0.33	0.005	0.015	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	2-5	1972	0.04	0.0100	0.03	—
Co-60	3-1	1972	0.05	0.004	0.012	—
Co-60	3-2	1972	53	0.01	0.03	—
Co-60	3-3	1972	0.45	0.01	0.03	—
Co-60	3-4	1972	2.1	0.1	0.3	—
Co-60	5-1	1973	0.131	0.008	0.024	—
Co-60	5-2	1973	0.28	0.005	0.015	—
Co-60	5-3	1973	0.113	0.0035	0.0105	—
Co-60	5-4	1973	0.31	0.005	0.015	—
Co-60	10-1	1978	0	0.004	0.012	U
Co-60	2-3	1978	0.175	0.014	0.042	—
Co-60	2-5	1978	0.00913	0.00445	0.01335	U
Co-60	2-7	1978	0.0262	0.0092	0.0276	U
Co-60	3-2	1978	0.0365	0.011	0.033	—
Co-60	3-4	1978	0.0373	0.0085	0.0255	—
Co-60	3-6	1978	0.00596	0.011	0.033	U
Co-60	3-8	1978	0.0441	0.0097	0.0291	—
Co-60	4-3	1978	-0.0132	0.0089	0.0267	U
Co-60	4-5	1978	-0.0137	0.00445	0.01335	U
Co-60	4-A	1978	-0.00422	0.00455	0.01365	U
Co-60	4-B	1978	0.0014	0.008	0.0243	U
Co-60	4-C	1978	0.0217	0.0092	0.0276	U
Co-60	5-11	1978	0.06	0.01	0.03	—
Co-60	5-13	1978	0.00228	0.0089	0.0267	U
Co-60	5-15	1978	-0.00181	0.0046	0.0138	U
Co-60	5-5	1978	0.0327	0.0092	0.0276	—
Co-60	5-7	1978	0.00334	0.0097	0.0291	U
Co-60	5-8	1978	0.0241	0.00055	0.00165	—
Co-60	6-1	1978	0.00844	0.0042	0.0126	U
Co-60	6-3	1978	0.000193	0.00485	0.01455	U
Co-60	6-5	1978	0.00691	0.0082	0.0246	U
Co-60	6-7	1978	0.00838	0.003033333	0.0091	U
Co-60	7-2	1978	0.0084	0.0055	0.0165	U
Co-60	7-4	1978	-0.00594	0.0045	0.0135	U
Co-60	7-6	1978	-0.0177	0.005	0.015	U
Co-60	7-A	1978	0.0307	0.00425	0.01275	—
Co-60	7-B	1978	0.00826	0.0095	0.0285	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	8-1	1978	0.176	0.002666667	0.008	—
Co-60	8-3	1978	0.0284	0.00475	0.01425	—
Co-60	8-5	1978	0.00408	0.0097	0.0291	U
Co-60	8-A	1978	-0.00436	0.002733333	0.0082	U
Co-60	8-B	1978	-0.00999	0.0045	0.0135	U
Co-60	8-C	1978	0.00301	0.01	0.03	U
Co-60	9-A	1978	-0.00985	0.006	0.018	U
Co-60	RWMC 2-4	2005	0.1362	0.004785	0.014355	—
Co-60	RWMC 10-1	2006	0.03508	1.44	4.32	U
Co-60	RWMC 2-5	2006	0.04393	2.56	7.68	U
Co-60	RWMC 2-6	2006	0.02273	1.38	4.14	U
Co-60	RWMC 2-7	2006	0.0547	2.2950	6.885	U
Co-60	RWMC 2-8	2006	0.0413	1.275	3.825	U
Co-60	RWMC 2-8	2006	0.006542	0.0189	0.0567	U
Co-60	RWMC 3-1	2006	0.03609	1.63	4.89	U
Co-60	RWMC 3-4	2006	0.06792	2.005	6.015	U
Co-60	RWMC 3-5	2006	0.0851	1.725	5.175	U
Co-60	RWMC 3-7	2006	0.09807	1.735	5.205	U
Co-60	RWMC 3-8	2006	0.05174	0.01005	0.03015	—
Co-60	RWMC 4-1	2006	0.0407	16.55	49.65	U
Co-60	RWMC 4-2	2006	0.027	4.97	14.91	U
Co-60	RWMC 4-3	2006	0.02876	2.955	8.865	U
Co-60	RWMC 4-4	2006	0.02849	2.75	8.25	U
Co-60	RWMC 4-5	2006	0.02432	2.75	8.25	U
Co-60	RWMC 5-10	2006	0.05465	2.01	6.03	U
Co-60	RWMC 5-11	2006	0.09864	1.845	5.535	U
Co-60	RWMC 5-12	2006	0.01871	1.305	3.915	U
Co-60	RWMC 5-14	2006	0.109	2.695	8.085	U
Co-60	RWMC 5-15	2006	0.03386	1.57	4.71	U
Co-60	RWMC 5-4	2006	0.05753	1.49	4.47	U
Co-60	RWMC 5-6	2006	0.02629	1.39	4.17	U
Co-60	RWMC 5-7	2006	0.04342	0.0091	0.02715	—
Co-60	RWMC 5-8	2006	0.01908	3.36	10.08	U
Co-60	RWMC 5-9	2006	0.04441	2.385	7.155	U
Co-60	RWMC 6-1	2006	0.04392	1.79	5.37	U
Co-60	RWMC 6-2	2006	0.04129	0.003005	0.009015	—
Co-60	RWMC 6-4	2006	0.04745	0.0062	0.01845	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	RWMC 6-5	2006	0.06728	2.95	8.85	U
Co-60	RWMC 6-6	2006	0.04451	9.4	28.2	U
Co-60	RWMC 6-7	2006	0.01338	0.985	2.955	U
Co-60	RWMC 7-3	2006	0.03879	1.935	5.805	U
Co-60	RWMC 7-4	2006	0.06145	1.455	4.365	U
Co-60	RWMC 7-5	2006	0.03095	2.355	7.065	U
Co-60	RWMC 7-6	2006	0.07822	2.54	7.62	U
Co-60	RWMC 7-7	2006	0.02347	1.755	5.265	U
Co-60	RWMC 9-1	2006	0.1309	1.34	4.02	U
Co-60	RWMC 10-1	2007	0.02181	0.525	1.575	U
Co-60	RWMC 2-4	2007	0.02785	0.04865	0.14595	U
Co-60	RWMC 2-5	2007	0.02016	0.0715	0.2145	U
Co-60	RWMC 2-6	2007	0.01592	0.04255	0.12765	U
Co-60	RWMC 2-7	2007	0.02003	0.0408	0.1224	U
Co-60	RWMC 3-1	2007	0.02415	0.6	1.8	U
Co-60	RWMC 3-4	2007	0.02131	0.0482	0.1446	U
Co-60	RWMC 3-5	2007	0.03854	0.056	0.168	U
Co-60	RWMC 3-6	2007	0.01411	0.0685	0.2055	U
Co-60	RWMC 3-7	2007	0.004402	0.068	0.204	U
Co-60	RWMC 3-8	2007	0.03349	0.0835	0.2505	U
Co-60	RWMC 4-1	2007	0.02433	0.052	0.156	U
Co-60	RWMC 4-2	2007	0.03199	0.105	0.315	U
Co-60	RWMC 4-3	2007	0.01336	0.0815	0.2445	U
Co-60	RWMC 4-4	2007	0.01228	0.03005	0.09015	U
Co-60	RWMC 4-5	2007	0.0101	0.056	0.168	U
Co-60	RWMC 5-10	2007	0.0109	0.01155	0.03465	U
Co-60	RWMC 5-11	2007	0.002606	0.013	0.039	U
Co-60	RWMC 5-12	2007	0.02219	0.191	0.573	U
Co-60	RWMC 5-14	2007	0.05446	0.091	0.273	U
Co-60	RWMC 5-15	2007	0.02435	0.0535	0.1605	U
Co-60	RWMC 5-4	2007	0.01527	3.65	10.95	U
Co-60	RWMC 5-6	2007	0.0185	0.011	0.033	U
Co-60	RWMC 5-8	2007	0.009057	0.089	0.267	U
Co-60	RWMC 5-9	2007	0.0234	0.0965	0.2895	U
Co-60	RWMC 6-1	2007	0.04542	0.02155	0.06465	U
Co-60	RWMC 6-2	2007	0.01604	0.0357	0.1071	U
Co-60	RWMC 6-3	2007	0.01973	0.051	0.153	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	RWMC 6-4	2007	0.007687	0.146	0.4365	U
Co-60	RWMC 6-5	2007	0.01272	0.128	0.384	U
Co-60	RWMC 6-6	2007	0.03056	0.0408	0.1224	U
Co-60	RWMC 6-7	2007	0.01421	0.0239	0.0717	U
Co-60	RWMC 6-9	2007	0.02392	0.95	2.85	U
Co-60	RWMC 7-2	2007	0.01376	0.00875	0.02625	U
Co-60	RWMC 7-3	2007	0.02547	0.07	0.21	U
Co-60	RWMC 7-4	2007	0.02588	0.0555	0.1665	U
Co-60	RWMC 7-5	2007	0.02864	0.0505	0.1515	U
Co-60	RWMC 7-6	2007	0.008029	0.01305	0.03915	U
Co-60	RWMC 7-7	2007	0.02255	0.03695	0.11085	U
Co-60	RWMC 8-1	2007	0.02336	0.086	0.258	U
Co-60	RWMC 8-4	2007	0.02238	0.0715	0.2145	U
Co-60	RWMC 8-5	2007	0.0203	0.0413	0.1239	U
Co-60	RWMC 9-1	2007	0.01631	0.03665	0.10995	U
Co-60	RWMC 5-4	2010	0.002166	0.00468	0.01404	U
Co-60	RWMC 10-1	2011	-0.0001377	0.00454	0.01362	U
Co-60	RWMC 2-4	2011	0.003653	0.00486	0.01458	U
Co-60	RWMC 2-6	2011	-0.002406	0.00418	0.01254	U
Co-60	RWMC 2-8	2011	-0.0003484	0.00379	0.01137	U
Co-60	RWMC 3-4	2011	0.002874	0.00457	0.01371	U
Co-60	RWMC 3-6	2011	-0.0009032	0.00421	0.01263	U
Co-60	RWMC 3-8	2011	0.0007645	0.00463	0.01389	U
Co-60	RWMC 4-1	2011	-0.000137	0.00472	0.01416	U
Co-60	RWMC 4-1	2011	-0.0009063	0.00368	0.01104	U
Co-60	RWMC 4-5	2011	-0.001505	0.00456	0.01368	U
Co-60	RWMC 5-12	2011	0.004576	0.00367	0.01101	U
Co-60	RWMC 5-7	2011	-0.006008	0.00485	0.01455	U
Co-60	RWMC 6-1	2011	0.0000146	0.00322	0.00966	U
Co-60	RWMC 6-3	2011	0.002186	0.00435	0.01305	U
Co-60	RWMC 6-7	2011	-0.001768	0.0052	0.0156	U
Co-60	RWMC 7-2	2011	0.003495	0.00459	0.01377	U
Co-60	RWMC 8-1	2011	0.003824	0.00448	0.01344	U
Co-60	RWMC 8-5	2011	0.001562	0.00509	0.01527	U
Co-60	RWMC 9-1	2011	0.0005726	0.0030	0.00888	U
Co-60	RWMC 2-4	2012	0.002558	0.00401	0.01203	U
Co-60	RWMC 3-4	2012	-0.0005804	0.00501	0.01503	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	RWMC 5-4	2012	0.004007	0.0046	0.01383	U
Co-60	RWMC 6-1	2012	-0.004479	0.00444	0.01332	U
Co-60	RWMC 8-1	2012	0.002582	0.00382	0.01146	U
Co-60	2 INCH AIR - RWMC	2013	0.0008422	0.00915	0.02745	U
Co-60	2 INCH AIR - RWMC	2013	0.0008422	0.00305	0.00915	U
Co-60	RWMC 2-4	2013	0.0008699	0.003283333	0.00985	U
Co-60	RWMC 3-5	2013	0.009989	0.002733333	0.0082	—
Co-60	RWMC 5-7	2013	0.0003676	0.00311	0.00932	U
Co-60	RWMC 2-4	2014	0.001877	0.00208	0.00624	U
Co-60	RWMC 2-4	2014	-0.0007302	0.00167	0.00501	U
Co-60	RWMC 3-4	2014	-0.000008105	0.000872	0.002616	U
Co-60	RWMC 4-1	2014	-0.001646	0.00213	0.00639	U
Co-60	RWMC 5-4	2014	-0.0001379	0.00119	0.00357	U
Co-60	RWMC 6-1	2014	0.001075	0.000807	0.002421	U
Co-60	RWMC 6-3	2014	-0.0005297	0.00224	0.00672	U
Cs-134	3-3	1972	0.069	0.008	0.024	—
Cs-134	RWMC 5-7	2007	0.0687	0.00988	0.02964	—
Cs-134	RWMC 2-5	2009	0.02457	0.002545	0.007635	—
Cs-134	RWMC 2-8	2009	0.0375	0.00414	0.01242	—
Cs-134	RWMC 3-8	2009	0.006642	0.00525	0.01575	U
Cs-134	RWMC 4-3	2009	0.01694	0.00351	0.01053	—
Cs-134	RWMC 5-15	2009	0.02807	0.00695	0.02085	—
Cs-134	RWMC 10-1	2010	0.02369	0.00662	0.01986	—
Cs-134	RWMC 2-4	2010	0.06453	0.005	0.015	—
Cs-134	RWMC 2-6	2010	0.01575	0.00201	0.00603	—
Cs-134	RWMC 3-1	2010	0.05565	0.00846	0.02538	—
Cs-134	RWMC 3-5	2010	0.04439	0.00603	0.01809	—
Cs-134	RWMC 3-6	2010	0.05433	0.0103	0.0309	—
Cs-134	RWMC 3-7	2010	0.07855	0.0111	0.0333	—
Cs-134	RWMC 3-8	2010	0.0691	0.0369	0.1107	U
Cs-134	RWMC 4-1	2010	0.0477	0.0073	0.0219	—
Cs-134	RWMC 4-2	2010	0.0279	0.00447	0.01341	—
Cs-134	RWMC 4-3	2010	0.06064	0.00982	0.02946	—
Cs-134	RWMC 4-4	2010	0.0281	0.00839	0.02517	—
Cs-134	RWMC 4-5	2010	0.036	0.00731	0.02193	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	RWMC 5-10	2010	0.07294	0.015	0.045	—
Cs-134	RWMC 5-11	2010	0.05173	0.00857	0.02571	—
Cs-134	RWMC 5-12	2010	0.03843	0.00634	0.01902	—
Cs-134	RWMC 5-14	2010	0.1417	0.0209	0.0627	—
Cs-134	RWMC 5-15	2010	0.01744	0.00411	0.01233	—
Cs-134	RWMC 5-4	2010	0.05223	0.00721	0.02163	—
Cs-134	RWMC 5-6	2010	0.0513	0.0129	0.0387	—
Cs-134	RWMC 5-7	2010	0.05173	0.00857	0.02571	—
Cs-134	RWMC 5-8	2010	0.1081	0.0173	0.0519	—
Cs-134	RWMC 5-9	2010	0.09421	0.021	0.063	—
Cs-134	RWMC 6-1	2010	0.0847	0.0123	0.0369	—
Cs-134	RWMC 6-2	2010	0.01519	0.00367	0.01101	—
Cs-134	RWMC 6-3	2010	0.05039	0.0147	0.0441	—
Cs-134	RWMC 6-4	2010	0.04721	0.00802	0.02406	—
Cs-134	RWMC 6-5	2010	0.05718	0.00753	0.02259	—
Cs-134	RWMC 6-6	2010	0.03894	0.00548	0.01644	—
Cs-134	RWMC 6-7	2010	0.08709	0.0104	0.0312	—
Cs-134	RWMC 7-2	2010	0.05179	0.00716	0.02148	—
Cs-134	RWMC 7-3	2010	0.03439	0.0069	0.0207	—
Cs-134	RWMC 7-4	2010	0.05554	0.0086	0.0258	—
Cs-134	RWMC 7-5	2010	0.04534	0.00722	0.02166	—
Cs-134	RWMC 7-6	2010	0.06628	0.00806	0.02418	—
Cs-134	RWMC 7-7	2010	0.1019	0.0127	0.0381	—
Cs-134	RWMC 8-1	2010	0.05419	0.00949	0.02847	—
Cs-134	RWMC 8-4	2010	0.04242	0.00631	0.01893	—
Cs-134	RWMC 8-5	2010	0.05722	0.00878	0.02634	—
Cs-134	RWMC 9-1	2010	0.03898	0.00503	0.01509	—
Cs-134	RWMC 10-1	2011	-0.02065	0.025	0.075	U
Cs-134	RWMC 2-4	2011	-0.01753	0.0133	0.0399	U
Cs-134	RWMC 2-6	2011	-0.0003842	0.0129	0.0387	U
Cs-134	RWMC 2-8	2011	0.008597	0.0131	0.0393	U
Cs-134	RWMC 3-4	2011	-0.04696	0.0153	0.0459	U
Cs-134	RWMC 3-6	2011	-0.00247	0.017	0.051	U
Cs-134	RWMC 3-8	2011	0.008029	0.0119	0.0357	U
Cs-134	RWMC 4-1	2011	-0.07023	0.0158	0.0474	U
Cs-134	RWMC 4-5	2011	-0.008205	0.0119	0.0357	U
Cs-134	RWMC 5-12	2011	-0.0008898	0.0153	0.0459	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	RWMC 5-4	2011	-0.008972	0.0252	0.0756	U
Cs-134	RWMC 5-7	2011	0.005653	0.0238	0.0714	U
Cs-134	RWMC 6-1	2011	-0.01617	0.0102	0.0306	U
Cs-134	RWMC 6-3	2011	0.00171	0.0213	0.0639	U
Cs-134	RWMC 6-7	2011	-0.004355	0.0251	0.0753	U
Cs-134	RWMC 7-2	2011	0.009518	0.0228	0.0684	U
Cs-134	RWMC 8-1	2011	0.00233	0.0245	0.0735	U
Cs-134	RWMC 8-5	2011	-0.004243	0.0241	0.0723	U
Cs-134	RWMC 9-1	2011	-0.009371	0.0242	0.0726	U
Cs-134	RWMC 2-4	2012	0.07999	0.0084	0.0252	—
Cs-134	RWMC 3-4	2012	0.06727	0.00978	0.02934	—
Cs-134	RWMC 4-1	2012	0.0733	0.00855	0.02565	—
Cs-134	RWMC 5-4	2012	0.07012	0.00922	0.02766	—
Cs-134	RWMC 6-1	2012	0.06552	0.00865	0.02595	—
Cs-134	RWMC 8-1	2012	0.01995	0.00724	0.02172	U
Cs-134	2 INCH AIR - RWMC	2013	0.06654	0.0341	0.1023	U
Cs-134	2 INCH AIR - RWMC	2013	0.06654	0.011366667	0.0341	—
Cs-134	RWMC 2-4	2013	0.05356	0.011733333	0.0352	—
Cs-134	RWMC 3-5	2013	0.06052	0.012633333	0.0379	—
Cs-134	RWMC 5-7	2013	0.07587	0.0133	0.0399	—
Cs-134	RWMC 2-4	2014	0.06338	0.0194	0.0582	—
Cs-134	RWMC 2-4	2014	-0.005712	0.013	0.039	U
Cs-134	RWMC 3-4	2014	0.03204	0.0083	0.0249	—
Cs-134	RWMC 4-1	2014	0.07438	0.0178	0.0534	—
Cs-134	RWMC 5-4	2014	-0.01806	0.0112	0.0336	U
Cs-134	RWMC 6-1	2014	0.03509	0.00909	0.02727	—
Cs-134	RWMC 6-3	2014	0.08769	0.0177	0.0531	—
Cs-137	2-3	1972	3.76	0.03	0.09	—
Cs-137	2-4	1972	2.45	0.02	0.06	—
Cs-137	2-5	1972	2.8	0.02	0.06	—
Cs-137	3-1	1972	2.04	0.02	0.06	—
Cs-137	3-2	1972	2.48	0.02	0.06	—
Cs-137	3-3	1972	1.76	0.01	0.03	—
Cs-137	3-4	1972	1.43	0.01	0.03	—
Cs-137	4-3	1973	1.31	0.02	0.06	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	5-1	1973	1.42	0.02	0.06	—
Cs-137	5-2	1973	2.16	0.02	0.06	—
Cs-137	5-3	1973	2.04	0.02	0.06	—
Cs-137	5-4	1973	2.39	0.02	0.06	—
Cs-137	10-1	1978	0.793	0.029	0.087	—
Cs-137	2-3	1978	1.37	0.048	0.144	—
Cs-137	2-5	1978	0.0525	0.011	0.033	—
Cs-137	2-7	1978	0.585	0.023	0.069	—
Cs-137	3-2	1978	2.03	0.068	0.204	—
Cs-137	3-4	1978	0.92	0.034	0.102	—
Cs-137	3-6	1978	0.471	0.0021	0.0063	—
Cs-137	3-8	1978	0.727	0.027	0.081	—
Cs-137	4-1	1978	1.42	0.046	0.138	—
Cs-137	4-3	1978	0.972	0.033	0.099	—
Cs-137	4-5	1978	0.714	0.026	0.078	—
Cs-137	4-A	1978	0.82	0.029	0.087	—
Cs-137	4-B	1978	0.63	0.024	0.072	—
Cs-137	4-C	1978	0.803	0.03	0.09	—
Cs-137	5-11	1978	0.403	0.019	0.057	—
Cs-137	5-13	1978	3.54	0.1	0.3	—
Cs-137	5-15	1978	0.205	0.014	0.042	—
Cs-137	5-5	1978	1.12	0.039	0.117	—
Cs-137	5-7	1978	0.73	0.027	0.081	—
Cs-137	5-8	1978	1.17	0.041	0.123	—
Cs-137	6-1	1978	0.739	0.028	0.084	—
Cs-137	6-3	1978	0.736	0.028	0.084	—
Cs-137	6-5	1978	0.703	0.026	0.078	—
Cs-137	6-7	1978	0.782	0.03	0.087	—
Cs-137	7-2	1978	0.821	0.03	0.09	—
Cs-137	7-4	1978	0.896	0.031	0.093	—
Cs-137	7-6	1978	0.775	0.028	0.084	—
Cs-137	7-A	1978	0.814	0.029	0.087	—
Cs-137	7-B	1978	0.57	0.023	0.069	—
Cs-137	8-1	1978	0.721	0.026	0.078	—
Cs-137	8-3	1978	0.897	0.033	0.099	—
Cs-137	8-5	1978	1.12	0.038	0.114	—
Cs-137	8-A	1978	0.939	0.032	0.096	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	8-B	1978	0.833	0.03	0.087	—
Cs-137	8-C	1978	0.911	0.032	0.096	—
Cs-137	9-A	1978	0.41	0.019	0.057	—
Cs-137	10-1	1985	0.5	0.06	0.18	—
Cs-137	2-4	1985	0.86	0.08	0.24	—
Cs-137	3-1	1985	0.66	0.07	0.21	—
Cs-137	3-7	1985	0.56	0.07	0.21	—
Cs-137	4-2	1985	0.65	0.06	0.18	—
Cs-137	4-A	1985	0.6	0.07	0.21	—
Cs-137	4-C	1985	0.35	0.025	0.075	—
Cs-137	5-10	1985	0.72	0.1	0.21	—
Cs-137	5-15	1985	0.76	0.07	0.21	—
Cs-137	5-5	1985	0.66	0.07	0.21	—
Cs-137	5-7	1985	1.04	0.09	0.27	—
Cs-137	6-1	1985	0.75	0.08	0.24	—
Cs-137	7-3	1985	0.92	0.1	0.24	—
Cs-137	7-5	1985	0.66	0.07	0.21	—
Cs-137	7-7	1985	0.59	0.1	0.21	—
Cs-137	7-A	1985	0.87	0.070	0.21	—
Cs-137	8-1	1985	0.61	0.06	0.18	—
Cs-137	8-2	1985	0.79	0.07	0.21	—
Cs-137	8-5	1985	0.057	0.03	0.09	U
Cs-137	8-C	1985	0.53	0.07	0.21	—
Cs-137	9-A	1985	0.052	0.03	0.09	U
Cs-137	10-1	1993	0.35	0.025	0.075	—
Cs-137	2-4	1993	0.51	0.06	0.18	—
Cs-137	2-5	1993	0.46	0.06	0.18	—
Cs-137	3-4	1993	0.74	0.06	0.18	—
Cs-137	3-6	1993	0.68	0.06	0.18	—
Cs-137	4-1	1993	0.7	0.06	0.18	—
Cs-137	5-12	1993	0.58	0.06	0.18	—
Cs-137	5-15	1993	0.76	0.06	0.18	—
Cs-137	5-4	1993	1.34	0.09	0.27	—
Cs-137	5-7	1993	0.69	0.06	0.18	—
Cs-137	5-9	1993	0.98	0.07	0.21	—
Cs-137	6-4	1993	0.63	0.06	0.18	—
Cs-137	7-2	1993	0.51	0.05	0.15	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	7-B	1993	0.47	0.06	0.18	—
Cs-137	8-1	1993	0.69	0.06	0.18	—
Cs-137	8-4	1993	0.52	0.06	0.18	—
Cs-137	8-5	1993	0.52	0.06	0.18	—
Cs-137	RWMC 2-4	2005	0.1453	0.00575	0.01725	—
Cs-137	RWMC 8-1	2005	0.1002	0.005	0.01515	—
Cs-137	RWMC 8-4	2005	0.1095	0.00957	0.02871	—
Cs-137	RWMC 8-5	2005	0.08006	0.0115	0.0345	—
Cs-137	RWMC 10-1	2006	0.08418	0.2245	0.6735	U
Cs-137	RWMC 2-6	2006	0.1336	0.1925	0.5775	U
Cs-137	RWMC 2-7	2006	0.1226	0.387	1.161	U
Cs-137	RWMC 2-8	2006	0.2834	0.01185	0.03555	—
Cs-137	RWMC 2-8	2006	0.1187	0.186	0.558	U
Cs-137	RWMC 3-1	2006	0.1485	0.202	0.606	U
Cs-137	RWMC 3-4	2006	0.1266	0.322	0.966	U
Cs-137	RWMC 3-5	2006	0.1266	0.2305	0.6915	U
Cs-137	RWMC 3-6	2006	0.1188	0.0064	0.0192	—
Cs-137	RWMC 3-7	2006	0.1244	0.2825	0.8475	U
Cs-137	RWMC 4-2	2006	0.1075	0.635	1.905	U
Cs-137	RWMC 4-3	2006	0.1081	0.79	2.37	U
Cs-137	RWMC 4-4	2006	0.1004	0.2085	0.6255	U
Cs-137	RWMC 4-5	2006	0.09192	0.327	0.981	U
Cs-137	RWMC 5-10	2006	0.1233	0.2685	0.8055	U
Cs-137	RWMC 5-11	2006	0.09832	0.427	1.281	U
Cs-137	RWMC 5-12	2006	0.1068	0.259	0.777	U
Cs-137	RWMC 5-14	2006	0.1225	0.2215	0.6645	U
Cs-137	RWMC 5-15	2006	0.1244	0.3355	1.0065	U
Cs-137	RWMC 5-4	2006	0.1232	0.2785	0.8355	U
Cs-137	RWMC 5-6	2006	0.1169	0.3625	1.0875	U
Cs-137	RWMC 5-7	2006	0.1287	0.00595	0.01785	—
Cs-137	RWMC 5-8	2006	0.08303	0.54	1.62	U
Cs-137	RWMC 5-9	2006	0.09614	0.3125	0.9375	U
Cs-137	RWMC 6-1	2006	0.1297	0.194	0.582	U
Cs-137	RWMC 6-2	2006	0.1333	0.52	1.56	U
Cs-137	RWMC 6-5	2006	0.0899	0.57	1.71	U
Cs-137	RWMC 6-6	2006	0.07244	0.2785	0.8355	U
Cs-137	RWMC 6-7	2006	0.1031	0.3715	1.1145	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RWMC 7-3	2006	0.08038	0.3285	0.9855	U
Cs-137	RWMC 7-4	2006	0.0981	0.278	0.834	U
Cs-137	RWMC 7-5	2006	0.09665	0.262	0.786	U
Cs-137	RWMC 7-6	2006	0.1274	0.2785	0.8355	U
Cs-137	RWMC 7-7	2006	0.1016	0.352	1.056	U
Cs-137	RWMC 9-1	2006	0.1196	0.1985	0.5955	U
Cs-137	RWMC 10-1	2007	0.2073	0.0975	0.2925	U
Cs-137	RWMC 2-4	2007	0.2107	0.084	0.252	U
Cs-137	RWMC 2-5	2007	0.3009	0.04735	0.14205	—
Cs-137	RWMC 2-6	2007	0.2624	0.038	0.114	—
Cs-137	RWMC 2-7	2007	0.3293	0.051	0.153	—
Cs-137	RWMC 3-1	2007	0.3137	0.091	0.273	—
Cs-137	RWMC 3-4	2007	0.2628	0.09	0.27	U
Cs-137	RWMC 3-5	2007	0.3221	0.086	0.258	—
Cs-137	RWMC 3-6	2007	0.2874	0.054	0.162	—
Cs-137	RWMC 3-7	2007	0.26	0.078	0.234	—
Cs-137	RWMC 3-8	2007	0.2743	0.065	0.195	—
Cs-137	RWMC 4-1	2007	0.5191	0.0675	0.2025	—
Cs-137	RWMC 4-2	2007	0.2438	0.079	0.237	—
Cs-137	RWMC 4-2	2007	0.2085	0.0106	0.0318	—
Cs-137	RWMC 4-3	2007	0.2856	0.056	0.168	—
Cs-137	RWMC 4-4	2007	0.2217	0.0705	0.2115	—
Cs-137	RWMC 4-5	2007	0.2277	0.0675	0.2025	—
Cs-137	RWMC 5-10	2007	0.3782	0.03505	0.10515	—
Cs-137	RWMC 5-11	2007	0.2219	0.106	0.318	U
Cs-137	RWMC 5-12	2007	0.2869	0.3895	1.1685	U
Cs-137	RWMC 5-14	2007	1.012	0.106	0.318	—
Cs-137	RWMC 5-15	2007	0.2935	0.53	1.59	U
Cs-137	RWMC 5-4	2007	0.364	0.1525	0.4575	U
Cs-137	RWMC 5-6	2007	0.2216	0.0354	0.1062	—
Cs-137	RWMC 5-7	2007	0.2778	0.0103	0.0309	—
Cs-137	RWMC 5-8	2007	0.2955	0.0308	0.0924	—
Cs-137	RWMC 5-9	2007	0.2758	0.04415	0.13245	—
Cs-137	RWMC 6-1	2007	0.2724	0.04775	0.14325	—
Cs-137	RWMC 6-2	2007	0.2241	0.0535	0.1605	—
Cs-137	RWMC 6-3	2007	0.2695	0.0845	0.2535	—
Cs-137	RWMC 6-4	2007	0.2518	0.03615	0.10845	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RWMC 6-5	2007	0.2423	0.0765	0.2295	—
Cs-137	RWMC 6-6	2007	0.1793	0.039	0.117	—
Cs-137	RWMC 6-7	2007	0.1884	0.069	0.207	U
Cs-137	RWMC 6-9	2007	0.2913	0.0635	0.1905	—
Cs-137	RWMC 7-2	2007	0.3112	0.1415	0.4245	U
Cs-137	RWMC 7-3	2007	0.1505	0.065	0.195	U
Cs-137	RWMC 7-4	2007	0.2336	0.0327	0.0981	—
Cs-137	RWMC 7-5	2007	0.2454	0.0494	0.1482	—
Cs-137	RWMC 7-6	2007	0.2613	0.079	0.237	—
Cs-137	RWMC 7-7	2007	0.2146	0.1405	0.4215	U
Cs-137	RWMC 8-1	2007	0.2961	1.055	3.165	U
Cs-137	RWMC 8-4	2007	0.2721	0.0384	0.1152	—
Cs-137	RWMC 9-1	2007	0.2242	0.06	0.18	—
Cs-137	RWMC 2-4	2009	0.2285	0.00805	0.02415	—
Cs-137	RWMC 2-5	2009	0.1598	0.695	2.085	U
Cs-137	RWMC 2-6	2009	0.1845	0.00825	0.02475	—
Cs-137	RWMC 2-7	2009	0.2029	0.0045	0.0135	—
Cs-137	RWMC 2-8	2009	0.155	0.0064	0.01905	—
Cs-137	RWMC 2-8	2009	0.1418	0.00845	0.02535	—
Cs-137	RWMC 3-1	2009	0.1831	0.0625	0.1875	U
Cs-137	RWMC 3-4	2009	0.1923	0.0362	0.1086	—
Cs-137	RWMC 3-5	2009	0.208	0.00725	0.02175	—
Cs-137	RWMC 3-6	2009	0.177	0.00645	0.01935	—
Cs-137	RWMC 3-7	2009	0.1835	0.0065	0.0195	—
Cs-137	RWMC 3-8	2009	0.1845	0.0052	0.0156	—
Cs-137	RWMC 4-1	2009	0.1844	0.0227	0.0681	—
Cs-137	RWMC 4-3	2009	0.1785	0.00715	0.02145	—
Cs-137	RWMC 4-4	2009	0.1885	0.0875	0.2625	U
Cs-137	RWMC 4-5	2009	0.1016	0.0055	0.0165	—
Cs-137	RWMC 5-10	2009	0.2035	0.0057	0.0171	—
Cs-137	RWMC 5-11	2009	0.1233	0.00725	0.02175	—
Cs-137	RWMC 5-12	2009	0.1785	0.007	0.021	—
Cs-137	RWMC 5-14	2009	0.1925	0.006	0.0192	—
Cs-137	RWMC 5-15	2009	0.1597	0.0052	0.0156	—
Cs-137	RWMC 5-4	2009	0.201	0.00585	0.01755	—
Cs-137	RWMC 5-6	2009	0.1712	0.0048	0.0144	—
Cs-137	RWMC 5-7	2009	0.2041	0.00815	0.02445	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RWMC 5-8	2009	0.1676	0.0068	0.0204	—
Cs-137	RWMC 6-1	2009	0.1832	0.03645	0.10935	—
Cs-137	RWMC 6-2	2009	0.1948	0.0081	0.0243	—
Cs-137	RWMC 6-3	2009	0.2105	0.004825	0.014475	—
Cs-137	RWMC 6-4	2009	0.1752	0.0062	0.0186	—
Cs-137	RWMC 6-5	2009	0.1444	0.00479	0.01437	—
Cs-137	RWMC 6-6	2009	0.1261	0.00383	0.01149	—
Cs-137	RWMC 6-7	2009	0.1506	0.0062	0.0186	—
Cs-137	RWMC 7-2	2009	0.2019	0.00645	0.01935	—
Cs-137	RWMC 7-5	2009	0.168	0.0431	0.1293	—
Cs-137	RWMC 7-6	2009	0.1759	0.00795	0.02385	—
Cs-137	RWMC 7-7	2009	0.1634	0.00476	0.01428	—
Cs-137	RWMC 8-1	2009	0.1742	0.00715	0.02145	—
Cs-137	RWMC 8-4	2009	0.1706	0.004275	0.012825	—
Cs-137	RWMC 8-5	2009	0.1818	0.00805	0.02415	—
Cs-137	RWMC 9-1	2009	0.1538	0.004715	0.014145	—
Cs-137	RWMC 10-1	2010	0.1668	0.00644	0.01932	—
Cs-137	RWMC 2-4	2010	0.2321	0.00538	0.01614	—
Cs-137	RWMC 2-6	2010	0.1106	0.00495	0.01485	—
Cs-137	RWMC 3-1	2010	0.2105	0.00785	0.02355	—
Cs-137	RWMC 3-5	2010	0.1758	0.0029	0.0087	—
Cs-137	RWMC 3-6	2010	0.1628	0.00629	0.01887	—
Cs-137	RWMC 3-7	2010	0.1876	0.00806	0.02418	—
Cs-137	RWMC 3-8	2010	0.1843	0.00432	0.01296	—
Cs-137	RWMC 4-1	2010	0.1988	0.0101	0.0303	—
Cs-137	RWMC 4-2	2010	0.2276	0.0112	0.0336	—
Cs-137	RWMC 4-3	2010	0.1596	0.00392	0.01176	—
Cs-137	RWMC 4-4	2010	0.1685	0.00374	0.01122	—
Cs-137	RWMC 4-5	2010	0.1405	0.0071	0.0213	—
Cs-137	RWMC 5-10	2010	0.2085	0.00932	0.02796	—
Cs-137	RWMC 5-11	2010	0.2222	0.00992	0.02976	—
Cs-137	RWMC 5-12	2010	0.1621	0.00681	0.02043	—
Cs-137	RWMC 5-14	2010	0.1779	0.0101	0.0303	—
Cs-137	RWMC 5-15	2010	0.2112	0.00994	0.02982	—
Cs-137	RWMC 5-4	2010	0.7561	0.0194	0.0582	—
Cs-137	RWMC 5-4	2010	0.1841	0.00524	0.01572	—
Cs-137	RWMC 5-6	2010	0.1703	0.00896	0.02688	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RWMC 5-7	2010	0.2222	0.00992	0.02976	—
Cs-137	RWMC 5-8	2010	0.1661	0.00773	0.02319	—
Cs-137	RWMC 5-9	2010	0.1608	0.00858	0.02574	—
Cs-137	RWMC 6-1	2010	0.2015	0.00852	0.02556	—
Cs-137	RWMC 6-2	2010	0.1996	0.00653	0.01959	—
Cs-137	RWMC 6-3	2010	0.2039	0.00981	0.02943	—
Cs-137	RWMC 6-4	2010	0.1557	0.0034	0.01032	—
Cs-137	RWMC 6-5	2010	0.1474	0.00719	0.02157	—
Cs-137	RWMC 6-6	2010	0.111	0.00228	0.00684	—
Cs-137	RWMC 6-7	2010	0.1599	0.00615	0.01845	—
Cs-137	RWMC 7-2	2010	0.2223	0.00945	0.02835	—
Cs-137	RWMC 7-3	2010	0.1457	0.00258	0.00774	—
Cs-137	RWMC 7-4	2010	0.1718	0.00654	0.01962	—
Cs-137	RWMC 7-5	2010	0.2047	0.0135	0.0405	—
Cs-137	RWMC 7-6	2010	0.2081	0.00857	0.02571	—
Cs-137	RWMC 7-7	2010	0.2213	0.0137	0.0411	—
Cs-137	RWMC 8-1	2010	0.2081	0.00988	0.02964	—
Cs-137	RWMC 8-4	2010	0.07565	0.0054	0.0162	—
Cs-137	RWMC 8-5	2010	0.2002	0.00715	0.02145	—
Cs-137	RWMC 9-1	2010	0.1529	0.00557	0.01671	—
Cs-137	RWMC 10-1	2011	0.4309	0.0223	0.0669	—
Cs-137	RWMC 2-4	2011	0.4077	0.0157	0.0471	—
Cs-137	RWMC 2-6	2011	0.5338	0.02	0.054	—
Cs-137	RWMC 2-8	2011	0.2298	0.0141	0.0423	—
Cs-137	RWMC 3-4	2011	0.25	0.0157	0.0471	—
Cs-137	RWMC 3-6	2011	0.5359	0.02	0.0651	—
Cs-137	RWMC 3-8	2011	0.3541	0.0146	0.0438	—
Cs-137	RWMC 4-1	2011	0.5888	0.0155	0.0465	—
Cs-137	RWMC 4-5	2011	0.4451	0.0181	0.0543	—
Cs-137	RWMC 5-12	2011	0.2245	0.0123	0.0369	—
Cs-137	RWMC 5-7	2011	0.5076	0.0205	0.0615	—
Cs-137	RWMC 6-1	2011	0.1841	0.0162	0.0486	—
Cs-137	RWMC 6-3	2011	0.127	0.0126	0.0378	—
Cs-137	RWMC 6-7	2011	0.4131	0.0117	0.0351	—
Cs-137	RWMC 7-2	2011	0.5668	0.0231	0.0693	—
Cs-137	RWMC 8-1	2011	0.1295	0.0124	0.0372	—
Cs-137	RWMC 8-5	2011	0.512	0.024	0.072	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	RWMC 9-1	2011	0.4914	0.0149	0.0447	—
Cs-137	RWMC 2-4	2012	0.2167	0.00671	0.02013	—
Cs-137	RWMC 3-4	2012	0.2237	0.01	0.03	—
Cs-137	RWMC 4-1	2012	0.2311	0.011	0.033	—
Cs-137	RWMC 5-4	2012	0.1029	0.00458	0.01374	—
Cs-137	RWMC 6-1	2012	0.08017	0.0041	0.0123	—
Cs-137	RWMC 8-1	2012	0.1529	0.00724	0.02172	—
Cs-137	2 INCH AIR - RWMC	2013	0.1761	0.0319	0.0957	—
Cs-137	2 INCH AIR - RWMC	2013	0.1761	0.010633333	0.0319	—
Cs-137	RWMC 2-4	2013	0.7373	0.0127	0.0381	—
Cs-137	RWMC 3-5	2013	0.2238	0.011866667	0.0356	—
Cs-137	RWMC 5-7	2013	0.2232	0.011233333	0.0337	—
Cs-137	RWMC 2-4	2014	0.3187	0.0202	0.0606	—
Cs-137	RWMC 2-4	2014	0.1439	0.0144	0.0432	—
Cs-137	RWMC 3-4	2014	0.1547	0.00318	0.00954	—
Cs-137	RWMC 4-1	2014	0.4513	0.0186	0.0558	—
Cs-137	RWMC 5-4	2014	0.1928	0.0090	0.02709	—
Cs-137	RWMC 6-1	2014	0.1204	0.00366	0.01098	—
Cs-137	RWMC 6-3	2014	0.4386	0.0263	0.0789	—
Eu-152	RWMC 10-1	2007	0.32	0.097	0.291	—
Eu-152	RWMC 2-4	2007	0.1453	0.0088	0.0264	—
Eu-152	RWMC 2-5	2007	0.2397	0.0187	0.0561	—
Eu-152	RWMC 2-6	2007	0.517	0.0117	0.0351	—
Eu-152	RWMC 2-7	2007	0.4407	0.0107	0.0321	—
Eu-152	RWMC 3-1	2007	0.263	0.0555	0.1665	—
Eu-152	RWMC 3-4	2007	0.3533	0.00965	0.02895	—
Eu-152	RWMC 3-5	2007	0.8876	0.0147	0.0441	—
Eu-152	RWMC 3-6	2007	0.2783	0.01265	0.03795	—
Eu-152	RWMC 3-7	2007	0.4788	0.0139	0.0417	—
Eu-152	RWMC 3-8	2007	0.2	0.0116	0.0348	—
Eu-152	RWMC 4-1	2007	0.3108	0.00505	0.01515	—
Eu-152	RWMC 4-2	2007	0.2353	0.02885	0.08655	—
Eu-152	RWMC 4-3	2007	0.4745	0.01005	0.03015	—
Eu-152	RWMC 4-4	2007	0.1989	0.0119	0.0357	—
Eu-152	RWMC 4-5	2007	0.3626	0.0124	0.0372	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	RWMC 5-10	2007	1.403	0.0088	0.0264	—
Eu-152	RWMC 5-11	2007	0.2959	0.02415	0.07245	—
Eu-152	RWMC 5-12	2007	0.2881	0.0154	0.0462	—
Eu-152	RWMC 5-14	2007	1.057	0.01415	0.04245	—
Eu-152	RWMC 5-15	2007	0.2922	0.03375	0.10125	—
Eu-152	RWMC 5-4	2007	1.187	0.071	0.213	—
Eu-152	RWMC 5-6	2007	0.5347	0.0136	0.0408	—
Eu-152	RWMC 5-8	2007	0.282	0.00945	0.02835	—
Eu-152	RWMC 5-9	2007	0.1749	0.01755	0.05265	—
Eu-152	RWMC 6-1	2007	0.2431	0.01845	0.05535	—
Eu-152	RWMC 6-2	2007	0.2854	0.01135	0.03405	—
Eu-152	RWMC 6-3	2007	0.3213	0.012	0.036	—
Eu-152	RWMC 6-4	2007	0.1973	0.0139	0.0417	—
Eu-152	RWMC 6-5	2007	0.2106	0.0056	0.0168	—
Eu-152	RWMC 6-6	2007	0.3139	0.0153	0.0459	—
Eu-152	RWMC 6-7	2007	0.4628	0.00645	0.01935	—
Eu-152	RWMC 6-9	2007	0.3908	0.1305	0.3915	U
Eu-152	RWMC 7-2	2007	0.3048	0.0063	0.0189	—
Eu-152	RWMC 7-3	2007	0.5589	0.00825	0.02475	—
Eu-152	RWMC 7-4	2007	0.2693	0.0113	0.0339	—
Eu-152	RWMC 7-5	2007	0.2192	0.01125	0.03375	—
Eu-152	RWMC 7-6	2007	0.2317	0.0183	0.0549	—
Eu-152	RWMC 7-7	2007	0.2397	0.00945	0.02835	—
Eu-152	RWMC 8-1	2007	0.1524	0.0086	0.0258	—
Eu-152	RWMC 8-4	2007	0.4579	0.0132	0.0396	—
Eu-152	RWMC 8-5	2007	0.5985	0.064	0.192	—
Eu-152	RWMC 9-1	2007	0.2081	0.00775	0.02325	—
Eu-152	RWMC 5-4	2010	0.004001	0.0314	0.0942	U
Eu-152	RWMC 10-1	2011	0.02199	0.0298	0.0894	U
Eu-152	RWMC 2-4	2011	-0.009919	0.0327	0.0981	U
Eu-152	RWMC 2-6	2011	0.01882	0.0266	0.0798	U
Eu-152	RWMC 2-8	2011	-0.02089	0.0284	0.0852	U
Eu-152	RWMC 3-4	2011	0.01484	0.0307	0.0921	U
Eu-152	RWMC 3-6	2011	0.0008288	0.0271	0.0813	U
Eu-152	RWMC 3-8	2011	-0.009544	0.03	0.09	U
Eu-152	RWMC 4-1	2011	0.01425	0.0294	0.0882	U
Eu-152	RWMC 4-1	2011	-0.002518	0.0219	0.0657	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	RWMC 4-5	2011	0.02435	0.0279	0.0837	U
Eu-152	RWMC 5-12	2011	-0.01587	0.0257	0.0771	U
Eu-152	RWMC 5-7	2011	0.03169	0.0276	0.0828	U
Eu-152	RWMC 6-1	2011	0.01291	0.0264	0.0792	U
Eu-152	RWMC 6-3	2011	-0.01289	0.0259	0.0777	U
Eu-152	RWMC 6-7	2011	-0.0001385	0.0317	0.0951	U
Eu-152	RWMC 7-2	2011	-0.01145	0.0293	0.0879	U
Eu-152	RWMC 8-1	2011	0.01273	0.03	0.09	U
Eu-152	RWMC 8-5	2011	0.04982	0.0313	0.0939	U
Eu-152	RWMC 9-1	2011	0.008186	0.0306	0.0918	U
Eu-152	RWMC 2-4	2012	0.01825	0.0246	0.0738	U
Eu-152	RWMC 3-4	2012	0.03389	0.0277	0.0831	U
Eu-152	RWMC 3-5	2012	0.1302	0.0329	0.0987	—
Eu-152	RWMC 5-4	2012	0.02051	0.0234	0.0702	U
Eu-152	RWMC 6-1	2012	0.03139	0.0219	0.0657	U
Eu-152	RWMC 8-1	2012	0.02745	0.0233	0.0699	U
Eu-152	2 INCH AIR - RWMC	2013	0.1113	0.0277	0.0831	—
Eu-152	RWMC 2-4	2013	0.1201	0.039666667	0.119	—
Eu-152	RWMC 3-4	2013	0.007423	0.0209	0.0627	U
Eu-152	RWMC 5-7	2013	0.1697	0.034	0.102	—
Eu-152	RWMC 2-4	2014	0.00355	0.0381	0.1143	U
Eu-152	RWMC 2-4	2014	-0.001385	0.0248	0.0744	U
Eu-152	RWMC 4-1	2014	0.05386	0.0346	0.1038	U
Eu-152	RWMC 5-4	2014	0.02324	0.0292	0.0876	U
Eu-152	RWMC 6-1	2014	0.003263	0.0219	0.0657	U
Eu-152	RWMC 6-3	2014	0.04793	0.0299	0.0897	U
Pu-238	2-3	1972	0.018	0.002	0.006	—
Pu-238	2-4	1972	0.0072	0.0007	0.0021	—
Pu-238	2-5	1972	0.0031	0.0045	0.0135	U
Pu-238	3-1	1972	0.0036	0.00014	0.00042	—
Pu-238	3-2	1972	0.0086	0.00135	0.00405	—
Pu-238	3-3	1972	0.0067	0.0013	0.0039	—
Pu-238	3-4	1972	0.011	0.00112	0.00336	—
Pu-238	3-5	1972	0.0045	0.00045	0.00135	—
Pu-238	2-6	1973	0.0076	0.0007	0.0021	—
Pu-238	2-7	1973	0.0031	0.0014	0.0042	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	2-8	1973	0.0049	0.00045	0.00135	—
Pu-238	3-6	1973	0.0018	0.003	0.009	U
Pu-238	3-7	1973	0.0049	0.000675	0.002025	—
Pu-238	3-8	1973	0.0049	0.0009	0.0027	—
Pu-238	4-1	1973	0.0049	0.0009	0.0027	—
Pu-238	4-2	1973	0.0022	0.0014	0.0042	U
Pu-238	4-3	1973	0.0027	0.0014	0.0042	U
Pu-238	4-4	1973	0.0045	0.00045	0.00135	—
Pu-238	4-5	1973	0.004	0.0009	0.0027	—
Pu-238	5-1	1973	0.058	0.002	0.006	—
Pu-238	5-2	1973	0.013	0.00135	0.00405	—
Pu-238	5-3	1973	0.005	0.0007	0.0021	—
Pu-238	5-4	1973	0.00816	0.0009	0.0027	—
Pu-238	10-1	1974	0.0027	0.009	0.027	U
Pu-238	5-10	1974	0.0045	0.00045	0.00135	—
Pu-238	5-11	1974	0.0014	0.0009	0.0027	U
Pu-238	5-12	1974	0.0036	0.0014	0.0042	U
Pu-238	5-13	1974	0.0031	0.0014	0.0042	U
Pu-238	5-14	1974	0.0072	0.0014	0.0042	—
Pu-238	5-14	1974	0.0009	0.0014	0.0042	U
Pu-238	5-5	1974	0.0068	0.0009	0.0027	
Pu-238	5-6	1974	0.0022	0.0009	0.0027	U
Pu-238	5-7	1974	0.004	0.0009	0.0027	—
Pu-238	5-8	1974	0.0063	0.0009	0.0027	—
Pu-238	5-9	1974	0.0059	0.0009	0.0027	—
Pu-238	6-1	1974	0.0022	0.0022	0.0066	U
Pu-238	6-2	1974	0.0036	0.0014	0.0042	U
Pu-238	6-3	1974	0.009	0.00225	0.00675	—
Pu-238	6-4	1974	0.0095	0.0007	0.0021	—
Pu-238	6-5	1974	0.0014	0.0009	0.0027	U
Pu-238	6-6	1974	0.0009	0.0014	0.0042	U
Pu-238	7-1	1974	0.005	0.0007	0.0021	—
Pu-238	7-2	1974	0.009	0.00225	0.00675	—
Pu-238	7-3	1974	0.058	0.0018	0.0054	—
Pu-238	7-4	1974	0.0022	0.0014	0.0042	U
Pu-238	7-5	1974	0.0022	0.0022	0.0066	U
Pu-238	7-6	1974	0.0018	0.0018	0.0054	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	8-1	1974	0.018	0.0045	0.0135	—
Pu-238	8-2	1974	0.0018	0.0018	0.0054	U
Pu-238	8-3	1974	0.0049	0.0009	0.0027	—
Pu-238	8-4	1974	0.0095	0.00135	0.00405	—
Pu-238	9-1	1974	0.0009	0.0009	0.0027	U
Pu-238	9-7	1974	0.0049	0.00045	0.00135	—
Pu-238	10-1	1978	0.0009	0.0007	0.0021	U
Pu-238	2-3	1978	0.007	0.006	0.018	U
Pu-238	2-5	1978	0	0.00025	0.00075	U
Pu-238	2-7	1978	0.002	0.001	0.003	U
Pu-238	3-2	1978	0.003	0.001	0.003	—
Pu-238	3-6	1978	0.002	0.001	0.003	U
Pu-238	3-8	1978	0.0008	0.0007	0.0021	U
Pu-238	4-1	1978	0.0018	0.0009	0.0027	U
Pu-238	4-3	1978	0.0011	0.0007	0.0021	U
Pu-238	4-5	1978	0.0004	0.0006	0.0018	U
Pu-238	4-A	1978	0.005	0.001	0.003	—
Pu-238	4-B	1978	0.0006	0.0004	0.0012	U
Pu-238	4-C	1978	0.02	—	0	—
Pu-238	5-11	1978	0.0002	0.0003	0.0009	U
Pu-238	5-13	1978	0.003	0.001	0.003	—
Pu-238	5-15	1978	0.0002	0.000166667	0.0005	U
Pu-238	5-5	1978	0.0009	0.0009	0.0027	U
Pu-238	5-7	1978	0.0005	0.0008	0.0024	U
Pu-238	5-8	1978	0.0022	0.0009	0.0027	U
Pu-238	6-1	1978	0.0002	0.00035	0.00105	U
Pu-238	6-3	1978	0.0005	0.0007	0.0021	U
Pu-238	6-5	1978	0.001	0.001	0.003	U
Pu-238	6-7	1978	0.0008	0.0009	0.0027	U
Pu-238	7-2	1978	0.004	0.0005	0.0015	—
Pu-238	7-4	1978	0.003	0.001	0.003	—
Pu-238	7-6	1978	0.00059	0.0012	0.0036	U
Pu-238	7-A	1978	0.0002	0.0003	0.0009	U
Pu-238	7-B	1978	0.0006	0.0006	0.0018	U
Pu-238	8-1	1978	0.0016	0.0009	0.0027	U
Pu-238	8-3	1978	0.0024	0.0009	0.0027	U
Pu-238	8-5	1978	0.003	0.001	0.003	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	8-A	1978	0.0016	0.0009	0.0027	U
Pu-238	8-B	1978	0.001	0.0009	0.0027	U
Pu-238	8-C	1978	0.0004	0.0006	0.0018	U
Pu-238	9-A	1978	0.0005	0.0006	0.0018	U
Pu-238	10-1	1985	0.0015	0.0017	0.0051	U
Pu-238	2-4	1985	0	0.0015	0.0045	U
Pu-238	3-1	1985	0.002	0.0015	0.0045	U
Pu-238	3-4	1985	0.009	0.001	0.003	—
Pu-238	3-7	1985	0.0011	0.0015	0.0045	U
Pu-238	4-2	1985	0.0031	0.00075	0.00225	—
Pu-238	4-4	1985	0.0033	0.0017	0.0051	U
Pu-238	4-A	1985	0.0021	0.0016	0.0048	U
Pu-238	4-B	1985	0.0005	0.0016	0.0048	U
Pu-238	4-C	1985	0.0022	0.0015	0.0045	U
Pu-238	5-10	1985	0.0035	0.0016	0.0048	U
Pu-238	5-15	1985	0.0021	0.0016	0.0048	U
Pu-238	5-5	1985	0.0021	0.0015	0.0045	U
Pu-238	5-7	1985	0.003	0.002	0.006	U
Pu-238	6-1	1985	0.005	0.001	0.003	—
Pu-238	7-3	1985	0.0002	0.0016	0.0048	U
Pu-238	7-5	1985	0.0025	0.0015	0.0045	U
Pu-238	7-7	1985	0.0029	0.0016	0.0048	U
Pu-238	7-A	1985	0.0033	0.0015	0.0045	U
Pu-238	8-1	1985	0.0024	0.0015	0.0045	U
Pu-238	8-2	1985	0.001	0.002	0.006	U
Pu-238	8-5	1985	0.003	0.002	0.006	U
Pu-238	8-C	1985	0.003	0.002	0.006	U
Pu-238	9-A	1985	0	0.001	0.003	U
Pu-239/240	2-3	1972	0.644	0.018	0.054	—
Pu-239/240	2-4	1972	0.4	0.014	0.042	—
Pu-239/240	2-5	1972	0.0054	0.0007	0.0021	—
Pu-239/240	3-1	1972	0.0027	0.032	0.096	U
Pu-239/240	3-2	1972	0.207	0.009	0.027	—
Pu-239/240	3-3	1972	0.171	0.000433333	0.0013	—
Pu-239/240	3-4	1972	0.166	0.004	0.012	—
Pu-239/240	3-5	1972	0.059	0.0018	0.0054	—
Pu-239/240	2-6	1973	0.055	0.0165	0.0495	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	2-7	1973	0.017	0.018	0.054	U
Pu-239/240	2-8	1973	0.038	0.003	0.009	—
Pu-239/240	3-6	1973	0.022	0.0045	0.0135	—
Pu-239/240	3-7	1973	0.527	0.0036	0.0108	—
Pu-239/240	3-8	1973	0.027	0.0018	0.0054	—
Pu-239/240	4-1	1973	0.063	0.0045	0.0135	—
Pu-239/240	4-2	1973	0.043	0.0031	0.0093	—
Pu-239/240	4-3	1973	0.031	0.0027	0.0081	—
Pu-239/240	4-4	1973	0.024	0.0022	0.0066	—
Pu-239/240	4-5	1973	0.028	0.0011	0.0033	—
Pu-239/240	5-1	1973	2.57	0.045	0.135	—
Pu-239/240	5-2	1973	0.405	0.014	0.042	—
Pu-239/240	5-3	1973	0.144	0.0045	0.0135	—
Pu-239/240	5-4	1973	0.0086	0.0009	0.0027	—
Pu-239/240	10-1	1974	0.0095	0.0018	0.0054	—
Pu-239/240	5-10	1974	0.04	0.0027	0.0081	—
Pu-239/240	5-11	1974	0.011	0.0007	0.0021	—
Pu-239/240	5-12	1974	0.014	0.0022	0.0066	—
Pu-239/240	5-13	1974	0.077	0.00225	0.00675	—
Pu-239/240	5-14	1974	0.083	0.002	0.006	—
Pu-239/240	5-14	1974	0.0018	0.0009	0.0027	U
Pu-239/240	5-5	1974	0.117	0.0045	0.0135	—
Pu-239/240	5-6	1974	0.0441	0.0027	0.0081	—
Pu-239/240	5-7	1974	0.0441	0.0009	0.0027	—
Pu-239/240	5-8	1974	0.108	0.002	0.006	—
Pu-239/240	5-9	1974	0.036	0.0027	0.0081	—
Pu-239/240	6-1	1974	0.049	0.003	0.009	—
Pu-239/240	6-2	1974	0.029	0.0027	0.0081	—
Pu-239/240	6-3	1974	0.126	0.009	0.027	—
Pu-239/240	6-4	1974	0.365	0.009	0.027	—
Pu-239/240	6-5	1974	0.0117	0.0007	0.0021	—
Pu-239/240	6-6	1974	0.149	0.0022	0.0066	—
Pu-239/240	7-1	1974	0.0049	0.0045	0.0135	U
Pu-239/240	7-2	1974	0.03	0.009	0.027	—
Pu-239/240	7-3	1974	0.049	0.0045	0.0135	—
Pu-239/240	7-4	1974	0.104	0.00225	0.00675	—
Pu-239/240	7-5	1974	0.027	0.0045	0.0135	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	7-6	1974	0.031	0.0045	0.0135	—
Pu-239/240	8-1	1974	0.185	0.007	0.021	—
Pu-239/240	8-2	1974	0.027	0.0045	0.0135	—
Pu-239/240	8-3	1974	0.042	0.0036	0.0108	—
Pu-239/240	8-4	1974	0.036	0.0045	0.0135	—
Pu-239/240	9-1	1974	0.011	0.0014	0.0042	—
Pu-239/240	9-7	1974	0.052	0.0018	0.0054	—
Pu-239/240	10-1	1978	0.012	0.001	0.003	—
Pu-239/240	2-3	1978	0.17	0.01	0.03	—
Pu-239/240	2-5	1978	0.022	0.003	0.009	—
Pu-239/240	2-7	1978	0.009	0.0005	0.0015	—
Pu-239/240	3-2	1978	0.053	0.002	0.006	—
Pu-239/240	3-6	1978	0.015	0.002	0.006	—
Pu-239/240	3-8	1978	0.018	0.002	0.006	—
Pu-239/240	4-1	1978	0.042	0.003	0.009	—
Pu-239/240	4-3	1978	0.017	0.002	0.006	—
Pu-239/240	4-5	1978	0.013	0.002	0.006	—
Pu-239/240	4-A	1978	0.018	0.002	0.006	—
Pu-239/240	4-B	1978	0.018	0.002	0.006	—
Pu-239/240	4-C	1978	0.015	0.002	0.006	—
Pu-239/240	5-11	1978	0.011	0.002	0.006	—
Pu-239/240	5-13	1978	0.081	0.0025	0.0075	—
Pu-239/240	5-15	1978	0.004	0.0005	0.0015	—
Pu-239/240	5-5	1978	0.078	0.0025	0.0075	—
Pu-239/240	5-7	1978	0.016	0.002	0.006	—
Pu-239/240	5-8	1978	0.042	0.003	0.009	—
Pu-239/240	6-1	1978	0.019	0.002	0.006	—
Pu-239/240	6-3	1978	0.02	0.002	0.006	—
Pu-239/240	6-5	1978	0.013	0.001	0.003	—
Pu-239/240	6-7	1978	0.013	0.002	0.006	—
Pu-239/240	7-2	1978	0.063	0.004	0.012	—
Pu-239/240	7-4	1978	0.129	0.006	0.018	—
Pu-239/240	7-6	1978	0.022	0.0015	0.0045	—
Pu-239/240	7-A	1978	0.016	0.002	0.006	—
Pu-239/240	7-B	1978	0.012	0.001	0.003	—
Pu-239/240	8-1	1978	0.015	0.002	0.006	—
Pu-239/240	8-3	1978	0.087	0.0025	0.0075	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	8-5	1978	0.025	0.002	0.006	—
Pu-239/240	8-A	1978	0.018	0.002	0.006	—
Pu-239/240	8-B	1978	0.031	0.0015	0.0045	—
Pu-239/240	8-C	1978	0.014	0.002	0.006	—
Pu-239/240	9-A	1978	0.006	0.0005	0.0015	—
Pu-239/240	10-1	1985	0.014	0.002	0.006	—
Pu-239/240	2-4	1985	0.152	0.012	0.036	—
Pu-239/240	3-1	1985	0.017	0.002	0.006	—
Pu-239/240	3-4	1985	0.351	0.0085	0.0255	—
Pu-239/240	3-7	1985	0.017	0.002	0.006	—
Pu-239/240	4-2	1985	0.023	0.0015	0.0045	—
Pu-239/240	4-4	1985	0.025	0.0015	0.0045	—
Pu-239/240	4-A	1985	0.017	0.002	0.006	—
Pu-239/240	4-B	1985	0.008	0.001	0.003	—
Pu-239/240	4-C	1985	0.007	0.001	0.003	—
Pu-239/240	5-10	1985	0.047	0.004	0.012	—
Pu-239/240	5-15	1985	0.016	0.002	0.006	—
Pu-239/240	5-5	1985	0.062	0.005	0.015	—
Pu-239/240	5-7	1985	0.03	0.0015	0.0045	—
Pu-239/240	6-1	1985	0.047	0.004	0.012	—
Pu-239/240	7-3	1985	0.025	0.003	0.009	—
Pu-239/240	7-5	1985	0.021	0.0015	0.0045	—
Pu-239/240	7-7	1985	0.024	0.0015	0.0045	—
Pu-239/240	7-A	1985	0.021	0.003	0.009	—
Pu-239/240	8-1	1985	0.018	0.003	0.009	—
Pu-239/240	8-2	1985	0.025	0.0015	0.0045	—
Pu-239/240	8-5	1985	0.015	0.003	0.009	—
Pu-239/240	8-C	1985	0.018	0.002	0.006	—
Pu-239/240	9-A	1985	0.016	0.003	0.009	—
Sb-125	2-4	1972	0.18	0.02	0.06	—
Sb-125	3-1	1972	0.14	0.02	0.06	—
Sb-125	3-2	1972	0.14	0.02	0.06	—
Sb-125	3-3	1972	0.14	0.02	0.06	—
Sb-125	4-3	1973	0.12	0.01	0.03	—
Sb-125	5-1	1973	0.12	0.01	0.03	—
Sb-125	5-2	1973	0.16	0.02	0.06	—
Sb-125	5-3	1973	0.13	0.02	0.06	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	5-4	1973	0.15	0.02	0.06	—
Sb-125	5-13	1978	0.176	0.02	0.06	—
Sb-125	8-3	1978	0.0894	0.032	0.096	U
Sb-125	RWMC 10-1	2007	0.4207	0.04215	0.12645	—
Sb-125	RWMC 2-4	2007	0.2333	0.0605	0.1815	—
Sb-125	RWMC 2-5	2007	0.2016	0.0675	0.2025	U
Sb-125	RWMC 2-6	2007	0.2536	0.0493	0.1479	—
Sb-125	RWMC 2-7	2007	0.4349	0.067	0.201	—
Sb-125	RWMC 2-8	2007	0.2987	0.0685	0.2055	—
Sb-125	RWMC 3-1	2007	0.2187	0.0328	0.0984	—
Sb-125	RWMC 3-4	2007	0.1545	0.073	0.219	U
Sb-125	RWMC 3-5	2007	0.5879	0.1215	0.3645	—
Sb-125	RWMC 3-6	2007	0.3984	0.069	0.207	—
Sb-125	RWMC 3-7	2007	0.3575	0.0725	0.2175	—
Sb-125	RWMC 3-8	2007	0.2807	0.068	0.204	—
Sb-125	RWMC 4-1	2007	0.2706	0.072	0.216	—
Sb-125	RWMC 4-2	2007	0.4213	0.0685	0.2055	—
Sb-125	RWMC 4-3	2007	0.06891	0.0895	0.2685	U
Sb-125	RWMC 4-4	2007	0.3558	0.076	0.228	—
Sb-125	RWMC 4-5	2007	0.2787	0.069	0.207	—
Sb-125	RWMC 5-10	2007	0.6717	0.086	0.258	—
Sb-125	RWMC 5-11	2007	0.3248	0.086	0.258	—
Sb-125	RWMC 5-12	2007	0.27	0.0286	0.0858	—
Sb-125	RWMC 5-4	2007	0.4895	0.0965	0.2895	—
Sb-125	RWMC 5-8	2007	0.1844	0.0685	0.2055	U
Sb-125	RWMC 5-9	2007	0.3107	0.0855	0.2565	—
Sb-125	RWMC 6-2	2007	0.2622	0.059	0.177	—
Sb-125	RWMC 6-3	2007	0.3561	0.0635	0.1905	—
Sb-125	RWMC 6-4	2007	0.2309	0.065	0.195	—
Sb-125	RWMC 6-5	2007	0.1829	0.0495	0.1485	—
Sb-125	RWMC 6-6	2007	0.405	0.0705	0.2115	—
Sb-125	RWMC 6-7	2007	0.262	0.061	0.183	—
Sb-125	RWMC 6-9	2007	0.2987	0.03725	0.11175	—
Sb-125	RWMC 7-2	2007	0.2667	0.067	0.201	—
Sb-125	RWMC 7-3	2007	0.5242	0.0625	0.1875	—
Sb-125	RWMC 7-4	2007	0.2316	0.0505	0.1515	—
Sb-125	RWMC 7-5	2007	0.2017	0.0715	0.2145	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	RWMC 7-6	2007	0.2763	0.0605	0.1815	—
Sb-125	RWMC 7-7	2007	0.0552	0.061	0.183	U
Sb-125	RWMC 8-4	2007	0.3383	0.048	0.144	—
Sb-125	RWMC 9-1	2007	0.2676	0.0545	0.1635	—
Sb-125	RWMC 10-1	2011	0.07524	0.041	0.123	U
Sb-125	RWMC 2-4	2011	0.001423	0.0424	0.1272	U
Sb-125	RWMC 2-6	2011	-0.05513	0.0392	0.1176	U
Sb-125	RWMC 2-8	2011	0.01756	0.0404	0.1212	U
Sb-125	RWMC 3-4	2011	0.02215	0.043	0.129	U
Sb-125	RWMC 3-6	2011	-0.01932	0.0391	0.1173	U
Sb-125	RWMC 3-8	2011	0.02143	0.0416	0.1248	U
Sb-125	RWMC 4-1	2011	0.1051	0.0438	0.1314	U
Sb-125	RWMC 4-5	2011	-0.03099	0.0378	0.1134	U
Sb-125	RWMC 5-12	2011	-0.05389	0.037	0.111	U
Sb-125	RWMC 5-4	2011	0.02386	0.0437	0.1311	U
Sb-125	RWMC 5-7	2011	-0.007075	0.0418	0.1254	U
Sb-125	RWMC 6-1	2011	-0.05623	0.0335	0.1005	U
Sb-125	RWMC 6-3	2011	0.008085	0.0398	0.1194	U
Sb-125	RWMC 6-7	2011	0.1629	0.0437	0.1311	—
Sb-125	RWMC 7-2	2011	0.1022	0.0391	0.1173	U
Sb-125	RWMC 8-1	2011	-0.005367	0.0411	0.1233	U
Sb-125	RWMC 8-5	2011	0.06898	0.0432	0.1296	U
Sb-125	RWMC 9-1	2011	0.0683	0.0405	0.1215	U
Sb-125	RWMC 2-4	2012	0.01468	0.0328	0.0984	U
Sb-125	RWMC 3-4	2012	0.0008926	0.0379	0.1137	U
Sb-125	RWMC 4-1	2012	-0.01497	0.0321	0.0963	U
Sb-125	RWMC 5-4	2012	-0.0009813	0.035	0.105	U
Sb-125	RWMC 6-1	2012	-0.02884	0.0309	0.0927	U
Sb-125	RWMC 8-1	2012	-0.007087	0.0299	0.0897	U
Sb-125	2 INCH AIR - RWMC	2013	0.2918	0.166	0.498	U
Sb-125	2 INCH AIR - RWMC	2013	0.2918	0.055333333	0.166	—
Sb-125	RWMC 2-4	2013	0.4115	0.077666667	0.233	—
Sb-125	RWMC 3-5	2013	0.01406	0.039	0.117	U
Sb-125	RWMC 5-7	2013	0.1517	0.047333333	0.142	—
Sb-125	RWMC 2-4	2014	0.001747	0.0658	0.1974	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sb-125	RWMC 2-4	2014	-0.03223	0.0441	0.1323	U
Sb-125	RWMC 3-4	2014	-0.01001	0.034	0.102	U
Sb-125	RWMC 4-1	2014	0.002262	0.0516	0.1548	U
Sb-125	RWMC 5-4	2014	-0.02792	0.0452	0.1356	U
Sb-125	RWMC 6-1	2014	-0.01593	0.0348	0.1044	U
Sb-125	RWMC 6-3	2014	0.03284	0.0508	0.1524	U
Sr-90	2-3	1972	1.17	0.14	0.42	—
Sr-90	2-4	1972	1.08	0.13	0.39	—
Sr-90	2-5	1972	0.72	0.09	0.27	—
Sr-90	3-1	1972	0.991	0.09	0.27	—
Sr-90	3-2	1972	0.486	0.064	0.192	—
Sr-90	3-3	1972	0.693	0.099	0.297	—
Sr-90	3-4	1972	0.99	0.09	0.27	—
Sr-90	3-5	1972	0.387	0.039	0.117	—
Sr-90	5-1	1973	1.31	0.09	0.27	—
Sr-90	5-3	1973	0.765	0.09	0.27	—
Sr-90	5-4	1973	1.3	0.09	0.27	—
Sr-90	2-3	1978	0.71	0.05	0.15	—
Sr-90	3-2	1978	2.52	0.12	0.36	—
Sr-90	4-1	1978	0.71	0.05	0.15	—
Sr-90	5-13	1978	0.8	0.1	0.3	—
Sr-90	5-5	1978	0.83	0.05	0.15	—
Sr-90	7-2	1978	0.55	0.05	0.15	—
Sr-90	7-4	1978	0.48	0.05	0.15	—
Sr-90	5-5	1985	0.37	0.08	0.24	—
Sr-90	7-3	1985	0.36	0.03	0.09	—
U-233/234	2-4	1972	1.16	0.02	0.06	—
U-233/234	3-6	1978	1.1	0.03	0.09	—
U-233/234	4-3	1978	0.86	0.02	0.06	—
U-233/234	6-1	1978	1.03	0.02	0.06	—
U-233/234	7-4	1978	1.13	0.02	0.06	—
U-233/234	8-A	1978	1.01	0.02	0.06	—
U-233/234	10-1	1985	1.03	0.04	0.12	—
U-233/234	2-4	1985	1.01	0.04	0.12	—
U-233/234	3-1	1985	1.05	0.04	0.12	—
U-233/234	3-4	1985	1.11	0.04	0.12	—
U-233/234	3-7	1985	1.04	0.04	0.12	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-233/234	4-2	1985	1.12	0.04	0.12	—
U-233/234	4-4	1985	1.18	0.04	0.12	—
U-233/234	4-A	1985	0.99	0.04	0.12	—
U-233/234	4-B	1985	0.99	0.04	0.12	—
U-233/234	4-C	1985	0.97	0.04	0.12	—
U-233/234	5-15	1985	0.96	0.04	0.12	—
U-233/234	5-5	1985	1.07	0.04	0.12	—
U-233/234	5-7	1985	1.07	0.04	0.12	—
U-233/234	6-1	1985	1.04	0.04	0.12	—
U-233/234	7-3	1985	1.03	0.04	0.12	—
U-233/234	7-5	1985	1.05	0.04	0.12	—
U-233/234	7-7	1985	1.04	0.04	0.12	—
U-233/234	7-A	1985	0.95	0.03	0.09	—
U-233/234	8-1	1985	1.06	0.04	0.12	—
U-233/234	8-2	1985	1.08	0.04	0.12	—
U-233/234	8-5	1985	1.12	0.04	0.12	—
U-233/234	8-C	1985	1.04	0.04	0.12	—
U-233/234	9-A	1985	1.02	0.04	0.12	—
U-234	RWMC 2-8	2006	20.23	4.265	12.795	—
U-234	RWMC 10-1	2007	16.51	0.04295	0.12885	—
U-234	RWMC 2-4	2007	7.199	0.00935	0.02805	—
U-234	RWMC 2-5	2007	35.45	0.0131	0.0393	—
U-234	RWMC 2-6	2007	40.39	0.01365	0.04095	—
U-234	RWMC 2-7	2007	27.73	0.0141	0.0423	—
U-234	RWMC 3-1	2007	104.2	0.0491	0.1473	—
U-234	RWMC 3-4	2007	42.99	0.003815	0.011445	—
U-234	RWMC 3-5	2007	26.3	0.01425	0.04275	—
U-234	RWMC 3-6	2007	23.05	0.0119	0.0357	—
U-234	RWMC 3-7	2007	24.85	0.0152	0.0456	—
U-234	RWMC 3-8	2007	112.2	0.01775	0.05325	—
U-234	RWMC 4-1	2007	68.35	0.01795	0.05385	—
U-234	RWMC 4-2	2007	43.83	0.0185	0.0555	—
U-234	RWMC 4-3	2007	77.21	0.0052	0.0156	—
U-234	RWMC 4-4	2007	20.21	0.01215	0.03645	—
U-234	RWMC 4-5	2007	25.79	0.00595	0.01785	—
U-234	RWMC 5-10	2007	47.07	0.0051	0.0153	—
U-234	RWMC 5-11	2007	29.16	0.004565	0.013695	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	RWMC 5-12	2007	14.29	0.02245	0.06735	—
U-234	RWMC 5-15	2007	19.24	0.01545	0.04635	—
U-234	RWMC 5-4	2007	67.99	0.061	0.183	—
U-234	RWMC 5-7	2007	132.6	4.57	13.71	—
U-234	RWMC 5-8	2007	33.93	0.01145	0.03435	—
U-234	RWMC 5-9	2007	13.98	0.0165	0.0495	—
U-234	RWMC 6-2	2007	27.3	0.0085	0.0255	—
U-234	RWMC 6-3	2007	54.22	0.01055	0.03165	—
U-234	RWMC 6-4	2007	10.14	0.01055	0.03165	—
U-234	RWMC 6-5	2007	79.23	0.00955	0.02865	—
U-234	RWMC 6-6	2007	11.1	0.0059	0.0177	—
U-234	RWMC 6-7	2007	47.66	0.0054	0.0162	—
U-234	RWMC 6-9	2007	24.1	0.088	0.264	—
U-234	RWMC 7-2	2007	19.32	0.00555	0.01665	—
U-234	RWMC 7-3	2007	41.15	0.01215	0.03645	—
U-234	RWMC 7-4	2007	49.35	0.00585	0.01755	—
U-234	RWMC 7-5	2007	55.01	0.0126	0.0378	—
U-234	RWMC 7-6	2007	14.4	0.004405	0.013215	—
U-234	RWMC 7-7	2007	23.98	0.0117	0.0351	—
U-234	RWMC 8-1	2007	35.94	0.0051	0.0153	—
U-234	RWMC 8-4	2007	38.48	0.0132	0.0396	—
U-234	RWMC 8-5	2007	188.2	0.0146	0.0438	—
U-234	RWMC 9-1	2007	22.57	0.0123	0.0369	—
U-234	RWMC 2-5	2009	0.509	1.075	3.225	U
U-234	RWMC 2-8	2009	1.187	1.01	3.03	U
U-234	RWMC 4-4	2009	10.78	0.00885	0.02655	—
U-234	RWMC 6-4	2009	2.081	2.575	7.725	U
U-234	RWMC 7-6	2009	4.158	0.04675	0.14025	—
U-234	RWMC 8-5	2009	4.863	0.00715	0.02145	—
U-234	RWMC 9-1	2009	4.555	0.00695	0.02085	—
U-234	RWMC 10-1	2010	26.1	1.88	5.64	—
U-234	RWMC 2-6	2010	7.071	4	12	U
U-234	RWMC 3-1	2010	22.84	2.19	6.57	—
U-234	RWMC 3-6	2010	66.58	3.69	11.07	—
U-234	RWMC 3-7	2010	21.57	1.94	5.82	—
U-234	RWMC 3-8	2010	29.62	1.96	5.88	—
U-234	RWMC 4-1	2010	25.3	2.24	6.72	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	RWMC 4-2	2010	26.94	2.07	6.21	—
U-234	RWMC 4-3	2010	18.6	1.7	5.1	—
U-234	RWMC 4-4	2010	27.89	1.98	5.94	—
U-234	RWMC 4-5	2010	38.09	2.18	6.54	—
U-234	RWMC 5-10	2010	16.6	2.42	7.26	—
U-234	RWMC 5-11	2010	27.11	1.94	5.82	—
U-234	RWMC 5-12	2010	38.96	2.15	6.45	—
U-234	RWMC 5-14	2010	11.49	1.76	5.28	—
U-234	RWMC 5-15	2010	27.04	1.96	5.88	—
U-234	RWMC 5-6	2010	20.27	1.66	4.98	—
U-234	RWMC 5-7	2010	27.11	1.94	5.82	—
U-234	RWMC 5-8	2010	16.5	1.95	5.85	—
U-234	RWMC 5-9	2010	24.22	1.63	4.89	—
U-234	RWMC 6-1	2010	17.57	1.7	5.1	—
U-234	RWMC 6-2	2010	39.62	2.17	6.51	—
U-234	RWMC 6-3	2010	7.86	1.43	4.29	—
U-234	RWMC 6-4	2010	10.74	1.74	5.22	—
U-234	RWMC 6-5	2010	14.66	1.7	5.1	—
U-234	RWMC 6-6	2010	9.179	1.9	5.7	—
U-234	RWMC 6-7	2010	5.614	2.3	6.9	U
U-234	RWMC 7-2	2010	9.86	1.6	4.8	—
U-234	RWMC 7-3	2010	38.45	2.15	6.45	—
U-234	RWMC 7-4	2010	18.61	1.55	4.65	—
U-234	RWMC 7-5	2010	25.79	1.91	5.73	—
U-234	RWMC 7-6	2010	22.98	1.87	5.61	—
U-234	RWMC 7-7	2010	29.14	2.04	6.12	—
U-234	RWMC 8-1	2010	27.58	2.05	6.15	—
U-234	RWMC 8-4	2010	61.63	3.55	10.65	—
U-234	RWMC 8-5	2010	28.13	2.03	6.09	—
U-234	RWMC 9-1	2010	5.095	1.89	5.67	U
U-234	RWMC 4-1	2011	-7.214	19.8	59.4	U
U-234	RWMC 2-4	2012	32.25	25	75	U
U-234	RWMC 3-4	2012	30.59	26.7	80.1	U
U-234	RWMC 3-5	2012	11.65	42.33333333	127	U
U-234	RWMC 5-4	2012	-6.716	17.1	51.3	U
U-234	RWMC 6-1	2012	19.69	14.2	42.6	U
U-234	RWMC 8-1	2012	29.29	22.5	67.5	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	2 INCH AIR - RWMC	2013	22.36	33.26666667	99.8	U
U-234	RWMC 3-4	2013	-37.91	57.2	171.6	U
U-234	RWMC 5-7	2013	44.72	39.33333333	118	U
U-234	RWMC 2-4	2014	-63.02	55.9	167.7	U
U-234	RWMC 6-1	2014	-57.17	57	171	U
U-235	10-1	1978	0.098	0.009	0.027	—
U-235	2-3	1978	0.0963	0.0095	0.0285	—
U-235	3-2	1978	0.111	0.01	0.03	—
U-235	3-6	1978	0.109	0.021	0.063	—
U-235	4-3	1978	0.043	0.004	0.012	—
U-235	4-5	1978	0.111	0.008	0.024	—
U-235	4-A	1978	0.0827	0.0095	0.0285	—
U-235	5-13	1978	0.124	0.0085	0.0255	—
U-235	5-15	1978	0.0742	0.0075	0.0225	—
U-235	5-5	1978	0.0745	0.008	0.024	—
U-235	5-8	1978	11.9	0.021	0.063	—
U-235	6-1	1978	0.101	0.016	0.048	—
U-235	6-3	1978	0.118	0.016	0.048	—
U-235	6-7	1978	0.093	0.0075	0.0225	—
U-235	7-6	1978	0.125	0.01	0.03	—
U-235	8-1	1978	0.0823	0.0008	0.0024	—
U-235	8-3	1978	0.101	0.016	0.048	—
U-235	8-5	1978	0.0991	0.069	0.207	U
U-235	8-A	1978	0.0815	0.008	0.024	—
U-235	8-C	1978	0.112	0.016	0.048	—
U-235	10-1	1985	0.053	0.013	0.039	—
U-235	2-4	1985	0.05	0.0125	0.0375	—
U-235	3-1	1985	0.081	0.015	0.045	—
U-235	3-4	1985	0.056	0.014	0.042	—
U-235	3-7	1985	0.053	0.013	0.039	—
U-235	4-2	1985	0.055	0.014	0.042	—
U-235	4-4	1985	0.058	0.0145	0.0435	—
U-235	4-A	1985	0.052	0.013	0.039	—
U-235	4-B	1985	0.053	0.013	0.039	—
U-235	4-C	1985	0.051	0.0125	0.0375	—
U-235	5-10	1985	0.055	0.0135	0.0405	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	5-15	1985	0.042	0.021	0.063	U
U-235	5-5	1985	0.052	0.013	0.039	—
U-235	5-7	1985	0.063	0.031	0.093	U
U-235	6-1	1985	0.055	0.014	0.042	—
U-235	7-3	1985	0.041	0.021	0.063	U
U-235	7-5	1985	0.049	0.0125	0.0375	—
U-235	7-7	1985	0.057	0.0145	0.0435	—
U-235	7-A	1985	0.049	0.0125	0.0375	—
U-235	8-1	1985	0.05	0.0125	0.0375	—
U-235	8-2	1985	0.055	0.014	0.042	—
U-235	8-5	1985	0.064	0.032	0.096	U
U-235	8-C	1985	0.053	0.013	0.039	—
U-235	9-A	1985	0.058	0.0145	0.0435	—
U-235	RWMC 2-4	2005	2.717	1.65	4.95	U
U-235	RWMC 2-5	2005	0.6396	0.00635	0.01905	—
U-235	RWMC 10-1	2006	0.7105	0.004635	0.013905	—
U-235	RWMC 2-6	2006	0.5868	0.00645	0.01935	—
U-235	RWMC 2-7	2006	0.3089	0.0065	0.0195	—
U-235	RWMC 2-8	2006	0.4887	0.00805	0.02415	—
U-235	RWMC 2-8	2006	0.4111	0.00905	0.02715	—
U-235	RWMC 3-1	2006	0.8473	0.0037	0.0111	—
U-235	RWMC 3-4	2006	1.534	0.0055	0.0165	—
U-235	RWMC 3-5	2006	0.7895	0.00605	0.01815	—
U-235	RWMC 3-6	2006	5.797	0.02045	0.06135	—
U-235	RWMC 3-7	2006	1.954	0.00775	0.02325	—
U-235	RWMC 3-8	2006	0.7999	0.0159	0.0477	—
U-235	RWMC 4-1	2006	0.2936	0.00625	0.01875	—
U-235	RWMC 4-2	2006	0.9281	0.0069	0.0207	—
U-235	RWMC 4-3	2006	1.276	0.00555	0.01665	—
U-235	RWMC 4-4	2006	1.022	0.0057	0.0171	—
U-235	RWMC 4-5	2006	0.3951	0.00875	0.02625	—
U-235	RWMC 5-10	2006	0.8833	0.003925	0.011775	—
U-235	RWMC 5-11	2006	2.309	0.0058	0.0174	—
U-235	RWMC 5-12	2006	0.2709	0.0058	0.0174	—
U-235	RWMC 5-14	2006	2.41	0.0051	0.0153	—
U-235	RWMC 5-15	2006	0.2295	0.00725	0.02175	—
U-235	RWMC 5-4	2006	0.7732	0.004325	0.012975	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RWMC 5-6	2006	0.7903	0.004	0.012	—
U-235	RWMC 5-7	2006	0.8109	0.2615	0.7845	—
U-235	RWMC 5-8	2006	0.5668	0.00635	0.01905	—
U-235	RWMC 5-9	2006	0.6516	0.0055	0.0165	—
U-235	RWMC 6-1	2006	1.132	0.00875	0.02625	—
U-235	RWMC 6-2	2006	1.223	0.00555	0.01665	—
U-235	RWMC 6-3	2006	1.007	0.01	0.03	—
U-235	RWMC 6-4	2006	2.293	0.0087	0.0261	—
U-235	RWMC 6-5	2006	0.5059	0.0128	0.0384	—
U-235	RWMC 6-6	2006	0.8452	0.00605	0.01815	—
U-235	RWMC 6-7	2006	0.3118	0.01115	0.03345	—
U-235	RWMC 7-3	2006	1.197	0.00615	0.01845	—
U-235	RWMC 7-4	2006	0.4268	0.003765	0.011295	—
U-235	RWMC 7-5	2006	0.649	0.0053	0.0159	—
U-235	RWMC 7-6	2006	3.631	0.00334	0.01002	—
U-235	RWMC 7-7	2006	1	0.004875	0.014625	—
U-235	RWMC 9-1	2006	1.344	0.00456	0.01368	—
U-235	RWMC 10-1	2007	0.3846	0.01335	0.04005	—
U-235	RWMC 2-4	2007	0.3813	0.00439	0.01317	—
U-235	RWMC 2-5	2007	0.3425	0.0054	0.0162	—
U-235	RWMC 2-6	2007	0.2928	0.00431	0.01293	—
U-235	RWMC 2-7	2007	0.4357	0.00261	0.00783	—
U-235	RWMC 3-1	2007	0.3329	0.0106	0.0318	—
U-235	RWMC 3-4	2007	0.5184	0.00545	0.01635	—
U-235	RWMC 3-5	2007	0.6104	0.0052	0.0156	—
U-235	RWMC 3-6	2007	0.2392	0.0064	0.0192	—
U-235	RWMC 3-7	2007	0.2851	0.0054	0.0162	—
U-235	RWMC 3-8	2007	0.135	0.00233	0.00699	—
U-235	RWMC 4-1	2007	0.3902	0.0079	0.0237	—
U-235	RWMC 4-2	2007	0.4573	0.009	0.027	—
U-235	RWMC 4-3	2007	0.5227	0.0083	0.0249	—
U-235	RWMC 4-4	2007	0.422	0.00326	0.00978	—
U-235	RWMC 4-5	2007	0.3474	0.003415	0.010245	—
U-235	RWMC 5-10	2007	0.4406	0.0635	0.1905	—
U-235	RWMC 5-11	2007	0.3162	0.084	0.252	—
U-235	RWMC 5-12	2007	0.335	0.0091	0.0273	—
U-235	RWMC 5-14	2007	0.9801	0.00605	0.01815	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RWMC 5-15	2007	0.3725	0.01645	0.04935	—
U-235	RWMC 5-4	2007	0.6284	0.0135	0.0405	—
U-235	RWMC 5-6	2007	0.4301	0.00277	0.00831	—
U-235	RWMC 5-7	2007	0.1493	0.0838	0.2514	U
U-235	RWMC 5-8	2007	0.2418	0.00457	0.01371	—
U-235	RWMC 5-9	2007	0.4254	0.00191	0.00573	—
U-235	RWMC 6-1	2007	0.2371	0.01075	0.03225	—
U-235	RWMC 6-2	2007	0.3431	0.00228	0.00684	—
U-235	RWMC 6-3	2007	0.2954	0.003385	0.010155	—
U-235	RWMC 6-4	2007	0.2656	0.0052	0.0156	—
U-235	RWMC 6-5	2007	0.2898	0.007	0.021	—
U-235	RWMC 6-6	2007	0.3599	0.002665	0.007995	—
U-235	RWMC 6-7	2007	0.258	0.00515	0.01545	—
U-235	RWMC 6-9	2007	0.2871	0.0093	0.0279	—
U-235	RWMC 7-2	2007	0.3766	0.051	0.153	—
U-235	RWMC 7-3	2007	0.3719	0.0052	0.0156	—
U-235	RWMC 7-4	2007	0.2595	0.00585	0.01755	—
U-235	RWMC 7-5	2007	0.3736	0.003085	0.009255	—
U-235	RWMC 7-6	2007	0.3634	0.0565	0.1695	—
U-235	RWMC 7-7	2007	0.3239	0.00685	0.02055	—
U-235	RWMC 8-1	2007	0.2923	0.00456	0.01368	—
U-235	RWMC 8-4	2007	0.267	0.00322	0.00966	—
U-235	RWMC 8-5	2007	0.3337	0.01325	0.03975	—
U-235	RWMC 9-1	2007	0.2699	0.00885	0.02655	—
U-235	RWMC 2-5	2009	0.2668	0.00605	0.01815	—
U-235	RWMC 2-6	2009	0.05966	0.00725	0.02175	—
U-235	RWMC 2-7	2009	0.03935	0.0377	0.1131	U
U-235	RWMC 2-8	2009	0.7081	0.185	0.555	—
U-235	RWMC 5-6	2009	0.1774	0.0199	0.0597	—
U-235	RWMC 5-7	2009	0.1445	0.0283	0.0849	—
U-235	RWMC 5-8	2009	0.1703	0.0073	0.0219	—
U-235	RWMC 6-3	2009	0.2004	0.00481	0.01443	—
U-235	RWMC 6-7	2009	0.2485	0.0053	0.0159	—
U-235	RWMC 7-6	2009	0.2094	0.0069	0.0207	—
U-235	RWMC 10-1	2010	0.4033	0.0599	0.1797	—
U-235	RWMC 2-4	2010	2.531	0.727	2.181	—
U-235	RWMC 2-6	2010	0.5375	0.136	0.408	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RWMC 3-1	2010	0.2493	0.0586	0.1758	—
U-235	RWMC 3-5	2010	1.89	0.44	1.32	—
U-235	RWMC 3-6	2010	1.049	0.255	0.765	—
U-235	RWMC 3-7	2010	0.288	0.0466	0.1398	—
U-235	RWMC 3-8	2010	0.7177	0.217	0.651	—
U-235	RWMC 4-1	2010	0.157	0.0432	0.1296	—
U-235	RWMC 4-2	2010	0.3715	0.0502	0.1506	—
U-235	RWMC 4-3	2010	0.3154	0.0529	0.1587	—
U-235	RWMC 4-4	2010	0.2099	0.0423	0.1269	—
U-235	RWMC 4-5	2010	1.018	0.19	0.57	—
U-235	RWMC 5-10	2010	0.8474	0.19	0.57	—
U-235	RWMC 5-11	2010	0.8656	0.204	0.612	—
U-235	RWMC 5-12	2010	0.3724	0.0569	0.1707	—
U-235	RWMC 5-14	2010	2.47	0.604	1.812	—
U-235	RWMC 5-15	2010	1.132	0.235	0.705	—
U-235	RWMC 5-4	2010	1.126	0.227	0.681	—
U-235	RWMC 5-4	2010	0.1112	0.183	0.549	U
U-235	RWMC 5-6	2010	0.4285	0.0576	0.1728	—
U-235	RWMC 5-7	2010	0.8656	0.204	0.612	—
U-235	RWMC 5-8	2010	0.3753	0.0585	0.1755	—
U-235	RWMC 5-9	2010	1.028	0.233	0.699	—
U-235	RWMC 6-1	2010	4.118	0.62	1.86	—
U-235	RWMC 6-2	2010	0.2718	0.0484	0.1452	—
U-235	RWMC 6-3	2010	1.191	0.231	0.693	—
U-235	RWMC 6-4	2010	0.3013	0.0598	0.1794	—
U-235	RWMC 6-5	2010	0.182	0.0476	0.1428	—
U-235	RWMC 6-6	2010	0.2986	0.0555	0.1665	—
U-235	RWMC 6-7	2010	0.7493	0.184	0.552	—
U-235	RWMC 7-2	2010	2.479	0.595	1.785	—
U-235	RWMC 7-3	2010	0.3401	0.0519	0.1557	—
U-235	RWMC 7-4	2010	0.9975	0.229	0.687	—
U-235	RWMC 7-5	2010	0.2192	0.0465	0.1395	—
U-235	RWMC 7-6	2010	3.341	0.639	1.917	—
U-235	RWMC 7-7	2010	0.4722	0.071	0.213	—
U-235	RWMC 8-1	2010	0.4099	0.0655	0.1965	—
U-235	RWMC 8-4	2010	0.9419	0.316	0.948	U
U-235	RWMC 8-5	2010	1.092	0.21	0.63	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RWMC 9-1	2010	0.2049	0.0429	0.1287	—
U-235	RWMC 10-1	2011	-0.0711	0.186	0.558	U
U-235	RWMC 2-4	2011	0.08319	0.195	0.585	U
U-235	RWMC 2-6	2011	0.05189	0.177	0.531	U
U-235	RWMC 2-8	2011	0.0233	0.179	0.537	U
U-235	RWMC 3-4	2011	-0.01841	0.183	0.549	U
U-235	RWMC 3-6	2011	0.03848	0.178	0.534	U
U-235	RWMC 3-8	2011	-0.08745	0.184	0.552	U
U-235	RWMC 4-1	2011	0.04411	0.151	0.453	U
U-235	RWMC 4-1	2011	0.01584	0.192	0.576	U
U-235	RWMC 4-5	2011	0.02357	0.186	0.558	U
U-235	RWMC 5-12	2011	0.09666	0.145	0.435	U
U-235	RWMC 5-7	2011	0.08005	0.179	0.537	U
U-235	RWMC 6-1	2011	0.09207	0.167	0.501	U
U-235	RWMC 6-3	2011	0.2295	0.179	0.537	U
U-235	RWMC 6-7	2011	0.007271	0.199	0.597	U
U-235	RWMC 7-2	2011	-0.1075	0.175	0.525	U
U-235	RWMC 8-1	2011	-0.02463	0.177	0.531	U
U-235	RWMC 8-5	2011	-0.2323	0.196	0.588	U
U-235	RWMC 9-1	2011	-0.0229	0.185	0.555	U
U-235	RWMC 2-4	2012	0.1215	0.154	0.462	U
U-235	RWMC 3-4	2012	0.02388	0.146	0.438	U
U-235	RWMC 3-5	2012	0.203	0.055666667	0.167	—
U-235	RWMC 5-4	2012	0.1115	0.15	0.45	U
U-235	RWMC 6-1	2012	0.1412	0.142	0.426	U
U-235	RWMC 8-1	2012	0.07348	0.148	0.444	U
U-235	2 INCH AIR - RWMC	2013	0.2514	0.251	0.753	U
U-235	2 INCH AIR - RWMC	2013	0.2514	0.083666667	0.251	—
U-235	RWMC 2-4	2013	0.4814	0.129333333	0.388	—
U-235	RWMC 3-4	2013	-0.01217	0.141	0.423	U
U-235	RWMC 5-7	2013	0.4637	0.092	0.276	—
U-235	RWMC 2-4	2014	-0.0419	0.245	0.735	U
U-235	RWMC 2-4	2014	-0.1396	0.149	0.447	U
U-235	RWMC 4-1	2014	-0.02984	0.191	0.573	U
U-235	RWMC 5-4	2014	-0.01218	0.18	0.54	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	RWMC 6-1	2014	-0.1239	0.137	0.411	U
U-235	RWMC 6-3	2014	0.1895	0.203	0.609	U
U-238	2-4	1972	1.12	0.022	0.066	—
U-238	3-6	1978	1.23	0.03	0.09	—
U-238	4-3	1978	0.88	0.02	0.06	—
U-238	6-1	1978	1.11	0.03	0.09	—
U-238	7-4	1978	1.22	0.03	0.09	—
U-238	8-A	1978	1.1	0.02	0.06	—
U-238	10-1	1985	1.1	0.04	0.12	—
U-238	2-4	1985	1.05	0.04	0.12	—
U-238	3-1	1985	1.12	0.04	0.12	—
U-238	3-4	1985	1.18	0.04	0.12	—
U-238	3-7	1985	1.18	0.04	0.12	—
U-238	4-2	1985	1.16	0.04	0.12	—
U-238	4-4	1985	1.07	0.04	0.12	—
U-238	4-A	1985	1.06	0.04	0.12	—
U-238	4-B	1985	1.08	0.04	0.12	—
U-238	4-C	1985	1.06	0.04	0.12	—
U-238	5-10	1985	1.13	0.04	0.12	—
U-238	5-15	1985	1.02	0.04	0.12	—
U-238	5-5	1985	1.02	0.04	0.12	—
U-238	5-7	1985	1.14	0.04	0.12	—
U-238	6-1	1985	1.11	0.04	0.12	—
U-238	7-3	1985	1.13	0.04	0.12	—
U-238	7-5	1985	1.08	0.04	0.12	—
U-238	7-7	1985	1.13	0.04	0.12	—
U-238	7-A	1985	1.02	0.04	0.12	—
U-238	8-1	1985	1.12	0.04	0.12	—
U-238	8-2	1985	1.14	0.04	0.12	—
U-238	8-5	1985	1.15	0.04	0.12	—
U-238	8-C	1985	1.06	0.04	0.12	—
U-238	9-A	1985	1.09	0.04	0.12	—
U-238	RWMC 2-4	2005	9.604	0.002525	0.007575	—
U-238	RWMC 2-5	2005	4.826	3.855	11.565	U
U-238	RWMC 7-2	2005	16.41	7.71	23.13	U
U-238	RWMC 8-1	2005	5.884	2.89	8.67	U
U-238	RWMC 8-4	2005	6.662	3.3	9.9	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	RWMC 10-1	2006	5.529	0.0105	0.0315	—
U-238	RWMC 2-6	2006	5.229	0.023	0.069	—
U-238	RWMC 2-7	2006	8.393	0.00615	0.01845	—
U-238	RWMC 2-8	2006	6.062	0.0123	0.0369	—
U-238	RWMC 2-8	2006	1.597	0.021	0.063	—
U-238	RWMC 3-1	2006	14.25	0.0086	0.0258	—
U-238	RWMC 3-4	2006	21.65	0.01475	0.04425	—
U-238	RWMC 3-5	2006	14.81	0.00855	0.02565	—
U-238	RWMC 3-7	2006	15.98	0.83	2.49	—
U-238	RWMC 4-1	2006	4.281	0.01405	0.04215	—
U-238	RWMC 4-2	2006	6.298	0.01125	0.03375	—
U-238	RWMC 4-3	2006	4.22	0.0073	0.0219	—
U-238	RWMC 4-4	2006	12.25	0.0069	0.0207	—
U-238	RWMC 4-5	2006	15.93	0.0082	0.0246	—
U-238	RWMC 5-10	2006	8.179	0.004145	0.012435	—
U-238	RWMC 5-11	2006	21.1	0.0075	0.0225	—
U-238	RWMC 5-12	2006	15.82	0.01595	0.04785	—
U-238	RWMC 5-14	2006	17.77	0.0106	0.0318	—
U-238	RWMC 5-15	2006	18.08	0.0087	0.0261	—
U-238	RWMC 5-4	2006	22.46	0.00855	0.02565	—
U-238	RWMC 5-6	2006	5.74	0.0068	0.0204	—
U-238	RWMC 5-7	2006	6.927	1.475	4.425	—
U-238	RWMC 5-8	2006	10.99	0.00965	0.02895	—
U-238	RWMC 5-9	2006	5.362	0.0074	0.0222	—
U-238	RWMC 6-1	2006	7.519	0.01165	0.03495	—
U-238	RWMC 6-2	2006	12.47	0.298	0.894	—
U-238	RWMC 6-3	2006	21.25	0.0136	0.0408	—
U-238	RWMC 6-4	2006	20.16	0.4275	1.2825	—
U-238	RWMC 6-5	2006	7.588	0.525	1.575	—
U-238	RWMC 6-6	2006	5.223	0.00875	0.02625	—
U-238	RWMC 6-7	2006	5.369	0.0153	0.0459	—
U-238	RWMC 7-3	2006	52.98	0.01615	0.04845	—
U-238	RWMC 7-4	2006	10.56	0.00595	0.01785	—
U-238	RWMC 7-5	2006	11.73	0.0068	0.0204	—
U-238	RWMC 7-6	2006	46.49	0.00925	0.02775	—
U-238	RWMC 7-7	2006	11.11	0.00545	0.01635	—
U-238	RWMC 9-1	2006	12.1	0.0119	0.0357	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	RWMC 10-1	2007	1.177	0.0144	0.0432	—
U-238	RWMC 2-4	2007	1.231	0.073	0.219	—
U-238	RWMC 2-5	2007	4.66	0.062	0.186	—
U-238	RWMC 2-6	2007	6.019	0.031	0.093	—
U-238	RWMC 2-7	2007	3.595	0.027	0.081	—
U-238	RWMC 3-1	2007	2.962	0.01675	0.05025	—
U-238	RWMC 3-4	2007	4.184	0.02185	0.06555	—
U-238	RWMC 3-5	2007	8.003	0.0306	0.0918	—
U-238	RWMC 3-6	2007	1.886	0.0244	0.0732	—
U-238	RWMC 3-7	2007	3.897	0.0363	0.1089	—
U-238	RWMC 3-8	2007	2.718	0.0525	0.1575	—
U-238	RWMC 4-1	2007	3.99	0.052	0.156	—
U-238	RWMC 4-2	2007	7.533	0.0595	0.1785	—
U-238	RWMC 4-3	2007	3.974	0.03155	0.09465	—
U-238	RWMC 4-4	2007	3.305	0.04105	0.12315	—
U-238	RWMC 4-5	2007	6.338	0.0404	0.1212	—
U-238	RWMC 5-10	2007	11.06	0.079	0.237	—
U-238	RWMC 5-11	2007	1.828	21	63	U
U-238	RWMC 5-12	2007	2.755	0.0945	0.2835	—
U-238	RWMC 5-14	2007	5.105	0.0059	0.0177	—
U-238	RWMC 5-15	2007	2.718	0.0056	0.0168	—
U-238	RWMC 5-4	2007	7.722	0.01265	0.03795	—
U-238	RWMC 5-6	2007	3.852	0.03155	0.09465	—
U-238	RWMC 5-7	2007	0	6.77	20.31	U
U-238	RWMC 5-8	2007	3.804	0.053	0.159	—
U-238	RWMC 5-9	2007	1.467	0.03315	0.09945	—
U-238	RWMC 6-1	2007	5.868	0.02425	0.07275	—
U-238	RWMC 6-2	2007	1.291	0.0381	0.1143	—
U-238	RWMC 6-3	2007	2.299	0.02355	0.07065	—
U-238	RWMC 6-4	2007	4.17	0.052	0.156	—
U-238	RWMC 6-5	2007	1.371	0.03755	0.11265	—
U-238	RWMC 6-6	2007	2.052	0.0326	0.0978	—
U-238	RWMC 6-7	2007	7.089	0.0246	0.0738	—
U-238	RWMC 6-9	2007	1.864	0.0186	0.0558	—
U-238	RWMC 7-2	2007	1.706	26.35	79.05	U
U-238	RWMC 7-3	2007	2.012	0.0355	0.1065	—
U-238	RWMC 7-4	2007	1.189	0.02495	0.07485	—

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	RWMC 7-5	2007	2.886	0.03115	0.09345	—
U-238	RWMC 7-6	2007	4.432	43	129	U
U-238	RWMC 7-7	2007	2.451	0.0314	0.0942	—
U-238	RWMC 8-1	2007	3.711	0.081	0.243	—
U-238	RWMC 8-4	2007	7.274	0.03335	0.10005	—
U-238	RWMC 8-5	2007	5.196	0.0525	0.1575	—
U-238	RWMC 9-1	2007	3.975	0.03045	0.09135	—
U-238	RWMC 2-5	2009	-4	2.225	6.675	U
U-238	RWMC 2-6	2009	21.15	5.23	15.69	—
U-238	RWMC 2-8	2009	24.24	20.2	60.6	U
U-238	RWMC 8-4	2009	4.936	0.0078	0.0234	—
U-238	RWMC 3-6	2010	112.1	5.05	15.15	—
U-238	RWMC 3-7	2010	36.75	2.58	7.74	—
U-238	RWMC 4-1	2010	47.76	3.05	9.15	—
U-238	RWMC 4-2	2010	63.61	24.2	72.6	U
U-238	RWMC 4-4	2010	32.11	28.2	84.6	U
U-238	RWMC 4-5	2010	16.97	16.6	49.8	U
U-238	RWMC 5-10	2010	47.37	3.18	9.54	—
U-238	RWMC 5-4	2010	207.8	47.4	142.2	—
U-238	RWMC 5-4	2010	1.215	1	3	U
U-238	RWMC 6-4	2010	23.37	22.8	68.4	U
U-238	RWMC 7-2	2010	43.66	24.6	73.8	U
U-238	RWMC 7-4	2010	31.56	21.6	64.8	U
U-238	RWMC 8-1	2010	146.2	27.8	83.4	—
U-238	RWMC 9-1	2010	2.685	2.59	7.77	U
U-238	RWMC 10-1	2011	1.416	0.945	2.835	U
U-238	RWMC 2-4	2011	0.004092	0.968	2.904	U
U-238	RWMC 2-6	2011	1.139	0.803	2.409	U
U-238	RWMC 2-8	2011	0.7944	0.849	2.547	U
U-238	RWMC 3-4	2011	0.7071	0.909	2.727	U
U-238	RWMC 3-6	2011	3.071	0.959	2.877	—
U-238	RWMC 3-8	2011	0	0.19	0.57	U
U-238	RWMC 4-1	2011	1.374	1	3	U
U-238	RWMC 4-1	2011	0.8743	0.774	2.322	U
U-238	RWMC 4-5	2011	1.39	0.851	2.553	U
U-238	RWMC 5-12	2011	0.8115	0.731	2.193	U
U-238	RWMC 5-7	2011	-0.539	0.885	2.655	U

Table C-5. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	RWMC 6-1	2011	0.03709	0.611	1.833	U
U-238	RWMC 6-3	2011	1.23	0.873	2.619	U
U-238	RWMC 6-7	2011	2.819	1.01	3.03	U
U-238	RWMC 7-2	2011	1.247	0.9	2.7	U
U-238	RWMC 8-1	2011	4.462	1.18	3.54	
U-238	RWMC 8-5	2011	1.505	0.98	2.94	U
U-238	RWMC 9-1	2011	2.659	0.715	2.145	—
U-238	RWMC 2-4	2012	1.216	0.758	2.274	U
U-238	RWMC 3-4	2012	0.9934	0.885	2.655	U
U-238	RWMC 3-5	2012	11.31	2.306666667	6.92	—
U-238	RWMC 5-4	2012	1.332	0.825	2.475	U
U-238	RWMC 6-1	2012	0.9122	0.789	2.367	U
U-238	RWMC 8-1	2012	1.937	0.739	2.217	U
U-238	2 INCH AIR - RWMC	2013	4.919	2.85	8.55	U
U-238	2 INCH AIR - RWMC	2013	4.919	0.95	2.85	—
U-238	RWMC 2-4	2013	19.08	4.2	12.6	—
U-238	RWMC 3-4	2013	0.8292	0.533	1.599	U
U-238	RWMC 5-7	2013	2.147	1.356666667	4.07	U
U-238	RWMC 2-4	2014	0.2858	1.22	3.66	U
U-238	RWMC 2-4	2014	-0.5831	0.963	2.889	U
U-238	RWMC 4-1	2014	2.258	1.17	3.51	U
U-238	RWMC 5-4	2014	1.503	0.685	2.055	U
U-238	RWMC 6-1	2014	0.5855	0.545	1.635	U
U-238	RWMC 6-3	2014	2.071	1.19	3.57	U

Table C-6. Radionuclides concentrations in surface soils associated with TAN/SMC.

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	LOFT 1-76	1976	0.005	0.002	0.006	U
Am-241	LOFT 2-76	1976	0.007	0.002	0.006	—
Am-241	LOFT 3-76	1976	0.005	0.002	0.006	U
Am-241	LOFT 4-76	1976	0.002	0.001	0.003	U
Am-241	LOFT 5-75	1976	0.003	0.001	0.003	—
Am-241	TSF-1	1981	0.004	0.002	0.006	U
Am-241	TSF-3	1981	0.002	0.002	0.006	U
Am-241	TSF-7	1981	0.0014	0.002	0.006	U

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	TSF-1	1988	0.007	0.004	0.012	U
Am-241	TSF-2	1988	0.029	0.005	0.015	—
Am-241	TSF-6	1988	0.086	0.011	0.033	—
Co-60	TSF-3	1981	0.21	0.05600	0.168	—
Co-60	IET-6	2006	0.124	0.0179	0.0537	—
Co-60	IET-7	2006	0.04831	0.00815	0.02445	—
Co-60	IET-8	2006	0.09975	0.0177	0.0531	—
Co-60	IET-9	2006	0.03735	0.00995	0.02985	—
Co-60	L1-76	2006	0.06147	0.0094	0.0282	—
Co-60	L2-76	2006	0.0846	0.01475	0.04425	—
Co-60	L3-76	2006	0.1309	0.02405	0.07215	—
Co-60	L4-76	2006	-0.0004739	0.00505	0.01515	U
Co-60	L5-76	2006	-0.0001839	0.004025	0.012075	U
Co-60	TSF-1	2006	0.006942	0.0054	0.0162	U
Co-60	TSF-6	2006	0.004388	0.0054	0.0162	U
Co-60	TSF-7	2006	0.04713	0.00945	0.02835	—
Co-60	TSF-8	2006	0.06725	0.0145	0.0435	—
Co-60	TSF-9	2006	0.009961	0.0051	0.0153	U
Co-60	WRRTF-5	2006	0.004234	0.004755	0.014265	U
Co-60	WRRTF-6	2006	0.08303	0.0128	0.0384	—
Co-60	WRRTF-7	2006	0.1173	0.0201	0.0603	—
Co-60	WRRTF-8	2006	0.002501	0.00396	0.01188	U
Co-60	IET-6	2011	0.002296	0.00375	0.01125	U
Co-60	IET-7	2011	-0.0009331	0.003	0.00978	U
Co-60	IET-8	2011	0.002898	0.00316	0.00948	U
Co-60	IET-9	2011	-0.00211	0.00379	0.01137	U
Co-60	L2-76	2011	0.003492	0.00363	0.01089	U
Co-60	L3-76	2011	-0.0004918	0.00279	0.00837	U
Co-60	L4-76	2011	0.002939	0.00458	0.01374	U
Co-60	L5-76	2011	-0.0001879	0.00333	0.00999	U
Co-60	TSF-1	2011	0.00006648	0.00304	0.00912	U
Co-60	TSF-6	2011	0.003802	0.00426	0.01278	U
Co-60	TSF-7	2011	-0.000726	0.00402	0.01206	U
Co-60	TSF-8	2011	0.003547	0.00458	0.01374	U
Co-60	TSF-9	2011	0.0001377	0.00295	0.00885	U
Co-60	WRRTF-5	2011	-0.0004112	0.00349	0.01047	U
Co-60	WRRTF-6	2011	0.004265	0.00459	0.01377	U

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Co-60	WRRTF-7	2011	-0.004101	0.0045	0.0135	U
Co-60	WRRTF-8	2011	0.0002946	0.0028	0.0084	U
Co-60	L1-76	2012	0.001256	0.0032	0.0096	U
Co-60	WRRTF-5	2012	-0.0003805	0.0030	0.00897	U
Co-60	WRRTF-7	2012	0.002655	0.00412	0.01236	U
Co-60	TSF-6	2013	0.01402	0.00407	0.0122	—
Co-60	2 INCH AIR - SMC	2014	-0.0006793	0.00117	0.00351	U
Co-60	TSF-1	2014	0.0004809	0.0014	0.0042	U
Co-60	TSF-6	2014	0.001506	0.00146	0.00438	U
Co-60	TSF-7	2014	0.00003378	0.00102	0.00306	U
Co-60	TSF-8	2014	-0.0006068	0.00167	0.00501	U
Co-60	TSF-9	2014	0.001732	0.00137	0.00411	U
Co-60	WRRTF-6	2014	0.0007879	0.00145	0.00435	U
Cs-134	IET-6	2007	0.06877	0.011	0.033	—
Cs-134	IET-7	2007	0.07063	0.0135	0.0405	—
Cs-134	IET-8	2007	0.03044	0.0048	0.0144	—
Cs-134	IET-9	2007	0.07361	0.0139	0.0417	—
Cs-134	L1-76	2007	0.08852	0.0129	0.0387	—
Cs-134	L2-76	2007	0.1084	0.015	0.045	—
Cs-134	L3-76	2007	0.08464	0.0163	0.0489	—
Cs-134	L4-76	2007	0.002981	0.00488	0.01464	U
Cs-134	L5-76	2007	0.008246	0.00481	0.01443	U
Cs-134	TSF-1	2007	0.06158	0.0103	0.0309	—
Cs-134	TSF-6	2007	0.0475	0.00593	0.01779	—
Cs-134	TSF-7	2007	0.09618	0.0241	0.0723	—
Cs-134	TSF-8	2007	0.08889	0.0135	0.0405	—
Cs-134	TSF-9	2007	0.06317	0.0105	0.0315	—
Cs-134	WRRTF-5	2007	0.02612	0.00886	0.02658	U
Cs-134	WRRTF-6	2007	0.09996	0.0182	0.0546	—
Cs-134	WRRTF-7	2007	0.07175	0.0115	0.0345	—
Cs-134	WRRTF-8	2007	0.0377	0.00616	0.01848	—
Cs-134	IET-6	2010	0.04428	0.00625	0.01875	—
Cs-134	IET-7	2010	0.02757	0.00515	0.01545	—
Cs-134	IET-8	2010	0.02161	0.0024	0.00726	—
Cs-134	IET-9	2010	0.03903	0.00944	0.02832	—
Cs-134	L1-76	2010	0.03515	0.0046	0.0138	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	L2-76	2010	0.02731	0.00623	0.01869	—
Cs-134	L3-76	2010	0.05578	0.0059	0.0177	—
Cs-134	L4-76	2010	0.059	0.0168	0.0504	—
Cs-134	L5-76	2010	0.04237	0.00722	0.02166	—
Cs-134	TSF-6	2010	0.05551	0.00745	0.02235	—
Cs-134	TSF-7	2010	0.049	0.0101	0.0303	—
Cs-134	TSF-8	2010	0.07905	0.0102	0.0306	—
Cs-134	TSF-9	2010	0.06294	0.0104	0.0312	—
Cs-134	WRRTF-6	2010	0.05511	0.00781	0.02343	—
Cs-134	WRRTF-7	2010	0.05268	0.00873	0.02619	—
Cs-134	WRRTF-8	2010	0.02755	0.00613	0.01839	—
Cs-134	IET-6	2011	-0.007257	0.0208	0.0624	U
Cs-134	IET-7	2011	-0.00533	0.0148	0.0444	U
Cs-134	IET-8	2011	-0.0003889	0.019	0.057	U
Cs-134	IET-9	2011	-0.005299	0.00895	0.02685	U
Cs-134	L2-76	2011	0.04522	0.0097	0.0291	—
Cs-134	L3-76	2011	0.00193	0.0149	0.0447	U
Cs-134	L4-76	2011	-0.007949	0.0223	0.0669	U
Cs-134	L5-76	2011	-0.007383	0.0116	0.0348	U
Cs-134	TSF-1	2011	-0.01346	0.0173	0.0519	U
Cs-134	TSF-6	2011	0.04498	0.0114	0.0342	—
Cs-134	TSF-7	2011	0.01823	0.01390	0.0417	U
Cs-134	TSF-8	2011	0.0319	0.0134	0.0402	U
Cs-134	TSF-9	2011	-0.05739	0.00955	0.02865	U
Cs-134	WRRTF-5	2011	0.02073	0.00898	0.02694	U
Cs-134	WRRTF-6	2011	-0.01216	0.0232	0.0696	U
Cs-134	WRRTF-7	2011	0.007082	0.023	0.069	U
Cs-134	WRRTF-8	2011	-0.002754	0.00854	0.02562	U
Cs-134	L1-76	2012	0.04116	0.00642	0.01926	—
Cs-134	WRRTF-5	2012	0.05597	0.007	0.021	—
Cs-134	WRRTF-7	2012	0.04962	0.00827	0.02481	—
Cs-134	TSF-6	2013	0.1081	0.0161	0.0482	—
Cs-134	2 INCH AIR - SMC	2014	0.02458	0.00958	0.02874	U
Cs-134	TSF-1	2014	0.03193	0.0147	0.0441	U
Cs-134	TSF-6	2014	0.04533	0.0117	0.0351	—
Cs-134	TSF-7	2014	0.04341	0.0105	0.0315	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-134	TSF-8	2014	0.05834	0.0122	0.0366	—
Cs-134	TSF-9	2014	0.02573	0.0146	0.0438	U
Cs-134	WRRTF-6	2014	0.03145	0.0116	0.0348	U
Cs-137	LOFT 1-76	1976	1.17	0.04	0.12	—
Cs-137	LOFT 2-76	1976	1.41	0.05	0.15	—
Cs-137	LOFT 3-76	1976	0.77	0.03	0.09	—
Cs-137	LOFT 4-76	1976	0.73	0.020	0.06	—
Cs-137	LOFT 5-75	1976	0.86	0.03	0.09	—
Cs-137	LOFT 1-76	1981	0.815	0.068	0.204	—
Cs-137	LOFT 2-76	1981	0.838	0.069	0.207	—
Cs-137	LOFT 3-76	1981	0.55	0.069	0.207	—
Cs-137	LOFT 4-76	1981	0.471	0.054	0.162	—
Cs-137	LOFT 5-75	1981	0.798	0.071	0.213	—
Cs-137	TSF-1	1981	0.963	0.77	2.31	U
Cs-137	TSF-2	1981	8.06	0.03	0.09	—
Cs-137	TSF-3	1981	23.8	0.71	2.13	—
Cs-137	TSF-4	1981	4.22	0.17	0.51	—
Cs-137	TSF-5	1981	2.08	0.12	0.36	—
Cs-137	TSF-6	1981	1.47	0.13	0.39	—
Cs-137	TSF-7	1981	1.16	0.081	0.243	—
Cs-137	TSF-8	1981	3.75	0.1600	0.48	—
Cs-137	TSF-9	1981	1.23	0.087	0.261	—
Cs-137	IET-6	1988	0.68	0.09	0.27	—
Cs-137	IET-7	1988	1.05	0.07	0.21	—
Cs-137	IET-8	1988	0.74	0.07	0.21	—
Cs-137	IET-9	1988	0.9	0.06	0.18	—
Cs-137	LOFT 1-76	1988	1.09	0.09	0.27	—
Cs-137	LOFT 2-76	1988	1.16	0.08	0.24	—
Cs-137	LOFT 3-76	1988	0.49	0.07	0.21	—
Cs-137	LOFT 4-76	1988	0.48	0.06	0.18	—
Cs-137	LOFT 5-75	1988	0.64	0.07	0.21	—
Cs-137	TSF-1	1988	1.69	0.11	0.33	—
Cs-137	TSF-2	1988	12.7	0.500	1.5	—
Cs-137	TSF-6	1988	1.6	0.11	0.33	—
Cs-137	TSF-7	1988	2.66	0.15	0.45	—
Cs-137	TSF-8	1988	3.75	0.20000	0.6	—
Cs-137	TSF-9	1988	1.02	0.09	0.27	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	WRRTF-5	1988	0.24	0.06	0.18	—
Cs-137	WRRTF-6	1988	0.52	0.08	0.24	—
Cs-137	WRRTF-7	1988	0.57	0.08	0.24	—
Cs-137	WRRTF-8	1988	0.84	0.08	0.24	—
Cs-137	IET-6	2006	0.1194	0.00745	0.02235	—
Cs-137	IET-7	2006	0.1154	0.00605	0.01815	—
Cs-137	IET-8	2006	0.4308	0.0925	0.2775	—
Cs-137	IET-9	2006	0.1163	0.0059	0.0177	—
Cs-137	L1-76	2006	0.3422	0.1005	0.3015	—
Cs-137	L2-76	2006	0.1215	0.0065	0.0195	—
Cs-137	L3-76	2006	0.9995	0.18	0.54	—
Cs-137	L4-76	2006	0.1269	0.01265	0.03795	—
Cs-137	L5-76	2006	0.1208	0.0088	0.0264	—
Cs-137	TSF-1	2006	0.1837	0.00775	0.02325	—
Cs-137	TSF-6	2006	0.1693	0.00935	0.02805	—
Cs-137	TSF-7	2006	0.548	0.0755	0.2265	—
Cs-137	TSF-8	2006	0.4919	0.0097	0.0291	—
Cs-137	TSF-9	2006	0.09393	0.00945	0.02835	—
Cs-137	WRRTF-5	2006	0.07391	0.00545	0.01635	—
Cs-137	WRRTF-6	2006	0.594	0.122	0.366	—
Cs-137	WRRTF-7	2006	0.07164	0.00235	0.00705	—
Cs-137	WRRTF-8	2006	0.07061	0.00715	0.02145	—
Cs-137	IET-6	2007	0.2077	0.00418	0.01254	—
Cs-137	IET-7	2007	0.2031	0.0186	0.0558	—
Cs-137	IET-8	2007	0.2191	0.00982	0.02946	—
Cs-137	IET-9	2007	0.2781	0.0169	0.0507	—
Cs-137	L1-76	2007	0.2518	0.0149	0.0447	—
Cs-137	L2-76	2007	0.2252	0.0209	0.0627	—
Cs-137	L3-76	2007	0.2511	0.0229	0.0687	—
Cs-137	L4-76	2007	0.1453	0.00426	0.01278	—
Cs-137	L5-76	2007	0.2353	0.0185	0.0555	—
Cs-137	TSF-1	2007	0.4386	0.0109	0.0327	—
Cs-137	TSF-6	2007	0.3705	0.023	0.0675	—
Cs-137	TSF-7	2007	0.5965	0.0144	0.0432	—
Cs-137	TSF-8	2007	1.204	0.0409	0.1227	—
Cs-137	TSF-9	2007	0.2542	0.0125	0.0375	—
Cs-137	WRRTF-5	2007	0.1518	0.0101	0.0303	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	WRRTF-6	2007	0.2041	0.0141	0.0423	—
Cs-137	WRRTF-7	2007	0.2122	0.0133	0.0399	—
Cs-137	WRRTF-8	2007	0.1625	0.0169	0.0507	—
Cs-137	IET-6	2009	0.2274	0.0098	0.0294	—
Cs-137	IET-7	2009	0.1524	0.00178	0.00534	—
Cs-137	IET-8	2009	0.1813	0.00565	0.01695	—
Cs-137	IET-9	2009	0.1883	0.00685	0.02055	—
Cs-137	L1-76	2009	0.1909	0.0064	0.0192	—
Cs-137	L2-76	2009	0.2164	0.006	0.018	—
Cs-137	L3-76	2009	0.1397	0.00215	0.00645	—
Cs-137	L4-76	2009	0.1383	0.0051	0.0153	—
Cs-137	L5-76	2009	0.1774	0.00805	0.02415	—
Cs-137	TSF-1	2009	0.3903	0.0095	0.0285	—
Cs-137	TSF-6	2009	0.3387	0.00825	0.02475	—
Cs-137	TSF-7	2009	0.1769	0.001755	0.005265	—
Cs-137	TSF-8	2009	1.085	0.01095	0.03285	—
Cs-137	WRRTF-5	2009	0.1296	0.0076	0.0228	—
Cs-137	WRRTF-6	2009	0.1636	0.0088	0.0264	—
Cs-137	WRRTF-7	2009	0.1623	0.0093	0.0279	—
Cs-137	WRRTF-8	2009	0.1029	0.0065	0.0195	—
Cs-137	IET-6	2010	0.2614	0.00875	0.02625	—
Cs-137	IET-7	2010	0.1617	0.00735	0.02205	—
Cs-137	IET-8	2010	0.1525	0.0053	0.0159	—
Cs-137	IET-9	2010	0.1748	0.00814	0.02442	—
Cs-137	L1-76	2010	0.1917	0.00722	0.02166	—
Cs-137	L2-76	2010	0.1933	0.0107	0.0321	—
Cs-137	L3-76	2010	0.1575	0.0074	0.02205	—
Cs-137	L4-76	2010	0.1202	0.00354	0.01062	—
Cs-137	L5-76	2010	0.2109	0.0108	0.0324	—
Cs-137	TSF-6	2010	0.3695	0.011	0.033	—
Cs-137	TSF-7	2010	0.325	0.00502	0.01506	—
Cs-137	TSF-8	2010	0.9118	0.0164	0.0492	—
Cs-137	TSF-9	2010	0.2037	0.00839	0.02517	—
Cs-137	WRRTF-6	2010	0.1374	0.00418	0.01254	—
Cs-137	WRRTF-7	2010	0.1362	0.00423	0.01269	—
Cs-137	WRRTF-8	2010	0.1213	0.00934	0.02802	—
Cs-137	IET-6	2011	0.4204	0.0122	0.0366	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	IET-7	2011	0.3688	0.0118	0.0354	—
Cs-137	IET-8	2011	0.31	0.0106	0.0318	—
Cs-137	IET-9	2011	0.4697	0.0172	0.0516	—
Cs-137	L2-76	2011	0.4193	0.0119	0.0357	—
Cs-137	L3-76	2011	0.2805	0.00754	0.02262	—
Cs-137	L4-76	2011	0.3124	0.0123	0.0369	—
Cs-137	L5-76	2011	0.3693	0.0121	0.0363	—
Cs-137	TSF-1	2011	0.838	0.0115	0.0345	—
Cs-137	TSF-6	2011	0.6579	0.0144	0.0432	—
Cs-137	TSF-7	2011	1.005	0.0184	0.0552	—
Cs-137	TSF-8	2011	2.569	0.0294	0.0882	—
Cs-137	TSF-9	2011	0.4512	0.0111	0.0333	—
Cs-137	WRRTF-5	2011	0.2464	0.00846	0.02538	—
Cs-137	WRRTF-6	2011	0.3832	0.0148	0.0444	—
Cs-137	WRRTF-7	2011	0.3435	0.0168	0.0504	—
Cs-137	WRRTF-8	2011	0.2056	0.00936	0.02808	—
Cs-137	L1-76	2012	0.1446	0.0042	0.01263	—
Cs-137	WRRTF-5	2012	0.1077	0.00787	0.02361	—
Cs-137	WRRTF-7	2012	0.1302	0.00498	0.01494	—
Cs-137	TSF-6	2013	0.2592	0.0048	0.0144	—
Cs-137	2 INCH AIR - SMC	2014	0.0164	0.00322	0.00966	—
Cs-137	TSF-1	2014	0.3043	0.013	0.039	—
Cs-137	TSF-6	2014	0.3656	0.0206	0.0618	—
Cs-137	TSF-7	2014	0.2194	0.00438	0.01314	—
Cs-137	TSF-8	2014	0.9604	0.00982	0.02946	—
Cs-137	TSF-9	2014	0.1081	0.00481	0.01443	—
Cs-137	WRRTF-6	2014	0.1391	0.00514	0.01542	—
Eu-152	IET-6	2011	0.006742	0.023	0.069	U
Eu-152	IET-7	2011	0.01517	0.0211	0.0633	U
Eu-152	IET-8	2011	0.01255	0.0214	0.0642	U
Eu-152	IET-9	2011	0.008969	0.0255	0.0765	U
Eu-152	L2-76	2011	0.00296	0.0224	0.0672	U
Eu-152	L3-76	2011	0.0175	0.0236	0.0708	U
Eu-152	L4-76	2011	0.03248	0.0294	0.0882	U
Eu-152	L5-76	2011	0.0177	0.0286	0.0858	U
Eu-152	TSF-1	2011	0.03444	0.0212	0.0636	U

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Eu-152	TSF-6	2011	0.014	0.0272	0.0816	U
Eu-152	TSF-7	2011	0.02032	0.028	0.084	U
Eu-152	TSF-8	2011	0.03855	0.0302	0.0906	U
Eu-152	TSF-9	2011	0.01254	0.0233	0.0699	U
Eu-152	WRRTF-5	2011	0.01726	0.0219	0.0657	U
Eu-152	WRRTF-6	2011	0.096	0.0291	0.0873	—
Eu-152	WRRTF-7	2011	0.02072	0.0288	0.0864	U
Eu-152	WRRTF-8	2011	0.01433	0.024	0.072	U
Eu-152	L1-76	2012	0.03755	0.0161	0.0483	U
Eu-152	WRRTF-5	2012	0.01112	0.0205	0.0615	U
Eu-152	WRRTF-7	2012	0.02151	0.0185	0.0555	U
Eu-152	TSF-6	2013	0.155	0.030066667	0.0902	—
Eu-152	2 INCH AIR - SMC	2014	0.01554	0.019	0.0573	U
Eu-152	TSF-1	2014	0.004745	0.0295	0.0885	U
Eu-152	TSF-6	2014	-0.01031	0.0218	0.0654	U
Eu-152	TSF-7	2014	0.03123	0.0192	0.0576	U
Eu-152	TSF-8	2014	0.02054	0.0235	0.0705	U
Eu-152	TSF-9	2014	-0.05029	0.0296	0.0888	U
Eu-152	WRRTF-6	2014	-0.006819	0.021	0.0615	U
Pu-238	LOFT 1-76	1976	0.0015	0.0011	0.0033	U
Pu-238	LOFT 2-76	1976	0.003	0.0013	0.0039	U
Pu-238	LOFT 3-76	1976	0.001	0.001	0.003	U
Pu-238	LOFT 4-76	1976	0.001	0.001	0.003	U
Pu-238	LOFT 5-75	1976	0.014	0.001	0.003	—
Pu-238	TSF-1	1981	0	0.002	0.006	U
Pu-238	TSF-3	1981	0.002	0.002	0.006	U
Pu-238	TSF-7	1981	-0.002	0.002	0.006	U
Pu-238	TSF-1	1988	0.003	0.002	0.006	U
Pu-238	TSF-2	1988	0.002	0.002	0.006	U
Pu-238	TSF-6	1988	0.003	0.001	0.003	—
Pu-239/240	LOFT 1-76	1976	0.023	0.002	0.006	—
Pu-239/240	LOFT 2-76	1976	0.026	0.002	0.006	—
Pu-239/240	LOFT 3-76	1976	0.011	0.002	0.006	—
Pu-239/240	LOFT 4-76	1976	0.014	0.002	0.006	—
Pu-239/240	LOFT 5-75	1976	0.013	0.002	0.006	—
Pu-239/240	TSF-1	1981	0.011	0.003	0.009	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	TSF-3	1981	0.011	0.002	0.006	—
Pu-239/240	TSF-7	1981	0.01	0.0020	0.006	—
Pu-239/240	TSF-1	1988	0.008	0.002	0.006	—
Pu-239/240	TSF-2	1988	0.014	0.003	0.009	—
Pu-239/240	TSF-6	1988	0.029	0.003	0.009	—
Sb-125	IET-6	2011	0.02715	0.0337	0.1011	U
Sb-125	IET-7	2011	-0.004162	0.0312	0.0936	U
Sb-125	IET-8	2011	0.02346	0.02920	0.0876	U
Sb-125	IET-9	2011	-0.00724	0.0369	0.1107	U
Sb-125	L2-76	2011	0.6859	0.0333	0.0999	—
Sb-125	L3-76	2011	-0.03426	0.0328	0.0984	U
Sb-125	L4-76	2011	0.05626	0.0391	0.1173	U
Sb-125	L5-76	2011	-0.05746	0.0412	0.1236	U
Sb-125	TSF-1	2011	-0.002396	0.0318	0.0954	U
Sb-125	TSF-6	2011	0.04945	0.03830	0.1149	U
Sb-125	TSF-7	2011	-0.09995	0.0443	0.1329	U
Sb-125	TSF-8	2011	0.06987	0.0445	0.1335	U
Sb-125	TSF-9	2011	-0.02397	0.0308	0.0924	U
Sb-125	WRRTF-5	2011	-0.0192	0.0336	0.1008	U
Sb-125	WRRTF-6	2011	-0.05755	0.0405	0.1215	U
Sb-125	WRRTF-7	2011	0.0169	0.0392	0.1176	U
Sb-125	WRRTF-8	2011	0.03347	0.0301	0.0903	U
Sb-125	L1-76	2012	0.01427	0.0249	0.0747	U
Sb-125	WRRTF-5	2012	0.01423	0.0279	0.0837	U
Sb-125	WRRTF-7	2012	-0.002	0.0323	0.0969	U
Sb-125	TSF-6	2013	0.2667	0.0623	0.187	—
Sb-125	2 INCH AIR - SMC	2014	-0.007939	0.0424	0.1272	U
Sb-125	TSF-1	2014	0.00856	0.0524	0.1572	U
Sb-125	TSF-6	2014	0.01042	0.0473	0.1419	U
Sb-125	TSF-7	2014	0.02055	0.0362	0.1086	U
Sb-125	TSF-8	2014	-0.1013	0.0465	0.1395	U
Sb-125	TSF-9	2014	0.8039	0.0527	0.1581	—
Sb-125	WRRTF-6	2014	-0.1639	0.0402	0.1206	U
Sr-90	LOFT 1-76	1976	0.65	0.05	0.15	—
Sr-90	LOFT 2-76	1976	0.66	0.05	0.15	—
Sr-90	LOFT 3-76	1976	0.47	0.05	0.15	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sr-90	LOFT 4-76	1976	0.47	0.05	0.15	—
Sr-90	LOFT 5-75	1976	0.45	0.06	0.18	—
Sr-90	TSF-1	1981	0.85	0.14	0.42	—
Sr-90	TSF-3	1981	1.15	0.09	0.27	—
Sr-90	TSF-7	1981	0.39	0.06	0.18	—
U-234	IET-6	2007	52.88	2.18	6.54	—
U-234	IET-7	2007	78.28	2.61	7.83	—
U-234	IET-8	2007	67.87	3.32	9.96	—
U-234	IET-9	2007	98.24	3.27	9.81	—
U-234	L1-76	2007	81.26	3	9	—
U-234	L2-76	2007	102.3	3.34	10.02	—
U-234	L3-76	2007	103.1	3.44	10.32	—
U-234	L4-76	2007	106.5	3.49	10.47	—
U-234	L5-76	2007	27.55	2.2700	6.81	—
U-234	TSF-1	2007	28.85	2.3	6.9	—
U-234	TSF-6	2007	27.87	2.16	6.48	—
U-234	TSF-7	2007	90.89	3.25	9.75	—
U-234	TSF-8	2007	413.9	7.06	21.18	—
U-234	TSF-9	2007	28.05	2.31	6.93	—
U-234	WRRTF-5	2007	30.41	2.1	6.3	—
U-234	WRRTF-6	2007	21.47	2.06	6.18	—
U-234	WRRTF-7	2007	101.5	3.45	10.35	—
U-234	WRRTF-8	2007	94.83	3.36	10.08	—
U-234	L3-76	2009	5.891	0.825	2.475	—
U-234	IET-6	2010	8.034	1.5400	4.62	—
U-234	IET-7	2010	11.79	1.39	4.17	—
U-234	IET-8	2010	28.94	1.88	5.64	—
U-234	IET-9	2010	80.45	3.28	9.84	—
U-234	L1-76	2010	39.53	2.18	6.54	—
U-234	L2-76	2010	18.65	1.63	4.89	—
U-234	L3-76	2010	45.24	2.41	7.23	—
U-234	L4-76	2010	107.8	3.68	11.04	—
U-234	TSF-6	2010	16.69	1.98	5.94	—
U-234	TSF-7	2010	111.3	3.82	11.46	—
U-234	TSF-8	2010	96.3	3.76	11.28	—
U-234	TSF-9	2010	17.32	1.69	5.07	—
U-234	WRRTF-6	2010	15.65	1.5	4.5	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-234	WRRTF-7	2010	18.5	1.57	4.71	—
U-234	WRRTF-8	2010	20.49	1.69	5.07	—
U-234	IET-6	2011	-43.45	63.7	191.1	U
U-234	IET-7	2011	-2.464	50.1	150.3	U
U-234	IET-8	2011	-3.025	53.3	159.9	U
U-234	IET-9	2011	-19.94	61	183	U
U-234	L2-76	2011	0.3156	62.2	186.6	U
U-234	L3-76	2011	-29.14	60.7	182.1	U
U-234	L4-76	2011	90.94	75.8	227.4	U
U-234	L5-76	2011	-44.42	80.7	242.1	U
U-234	TSF-1	2011	-50.73	67.1	201.3	U
U-234	TSF-6	2011	29.86	70.2	210.6	U
U-234	TSF-7	2011	-0.01494	69.5	208.5	U
U-234	TSF-8	2011	71.47	84.9	254.7	U
U-234	TSF-9	2011	9.588	66.2	198.6	U
U-234	WRRTF-5	2011	63.75	59.4	178.2	U
U-234	WRRTF-6	2011	-66.71	71.4	214.2	U
U-234	WRRTF-7	2011	3.563	70.7	212.1	U
U-234	WRRTF-8	2011	39.82	69.6	208.8	U
U-234	L1-76	2012	-2.587	11.8	35.4	U
U-234	WRRTF-5	2012	5.637	20	60	U
U-234	WRRTF-7	2012	1.553	14.5	43.5	U
U-234	TSF-6	2013	63.58	42.33	127	U
U-234	2 INCH AIR - SMC	2014	-7.101	53.3	159.9	U
U-234	TSF-1	2014	48.62	78.8	236.4	U
U-234	TSF-6	2014	26.31	64.8	194.4	U
U-234	TSF-7	2014	13.51	43.3	129.9	U
U-234	TSF-8	2014	-12.11	59.8	179.4	U
U-234	TSF-9	2014	-46.01	82.9	248.7	U
U-234	WRRTF-6	2014	-26.57	52.5	157.5	U
U-235	IET-6	2006	1.415	0.575	1.725	U
U-235	IET-7	2006	1.624	0.55	1.65	U
U-235	IET-8	2006	1.988	0.4845	1.4535	—
U-235	IET-9	2006	1.433	0.376	1.128	—
U-235	L1-76	2006	3.193	0.685	2.055	—
U-235	L2-76	2006	0.9748	0.4005	1.2015	U

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	L3-76	2006	2.675	0.715	2.145	—
U-235	L4-76	2006	-0.1144	0.2565	0.7695	U
U-235	L5-76	2006	0.184	0.2305	0.6915	U
U-235	TSF-1	2006	-0.1096	0.27	0.81	U
U-235	TSF-6	2006	-0.06985	0.277	0.831	U
U-235	TSF-7	2006	3.181	0.86	2.58	—
U-235	TSF-8	2006	1.083	0.585	1.755	U
U-235	TSF-9	2006	-0.01044	0.227	0.681	U
U-235	WRRTF-5	2006	0.1964	0.229	0.687	U
U-235	WRRTF-6	2006	0.3743	0.17	0.51	U
U-235	WRRTF-7	2006	0.4855	0.975	2.925	U
U-235	WRRTF-8	2006	-0.0999	0.229	0.687	U
U-235	IET-6	2007	0.1656	0.07	0.1956	U
U-235	IET-7	2007	0.2993	0.0797	0.2391	—
U-235	IET-8	2007	0.4681	0.0932	0.2796	—
U-235	IET-9	2007	0.2641	0.068	0.204	—
U-235	L1-76	2007	0.1488	0.0712	0.2136	U
U-235	L2-76	2007	0.3363	0.085	0.255	—
U-235	L3-76	2007	0.3923	0.104	0.312	—
U-235	L4-76	2007	0.2734	0.0934	0.2802	U
U-235	L5-76	2007	0.4409	0.0958	0.2874	—
U-235	TSF-1	2007	0.211	0.0736	0.2208	U
U-235	TSF-6	2007	0.2143	0.0975	0.2925	U
U-235	TSF-7	2007	0.1753	0.0764	0.2292	U
U-235	TSF-8	2007	0.3882	0.0938	0.2814	—
U-235	TSF-9	2007	0.3686	0.0884	0.2652	—
U-235	WRRTF-5	2007	0.2481	0.0717	0.2151	—
U-235	WRRTF-6	2007	0.3854	0.0907	0.2721	—
U-235	WRRTF-7	2007	0.3015	0.0759	0.2277	
U-235	WRRTF-8	2007	0.04745	0.1	0.2049	U
U-235	IET-7	2009	0.1267	0.051	0.153	U
U-235	L2-76	2009	0.1969	0.02755	0.08265	—
U-235	L3-76	2009	0.1025	0.1	0.18	U
U-235	IET-6	2010	0.2751	0.0514	0.1542	—
U-235	IET-7	2010	0.129	0.0391	0.1173	—
U-235	IET-8	2010	0.5844	0.159	0.477	—
U-235	IET-9	2010	1.008	0.245	0.735	—

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	L1-76	2010	0.2612	0.0462	0.1386	—
U-235	L2-76	2010	0.8529	0.174	0.522	—
U-235	L3-76	2010	0.2926	0.0468	0.1404	—
U-235	L4-76	2010	0.9235	0.276	0.828	—
U-235	L5-76	2010	1.444	0.217	0.651	—
U-235	TSF-6	2010	1.139	0.233	0.699	—
U-235	TSF-7	2010	1.15	0.256	0.768	—
U-235	TSF-8	2010	0.7747	0.256	0.768	—
U-235	TSF-9	2010	1.088	0.212	0.636	—
U-235	WRRTF-6	2010	0.2521	0.0457	0.1371	—
U-235	WRRTF-7	2010	0.2422	0.05	0.1512	—
U-235	WRRTF-8	2010	0.8924	0.183	0.549	—
U-235	IET-6	2011	0.02033	0.16	0.48	U
U-235	IET-7	2011	0.05071	0.14	0.426	U
U-235	IET-8	2011	-0.07102	0.127	0.381	U
U-235	IET-9	2011	-0.06927	0.14	0.42	U
U-235	L2-76	2011	-0.009221	0.151	0.453	U
U-235	L3-76	2011	-0.1428	0.15	0.45	U
U-235	L4-76	2011	0.1672	0.184	0.552	U
U-235	L5-76	2011	0.2332	0.193	0.579	U
U-235	TSF-1	2011	0.01161	0.1	0.429	U
U-235	TSF-6	2011	-0.1635	0.17	0.51	U
U-235	TSF-7	2011	0.1027	0.178	0.534	U
U-235	TSF-8	2011	0.2009	0.195	0.585	U
U-235	TSF-9	2011	0.1048	0.151	0.453	U
U-235	WRRTF-5	2011	0.009377	0.159	0.477	U
U-235	WRRTF-6	2011	0.131	0.173	0.519	U
U-235	WRRTF-7	2011	-0.06129	0.177	0.531	U
U-235	WRRTF-8	2011	0.1379	0.162	0.486	U
U-235	L1-76	2012	0.0707	0.113	0.339	U
U-235	WRRTF-5	2012	0.1557	0.129	0.387	U
U-235	WRRTF-7	2012	0.06636	0.128	0.384	U
U-235	TSF-6	2013	0.1144	0.0577	0.173	U
U-235	2 INCH AIR - SMC	2014	0.06871	0.12	0.36	U
U-235	TSF-1	2014	-0.09704	0.198	0.594	U
U-235	TSF-6	2014	-0.05248	0.148	0.444	U

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-235	TSF-7	2014	-0.001988	0.126	0.378	U
U-235	TSF-8	2014	-0.01483	0.15	0.441	U
U-235	TSF-9	2014	-0.06305	0.196	0.588	U
U-235	WRRTF-6	2014	-0.1091	0.135	0.405	U
U-238	IET-6	2006	45.64	7.45	22.35	—
U-238	IET-7	2006	31.34	3.995	11.985	—
U-238	IET-8	2006	15.87	2.425	7.275	—
U-238	IET-9	2006	28.89	4.055	12.165	—
U-238	L1-76	2006	33.75	4.41	13.23	—
U-238	L2-76	2006	20.3	3.24	9.72	—
U-238	L3-76	2006	26.54	3.53	10.59	—
U-238	L4-76	2006	-0.1236	1.12	3.36	U
U-238	L5-76	2006	5.717	1.13	3.39	—
U-238	TSF-1	2006	-0.1868	1.19	3.57	U
U-238	TSF-6	2006	3.65	1.14	3.42	—
U-238	TSF-7	2006	28.73	3.665	10.995	—
U-238	TSF-8	2006	35.01	4.465	13.395	—
U-238	TSF-9	2006	0.2955	1.205	3.615	U
U-238	WRRTF-5	2006	1.126	0.99	2.97	U
U-238	WRRTF-6	2006	26.33	3.42	10.26	—
U-238	WRRTF-7	2006	31.55	4.715	14.145	—
U-238	WRRTF-8	2006	16.69	2.91	8.73	—
U-238	IET-6	2007	0.06112	3.45	10.35	U
U-238	IET-7	2007	0.001383	4.12	12.36	U
U-238	IET-8	2007	111.4	4.76	14.28	—
U-238	IET-9	2007	0.1675	4.88	14.64	U
U-238	L1-76	2007	0.2617	4.79	14.37	U
U-238	L2-76	2007	0.05993	4.98	14.94	U
U-238	L3-76	2007	0.001831	5.42	16.26	U
U-238	L4-76	2007	0.08309	5.54	16.62	U
U-238	L5-76	2007	0.0002811	3.21	9.63	U
U-238	TSF-1	2007	0	3.17	9.51	U
U-238	TSF-6	2007	0	3.16	9.48	U
U-238	TSF-7	2007	0.1446	5.15	15.45	U
U-238	TSF-8	2007	0	10.7	32.1	U
U-238	TSF-9	2007	0.4285	3.14	9.42	U
U-238	WRRTF-5	2007	0	2.94	8.82	U

Table C-6. (continued).

Radionuclide	Sample Location	Date	Concentrations (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
U-238	WRRTF-6	2007	0	2.93	8.79	U
U-238	WRRTF-7	2007	0.058	5.42	16.26	U
U-238	WRRTF-8	2007	0.179	5.25	15.75	U
U-238	L1-76	2009	86.8	5.45	16.35	—
U-238	IET-6	2010	57.68	23.9	71.7	U
U-238	IET-9	2010	33.25	18.8	56.4	U
U-238	L4-76	2010	23.94	21.2	63.6	U
U-238	WRRTF-6	2010	2.28	2.1	6.3	U
U-238	IET-6	2011	1.146	0.752	2.256	U
U-238	IET-7	2011	0.5476	0.645	1.935	U
U-238	IET-8	2011	0.5605	0.655	1.965	U
U-238	IET-9	2011	1.63	0.801	2.403	U
U-238	L2-76	2011	0.5252	0.712	2.136	U
U-238	L3-76	2011	0.6755	0.617	1.851	U
U-238	L4-76	2011	1.374	0.922	2.766	U
U-238	L5-76	2011	3.019	0.918	2.754	—
U-238	TSF-1	2011	2.358	0.669	2.007	—
U-238	TSF-6	2011	1.187	0.832	2.496	U
U-238	TSF-7	2011	1.374	0.969	2.907	U
U-238	TSF-8	2011	1.713	0.961	2.883	U
U-238	TSF-9	2011	1.714	0.553	1.659	—
U-238	WRRTF-5	2011	0.9822	0.724	2.172	U
U-238	WRRTF-6	2011	1.193	0.92	2.76	U
U-238	WRRTF-7	2011	-0.5428	0.75	2.25	U
U-238	WRRTF-8	2011	1.055	0.567	1.701	U
U-238	L1-76	2012	0.6917	0.619	1.857	U
U-238	WRRTF-5	2012	4.332	1.01	3.03	—
U-238	WRRTF-7	2012	1.16	0.774	2.322	U
U-238	TSF-6	2013	3.329	1.913	5.74	U
U-238	2 INCH AIR - SMC	2014	-0.3254	0.456	1.368	U
U-238	TSF-1	2014	1.267	0.91	2.73	U
U-238	TSF-6	2014	0.9815	0.733	2.199	U
U-238	TSF-7	2014	0.7491	0.683	2.049	U
U-238	TSF-8	2014	1.607	0.835	2.505	U
U-238	TSF-9	2014	1.441	0.912	2.736	U
U-238	WRRTF-6	2014	1.461	0.786	2.358	U

Table C-7. Radionuclides concentrations in surface soils associated with Atomic City.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.006	0.002	0.006	—
Am-241	1996	0.009	0.003	0.009	—
Am-241	1998	0.02	0.0045	0.0135	—
Am-241	2000	0.00569	0.00075	0.00225	—
Am-241	2002	0.00569	0.00075	0.00225	—
Am-241	2004	0.0062	0.0062	0.0186	—
Am-241	2006	0.00117	0.0072	0.0216	U
Am-241	2008	0.004645	0.01694	0.05082	U
Am-241	2010	-0.00904	0.00524	0.01572	U
Am-241	2012	0.00396	0.00709	0.02127	U
Am-241	2014	0.0133	0.00843	0.02529	—
Cs-137	1994	0.81	0.0205	0.0615	—
Cs-137	1996	0.44	0.01	0.03	—
Cs-137	1998	0.3	0.045	0.135	—
Cs-137	2000	0.613	0.0131	0.0393	—
Cs-137	2000	0.345	0.00852	0.02556	—
Cs-137	2002	0.544	0.0178	0.0534	—
Cs-137	2002	0.535	0.0176	0.0528	—
Cs-137	2002	0.118	0.00755	0.02265	—
Cs-137	2002	0.119	0.00438	0.01314	—
Cs-137	2004	0.557	0.0122	0.0366	—
Cs-137	2004	0.161	0.00797	0.02391	—
Cs-137	2006	0.367	0.0116	0.0348	—
Cs-137	2006	-0.575	0.271	0.813	U
Cs-137	2008	0.5249	0.0158	0.0474	—
Cs-137	2008	0.1741	0.0048	0.0144	—
Cs-137	2010	0.329	0.00859	0.02577	—
Cs-137	2010	0.0944	0.00276	0.00828	—
Cs-137	2012	0.447	0.0257	0.0771	—
Cs-137	2012	0.0928	0.00777	0.02331	—
Cs-137	2014	0.323	0.0186	0.0558	—
Cs-137	2014	0.0788	0.00575	0.01725	—
Pu-238	1994	0.004	0.002	0.006	—
Pu-238	1996	0	0.001	0.003	U
Pu-238	1998	0.003	0.003	0.009	—
Pu-238	2000	0.00235	0.00039	0.00117	—
Pu-238	2002	0.00235	0.00039	0.00117	—

Table C-7. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	2004	0.00211	0.000455	0.001365	—
Pu-238	2006	0.014	0.0102	0.0306	—
Pu-238	2008	0.001644	0.005995	0.017985	U
Pu-238	2010	0.00452	0.0276	0.0828	U
Pu-238	2012	0.009	0.00374	0.01122	—
Pu-238	2014	0.0092	0.00456	0.01368	—
Pu-239/240	1994	0.02	0.003	0.009	—
Pu-239/240	1996	0.02	0.004	0.012	—
Pu-239/240	1998	0.02	0.005	0.015	—
Pu-239/240	2000	0.0174	0.0015	0.0045	—
Pu-239/240	2002	0.0174	0.0015	0.0045	—
Pu-239/240	2004	0.0204	0.0018	0.0054	—
Pu-239/240	2006	0.011	0.0106	0.0318	—
Pu-239/240	2008	0.04095	0.016635	0.049905	—
Pu-239/240	2010	-0.0126	0.0217	0.0651	U
Pu-239/240	2012	0.0315	0.00759	0.02277	—
Pu-239/240	2014	0.0349	0.00845	0.02535	—
Sr-90	1994	0.42	0.06	0.18	—
Sr-90	1996	0.22	0.025	0.075	—
Sr-90	1998	0.3	0.045	0.135	—
Sr-90	2000	0.215	0.36	1.08	U
Sr-90	2002	0.215	0.36	1.08	U
Sr-90	2004	0.199	0.034	0.102	—
Sr-90	2006	0.0928	0.0108	0.0324	—
Sr-90	2008	0.241	0.02345	0.07035	—
Sr-90	2010	0.0453	0.0114	0.0342	—
Sr-90	2012	0.141	0.0381	0.1143	—
Sr-90	2014	0.364	0.0539	0.1617	—

Table C-8. Radionuclides concentrations in surface soils associated with Blackfoot.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.006	0.002	0.006	—
Am-241	1996	0.01	0.0035	0.0105	—
Am-241	1998	0.007	0.0025	0.0075	—
Am-241	2000	0.00663	0.00088	0.00264	—
Am-241	2002	0.00663	0.00088	0.00264	—

Table C-8. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	2002	0.00611	0.00072	0.00216	—
Am-241	2004	0.00423	0.00064	0.00192	—
Am-241	2006	0.0209	0.00814	0.02442	—
Am-241	2008	-0.006237	0.004416	0.01325	U
Am-241	2010	0.00418	0.0108	0.0324	U
Am-241	2012	0.0158	0.0104	0.0312	—
Am-241	2014	0.0114	0.0102	0.0306	—
Cs-137	1994	1.01	0.01	0.03	—
Cs-137	1996	1.3	0.045	0.135	—
Cs-137	1998	0.6	0.015	0.045	—
Cs-137	2000	0.649	0.0174	0.0522	—
Cs-137	2002	0.61	0.0154	0.0462	—
Cs-137	2002	0.593	0.0127	0.0381	—
Cs-137	2002	0.3240	0.0109	0.0327	—
Cs-137	2002	0.3460	0.0088	0.0264	—
Cs-137	2004	0.229	0.0064	0.0192	—
Cs-137	2004	0.194	0.00524	0.01572	—
Cs-137	2006	0.226	0.00583	0.01749	—
Cs-137	2006	0.27	0.00991	0.02973	—
Cs-137	2008	0.6020	0.0141	0.0423	—
Cs-137	2008	0.2082	0.0052	0.0155	—
Cs-137	2010	0.369	0.00937	0.02811	—
Cs-137	2010	0.139	0.00385	0.01155	—
Cs-137	2012	0.0522	0.00587	0.01761	—
Cs-137	2012	0.239	0.0144	0.0432	—
Cs-137	2014	0.167	0.0108	0.0324	—
Cs-137	2014	0.0347	0.00298	0.00894	—
Pu-238	1994	0.002	0.0015	0.0045	—
Pu-238	1996	0.002	0.0025	0.0075	U
Pu-238	1998	0.01	0.005	0.015	—
Pu-238	2000	0.0023	0.00043	0.00129	—
Pu-238	2002	0.019	0.0017	0.0051	—
Pu-238	2002	0.0153	0.0015	0.0045	—
Pu-238	2004	0.00984	0.0017	0.0051	—
Pu-238	2006	0.154	0.0294	0.0882	—
Pu-238	2008	-0.005634	0.0088	0.0264	U
Pu-238	2010	-0.0373	0.0113	0.0339	U

Table C-8. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	2012	0.0118	0.00405	0.01215	—
Pu-238	2014	0	0.0097	0.0291	U
Pu-239/240	1994	0.03	0.003	0.009	—
Pu-239/240	1996	0.03	0.01	0.03	—
Pu-239/240	1998	0.03	0.005	0.015	—
Pu-239/240	2000	0.019	0.0017	0.0051	—
Pu-239/240	2002	0.0023	0.00043	0.00129	—
Pu-239/240	2002	0.0019	0.0004	0.0012	—
Pu-239/240	2004	0.00842	0.0016	0.0048	—
Pu-239/240	2006	0.0885	0.0198	0.0594	—
Pu-239/240	2008	0.01829	0.010185	0.0306	—
Pu-239/240	2010	0.00936	0.015	0.045	U
Pu-239/240	2012	0.0144	0.00486	0.01458	—
Pu-239/240	2014	0.0153	0.00819	0.02457	—
Sr-90	1994	0.27	0.05	0.15	—
Sr-90	1996	0.21	0.025	0.075	—
Sr-90	1998	0.11	0.3	0.9	U
Sr-90	2000	0.0979	0.03	0.09	—
Sr-90	2002	0.0979	0.03	0.09	—
Sr-90	2002	0.0634	0.022	0.066	—
Sr-90	2004	0.0625	0.019	0.057	—
Sr-90	2006	0.0115	0.0095	0.0285	—
Sr-90	2008	0.000718	0.00635	0.01905	U
Sr-90	2010	0.0126	0.0121	0.0363	—
Sr-90	2012	0.0977	0.0366	0.1098	—
Sr-90	2014	0.125	0.0391	0.1173	—

Table C-9. Radionuclides concentrations in surface soils associated with Butte City.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.005	0.002	0.006	—
Am-241	1996	0.008	0.0035	0.0105	—
Am-241	1998	0.002	0.0015	0.0045	—
Am-241	2000	0.00725	0.0009	0.0027	—
Am-241	2002	0.00725	0.0009	0.0027	—
Am-241	2004	0.0054	0.0007	0.0021	—
Am-241	2006	0.00463	0.00858	0.0257	U

Table C-9. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	2008	0.09415	0.044325	0.1330	—
Am-241	2010	0.0184	0.0277	0.0831	U
Am-241	2012	0.0126	0.00816	0.0245	—
Am-241	2014	0.0144	0.00988	0.0296	—
Cs-137	1994	0.8	0.02	0.06	—
Cs-137	1996	0.96	0.035	0.105	—
Cs-137	1998	0.2	0.045	0.135	—
Cs-137	2000	0.815	0.0212	0.0636	—
Cs-137	2000	0.162	0.00813	0.02439	—
Cs-137	2002	0.651	0.0179	0.0537	—
Cs-137	2002	0.603	0.0171	0.0513	—
Cs-137	2002	0.2140	0.0085	0.0254	—
Cs-137	2002	0.2240	0.0067	0.0202	—
Cs-137	2004	0.466	0.0104	0.0312	—
Cs-137	2004	0.143	0.00467	0.01401	—
Cs-137	2006	0.306	0.00791	0.02373	—
Cs-137	2006	0.0894	0.00283	0.00849	—
Cs-137	2008	0.06976	0.00586	0.01759	—
Cs-137	2008	0.35190	0.00812	0.02435	—
Cs-137	2010	0.4960	0.0108	0.0324	—
Cs-137	2010	0.1790	0.0048	0.0143	—
Cs-137	2012	0.444	0.0255	0.0765	—
Cs-137	2012	0.086	0.00599	0.01797	—
Cs-137	2014	0.476	0.027	0.081	—
Cs-137	2014	0.102	0.00692	0.02076	—
Pu-238	1994	0.006	0.002	0.006	—
Pu-238	1996	0.003	0.0015	0.0045	—
Pu-238	1998	0.006	0.003	0.009	—
Pu-238	2000	0.00261	0.00048	0.00144	—
Pu-238	2002	0.0192	0.0018	0.0054	—
Pu-238	2004	0.00166	0.00041	0.00123	—
Pu-238	2006	-0.0054	0.0118	0.0354	U
Pu-238	2008	0.01623	0.01317	0.03951	—
Pu-238	2010	0.0166	0.0118	0.0354	—
Pu-238	2012	0.00234	0.00287	0.00861	U
Pu-238	2014	-0.00578	0.00709	0.02127	U
Pu-239/240	1994	0.02	0.003	0.009	—

Table C-9. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	1996	0.03	0.01	0.03	—
Pu-239/240	1998	0.02	0.005	0.015	—
Pu-239/240	2000	0.0192	0.0018	0.0054	—
Pu-239/240	2002	0.00261	0.00048	0.00144	—
Pu-239/240	2004	0.0171	0.00155	0.00465	—
Pu-239/240	2006	0.000674	0.00634	0.01902	U
Pu-239/240	2008	0.008112	0.00931	0.0279	U
Pu-239/240	2010	0.0189	0.0195	0.0585	U
Pu-239/240	2012	0.021	0.00571	0.01713	—
Pu-239/240	2014	0.0231	0.0102	0.0306	—
Sr-90	1994	0.31	0.07	0.21	—
Sr-90	1996	0.31	0.035	0.105	—
Sr-90	1998	0.2	0.045	0.135	—
Sr-90	2000	0.194	0.36	1.08	U
Sr-90	2002	0.194	0.36	1.08	U
Sr-90	2004	0.195	0.0255	0.0765	—
Sr-90	2006	0.106	0.0153	0.0459	—
Sr-90	2008	0.091	0.01255	0.03765	—
Sr-90	2010	0.0448	0.0128	0.0384	—
Sr-90	2012	0.201	0.0412	0.1236	—
Sr-90	2014	0.139	0.0387	0.1161	—

Table C-10. Radionuclides concentrations in surface soils associated with Carey.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0	0.002	0.006	U
Am-241	1996	0.01	0.0035	0.0105	—
Am-241	1998	0.01	0.0045	0.0135	—
Am-241	2000	0.00913	0.00099	0.00297	—
Am-241	2002	0.00913	0.00099	0.0030	—
Am-241	2006	0.0556	0.0149	0.0447	—
Am-241	2008	0.02859	0.01675	0.05025	—
Am-241	2010	-0.00716	0.0123	0.0369	U
Am-241	2012	-0.00721	0.00541	0.0162	U
Am-241	2014	0.00442	0.00776	0.02328	U
Cs-137	1994	0.42	0.01	0.0300	—
Cs-137	1996	0.38	0.01	0.03	—

Table C-10. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	1998	0.3	0.001	0.003	—
Cs-137	2000	0.2830	0.0086	0.0259	—
Cs-137	2000	0.416	0.0131	0.0393	—
Cs-137	2002	0.759	0.016	0.048	—
Cs-137	2002	0.733	0.0229	0.0687	—
Cs-137	2002	0.34	0.00952	0.02856	—
Cs-137	2002	0.32700	0.00762	0.02286	—
Cs-137	2004	0.50600	0.01130	0.03390	—
Cs-137	2004	0.0876	0.0067	0.0202	—
Cs-137	2006	0.554	0.0132	0.0396	—
Cs-137	2006	0.206	0.00535	0.01605	—
Cs-137	2008	0.4459	0.0117	0.0350	—
Cs-137	2008	0.1689	0.0053	0.0158	—
Cs-137	2010	0.186	0.00495	0.01485	—
Cs-137	2010	0.1190	0.0048	0.0145	—
Cs-137	2012	0.4450	0.0256	0.0768	—
Cs-137	2012	0.151	0.00958	0.02874	—
Cs-137	2014	0.35	0.0201	0.0603	—
Cs-137	2014	0.119	0.00804	0.02412	—
Pu-238	1994	0.002	0.0015	0.0045	—
Pu-238	1996	0.005	0.0025	0.0075	—
Pu-238	1998	0.01	0.01	0.03	—
Pu-238	2000	0.00206	0.00038	0.00114	—
Pu-238	2002	0.00206	0.00038	0.00114	—
Pu-238	2004	0.00618	0.00085	0.00255	—
Pu-238	2006	-0.00138	0.00872	0.02616	U
Pu-238	2008	0.03364	0.01684	0.05052	—
Pu-238	2010	0.00428	0.00781	0.02343	U
Pu-238	2012	0.0147	0.00502	0.01506	—
Pu-238	2014	0.0156	0.00834	0.02502	—
Pu-239/240	1994	0.02	0.002	0.006	—
Pu-239/240	1996	0.02	0.005	0.015	—
Pu-239/240	1998	0.04	0.015	0.045	—
Pu-239/240	2000	0.0268	0.0022	0.0066	—
Pu-239/240	2002	0.0268	0.0022	0.0066	—
Pu-239/240	2004	0.0188	0.00175	0.00525	—
Pu-239/240	2006	0.017	0.00862	0.0259	—

Table C-10. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	2008	-0.00395	0.00280	0.00839	U
Pu-239/240	2010	0.00867	0.00606	0.0182	—
Pu-239/240	2012	0.0342	0.0076	0.0228	—
Pu-239/240	2014	0.0442	0.0113	0.0339	—
Sr-90	1994	0.36	0.06	0.18	—
Sr-90	1996	0.13	0.02	0.06	—
Sr-90	1998	0.1	0.035	0.105	—
Sr-90	2000	0.213	0.037	0.111	—
Sr-90	2002	0.213	0.037	0.111	—
Sr-90	2004	0.263	0.0325	0.0975	—
Sr-90	2006	0.129	0.0164	0.0492	—
Sr-90	2008	0.0447	0.0192	0.0576	—
Sr-90	2010	0.00515	0.0107	0.0321	U
Sr-90	2012	0.0495	0.0354	0.1062	—
Sr-90	2014	0.0123	0.0357	0.1071	U

Table C-11. Radionuclides concentrations in surface soils associated with FAA.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.011	0.003	0.009	—
Am-241	1996	0.02	0.004	0.012	—
Am-241	1998	0.01	0.005	0.015	—
Am-241	2000	0.00781	0.00091	0.00273	—
Am-241	2004	0.00864	0.00094	0.00282	—
Am-241	2006	0.0227	0.00762	0.02286	—
Am-241	2008	0.01378	0.01291	0.0387	—
Am-241	2010	0.0239	0.0275	0.0825	U
Am-241	2012	0.00517	0.00653	0.01959	U
Am-241	2014	-0.00141	0.00771	0.0231	U
Cs-137	1994	1.38	0.02	0.0600	—
Cs-137	1996	1.26	0.025	0.075	—
Cs-137	1998	1.01	0.02	0.06	—
Cs-137	2000	0.714	0.022	0.066	—
Cs-137	2000	0.32600	0.00837	0.02511	—
Cs-137	2002	0.58200	0.01640	0.04920	—
Cs-137	2002	0.5900	0.0136	0.0408	—
Cs-137	2002	0.125	0.00428	0.01284	—

Table C-11. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	2002	0.109	0.0066	0.0198	—
Cs-137	2004	0.7170	0.0156	0.0468	—
Cs-137	2004	0.3570	0.0083	0.0249	—
Cs-137	2004	0.373	0.0123	0.0369	—
Cs-137	2006	0.268	0.297	0.891	U
Cs-137	2006	0.311	0.00729	0.02187	—
Cs-137	2008	0.4576	0.0118	0.0354	—
Cs-137	2008	0.1511	0.0045	0.0134	—
Cs-137	2010	0.519	0.0114	0.0342	—
Cs-137	2010	0.208	0.00549	0.01647	—
Cs-137	2012	0.7040	0.0411	0.1233	—
Cs-137	2012	0.1940	0.0118	0.0354	—
Cs-137	2014	0.494	0.0289	0.0867	—
Cs-137	2014	0.163	0.00985	0.02955	—
Pu-238	1994	0.004	0.0015	0.0045	—
Pu-238	1996	0.008	0.004	0.012	—
Pu-238	1998	0.03	0.015	0.045	—
Pu-238	2000	0.0017	0.00035	0.00105	—
Pu-238	2004	0.0115	0.00135	0.00405	—
Pu-238	2006	0.0517	0.0251	0.0753	—
Pu-238	2008	0.02017	0.01465	0.04395	—
Pu-238	2010	-0.00166	0.00581	0.01743	U
Pu-238	2012	0.00364	0.00313	0.00939	—
Pu-238	2014	0.0036	0.00441	0.01323	U
Pu-239/240	1994	0.05	0.004	0.012	—
Pu-239/240	1996	0.05	0.01	0.03	—
Pu-239/240	1998	0.04	0.015	0.045	—
Pu-239/240	2000	0.0225	0.002	0.006	—
Pu-239/240	2004	0.0245	0.0023	0.0069	—
Pu-239/240	2006	0.0248	0.00971	0.0291	—
Pu-239/240	2008	0.01425	0.01114	0.03342	—
Pu-239/240	2010	0.0124	0.00862	0.02586	—
Pu-239/240	2012	0.0185	0.00505	0.0152	—
Pu-239/240	2014	0.02690	0.00769	0.02307	—
Sr-90	1994	0.57	0.07	0.21	—
Sr-90	1996	0.4	0.04	0.12	—
Sr-90	1998	0.4	0.05	0.15	—

Table C-11. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sr-90	2000	0.243	0.038	0.114	—
Sr-90	2002	0.243	0.038	0.114	—
Sr-90	2004	0.187	0.026	0.078	—
Sr-90	2006	0.116	0.0153	0.0459	—
Sr-90	2008	0.199	0.02095	0.06285	—
Sr-90	2010	0.00968	0.014	0.042	U
Sr-90	2012	0.159	0.0405	0.1215	—
Sr-90	2014	0.157	0.0408	0.1224	—

Table C-12. Radionuclides concentrations in surface soils associated with Frenchman's Cabin.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	2010	0.0175	0.0142	0.0426	—
Am-241	2012	0.000118	0.00678	0.02034	U
Am-241	2014	0.0052	0.0107	0.0321	U
Cs-137	2010	0.359	0.00801	0.02403	—
Cs-137	2010	0.126	0.00347	0.01041	—
Cs-137	2012	0.339	0.0206	0.0618	—
Cs-137	2012	0.0991	0.00652	0.0196	—
Cs-137	2014	0.275	0.0158	0.0474	—
Cs-137	2014	0.0679	0.00489	0.01467	—
Pu-238	2010	0.11	0.0486	0.1458	—
Pu-238	2012	0.00762	0.00378	0.0113	—
Pu-238	2014	0.00555	0.00491	0.01473	—
Pu-239/240	2010	0.0167	0.0278	0.0834	U
Pu-239/240	2012	0.0228	0.00687	0.02061	—
Pu-239/240	2014	0.00923	0.00458	0.01374	—
Sr-90	2010	0.04320	0.01100	0.03300	—
Sr-90	2012	0.0816	0.0436	0.1308	—
Sr-90	2014	0.0877	0.0339	0.1017	—

Table C-13. Radionuclides concentrations in surface soils associated with Howe.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0	0.002	0.006	U
Am-241	1996	0.01	0.0035	0.0105	—
Am-241	1998	0.01	0.0035	0.0105	—
Am-241	2004	0.00424	0.00065	0.00195	—

Table C-13. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	2006	-0.0028	0.0106	0.0318	U
Am-241	2008	0.0042	0.0067	0.0202	U
Am-241	2010	0.00996	0.0115	0.0345	U
Am-241	2012	0.00908	0.00959	0.0288	U
Am-241	2014	-0.00425	0.00685	0.0206	U
Cs-137	1994	0.5	0.01	0.0300	—
Cs-137	1996	0.38	0.015	0.0450	—
Cs-137	1998	0.2	0.035	0.105	—
Cs-137	2000	0.5250	0.0120	0.0360	—
Cs-137	2000	0.248	0.00595	0.01785	—
Cs-137	2000	0.235	0.00924	0.02772	—
Cs-137	2002	0.399	0.00971	0.02913	—
Cs-137	2002	0.409	0.0099	0.0297	—
Cs-137	2002	0.196	0.00613	0.01839	—
Cs-137	2002	0.193	0.00586	0.01758	—
Cs-137	2004	0.39	0.00879	0.02637	—
Cs-137	2004	0.124	0.00416	0.01248	—
Cs-137	2006	0.412	0.0122	0.0366	—
Cs-137	2006	0.181	0.00456	0.01368	—
Cs-137	2008	0.3077	0.0072	0.0216	—
Cs-137	2008	0.1039	0.0034	0.0101	—
Cs-137	2010	0.26600	0.00713	0.02139	—
Cs-137	2010	0.08730	0.00277	0.00831	—
Cs-137	2012	0.179	0.0121	0.0363	—
Cs-137	2012	0.109	0.00711	0.02133	—
Cs-137	2014	0.279	0.0166	0.0498	—
Cs-137	2014	0.074	0.00531	0.01593	—
Pu-238	1994	0	0.001	0.003	—
Pu-238	1996	0.001	0.001	0.003	—
Pu-238	1998	0.0001	0.0035	0.0105	—
Pu-238	2004	0.0010	0.0004	0.0011	—
Pu-238	2006	-0.0187	0.00728	0.02184	U
Pu-238	2008	-0.005163	0.008885	0.026655	U
Pu-238	2010	-0.00726	0.00685	0.02055	U
Pu-238	2012	0.00749	0.00462	0.01386	—
Pu-238	2014	0.0119	0.00588	0.01764	—
Pu-239/240	1994	0.02	0.002	0.006	—

Table C-13. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	1996	0.02	0.004	0.012	—
Pu-239/240	1998	0.01	0.004	0.012	—
Pu-239/240	2004	0.0158	0.00185	0.00555	—
Pu-239/240	2006	0.00631	0.0042	0.0126	—
Pu-239/240	2008	-0.004871	0.00345	0.01035	U
Pu-239/240	2010	0.00783	0.00609	0.01827	—
Pu-239/240	2012	0.00561	0.0046	0.0138	—
Pu-239/240	2014	0.0166	0.00722	0.02166	—
Sr-90	1994	0.35	0.06	0.18	—
Sr-90	1996	0.35	0.1	0.3	—
Sr-90	1998	0.2	0.035	0.105	—
Sr-90	2000	0.0734	0.35	1.05	U
Sr-90	2002	0.0734	0.35	1.05	U
Sr-90	2004	0.154	0.024	0.072	—
Sr-90	2006	0.0487	0.0097	0.0291	—
Sr-90	2008	0.123	0.0139	0.0417	—
Sr-90	2010	0.0204	0.0114	0.0342	—
Sr-90	2012	0.123	0.0518	0.1554	—
Sr-90	2014	0.0404	0.0316	0.0948	—

Table C-14. Radionuclides concentrations in surface soils associated with Monteview.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.008	0.002	0.006	—
Am-241	1996	0.01	0.0035	0.0105	—
Am-241	1998	0.02	0.03	0.09	U
Am-241	2000	0.00335	0.00063	0.00189	—
Am-241	2002	0.00335	0.00063	0.0019	—
Am-241	2004	0.0194	0.0098	0.0294	—
Am-241	2006	0.00589	0.0133	0.0399	U
Am-241	2008	0.0085	0.0112	0.0336	U
Am-241	2010	0.0018	0.0107	0.0321	U
Am-241	2012	0.0106	0.0068	0.0204	—
Am-241	2014	-0.00554	0.00821	0.0246	U
Cs-137	1994	1.11	0.01	0.03	—
Cs-137	1996	0.8200	0.0200	0.0600	—
Cs-137	1998	0.1	0.03	0.09	—

Table C-14. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	2000	0.432	0.0149	0.0447	—
Cs-137	2000	0.373	0.0103	0.0309	—
Cs-137	2000	0.348	0.0127	0.0381	—
Cs-137	2002	0.362	0.0111	0.0333	—
Cs-137	2002	0.372	0.0105	0.0315	—
Cs-137	2002	0.3960	0.0097	0.0290	—
Cs-137	2002	0.3990	0.0112	0.0336	—
Cs-137	2004	0.32600	0.00790	0.02370	—
Cs-137	2004	0.20100	0.00498	0.01494	—
Cs-137	2006	0.32	0.00721	0.02163	—
Cs-137	2006	0.206	0.00766	0.02298	—
Cs-137	2008	0.3600	0.0090	0.0269	—
Cs-137	2008	0.3012	0.0112	0.0335	—
Cs-137	2010	0.264	0.00616	0.01848	—
Cs-137	2010	0.166	0.00509	0.01527	—
Cs-137	2012	0.285	0.0166	0.0498	—
Cs-137	2012	0.227	0.0141	0.0423	—
Cs-137	2014	0.288	0.0171	0.0513	—
Cs-137	2014	0.196	0.0114	0.0342	—
Pu-238	1994	0	0.001	0.003	U
Pu-238	1996	0.0010	0.0010	0.0030	—
Pu-238	1998	0.002	0.0005	0.0015	—
Pu-238	2000	0.000619	0.00025	0.00075	—
Pu-238	2002	0.0111	0.0012	0.0036	—
Pu-238	2004	0.00148	0.000375	0.001125	—
Pu-238	2006	-0.0104	0.0136	0.0408	U
Pu-238	2008	0.0227	0.02104	0.06312	—
Pu-238	2010	-0.00269	0.0053	0.0159	U
Pu-238	2012	0.0115	0.00392	0.01176	—
Pu-238	2014	0.0117	0.00509	0.01527	—
Pu-239/240	1994	0.03	0.003	0.009	—
Pu-239/240	1996	0.02	0.004	0.012	—
Pu-239/240	1998	0.02	0.005	0.015	—
Pu-239/240	2000	0.0111	0.0012	0.0036	—
Pu-239/240	2002	0.000619	0.00025	0.00075	—
Pu-239/240	2004	0.0113	0.00012	0.00036	—
Pu-239/240	2006	0.00421	0.00861	0.02583	U

Table C-14. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	2008	0.002412	0.008795	0.026385	U
Pu-239/240	2010	0.00549	0.0067	0.0201	U
Pu-239/240	2012	0.0242	0.00687	0.02061	—
Pu-239/240	2014	0.00999	0.00477	0.01431	—
Sr-90	1994	0.17	0.06	0.18	—
Sr-90	1996	0.14	0.015	0.045	—
Sr-90	1998	0.1	0.03	0.09	—
Sr-90	2000	0.0557	0.35	1.05	U
Sr-90	2002	0.0557	0.35	1.05	U
Sr-90	2004	0.069	0.0165	0.0495	—
Sr-90	2006	0.0297	0.0093	0.0279	—
Sr-90	2008	0.0566	0.01	0.03	—
Sr-90	2010	0.0844	0.0128	0.0384	—
Sr-90	2012	0.0387	0.033	0.099	—
Sr-90	2014	-0.00386	0.0313	0.0939	U

Table C-15. Radionuclides concentrations in surface soils associated with Mud Lake.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.002	0.002	0.006	—
Am-241	1996	0.0040	0.0025	0.0075	—
Am-241	1996	0.009	0.0035	0.0105	—
Am-241	1998	0.003	0.0015	0.0045	—
Am-241	1998	0.007	0.0025	0.0075	—
Am-241	2000	0.00393	0.00059	0.0018	—
Am-241	2000	0.00376	0.00058	0.00174	—
Am-241	2000	0.00166	0.00037	0.00111	—
Am-241	2002	0.0039	0.0006	0.0018	—
Am-241	2002	0.00376	0.00058	0.00174	—
Am-241	2002	0.00166	0.00037	0.00111	—
Am-241	2004	0.0035	0.00054	0.0016	—
Am-241	2004	0.0022	0.00041	0.00123	—
Am-241	2006	0.00478	0.00462	0.01386	—
Am-241	2006	0.00698	0.00675	0.02025	—
Am-241	2008	0.0875	0.0426	0.1277	—
Am-241	2008	0.00900	0.0232	0.0696	U
Am-241	2010	0.0197	0.0179	0.0537	—

Table C-15. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	2010	0.00173	0.0106	0.0318	U
Am-241	2012	0.00729	0.00978	0.02934	U
Am-241	2012	0.00967	0.00712	0.02136	—
Am-241	2014	0.00741	0.00793	0.02379	U
Am-241	2014	-0.00355	0.00719	0.02157	U
Cs-137	1994	0.44	0.01	0.03	—
Cs-137	1996	0.59000	0.01500	0.04500	—
Cs-137	1996	0.14	0.005	0.015	—
Cs-137	1998	0.07000	0.02500	0.07500	—
Cs-137	1998	0.2	0.005	0.015	—
Cs-137	2000	0.471	0.012	0.036	—
Cs-137	2000	0.196	0.00887	0.02661	—
Cs-137	2000	0.311	0.00735	0.02205	—
Cs-137	2000	0.402	0.0137	0.0411	—
Cs-137	2002	0.4350	0.0105	0.0315	—
Cs-137	2002	0.4260	0.0129	0.0387	—
Cs-137	2002	0.41	0.00975	0.02925	—
Cs-137	2002	0.385	0.0116	0.0348	—
Cs-137	2002	0.0907	0.00592	0.01776	—
Cs-137	2002	0.102	0.00389	0.01167	—
Cs-137	2002	0.114	0.00408	0.01224	—
Cs-137	2002	0.0926	0.006	0.018	—
Cs-137	2002	0.0976	0.0062	0.0186	—
Cs-137	2002	0.114	0.00398	0.01194	—
Cs-137	2002	0.131	0.00669	0.02007	—
Cs-137	2002	0.121	0.0065	0.0195	—
Cs-137	2004	0.198	0.00505	0.01515	—
Cs-137	2004	0.1000	0.0036	0.0107	—
Cs-137	2004	0.0904	0.00301	0.00903	—
Cs-137	2004	0.0881	0.00572	0.01716	—
Cs-137	2006	0.244	0.00579	0.01737	—
Cs-137	2006	0.126	0.00621	0.01863	—
Cs-137	2006	0.487	0.0106	0.0318	—
Cs-137	2006	0.261	0.00938	0.02814	—
Cs-137	2008	0.3412	0.00776	0.02329	—
Cs-137	2008	0.2594	0.00626	0.01877	—
Cs-137	2008	0.3168	0.01069	0.03206	—

Table C-15. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	2008	0.2817	0.00676	0.02028	—
Cs-137	2010	0.3430	0.0078	0.0233	—
Cs-137	2010	0.1620	0.0042	0.0126	—
Cs-137	2010	0.238	0.00578	0.01734	—
Cs-137	2010	0.229	0.00644	0.01932	—
Cs-137	2012	0.114	0.00861	0.02583	—
Cs-137	2012	0.0504	0.00408	0.01224	—
Cs-137	2012	0.256	0.015	0.045	—
Cs-137	2012	0.223	0.0132	0.0396	—
Cs-137	2014	0.295	0.0176	0.0528	—
Cs-137	2014	0.161	0.00958	0.02874	—
Cs-137	2014	0.216	0.0132	0.0396	—
Cs-137	2014	0.192	0.0114	0.0342	—
Pu-238	1994	0	0.001	0.003	U
Pu-238	1996	0.001	0.0025	0.0075	U
Pu-238	1996	0.002	0.0015	0.0045	—
Pu-238	1998	0.008	0.0035	0.0105	—
Pu-238	1998	0.01	0.004	0.012	—
Pu-238	2000	0.00256	0.00045	0.00135	—
Pu-238	2000	0.0000809	0.000081	0.000243	U
Pu-238	2002	0.0118	0.0012	0.0036	—
Pu-238	2002	0.0119	0.0012	0.0036	—
Pu-238	2002	0.0000809	0.000081	0.000243	U
Pu-238	2004	0.00388	0.0008	0.0024	—
Pu-238	2004	0.00673	0.00105	0.00315	—
Pu-238	2006	-0.0102	0.00713	0.02139	U
Pu-238	2006	-0.0294	0.015	0.045	U
Pu-238	2008	0.0205	0.0167	0.0500	—
Pu-238	2008	-0.0261	0.0088	0.0264	U
Pu-238	2010	0.00151	0.00923	0.02769	U
Pu-238	2010	0.044	0.032	0.096	—
Pu-238	2012	0.00506	0.00402	0.01206	—
Pu-238	2012	0.002	0.00489	0.01467	U
Pu-238	2014	0.012	0.00641	0.01923	—
Pu-238	2014	0.00493	0.00605	0.01815	U
Pu-239/240	1994	0.01	0.0015	0.0045	—
Pu-239/240	1996	0.02	0.01	0.03	—

Table C-15. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-239/240	1996	0.008	0.004	0.012	—
Pu-239/240	1998	0.05	0.01	0.03	—
Pu-239/240	1998	0.01	0.0045	0.0135	—
Pu-239/240	2000	0.0118	0.0012	0.0036	—
Pu-239/240	2000	0.0119	0.0012	0.0036	—
Pu-239/240	2000	0.00307	0.00056	0.00168	—
Pu-239/240	2002	0.00183	0.00038	0.00114	—
Pu-239/240	2002	0.00256	0.00045	0.00135	—
Pu-239/240	2002	0.00307	0.00056	0.00168	—
Pu-239/240	2004	0.00744	0.0012	0.0036	—
Pu-239/240	2004	0.00379	0.0008	0.0024	—
Pu-239/240	2006	0.0104	0.00426	0.01278	—
Pu-239/240	2006	0.00875	0.00938	0.02814	U
Pu-239/240	2008	0.04173	0.019735	0.059205	—
Pu-239/240	2008	0.01092	0.01253	0.03759	U
Pu-239/240	2010	0.0209	0.0117	0.0351	—
Pu-239/240	2010	0.00218	0.0195	0.0585	U
Pu-239/240	2012	0.00252	0.00565	0.01695	U
Pu-239/240	2012	0.0339	0.00951	0.02853	—
Pu-239/240	2014	0.012	0.00806	0.02418	—
Pu-239/240	2014	0.00983	0.00607	0.01821	—
Sr-90	1994	0.32	0.06	0.18	—
Sr-90	1996	0.1	0.015	0.045	—
Sr-90	1996	0.2	0.025	0.075	—
Sr-90	1998	0.07	0.025	0.075	—
Sr-90	1998	0.1	0.03	0.09	—
Sr-90	2000	0.00394	0.35	1.05	U
Sr-90	2000	0.0203	0.35	1.05	U
Sr-90	2002	0.00394	0.35	1.05	U
Sr-90	2002	-0.163	0.33	0.99	U
Sr-90	2002	0.0203	0.35	1.05	U
Sr-90	2004	0.0593	0.0165	0.0495	—
Sr-90	2004	0.0345	0.0145	0.0435	—
Sr-90	2006	0.0448	0.0122	0.0366	—
Sr-90	2006	0.11	0.0177	0.0531	—
Sr-90	2008	0.0243	0.01125	0.03375	—
Sr-90	2008	0.0813	0.01465	0.04395	—

Table C-15. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Sr-90	2010	0.0417	0.0131	0.0393	—
Sr-90	2010	-0.0289	0.0128	0.0384	U
Sr-90	2012	0.0138	0.035	0.105	U
Sr-90	2012	0.123	0.0411	0.1233	—
Sr-90	2014	0.0303	0.0292	0.0876	—
Sr-90	2014	0.0579	0.0307	0.0921	—

Table C-16. Radionuclides concentrations in surface soils associated with Blue Dome/Birch Creek Hydro.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.007	0.002	0.006	—
Am-241	1996	0.01	0.0035	0.0105	—
Am-241	1998	0.009	0.003	0.009	—
Am-241	2000	0.00831	0.00098	0.00294	—
Am-241	2004	0.00757	0.00091	0.00273	—
Am-241	2004	0.0089	0.0010	0.0030	—
Am-241	2006	0.0168	0.0131	0.0393	—
Am-241	2008	0.02682	0.016755	0.0503	—
Am-241	2010	-0.00777	0.0122	0.0366	U
Am-241	2012	0.0213	0.0084	0.0253	—
Am-241	2014	0.0108	0.0105	0.0315	—
Cs-137	1994	1.3	0.01	0.0300	—
Cs-137	1996	0.68	0.015	0.045	—
Cs-137	1998	0.4	0.05	0.15	—
Cs-137	2000	0.935	0.0194	0.0582	—
Cs-137	2000	0.211	0.00988	0.02964	—
Cs-137	2004	0.653	0.0152	0.0456	—
Cs-137	2004	0.264	0.00654	0.01962	—
Cs-137	2006	0.464	0.0111	0.0333	—
Cs-137	2006	0.294	0.00694	0.02082	—
Cs-137	2008	0.6643	0.0195	0.0584	—
Cs-137	2008	0.0839	0.0035	0.0104	—
Cs-137	2010	0.57300	0.0125	0.0375	—
Cs-137	2010	0.132	0.0038	0.0114	—
Cs-137	2012	0.663	0.0376	0.1128	—
Cs-137	2012	0.162	0.0115	0.0345	—
Cs-137	2014	0.64100	0.03610	0.10830	—

Table C-16. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Cs-137	2014	0.274	0.0165	0.0495	—
Pu-238	1994	0.001	0.0015	0.0045	U
Pu-238	1996	0.001	0.002	0.006	U
Pu-238	1998	0.002	0.0015	0.0045	—
Pu-238	2000	0.0013	0.0003	0.0010	—
Pu-238	2004	2.36E-08	0.000285	0.000855	U
Pu-238	2004	0.000617	0.000295	0.000885	—
Pu-238	2006	-0.0274	0.0144	0.0432	U
Pu-238	2008	0.004464	0.01151	0.03453	U
Pu-238	2010	-0.0016	0.0099	0.0297	U
Pu-238	2012	0.0144	0.0051	0.0153	—
Pu-238	2014	0.00737	0.00394	0.01182	—
Pu-239/240	1994	0.04	0.003	0.009	—
Pu-239/240	1996	0.012	0.003	0.009	—
Pu-239/240	1998	0.02	0.005	0.015	—
Pu-239/240	2000	0.0266	0.0024	0.0072	—
Pu-239/240	2004	0.0222	0.0022	0.0066	—
Pu-239/240	2006	0.00437	0.0101	0.0303	U
Pu-239/240	2008	0.01654	0.01569	0.04707	—
Pu-239/240	2010	0.00573	0.00591	0.01773	U
Pu-239/240	2012	0.0430	0.0092	0.0277	—
Pu-239/240	2014	0.0368	0.00789	0.02367	—
Sr-90	1994	0.52	0.08	0.24	—
Sr-90	1996	0.4	0.04	0.12	—
Sr-90	1998	0.4	0.05	0.15	—
Sr-90	2000	0.3130	0.37000	1.11000	U
Sr-90	2004	0.2640	0.03150	0.09450	—
Sr-90	2006	0.1010	0.0129	0.0387	—
Sr-90	2008	0.2330	0.01430	0.04290	—
Sr-90	2010	0.0230	0.01390	0.04170	—
Sr-90	2012	0.2650	0.0463	0.1389	—
Sr-90	2014	0.19	0.0366	0.1098	—

Table C-17. Radionuclides concentrations in surface soils associated with St. Anthony.

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Am-241	1994	0.008	0.003	0.0090	—
Am-241	1996	0.006	0.0025	0.0075	—
Am-241	1998	0.02	0.005	0.015	—
Am-241	2000	0.0146	0.0015	0.0045	—
Am-241	2002	0.0146	0.0015	0.0045	—
Am-241	2004	0.00587	0.00075	0.00225	—
Am-241	2006	0.00543	0.00504	0.01512	—
Am-241	2008	0.0132	0.01084	0.03252	—
Am-241	2010	-0.0056	0.0142	0.0426	U
Am-241	2012	0.00851	0.00735	0.02205	—
Am-241	2014	0.0287	0.0113	0.0339	—
Cs-137	1994	1.11	0.01	0.03	—
Cs-137	1996	1.1	0.025	0.075	—
Cs-137	1998	1	0.02	0.06	—
Cs-137	2000	0.6440	0.0210	0.0630	—
Cs-137	2000	0.7130	0.0158	0.0474	—
Cs-137	2002	1.27000	0.0303	0.0909	—
Cs-137	2002	1.27	0.0303	0.0909	—
Cs-137	2002	0.490	0.0117	0.0351	—
Cs-137	2002	0.492	0.0146	0.0438	—
Cs-137	2004	0.55100	0.01210	0.03630	—
Cs-137	2004	0.281	0.0103	0.0309	—
Cs-137	2006	0.0752	0.00326	0.0098	—
Cs-137	2006	0.0769	0.00388	0.01164	—
Cs-137	2008	0.4875	0.0109	0.0326	—
Cs-137	2008	0.5141	0.0128	0.0385	—
Cs-137	2010	0.71	0.0151	0.0453	—
Cs-137	2010	0.607	0.0133	0.0399	—
Cs-137	2012	0.746	0.0432	0.1296	—
Cs-137	2012	0.624	0.0353	0.1059	—
Cs-137	2014	0.616	0.0354	0.1062	—
Cs-137	2014	0.4260	0.0242	0.0726	—
Pu-238	1994	0.002	0.0015	0.0045	—
Pu-238	1996	-0.0004	0.00035	0.00105	U
Pu-238	1998	0.006	0.003	0.009	—
Pu-238	2000	0.00147	0.00035	0.00105	—

Table C-17. (continued).

Radionuclide	Year	Concentration (pCi/g)	Uncertainty (pCi/g)	MDA (pCi/g)	Flag
Pu-238	2002	0.0326	0.0028	0.0084	—
Pu-238	2004	0.00717	0.0009	0.0027	—
Pu-238	2006	-0.00371	0.00672	0.02016	U
Pu-238	2008	0.01899	0.01557	0.04671	—
Pu-238	2010	0.0657	0.0345	0.1035	—
Pu-238	2012	0.0112	0.00491	0.01473	—
Pu-238	2014	0.0105	0.00437	0.01311	—
Pu-239/240	1994	0.03	0.003	0.009	—
Pu-239/240	1996	0.02	0.005	0.015	—
Pu-239/240	1998	0.06	0.005	0.015	—
Pu-239/240	2000	0.0326	0.00280	0.00840	—
Pu-239/240	2002	0.0015	0.00035	0.00105	—
Pu-239/240	2004	0.019	0.00175	0.00525	—
Pu-239/240	2006	0.00699	0.00415	0.01245	—
Pu-239/240	2008	0.01179	0.008345	0.025035	—
Pu-239/240	2010	-0.0059	0.0256	0.0768	U
Pu-239/240	2012	0.0404	0.00903	0.02709	—
Pu-239/240	2014	0.035	0.00828	0.02484	—
Sr-90	1994	0.5600	0.07000	0.21000	—
Sr-90	1996	0.4200	0.05000	0.15000	—
Sr-90	1998	0.3400	0.0450	0.1350	—
Sr-90	2000	0.277	0.37	1.11	U
Sr-90	2002	0.277	0.37	1.11	U
Sr-90	2004	0.199	0.034	0.102	—
Sr-90	2006	0.0547	0.0146	0.0438	—
Sr-90	2008	0.174	0.0114	0.0342	—
Sr-90	2010	0.0432	0.011	0.033	—
Sr-90	2012	0.238	0.0436	0.1308	—
Sr-90	2014	0.15	0.0348	0.1044	—