LA-UR-99-4787
Final Draft
September 1999

Technical Area 49 Area 2 Data Summary Report

Environmental Restoration Project
A Department of Energy Environmental Cleanup Program
ER19990102

Los Alamos
NATIONAL LABORATORY
Los Alamos, NM 87545

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1.0 INTRODUCTION

This report presents information and data for Areas 2, 2A, and 2B (collectively referred to as Area 2 in this report) at Los Alamos National Laboratory's (the Laboratory's) Technical Area (TA) 49 (Figure 1.0-1). Area 2 includes Potential Release Sites (PRSs) 49-001(b,c,d, and g); the PRSs are contiguous, are related to the same operations, and have the same contaminants and contaminant origin. Therefore, they are being investigated together as one area. These PRSs are all associated with Material Disposal Area (MDA) AB (Figure 1.0-2). All of these PRSs are listed on Table A of Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 1585).

This data summary report includes all Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) data acquired from 1993 through September 1998 for PRSs 49-001(b,c,d, and g). Pre-RFI activities and corresponding data are not included in this report but will be included in the Phase II sampling and analysis plan (SAP) and the RFI report. The intent of this report is to document current knowledge and preserve information over the period of time until the RFI report is prepared.

PRSs 49-001(b,c,d, and g) are considered to represent a bounding case for other sites having similar environmental issues in other parts of MDA AB (Areas 1, 3, and 4). Thus, the RFI process applied to them is expected to establish the approach for investigations, assessments, and decisions in the other areas.

A brief site description and operational history for each PRS is provided in Section 2. More detailed information can be found in Sections 3 and 4 of the RFI work plan for Operable Unit (OU) 1144 (LANL 1992, 7670). Appendix A includes a list of acronyms that apply to this document. Appendix B provides the analytical suites used for the RFI analysis and an abridged version of the data from the RFI investigations. The complete RFI data set exists in electronic format.

2.0 DESCRIPTION AND OPERATIONAL HISTORY OF PRSs 49-001(b,c,d, and g)

2.1 Site Description

TA-49, the Frijoles Mesa Site, occupies approximately 1280 acres along the southwestern boundary of the Laboratory (Figure 1.0-1). PRSs 49-001(b–d, and g) are located on the mesa top at an elevation of approximately 7140 ft. These sites are approximately 1650 ft from an ephemeral stream at the bottom of Water Canyon (Figure 1.0-2). The distance to the nearest mesa edge, above a tributary to Water Canyon, is approximately 700 ft. The PRSs are shown in Figure 2.1-1 and are discussed below.

Nuclear safety and related tests were conducted in 3-ft- or 6-ft-diameter shafts at depths ranging between 31 and 108 ft. Tests were conducted in 37 shafts; additional shafts were drilled but never used. The shafts are described in Weir and Purtymun (1962, 11890) and in the OU 1148 RFI work plan (LANL 1992, 7670).

There were releases to the surface from several of the shafts. The most serious of these releases occurred in the area of PRS 49-001(b) and was contained in 1961 by the installation of a soil cover protected with an asphalt cap.

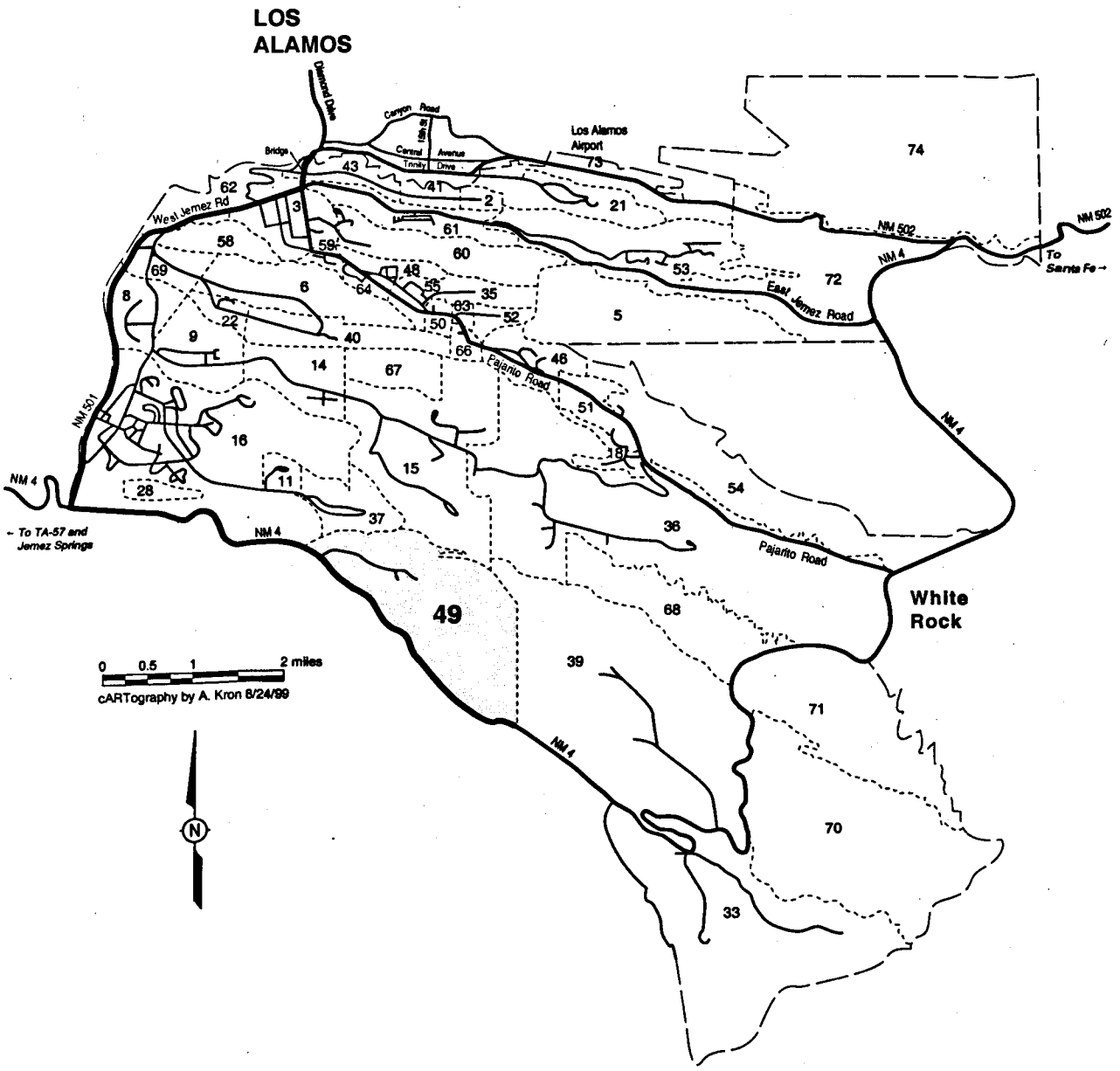


Figure 1.0-1. Location of TA-49

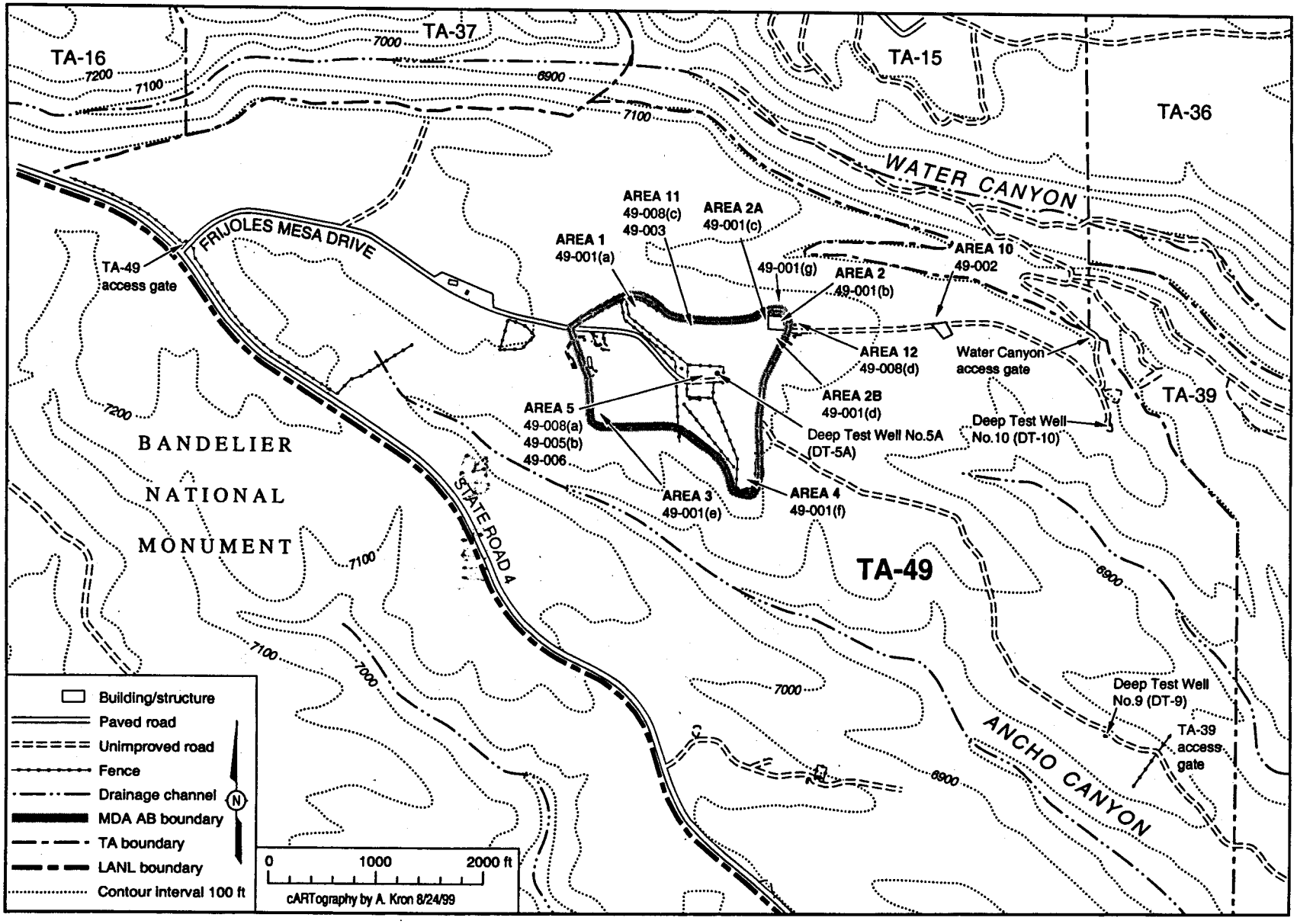


Figure 1.0-2. Map of TA-49

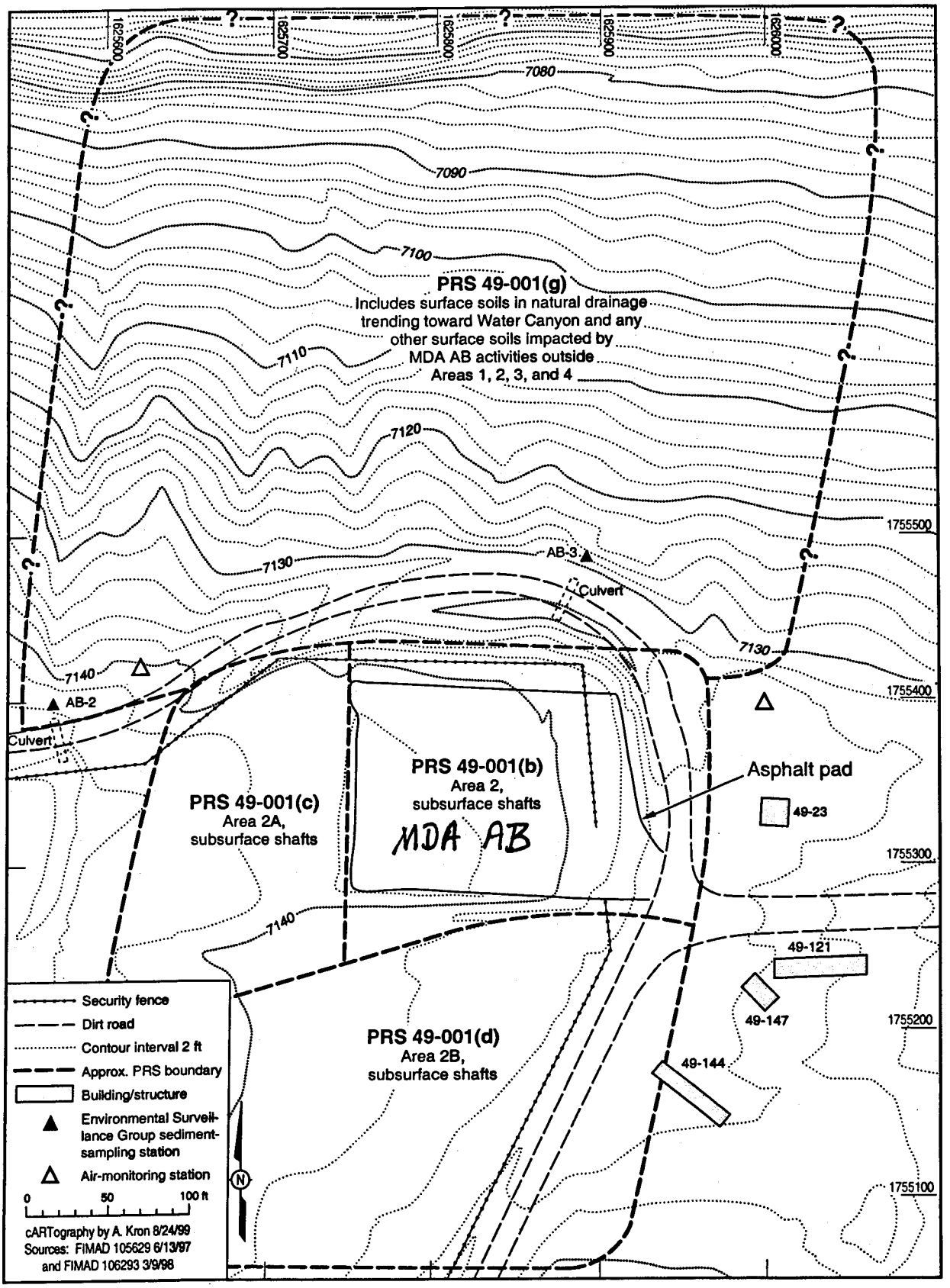


Figure 2.1-1. PRSs at Area 2, TA-49

PRS 49-001(b) is described as experimental shafts and has been inactive except for maintenance and monitoring since 1961. The PRS occupies approximately 45,000 ft^2. Twenty-eight shafts were drilled in the area of this PRS for various aspects of the nuclear safety experiments; one shaft was backfilled without being used (Figure 2.1-2). Tritium-containing components (called zippers) were used in the tests in shafts 2-K and 2-U. This PRS includes the test shafts and associated subsurface, near surface, and surficial debris, equipment, and contaminated materials. Concrete was used to top off the shafts, cover the filter box (which was the primary near-surface contaminated feature), and in some cases, to cover contaminated soil because of inadvertent releases. Areas where surface releases were documented are identified in Figure 2.1-2. The surface release at Shaft 2-H (January 1960) occurred at the filter box and was corrected by covering the soil around the shaft with 300 ft^3 of concrete. The release at Shaft 2-S (March 1960) also occurred at the filter box and also was corrected by covering the surface soils with concrete. The third and most extensive release occurred at Shaft 2-M (November 1960) during excavation of the shaft. As a result of the Shaft 2-M release, the area was covered with fill and a protective asphalt cap. The asphalt pad remained in place (repaired in 1975 because of subsidence) until it was removed during an interim measure (IM) implemented in 1998 at the direction of New Mexico Environment Department Hazardous and Radioactive Materials Bureau (NMED-HRMB). The area was covered with soil and gravel as part of stabilization activities. The IM was conducted to address concerns arising from moisture accumulation beneath the pad. The IM and associated best management practices (BMPs) are summarized in Section 4.0.

PRS 49-001(c) is described as experimental shafts and has been inactive except for maintenance and monitoring since 1961. The PRS occupies approximately 2500 ft^2. Six shafts were drilled for various aspects of the nuclear safety experiments; two shafts were backfilled without being used. This PRS includes the test shafts and associated subsurface, near surface, and surficial debris, equipment, and contaminated materials. Concrete was used to top off the shafts and to cover the filter box, which was the primary near-surface contaminated feature.

PRS 49-001(d) is described as experimental shafts and has been inactive except for maintenance and monitoring since 1961. The PRS occupies approximately 70,000 ft^2. Eleven shafts were drilled for various aspects of the nuclear safety experiments; four shafts were backfilled without being used. This PRS includes the tests shaft and associated subsurface, near surface, and surficial debris, equipment, and contaminated materials. Concrete was used to top off the shafts, to cover the filter box (which was the primary near-surface contaminated feature), and in one case, to cover contaminated soil because of an inadvertent release from Shaft 2B-H (Figure 2.1-2). The surface release at Shaft 2-BH (March 1961) occurred at the filter box and was corrected by covering a 30-ft by 40-ft area around the shaft with concrete.

PRS 49-001(g) is described as a contiguous area of surface soil contamination to the north of PRS 49-001(b). This PRS was never the location of any site operations. The PRS occupies approximately 225,000 ft^2. PRS 49-001(g) is an open area bounded by two natural drainage channels northeast and northwest of the former asphalt pad. This PRS is described as all remaining surface areas that have been impacted by contamination in any part by MDA AB. Thus the *boundary* of the PRS could be interpreted to include surface soil contamination at Areas 1, 3, and 4. Because no other areas of significant surface soil contamination are known to exist at MDA AB, this PRS is assumed to be limited to the area shown in Figure 2.1-1.

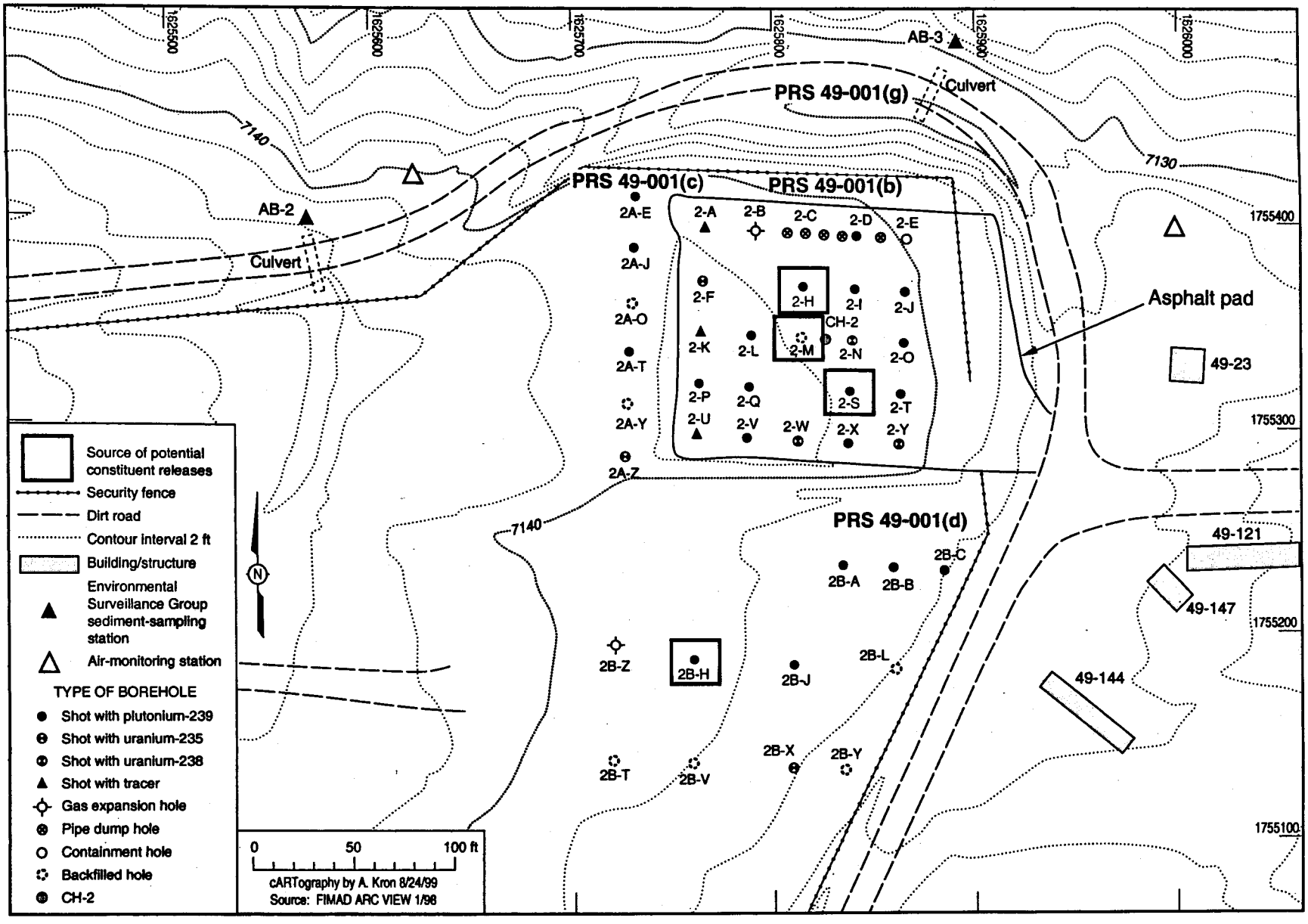


Figure 2.1-2. Locations of surface releases at Area 2

2.2 Operational History

Beginning in the mid-1940s, Frijoles Mesa was used as a buffer zone for firing sites in adjacent TA-15 and TA-39. In the fall of 1959, TA-49 was created, and a period of intense experimental activity took place from late 1959 through September 1961. TA-49 had previously been studied extensively by the Laboratory and the US Geological Survey to determine its suitability for these experiments. The location was selected because it exhibited geologic characteristics that ensured containment of the experiments and hydrologic characteristics that were thought to preclude the contamination of groundwater. During these years, significant amounts of plutonium, uranium, lead, and beryllium were used in nuclear safety and related experiments in underground shafts. These activities were responsible for almost all of the radioactive and hazardous materials currently present at TA-49. Area 2 contains transuranic waste and heavy metal contamination from about 35 nuclear safety experiments (Thorne and Westervelt 1987, 6672). At least 23 additional underground containment, equipment development, and mockup experiments were conducted using high explosives (HE) and, in a few cases, very small amounts of uranium-238 or radioactive tracer.

The use of special nuclear material required extremely close accounting of the quantities of uranium, plutonium, lead, and beryllium, which are now the primary contaminants at Area 2. The quantities and locations of these contaminants are thus known with a high degree of precision (Purtymun and Stoker 1987, 6688). Most of the contaminant inventory is present in the test shafts at depths ranging between approximately 50 and 78 ft. Area 2 is believed to contain approximately 22 kg of plutonium. Plutonium-239 is estimated to account for more than 93% of the total mass, with plutonium-238, plutonium-240, and plutonium-241 accounting for the remainder (LANL 1992, 7670). Estimates indicate that Area 2 also contains approximately 63.6 kg of uranium-235, 77.8 kg of uranium-238, and 0.025 Ci of tritium (LANL 1992, 7670). All of MDA AB is estimated to contain more than 90,000 kg of lead and 14 kg of beryllium, the majority of which is contained within Area 2.

In January 1961, portions of PRSs 49-001(b, c, d and g) were capped with 2 ft to 3 ft of compacted clay and gravel. In September 1961, it was capped with 2 to 4 in. of asphalt pavement and closed. Historical estimates of the soil/fill thickness below the asphalt range from 1 ft to 6 ft, but recent field investigations suggest 2 ft to 3 ft is most common. The fill and asphalt pad extended approximately 12.5 ft beyond the outermost shafts to form a 125-ft by 125-ft surface. Detailed information regarding the fill and former asphalt pad are provided in the RFI work plan for OU 1144 and the stabilization plan (LANL 1992, 7670 and LANL 1999, 63918).

No operational activities occurred at Area 2 after termination of tests in September 1961 (DOE 1987, 8663 and 8664). Maintenance and monitoring of the area has continued through the present.

3.0 RFI ACTIVITY SUMMARY

The Laboratory Environmental Restoration (ER) Project conducted RFI fieldwork at Area 2 from 1993 to 1998. The objectives of the RFI were to (1) confirm the nature of the contamination present; (2) determine the extent of current contaminant dispersal in surface and subsurface soil and rock, drainage channel sediments, and subsurface water; and (3) assess the potential for future migration of contaminants along the various migration pathways.

The RFI activities conducted in 1998 were implemented specifically to support the IM but also contribute useful information about site conditions. Completed RFI activities summarized in this report include

- surface soil sampling (April 1993);
- boreholes through the asphalt pad for subsurface soil sampling and analysis (1993–1994), and resampling of the core for additional analyses (March 1998);
- radiological screening survey (1994); and
- investigations needed to support an RFI IM and BMPs in 1998, which include
  - geophysical and radiation surveys (March 1998),
  - shallow boreholes through the asphalt pad for cuttings collection and screening analyses (March 1998),
  - shallow boreholes to define soil depth to tuff in the up-slope drainage area above Area 2 (May 1998),IM measure activities (May–September 1998), and
  - high-explosives sampling (June 1998).

RFI activities planned for Area 2 include the drilling of horizontal and vertical boreholes beneath the site. All future RFI activities planned for Area 2 will be described in detail in a Phase II SAP.

Information available to date confirms the presence of isotopes of the radionuclides uranium, plutonium, and americium. The presence of lead has been confirmed as well as low concentrations of beryllium. Tritium is present at low levels, and as expected, no organic compounds were identified as potential chemicals of potential concern (COPCs).

Surface soils in the vicinity of PRS 49-001(b) and PRSs 49-001(c and d) exhibit levels of radionuclides that are elevated above background but not above ER Project upper tolerance limits (UTLs), except in a few isolated points near the former location of the asphalt pad. Fill material remaining beneath the former asphalt pad at PRS 49-001(b) have been confirmed to be predominantly uncontaminated to the depth of the original soil surface that existed before the fill material and former asphalt were placed (2 ft to 3 ft). Radionuclide contamination has been confirmed at that original surface at some locations beneath the former asphalt pad. Contaminated surface soils in isolated locations adjacent to the asphalt pad appear to have been brought to the surface by the action of gophers digging beneath the pad. PRS 49-001(g) is an area of surface contamination to the north of Area 2, where levels of radionuclides that are elevated above background have been confirmed. This area also includes the primary drainage channels from Area 2 where radionuclide levels above background levels have been confirmed.

The extent of subsurface contamination for PRSs 49-001(b–d) has been partially determined by boreholes placed within the array of experimental shafts. The design of the experimental shafts was based on preliminary tests that indicated that the explosive tests would not disperse material beyond a 15-ft radius centered on the shaft in the subsurface. Analyses of samples collected from boreholes placed within the array of shafts did not identify contaminants dispersed between shafts, indicating that explosive-dispersal laterally from the test points was well contained, and subsequent lateral migration also has not occurred. Investigations to evaluate vertical dispersal or migration beneath the test shafts have not yet been implemented.

The large subsurface radionuclide inventory at MDA AB and the presence of significant near-surface contamination beneath the former asphalt pad have resulted in MDA AB remaining under secure access and subject to periodic environmental monitoring since the 1960s. Data from pre-RFI activities will be presented in a Phase II SAP and in the subsequent RFI report.

In this data summary report no human health screening or risk assessments and no ecological screening or risk assessments have been included. These will be incorporated into the final RFI report. Conclusions

and recommendations with regard to future activities at MDA AB Area 2 have not been presented in this report but will be a part of the final RFI report.

Field activities and analytes are specified in the work plan (LANL 1992, 7670). A summary of the RFI activities completed to date and a summary of analytical results are provided in the following sections. All of the 1998 activities were undertaken as part of the "Stabilization Plan for Installing Best Management Practices at Potential Release Sites 49-001 (b, c, d, and g)" (LANL 1999, 63918). A summary of the BMPs and IM activities is provided in Section 4.0.

3.1 1993 Surface Soil Investigation

A total of 34 locations around the asphalt pad and in the northeast drainage were sampled in the 0-in.- to 6-in.-depth range in accordance with LANL-ER-SOP-6.09,.R0, "Spade and Scoop Method for Collection of Soil Samples." These locations are shown in Figure 3.1-1. Nine additional locations were sampled in an effort to establish site background (Figure 3.1-2).

A total of 36 samples plus 6 duplicate samples were collected from the 34 locations in the vicinity of the pad and northeast drainage. Eleven samples plus two duplicates were collected from the nine background locations. The analyses conducted included target analyte list (TAL) metals and radionuclides. The list of samples collected and analyses for each data set is detailed in Appendix B.

The results of the investigation indicated the presence of plutonium-239 in the areas surrounding the pad and in the northeast drainage area (Figure 3.1-1). The two other isotopes detected at generally lower concentrations included plutonium-238 and cesium-137. Inorganics were detected at concentrations below UTLs.

3.2 1994 Subsurface Investigation

A total of four shallow boreholes (10-ft depth) and two deep boreholes (150-ft depth) were drilled through the asphalt pad in February and March 1994. In addition, one 700-ft borehole was drilled in an area located approximately 300 ft southeast PRS 49-001(b). This borehole was advanced to obtain subsurface background information. Figure 3.1-3 shows the location of each Phase 1 RFI borehole.

The subsurface samples were collected using a CME 45 hollow-stem auger drill rig and 5-ft core barrel samplers, following LANL-ER-SOP-6.26, R0, "Core Barrel Sampling for Subsurface Earth Materials." All samples were screened for gross gamma, alpha, and beta radiation levels. Selected samples were also analyzed for specific analytes prescribed in the work plan, including TAL metals, isotopic plutonium, and total uranium. The following discussion describes the drilling and sampling methods, summarizes the samples collected from each borehole, and briefly discusses the general results of the investigation.

3.2.1 Background Borehole 49-2-799-1 (Location 49-2901)

The background borehole (Figure 3.1-3) was drilled in an area outside Area 2, approximately 100 ft south of PRS 49-008(d). The borehole was drilled to a depth of 700 ft with a recovery to 692 ft. The first 10 ft of the deep borehole was drilled with a drive casing/ thin wall sampler system, with 3.25-in. core collected in 5-ft samplers. The remainder of the borehole was air cored with continuous sampling using a 101/HQ Geo Barrel/Punch Core System to collect 5-ft core. Field screening, analytical, and geotechnical samples were collected according to LANL-ER-SOP-6.26, R0, "Core Barrel Sampling for Subsurface Earth Materials."

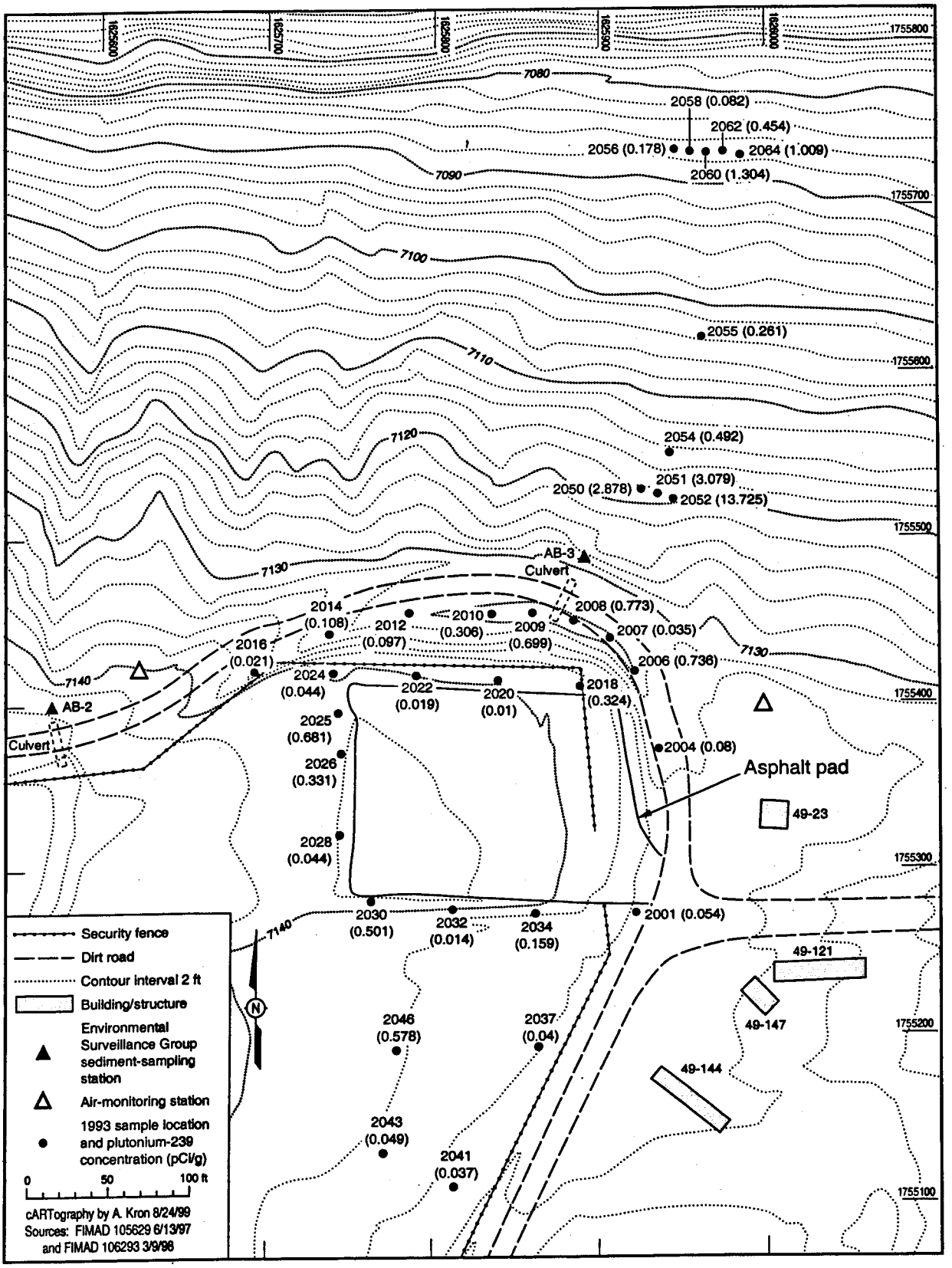
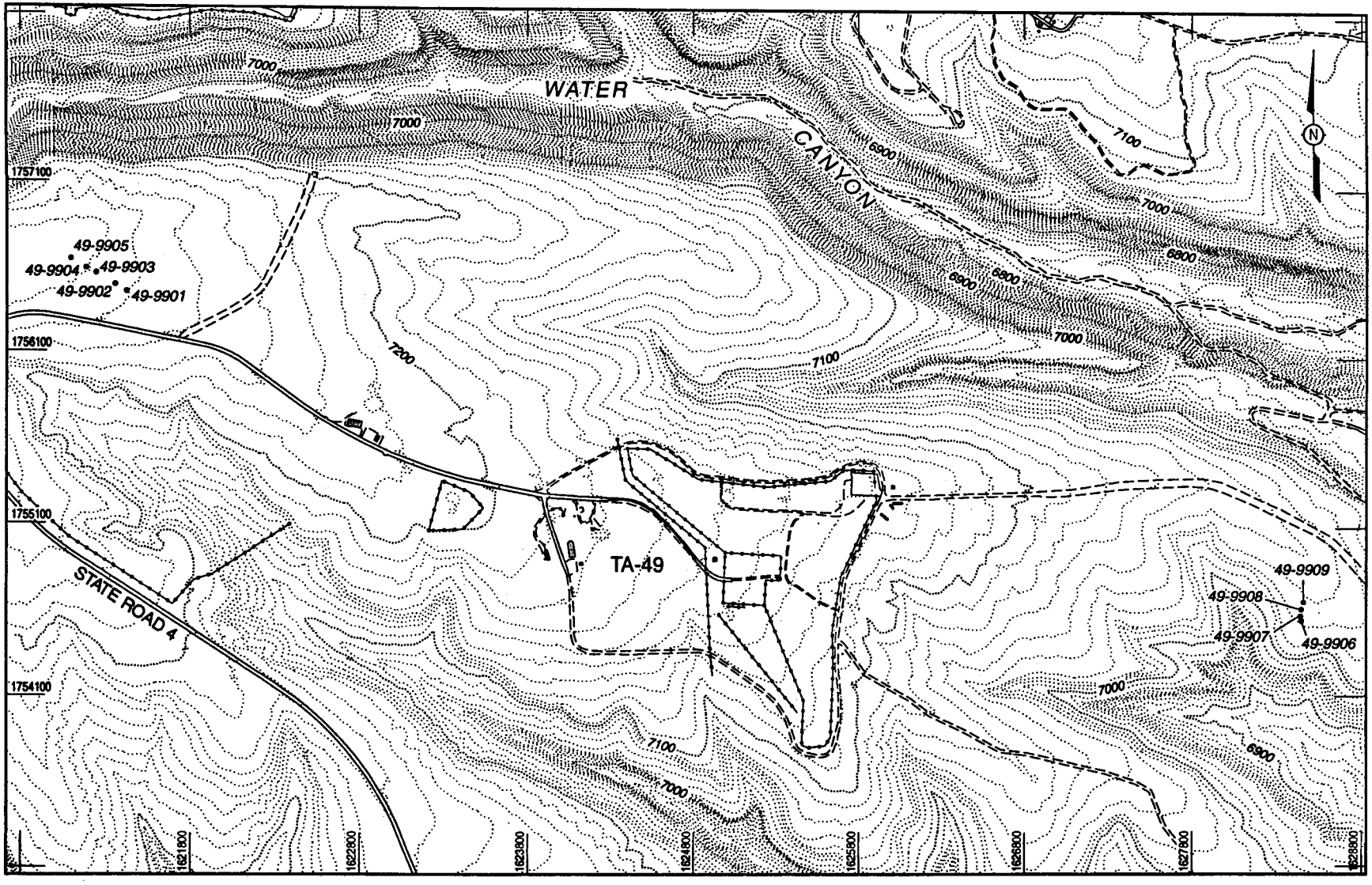


Figure 3.1-1. **1993 RFI surface soil sampling locations and plutonium-239 concentrations at Area 2**



Building/structure
Paved road
Unimproved road
Fence
Contour interval 10 ft
Sample location
49-9909 Location ID

0 500 1000 ft

cARTography by A. Kron 8/24/99
Source: FIMAD 106935 8/26/98

Figure 3.1-2 Background surface soil sample locations at TA-49

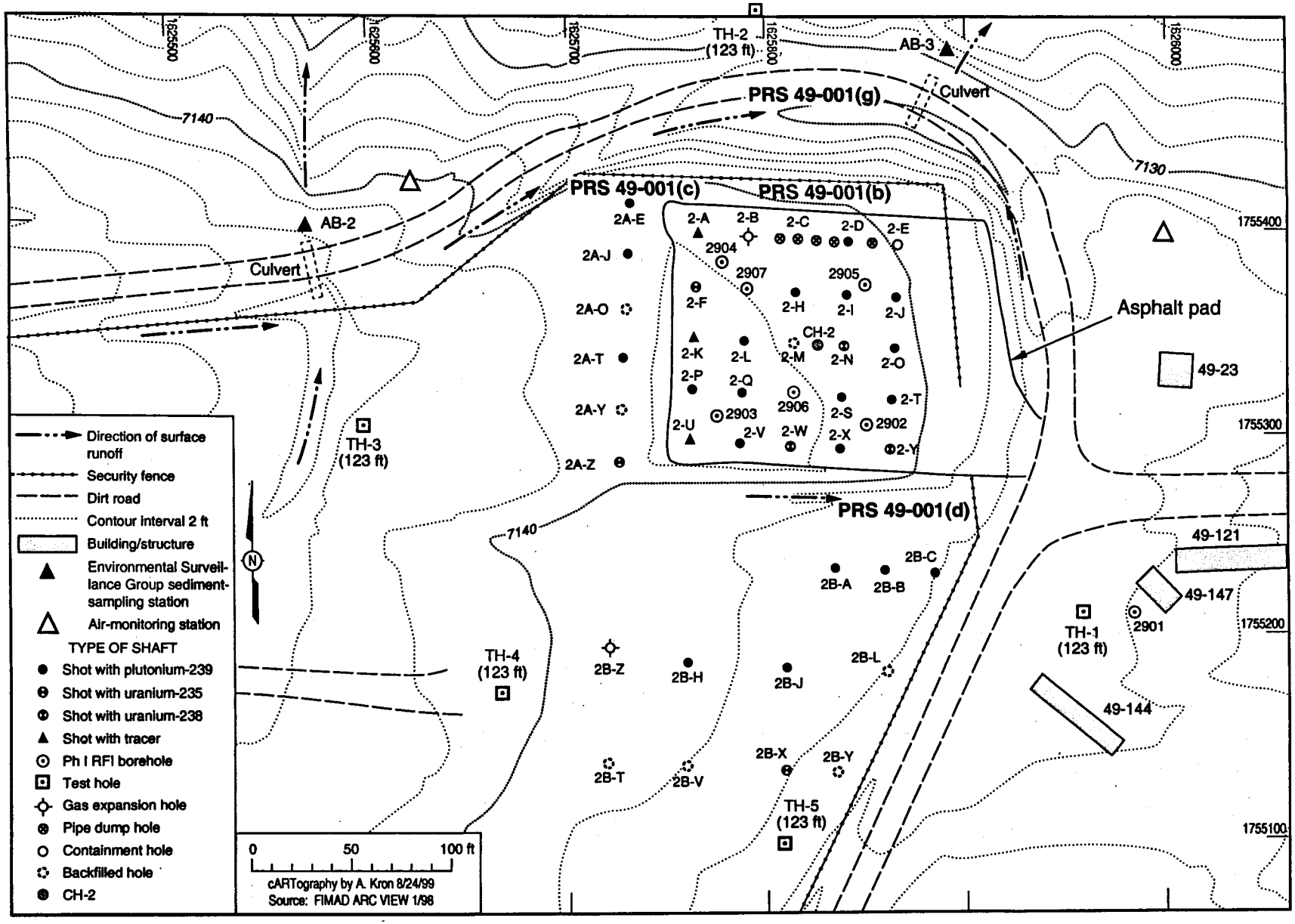


Figure 3.1-3. Locations of 1994 RFI boreholes and shafts at Area 2

The main objective of the deep borehole was to evaluate potential contaminant transport pathways for the near surface and vadose zone to a depth of at least 700 ft (i.e., across the potential water-perching Tshirege-Otowi contact). Further characterization is also needed of hydraulic, lithologic, chemical, and mineralogic properties required for modeling long-term contaminant migration through soils and rock at MDA AB. Summary tables are provided in Appendix B, Section B-3.0.

3.2.2 150-ft Boreholes 49-2-150-1 and 49-2-150-2 (Location 49-2906 and 49-2907)

These two boreholes (Figure 3.1-3) were drilled through the asphalt pad to evaluate subsurface conditions below the depths of the shafts and to augment the existing moisture monitoring holes (TH-1 through TH-5). The locations for these boreholes were selected in part because historical information indicated that they did not contain subsurface contaminants, thus simplifying drilling operations. Additional reasons for selecting these locations include the collection of subsurface samples around CH-2 and shaft 2-M and the proximity of these locations to adjacent shot holes containing plutonium and uranium.

The uppermost core sections were used to provide information on the distribution of contaminants in the fill material under the asphalt pad and confirm the thickness and composition of the fill. Summary tables including the 34 subsurface samples collected from the two boreholes, the number of analytes detected, and the minimum and maximum values detected in the subsurface are provided in Appendix B, Section B-3.0. Nineteen of the 34 samples were collected from the Unit 4 Tshirege Member of the Bandelier Tuff, and 13 samples were collected from the Unit 3 Tshirege Member of the Bandelier Tuff.

Plutonium-239 and tritium were measured at depths greater than 10 ft in these boreholes. However, the tritium data were screening level data generated by a Mobile Radiological Analysis Laboratory, and the data should be considered qualitative for the purposes of this analysis. Tables in Appendix B, Section B-3.0, list each sample, analyte, and additional descriptive data fields including qualifiers for the two boreholes.

3.2.3 10-ft Boreholes 49-2-10-1 through 49-2-10-4 (Location 49-2902 through 49-2905)

The shallow boreholes (Figure 3.1-3) were drilled through the asphalt pad primarily to provide information on the distribution of contaminants in the soil/fill material, to confirm the thickness and composition of the soil/fill, and to quantify the distribution of water underneath the pad and at the soil-tuff interface. Nine samples were collected from soil/fill material, including two from each borehole plus one field duplicate.

Data results for the soil/fill analyses confirm that plutonium-239 and americium-241 are considered COPCs at shallow depths in these boreholes. The summary table in Section B-3.0, Appendix B, lists each sample, analyte, and additional descriptive data fields including qualifiers.

3.3 1994 Radiological Field-Screening Survey

A radiological screening survey of surface soil in Area 2 was conducted using Violinist III field instrument for detection of low-energy radiation (FIDLER) instrument. The FIDLER is used primarily to detect the presence of low-energy gamma emitters. Measurements taken at Area 2 were compared to site background levels. The study attempted to screen for the presence of plutonium, americium-241, and cesium-137. Results generally indicated measurements within background ranges.

3.4 1998 Radiological Field-Screening Survey, Low-Energy Gamma

A low-energy gamma detection probe was used to conduct the field survey at 49-001(b,c,d, and g), at Area 12 (Bottle House), and in the drainage path following the road to the north and east and stretching into the entrance to Water Canyon to the north (Figure 3.1-4). The objective of the survey was to examine the potential release and/or redistribution of radionuclides within Area 2. Figure 3.1-4 shows Area 2 and Bottle House screening locations.

The conclusion drawn from this investigation is that there is not widespread radiochemical contamination on surface soils within Area 2 and adjacent areas included in the survey. Only two locations showed elevated concentrations: one at the western side of the pad (17,000 cpm) and one in the northeast drainage area (73,000 cpm) (Figure 3.1-4). Additional discussion and a summary of these data are presented in Appendix B, Section B-4.0.

3.5 1998 Radiological Field Screening, Shallow Subsurface Under Asphalt Pad

A shallow subsurface screening investigation was conducted in March 1998 beneath the asphalt pad. This investigation was undertaken for characterization purposes and in preparation for earth-moving activities associated with the removal of the asphalt pad. The asphalt was removed in September 1998 during the implementation of the stabilization plan (LANL 1999, 63918).

A related objective of the study was to locate the concrete caps, if present, on the top of the shafts. Before initiating the investigation, the location of each shaft was marked on the asphalt pad by survey personnel, and a reference grid was developed based on the survey. The original coordinates for shafts 2B-Y and 2B-Z were noted as being incorrect.

Boreholes were advanced through the asphalt pad and into subsurface soils at the locations of shafts shown on Figure 3.1-5. Samples were collected in two 1-ft intervals to a maximum depth of 9 ft. A total of 105 samples were collected and were screened using the Ludlum 2221 Scaler Instrument in combination with the 43-1 Alpha Scintillator (ZnS) for gross alpha measurements, the 44-40 Geiger-Mueller (Shielded Pancake Type) for gross beta measurements, and the 44-10 Gamma Scintillator (2 x 2 NaI) for gross gamma measurements. The borehole screening information including screening intervals is included in Tables B-4.0-1 through B-4.0-3, Appendix B. Measurements were conducted for each 6- in. to 12-in. interval collected above each of the 23 shafts on the asphalt pad. In addition, six new shallow boreholes numbered 51 through 56 were drilled at selected locations between shafts in order to measure the potential lateral drift of shallow contamination (Figure 3.1-5).

Based on the results of the screening analysis, 20 of the 105 samples were submitted to the on-site analytical laboratory for gross alpha, gross beta, and gross gamma analysis. These results are included in Table B-4.0-4, Appendix B. The samples were selected to get a representation of the different media, depths, and activity ranges. The majority of the results were reported as less than the minimal detectable activity. Only one location (two samples) showed significant radiochemical contamination (shaft 2-N) at a depth between 2 ft and 3 ft below the asphalt.

Table B-4.0-5 B3-3 provides a summary of the depth of each borehole or cap. Concrete caps were not found in 7 (2-A, 2-B, 2-G, 2-N, 2-U, 2-W, and 2-Y) of the 23 shafts under the pad. The depths of the boreholes above these seven shafts ranged between 3 ft and 8 ft. The depth to the concrete caps in the remaining boreholes ranged between 2 ft and 4 ft, with the exception of shaft 2-M in which the cap was encountered at 6 ft. Boreholes 51 through 56 ranged between 2 ft and 9 ft. Concrete was encountered during the drilling of boreholes 52, 53, and 54. It is thought that this was excess material deposited on the original ground surface when the shafts were being plugged.

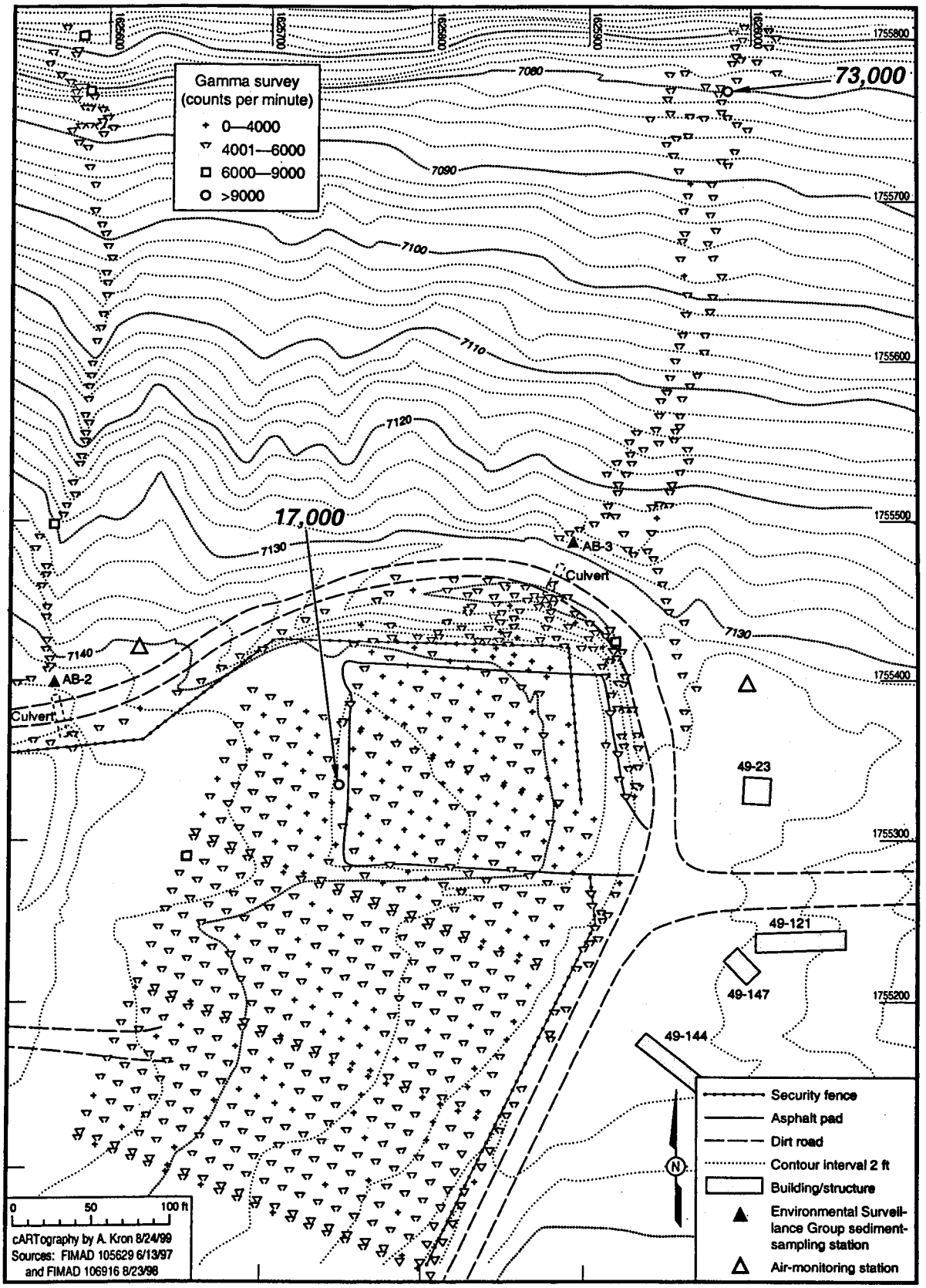


Figure 3.1-4. 1998 radiological field-screening survey locations for low-energy gamma

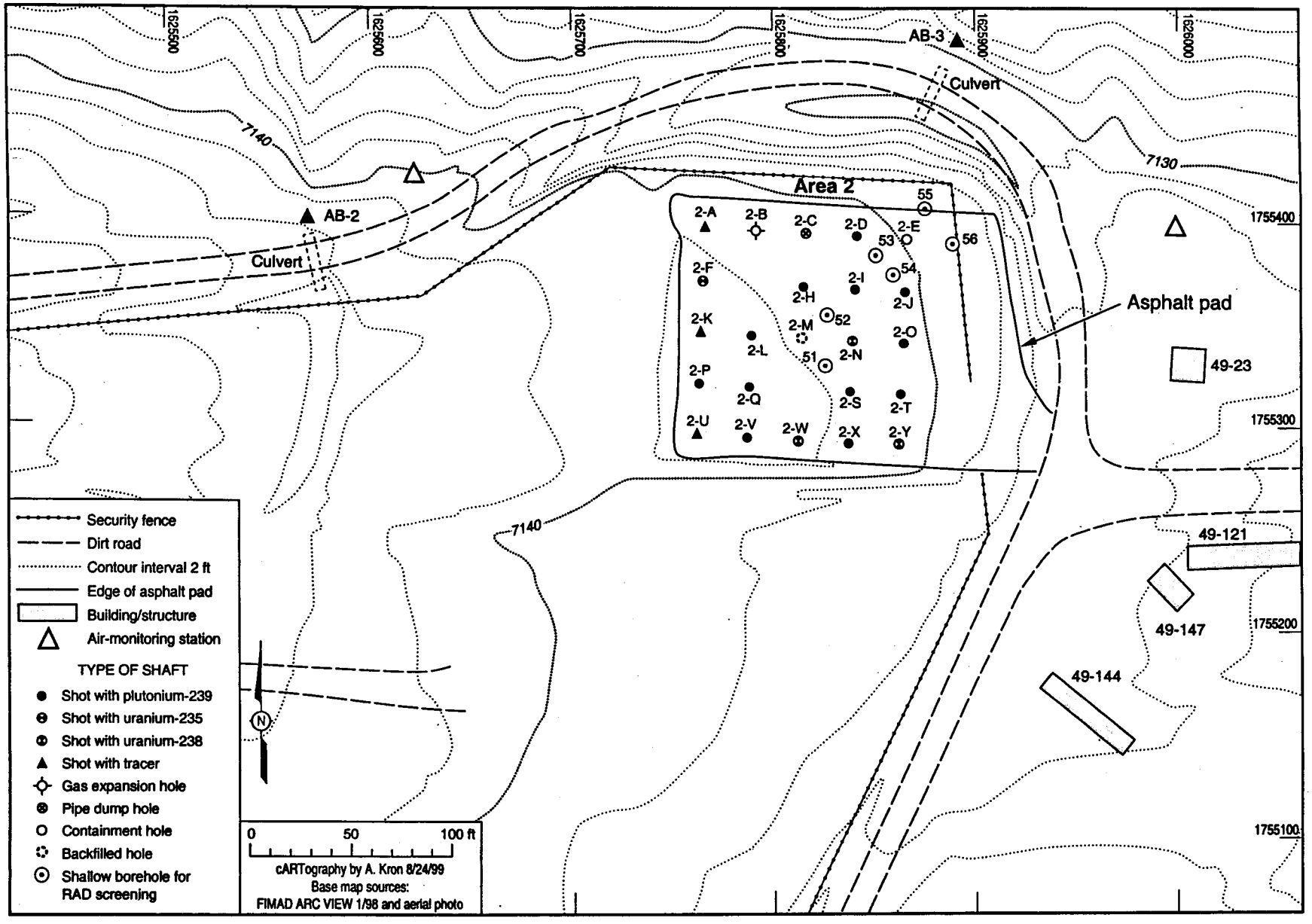


Figure 3.1-5. 1998 asphalt pad shallow borehole radiological screening locations

3.6 1998 Tritium Screening Analysis Under Asphalt Pad

As part of the preparatory operations for the removal of the asphalt pad, 28 gravel/fill samples were collected from directly beneath the pad and analyzed for tritium at a screening analytical laboratory. The samples were collected above each shaft and shallow borehole location on the pad (Figure 3.1-6). The results of the screening analysis indicated the presence of tritium below the asphalt, with three locations having levels clearly IM measure but also contributes useful information about site conditions. Therefore, The tritium data will be presented in the future Phase II SAP and RFI report.

3.7 1998 Soil Sampling for HE

Three locations were sampled around shaft 2B-H (Figure 3.1-6). HE field-screening spot tests were conducted at each location and showed no detectable HE. Soil samples were subsequently collected from between 2 in. and 4 in. below the ground surface, depending on the thickness of the concrete at the surface, and submitted to a fixed laboratory for analysis. These sampling locations were selected based on the historical information discussed in the OU 1144 (TA-49) work plan concerning the potential surficial release of HE (LANL, 1992, 7670). This activity was conducted specifically to support the IM, but also contributes useful information about site conditions. The HE data is not provided in this report because there were no detects. However, the HE data will be presented in the future Phase II SAP and RFI report.

3.8 1998 Core Resampling

Much of the original 1994 sampling data for isotopic plutonium, uranium, and americium were rejected because of various laboratory analytical and reporting problems. These issues will be discussed in detail in a focused validation report that will be included with the RFI report. The decision was made to reanalyze samples from all seven of the original cores collected from each borehole. The resampling included the collection of a sample as close as possible to each of the original sampling intervals. Each of the 50 samples collected from the 150-ft and 700-ft (background) boreholes were analyzed for isotopic plutonium, uranium, and americium. The eight samples collected from the 10-ft boreholes were analyzed for one or more of the isotopic radionuclides. Four of the samples were also analyzed for inorganic compounds. Preliminary results support the 1994 results and will be presented in the RFI report and the Phase II SAP.

4.0 STABILIZATION PLAN IMPLEMENTED AT AREA 2 IN 1998

As previously stated, the entire surface of Area 2 was covered with fill and an asphalt pad in 1961. It was subsequently determined that moisture was accumulating between the asphalt and the tuff surface, that there was a potential for surface water to pond at the site, and that standing water was periodically present in a monitoring well that extended through the site far below the area of experimentation. This moisture raised concern as to the potential for deep subsurface migration of contaminants at MDA AB. Because of the magnitude of the source constituents at Areas 2, stabilization activities at this site were implemented as both an IM and BMPs to reduce the moisture content of near-surface soils and thereby reduce the migration potential of the subsurface contaminants.

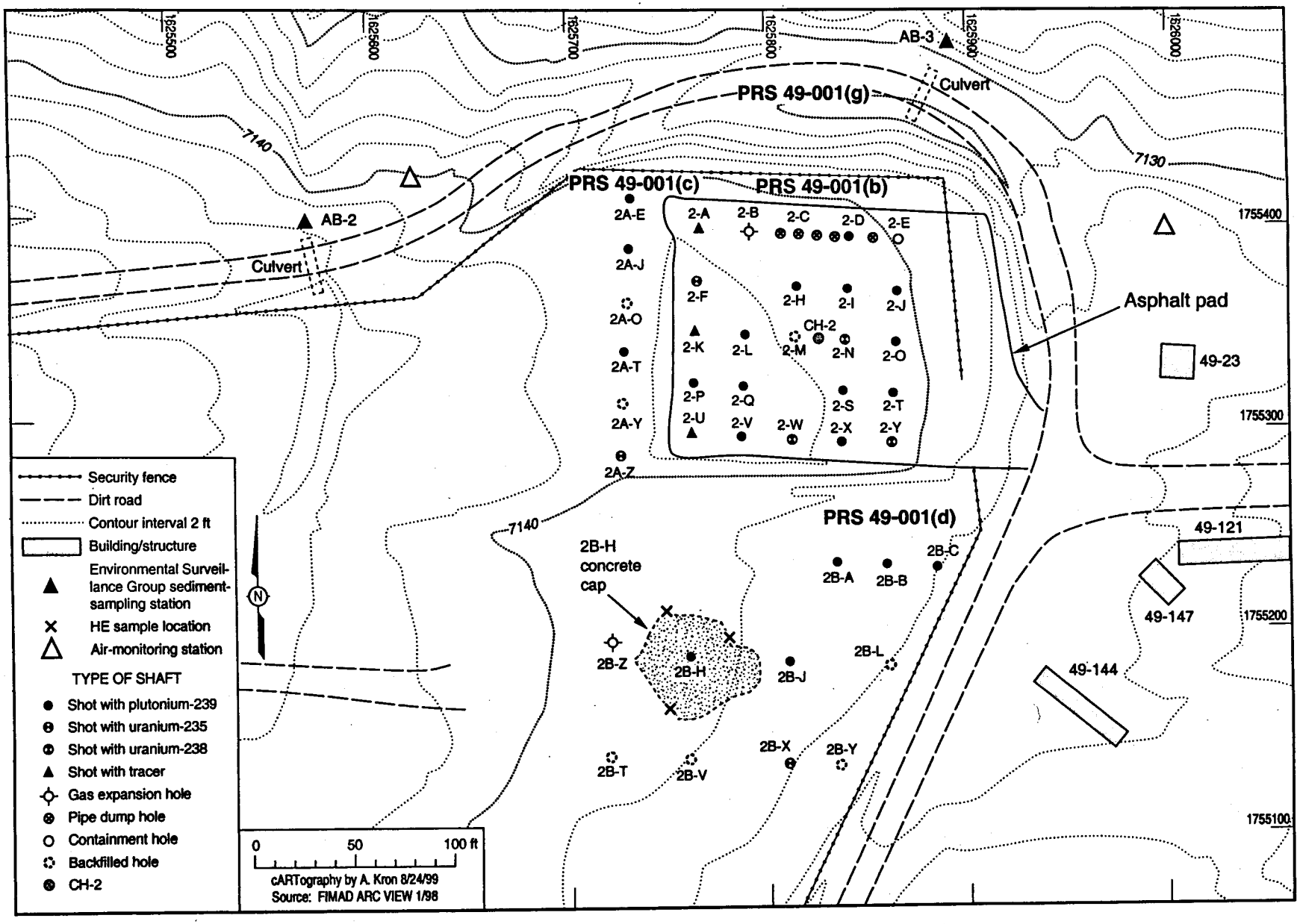


Figure 3.1-6. HE sampling locations around Shaft 2B-H

4.1 Summary of BMPs

The principal activities implemented as BMPs included construction of a stormwater diversion channel upgradient of Area 2 and construction of erosion control structures in both upgradient and downgradient surface water drainage channels. These activities were described in "Best Management Practices Report for Stabilization Measures at Potential Release Sites 49-001 (b,c,d, and g)" (LANL 1999, 63920), which was submitted to NMED-HRMB in August 1999. The diversion channel, silt fence, downgradient channel stabilization, and power pole removal were completed in June 1998. Following the recommendation of the NMED Surface Water Quality Bureau, straw bales were placed in the upgradient runoff channel, and the western bank of the diversion channel was stabilized with erosion control matting in August and September 1998.

4.2 Summary of IM

The principal activities implemented as IMs during 1998 included

- plugging and abandonment of Corehole 2;
- removing asphalt pavement from Area 2;
- regrading the site with clean, crushed tuff to eliminate surface water ponding;
- spreading topsoil over the regraded site;
- seeding the topsoil with shallow-rooting grasses;
- placing gravel on the topsoil for erosion protection; and
- covering part of the site and the vicinity with a biointrusion barrier.

These activities were implemented to temporarily stabilize the site pending identification of a permanent remedy. The design of these IMs is described in "Stabilization Plan for Implementing Interim Measures and Best Management Practices at Potential Release Sites 49-001(b,c,d, and g)" (LANL 1999, 63918). The description of the implementation of IMs is in "Interim Measures Report for Potential Release Sites 49-001(b,c,d, and g)" (LANL 1999, 63919) submitted to NMED-HRMB in August 1999.

5.0 REFERENCES

DOE (US Department of Energy), October 1987. "Phase I: Installation Assessment, Los Alamos National Laboratory," Vol. I (draft), Comprehensive Environmental Assessment and Response Program, Albuquerque Operations Office, Albuquerque, New Mexico. (DOE 1987, 8663)

DOE (US Department of Energy), October 1987. "Phase I: Installation Assessment, Los Alamos National Laboratory," Vol. II (draft), Comprehensive Environmental Assessment and Response Program, Albuquerque Operations Office, Albuquerque, New Mexico. (DOE 1987, 8664)

EPA (US Environmental Protection Agency), April 10, 1990. Module VIII of RCRA Permit No. NM0890010515, EPA Region VI, issued to Los Alamos National Laboratory, Los Alamos, New Mexico, effective May 23, 1990, EPA Region VI, Hazardous Waste Management Division, Dallas, Texas. (EPA 1990, 1585)

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1144," Los Alamos National Laboratory report LA-UR-92-900, Los Alamos, New Mexico. (LANL 1992, 7670)

LANL (Los Alamos National Laboratory), August 1999. "Stabilization Plan for Implementing Interim Measures and Best Management Practices at Potential Release Sites 49-001 (b) 49-001 (c) 49-001 (d) 49-001 (g)," Los Alamos National Laboratory report LA-UR-98-1534, Los Alamos, New Mexico. (LANL 1999, 63918)

LANL (Los Alamos National Laboratory), August 1999. "Interim Measures Report for Potential Release Sites 49-001(b) 49-001(c) 49-001(d) 49-001(g)," Los Alamos National Laboratory report LA-UR-99-2169, Los Alamos, New Mexico. (LANL 1999, 63919)

LANL (Los Alamos National Laboratory), August 1999. "Best Management Practices Report for Stabilization Measures at Potential Release Sites 49-001 (b,c,d, and g), Los Alamos National Laboratory report LA-UR-99-4170, Los Alamos, New Mexico. (LANL 1999, 63920)

Purtymun, W. D., and A. K. Stoker, November 1987. "Environmental Status of Technical Area 49, Los Alamos, New Mexico," Los Alamos National Laboratory report LA-11135-MS, Los Alamos, New Mexico. (Purtymun and Stoker 1987, 6688)

Thorne, R. N., and D. R. Westervelt, February 1987. "Hydronuclear Experiments," Los Alamos National Laboratory report LA-UR-10902-MS, Los Alamos, New Mexico. (Thorne and Westervelt 1987, 6672)

Weir, J. E., Jr., and W. D. Purtymun, 1962. "Geology and Hydrology of Technical Area 49, Frijoles Mesa, Los Alamos County, New Mexico," US Geological Survey Administrative Release, Albuquerque, New Mexico. (Weir and Purtymun 1962, 11890)

Appendix A

Acronyms

APPENDIX A ACRONYMS

BMP	best management practice
COPC	chemical of potential concern
DOE	Department of Energy
ER	environmental restoration
FIDLER	field instrument for detection of low-energy radiation
HE	high explosive
HRMB	Hazardous and Radioactive Materials Bureau
IM	interim measure
Laboratory	Los Alamos National Laboratory
MDA	material disposal area
NMED	New Mexico Environment Department
OU	operable unit
PRS	potential release site
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
SAP	sampling and analysis plan
TA	technical area
TRU	transuranic
UTL	upper tolerance limit

Appendix B

Analytical Suites and Results

APPENDIX B ANALYTICAL SUITES AND RESULTS

B-1.0 SUMMARY

The following presents the analytical suites used for the Resource Conservation and Recovery Act facility investigation (RFI) analyses and an abridged version of the data, where available, from the completed RFI investigations. Complete information regarding RFI analytical suites and results will be provided in a complete RFI report for Technical Area (TA) 49 Area 2.

A summary of samples is included in Table B-1.0-1; a summary of sample results is in Table B-1.0-2; and samples details are included in Table B-1.0-3.

B-2.0 1993 SURFACE SOIL INVESTIGATION

B-2.1 Target Analytes and Detection Limits

Tables documenting target analytes and detection limits for the TA-49 Area 2 1993 RFI surface soil investigation will be presented in the RFI report.

B-2.2 Analytical Results

Tables documenting target analytical results for the TA-49 Area 2 1993 RFI surface soil investigation will be presented in the RFI report.

B-3.0 1994 SUBSURFACE INVESTIGATION

B-3.1 Target Analytes and Detection Limits

Tables B-3.1-1 through B-3.1-3 include the maximum required detection limits according to the Laboratory's analytical statement of work and quality assurance project plan (LANL 1995, 49738; LANL 1996, 54609). In most cases, the concentrations for the analytes were significantly lower than the estimated detection limits (EDLs) or estimated quantitation limits (EQLs) reported in these tables. Efforts were made to ensure that detection limits for inorganic analytes were below Laboratory background concentrations.

B-3.2 Analytical Results

Tables documenting target analytical results for the TA-49 Area 2 199 RFI subsurface investigation will be presented in the RFI report.

B-4.0 OTHER APPLICABLE RFI RESULTS

Table B-4.0-1 through Table B-4.0-3 include the RFI radiochemical borehole screening data for the 1998 shallow boreholes drilled through the asphalt pad. The tables include gross alpha, beta, and gamma results in counts per minute (cpm) and disintegrations per minute (dpm). Table B-4.0-4 includes the borehole screening analytical data from the TA-21 on-site screening laboratory. Gross alpha, beta, and gamma analyses were conducted for 20 samples collected during the 1998 borehole field screening (Table B-4.0-1 through Table B-4.0-3). Table B-4.0-5 includes the summary information for these 1998 shallow boreholes. Table B-4.0-6 includes the results of the 1998 surface soil radiological field screening (field instrument for detection of low-energy radiation) survey in cpm.

Table B-1.0-1
Summary of RFI Samples Collected for TA-49 Area 2

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Surface	AAA1750	04/20/93	49-2001	0	0.5	ALLH	—[d]	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1751	04/20/93	49-2004	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1752	04/20/93	49-2006	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1753	04/20/93	49-2007	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1754	04/20/93	49-2007	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1755	04/20/93	49-2008	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1756	04/20/93	49-2009	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1757	04/20/93	49-2010	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1758	04/20/93	49-2012	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1759	04/20/93	49-2014	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1760	04/20/93	49-2016	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1761	04/20/93	49-2018	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1762	04/20/93	49-2020	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1763	04/20/93	49-2020	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1764	04/20/93	49-2022	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1765	04/20/93	49-2024	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1766	04/20/93	49-2025	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1767	04/20/93	49-2026	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1768	04/20/93	49-2028	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1769	04/20/93	49-2030	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1770	04/20/93	49-2032	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1771	04/20/93	49-2032	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1772	04/20/93	49-2034	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1773	04/20/93	49-2037	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1774	04/20/93	49-2037	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1775	04/20/93	49-2041	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1776	04/20/93	49-2043	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1777	04/20/93	49-2046	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Surface	AAA1778	04/20/93	49-2046	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1779	04/20/93	49-2050	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1780	04/20/93	49-2050	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1781	04/20/93	49-2051	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1782	04/20/93	49-2052	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1783	04/20/93	49-2054	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1784	04/20/93	49-2055	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1785	04/20/93	49-2056	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1786	04/20/93	49-2058	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1787	04/20/93	49-2060	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1788	04/20/93	49-2062	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Surface	AAA1789	04/20/93	49-2064	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	—	14553	14553	14553	—	14553	—
Subsurface Background	AAA4648	11/19/93	49-2901	—	—	QBT3	16442	16411	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—
Subsurface Background	AAA4653	12/01/93	49-2901	—	—	QBT3	16432	16408	16408	—	—	—	16435	—	16435	—	16435	—	—	—	—	—	—	—
Subsurface Background	AAA4594	11/17/93	49-2901	2.3	6.5	QBT3	16442	16411/ 17806	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0101	05/06/98	49-2901	2.5	2.6	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4567	11/18/93	49-2901	14.1	15.2	QBT3	16442	16411/ 17806	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0102	05/06/98	49-2901	14.3	14.5	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	MD49-98-0103	05/06/98	49-2901	24	24.2	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4553	11/18/93	49-2901	24.5	25	QBT3	16442	16411/ 17806	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—
Subsurface Background	AAA8142	11/18/93	49-2901	24.5	25	QBT3	—	—	—	—	—	16613	—	16613	16613	16613	—	—	—	—	—	—	—	—
Subsurface Background	AAA4554	11/19/93	49-2901	34.6	36	QBT3	16442	16411/ 17806	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface Background	MD49-98-0104	05/06/98	49-2901	35.2	35.6	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4564	11/19/93	49-2901	44.6	46.5	QBT3	16442	16411/ 17806	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0105	05/06/98	49-2901	45.6	46	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	MD49-98-0106	05/06/98	49-2901	45.6	46	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA8145	11/19/93	49-2901	49.7	49.9	QBT3	—	—	—	—	—	16613	—	16613	16613	16613	—	—	—	—	—	—	—	—
Subsurface Background	AAA4562	11/19/93	49-2901	55	56.3	QBT3	—	16411/ 17806	16411	—	—	—	16440	—	16440	—	16440	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0107	05/06/98	49-2901	55.5	55.8	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4557	11/29/93	49-2901	63.9	65	QBT3	16438	16410/ 17806	16410	—	—	—	16436	—	16436	—	16436	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0108	05/06/98	49-2901	65	65.2	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4563	11/30/93	49-2901	69.5	70.2	QBT3	16438	16410/ 17806	16410	—	—	—	16436	—	16436	—	16436	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0109	05/06/98	49-2901	71.2	71.3	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	MD49-98-0110	05/06/98	49-2901	76.4	76.6	QBT4	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4561	11/30/93	49-2901	78.2	79	QBT3	16438	16410/ 17806	16410	—	—	—	16436	—	16436	—	16436	—	—	—	—	—	—	—
Subsurface Background	AAA8143	11/30/93	49-2901	84.2	84.4	QBT3	—	—	—	—	—	16613	—	16613	16613	16613	—	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0111	05/06/98	49-2901	88.4	88.6	QBT3	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4555	11/30/93	49-2901	88.6	89.4	QBT3	16438	16410/ 17806	16410	—	—	—	16436	—	16436	—	16436	—	—	—	—	—	—	—
Subsurface Background	AAA4566	11/30/93	49-2901	93.5	94.8	QBT3	16438	16410/ 17806	16410	—	—	—	16436	—	16436	—	16436	—	—	—	—	—	—	—

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface Background	MD49-98-0112	05/06/98	49-2901	94.4	94.6	QBT3	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	MD49-98-0113	05/06/98	49-2901	115.8	116	QBT3	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA8144	12/01/93	49-2901	116	116.2	QBT3	—	—	—	—	—	16613	—	16613	16613	16613	—	—	—	—	—	—	—	—
Subsurface Background	AAA4560	12/01/93	49-2901	116	116.7	QBT3	16432	16408/ 17806	16408	—	—	—	16435	—	16435	—	16435	—	—	—	—	—	—	—
Subsurface Background	AAA4593	12/01/93	49-2901	133	134	QBT3	16432	16408/ 17806	16408	—	—	—	16435	—	16435	—	16435	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0114	05/06/98	49-2901	133.2	133.5	QBT3	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4559	12/01/93	49-2901	136	136.7	QBT3	16432	16408/ 17806	16408	—	—	—	16435	—	16435	—	16435	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0115	05/06/98	49-2901	136.8	137	QBT3	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA4565	12/01/93	49-2901	145.6	147.9	QBT3	16432	16408/ 17806	16408	—	—	—	16435	—	16435	—	16435	—	—	—	—	—	—	—
Subsurface Background	AAA8146	12/01/93	49-2901	148.6	148.8	QBT3	—	—	—	—	—	16613	—	16613	16613	16613	—	—	—	—	—	—	—	—
Subsurface Background	MD49-98-0116	05/06/98	49-2901	150	150.2	QBT3	—	—	—	—	—	—	4258R	—	—	—	4258R	4258R	—	—	—	—	—	—
Subsurface Background	AAA8107	01/10/94	49-2901	470	470.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8108	01/10/94	49-2901	473.5	474	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8110	01/10/94	49-2901	482	482.4	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8114	01/10/94	49-2901	488.4	488.8	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8117	01/10/94	49-2901	493.5	494	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8118	01/11/94	49-2901	501.5	502	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface Background	AAA8119	01/11/94	49-2901	502	502.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8121	01/11/94	49-2901	505.6	506.1	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8123	01/11/94	49-2901	510	510.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8126	01/11/94	49-2901	514.5	515	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8128	01/11/94	49-2901	520	520.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8129	01/11/94	49-2901	524	524.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16596
Subsurface Background	AAA8130	01/11/94	49-2901	529.6	530.1	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8133	01/11/94	49-2901	536.7	537.2	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8135	01/11/94	49-2901	542.6	543.1	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8136	01/11/94	49-2901	546.5	547	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8139	01/11/94	49-2901	547	547.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8140	01/11/94	49-2901	549.8	550.3	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8149	01/12/94	49-2901	558.8	559.3	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8151	01/12/94	49-2901	561.5	562	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8153	01/12/94	49-2901	563.2	563.7	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8155	01/12/94	49-2901	567.3	567.8	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8158	01/12/94	49-2901	571.4	571.9	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface Background	AAA8159	01/12/94	49-2901	576.5	577	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8160	01/12/94	49-2901	581	581.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8161	01/12/94	49-2901	586	586.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16610
Subsurface Background	AAA8162	01/13/94	49-2901	589	589.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16612
Subsurface Background	AAA8165	01/13/94	49-2901	595	595.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16612
Subsurface Background	AAA8166	01/13/94	49-2901	595.5	596	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16612
Subsurface Background	AAA8171	01/21/94	49-2901	599	599.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8174	01/21/94	49-2901	603.5	604	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8176	01/21/94	49-2901	608.6	609.1	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8178	01/21/94	49-2901	613.7	614.2	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8181	01/21/94	49-2901	619	619.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8182	01/24/94	49-2901	624	624.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8184	01/24/94	49-2901	627	627.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8185	01/24/94	49-2901	633.8	634.3	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8188	01/24/94	49-2901	638	638.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8190	01/24/94	49-2901	644.5	645	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8191	01/24/94	49-2901	648.5	649	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface Background	AAA8192	01/24/94	49-2901	649	649.5	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8193	01/24/94	49-2901	658.5	659	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8196	01/24/94	49-2901	663.7	664.2	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8198	01/24/94	49-2901	673.9	674.4	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8201	01/24/94	49-2901	678.5	679	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8203	01/24/94	49-2901	681.7	682.2	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8207	01/25/94	49-2901	686.5	687	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface Background	AAA8210	01/25/94	49-2901	691.5	692	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16651
Subsurface	AAA4642	02/17/94	49-2902	3.2	3.5	ALLH	—	16782	16782	—	—	—	16788	—	16788	—	16788	—	—	—	—	—	—	—
Subsurface	AAB7452	02/17/94	49-2902	3.2	3.5	ALLH	20388	19294	19294	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subsurface	0549-98-0000	01/13/98	49-2902	3.8	4.1	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	0549-98-0001	01/13/98	49-2902	4.4	4.8	ALLH	—	4046R	—	—	—	—	4047R	—	—	—	4047R	4047R	—	—	—	—	—	—
Subsurface	0549-98-0002	01/13/98	49-2902	7.2	7.4	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4576	02/17/94	49-2902	7.4	7.7	ALLH	—	16782	16782	—	—	—	16788	—	16788	—	16788	—	—	—	—	—	—	—
Subsurface	AAB7451	02/17/94	49-2902	7.4	7.7	ALLH	20388	19294	19294	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subsurface	0549-98-0003	01/13/98	49-2903	1.5	2	ALLH	—	4046R	—	—	—	—	4047R	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4638	02/22/94	49-2903	2.1	2.7	ALLH	16814	16872/ 17637	16872	—	—	—	16815	—	16815	—	16815	—	—	—	—	—	—	—
Subsurface	AAA4574	02/22/94	49-2903	6.2	7	ALLH	16814	16872/ 17637	16872	—	—	—	16815	—	16815	—	16815	—	—	—	—	—	—	—
Subsurface	AAA4639	02/22/94	49-2903	6.2	7	ALLH	16814	16872/ 17637	16872	—	—	—	16815	—	16815	—	16815	—	—	—	—	—	—	—
Subsurface	0549-98-0004	01/14/98	49-2903	7.2	7.8	ALLH	—	4046R	—	—	—	—	4047R	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4645	02/23/94	49-2904	—	—	QBT3	—	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface	AAA4656	02/23/94	49-2904	—	—	QBT3	—	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—
Subsurface	0549-98-0005	01/14/98	49-2904	1.9	2.1	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4641	02/23/94	49-2904	2.4	3	ALLH	16907	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—
Subsurface	0549-98-0006	01/14/98	49-2904	5.6	6	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4575	02/23/94	49-2904	6.4	7	ALLH	16907	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—
Subsurface	AAA4640	02/24/94	49-2905	2.5	3	ALLH	16907	16872/ 17637	16872	—	—	—	16878/ 20205	—	16878	—	16878/ 20205	—	—	—	—	—	—	—
Subsurface	0549-98-0007	01/14/98	49-2905	3.1	3.3	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4581	02/24/94	49-2905	6.2	6.7	ALLH	16907	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—
Subsurface	0549-98-0008	01/14/98	49-2905	6.9	7	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4646	03/15/94	49-2906	—	—	QBT3	—	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4649	03/15/94	49-2906	—	—	QBT3	—	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	0549-98-0009	01/14/98	49-2906	4.7	4.8	ALLH	—	—	—	—	—	—	—	—	—	—	—	4047R	—	—	—	—	—	—
Subsurface	AAA4624	02/25/94	49-2906	5.2	5.7	ALLH	16816	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—
Subsurface	AAA4625	02/28/94	49-2906	15.9	16.5	QBT4	16907	16872/ 17637	16872	—	—	—	16878	—	16878	—	16878	—	—	—	—	—	—	—
Subsurface	AAA4631	03/07/94	49-2906	28.2	28.6	QBT4	17113	16921/ 17637	16921	—	—	—	16923	—	16923	—	16923	—	—	—	—	—	—	—
Subsurface	AAA4630	03/07/94	49-2906	38.3	38.8	QBT4	17113	16921/ 17637	16921	—	—	—	16923	—	16923	—	16923	—	—	—	—	—	—	—
Subsurface	AAA4627	03/10/94	49-2906	40.5	42.3	QBT4	17113	16921/ 17637	16921	—	—	—	16923	—	16923	—	16923	—	—	—	—	—	—	—
Subsurface	AAA4622	03/10/94	49-2906	53.5	54	QBT4	17113	16921/ 17637	16921	—	—	—	16923	—	16923	—	16923	—	—	—	—	—	—	—
Subsurface	AAA9979	03/11/94	49-2906	63	63.3	QBT4	—	—	—	—	16929	—	—	—	—	—	—	—	—	—	—	—	—	—
Subsurface	AAA9980	03/11/94	49-2906	63	63.3	QBT4	—	—	—	16929	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface	AAA4623	03/11/94	49-2906	67.5	68	QBT4	16931	16925/ 17637	16925	16929	16929	—	16926	—	16926	—	16926	—	—	—	—	—	—	—
Subsurface	AAA9976	03/11/94	49-2906	72.3	72.5	QBT4	16931	—	—	16929	16929	—	—	—	—	—	—	—	—	—	—	—	—	—
Subsurface	AAA4626	03/11/94	49-2906	75.5	76.8	QBT4	16931	16925/ 17637	16925	—	—	—	16926	—	16926	—	16926	—	—	—	—	—	—	—
Subsurface	AAA4628	03/11/94	49-2906	75.5	76.8	QBT4	16931	16925/ 17637	16925	16929	16929	—	16926	—	16926	—	16926	—	—	—	—	—	—	—
Subsurface	AAA4632	03/11/94	49-2906	85	85.5	QBT4	16950	16953/ 17637	16953	—	—	—	16956	—	16956	—	—	—	—	—	—	—	—	—
Subsurface	AAA4637	03/11/94	49-2906	91	91.5	QBT4	16950	16953/ 17637	16953	—	—	—	16956	—	16956	—	—	—	—	—	—	—	—	—
Subsurface	AAA4621	03/14/94	49-2906	107.2	107.7	QBT3	20934	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4635	03/15/94	49-2906	116	117	QBT3	20934	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4633	03/15/94	49-2906	125	126	QBT3	20934	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4634	03/15/94	49-2906	125	126	QBT3	20934	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4636	03/15/94	49-2906	135.2	135.7	QBT3	20934	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4629	03/15/94	49-2906	144.7	145.3	QBT3	20934	17125/ 17637	17125	—	—	—	17127	—	17127	—	17127	—	—	—	—	—	—	—
Subsurface	AAA4643	03/17/94	49-2907	—	—	QBT3	—	16981/ 17637	16981	—	—	—	16987	—	16987	—	16987	—	—	—	—	—	—	—
Subsurface	AAA4650	03/23/94	49-2907	—	—	QBT3	—	17114	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4654	03/16/94	49-2907	—	—	QBT3	—	16981/ 17637	16981	—	—	—	16987	—	16987	—	16987	—	—	—	—	—	—	—
Subsurface	AAA4655	03/23/94	49-2907	—	—	QBT3	—	17114	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	0549-98-0010	01/14/98	49-2907	3.7	4.6	ALLH	—	4046R	—	—	—	—	4047R	—	—	—	4047R	4047R	—	—	—	—	—	—
Subsurface	AAA4602	03/16/94	49-2907	5	5.5	ALLH	17111	16981/ 17637	16981	—	—	—	16987	—	16987	—	—	—	—	—	—	—	—	—
Subsurface	AAA4614	03/17/94	49-2907	14.5	16.5	QBT4	17111	16981/ 17637	16981	—	—	—	16987	—	16987	—	—	—	—	—	—	—	—	—

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Subsurface	AAA4613	03/21/94	49-2907	24.5	25	QBT4	17109	17088/ 17637	17088	—	—	—	17086	—	17086	—	17086	—	—	—	—	—	—	—
Subsurface	AAA4611	03/21/94	49-2907	36.5	37	QBT4	17109	17088/ 17637	17088	—	—	—	17086	—	17086	—	17086	—	—	—	—	—	—	—
Subsurface	AAA4618	03/21/94	49-2907	47	47.5	QBT4	17109	17088/ 17637	17088	—	—	—	17086	—	17086	—	17086	—	—	—	—	—	—	—
Subsurface	AAA4606	03/22/94	49-2907	53.5	54.2	QBT4	17109	17088/ 17637	17088	—	—	—	17086	—	17086	—	17086	—	—	—	—	—	—	—
Subsurface	AAA4605	03/22/94	49-2907	65.6	66.2	QBT4	18080	17089/ 17637	17089	—	—	—	17087	—	17087	—	17087	—	—	—	—	—	—	—
Subsurface	AAA4603	03/22/94	49-2907	76.5	79	QBT4	18080	17089/ 17637	17089	—	—	—	17087	—	17087	—	17087	—	—	—	—	—	—	—
Subsurface	AAA4612	03/22/94	49-2907	76.5	79	QBT4	18080	17089/ 17637	17089	—	—	—	17087	—	17087	—	17087	—	—	—	—	—	—	—
Subsurface	AAA4616	03/23/94	49-2907	84.7	85.2	QBT4	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4609	03/23/94	49-2907	95	95.5	QBT3	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4608	03/23/94	49-2907	106	106.5	QBT3	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4615	03/23/94	49-2907	115.3	115.8	QBT3	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4610	03/24/94	49-2907	125	126.5	QBT3	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4619	03/24/94	49-2907	125	126.5	QBT3	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4604	03/24/94	49-2907	138	138.7	QBT3	18078	17114/ 17637	17114	—	—	—	17119	—	17119	—	17119	—	—	—	—	—	—	—
Subsurface	AAA4607	03/24/94	49-2907	145	145.6	QBT3	18079	17091/ 17637	17091	—	—	—	17090	—	17090	—	17090	—	—	—	—	—	—	—
Surface Background	AAA1739	04/27/93	49-9901	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1740	04/27/93	49-9901	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553

Table B-1.0-1 (continued)

Investigation	Sample ID	Collection Date	Location ID	Begin Depth[a]	End Depth	Media Code	Rad Van Screening	Metals	Mercury	VOC[b]	SVOC[c]	Alpha	Am-241	Beta	Cesium-137	Gamma	Isotopic Plutonium	Isotopic Uranium	Potassium-40	Radium-226	Thorium-232	Tritium	Uranium	Water (Unbound)
Surface Background	AAA1741	04/27/93	49-9902	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1742	04/27/93	49-9903	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1743	04/27/93	49-9904	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1744	04/27/93	49-9905	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1745	04/27/93	49-9906	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1746	04/27/93	49-9906	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1747	04/27/93	49-9907	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	AAA1748	04/27/93	49-9908	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553
Surface Background	0549-95-0351	09/01/95	49-9909	0	0.5	ALLH	—	1143	1143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Surface Background	AAA1749	04/27/93	49-9909	0	0.5	ALLH	—	14552	14552	—	14553	—	14553	—	14553	—	14553	14553	14553	14553	14553	14553	—	14553

[a] Depth is in feet.

[b] VOC = volatile organic compound.

[c] SVOC = semivolatile organic compound

[d] A dash in the table means no samples for these analytes.

Table B-1.0-2
Summary of RFI Sample Results for TA-49 Area 2

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL[a]	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Inorganic	Soil	AL	Aluminum	mg/kg	4/4	7530–12000	7340	mg/kg	7530	12000	4	7530	12000	4
Subsurface	Inorganic	Soil	SB	Antimony	mg/kg	2/14	[0.32]–7.4	0.5	mg/kg	0.32	7.4	14	0.48	0.5	2
Subsurface	Inorganic	Soil	AS	Arsenic	mg/kg	10/14	[1]–3.9	2.79	mg/kg	1	3.9	14	2.5	3.9	10
Subsurface	Inorganic	Soil	BA	Barium	mg/kg	14/14	65.1–287	46	mg/kg	65.1	287	14	65.1	287	14
Subsurface	Inorganic	Soil	BE	Beryllium	mg/kg	9/14	[0.59]–1.7	1.21	mg/kg	0.59	1.7	14	0.84	1.7	9
Subsurface	Inorganic	Soil	CD	Cadmium	mg/kg	5/14	[0.09]–2	1.63	mg/kg	0.09	2	14	1.3	2	5
Subsurface	Inorganic	Soil	CA	Calcium	mg/kg	4/4	1910–5210	2200	mg/kg	1910	5210	4	1910	5210	4
Subsurface	Inorganic	Soil	CR	Chromium, total	mg/kg	14/14	3.9–28	7.14	mg/kg	3.9	28	14	3.9	28	14
Subsurface	Inorganic	Soil	CO	Cobalt	mg/kg	4/4	5–7.5	3.14	mg/kg	5	7.5	4	5	7.5	4
Subsurface	Inorganic	Soil	CU	Copper	mg/kg	4/4	5.7–7.3	4.66	mg/kg	5.7	7.3	4	5.7	7.3	4
Subsurface	Inorganic	Soil	FE	Iron	mg/kg	4/4	10200–12100	14500	mg/kg	10200	12100	4	10200	12100	4
Subsurface	Inorganic	Soil	PB	Lead	mg/kg	13/13	3.5–15.7	11.2	mg/kg	3.5	15.7	13	3.5	15.7	13
Subsurface	Inorganic	Soil	MG	Magnesium	mg/kg	4/4	1790–2300	1690	mg/kg	1790	2300	4	1790	2300	4
Subsurface	Inorganic	Soil	MN	Manganese	mg/kg	4/4	238–492	482	mg/kg	238	492	4	238	492	4
Subsurface	Inorganic	Soil	HG	Mercury	mg/kg	3/14	[0.012]–0.12	0.1	mg/kg	0.012	0.12	14	0.012	0.027	3
Subsurface	Inorganic	Soil	NI	Nickel	mg/kg	7/14	[3.9]–11.7	6.58	mg/kg	3.9	11.7	14	6.8	11.7	7
Subsurface	Inorganic	Soil	K	Potassium	mg/kg	4/4	1450–1620	3500	mg/kg	1450	1620	4	1450	1620	4
Subsurface	Inorganic	Soil	SE	Selenium	mg/kg	2/14	[0.36]–1.1	0.3	mg/kg	0.36	1.1	14	0.91	1.1	2
Subsurface	Inorganic	Soil	AG	Silver	mg/kg	4/14	[0.23]–0.98	1	mg/kg	0.23	0.98	14	0.23	0.42	4
Subsurface	Inorganic	Soil	NA	Sodium	mg/kg	4/6	[30.2]–358	2770	mg/kg	30.2	358	6	133	358	4
Subsurface	Inorganic	Soil	TL	Thallium	mg/kg	1/14	[0.36]–0.78	1.1	mg/kg	0.36	0.78	14	0.4	0.4	1
Subsurface	Inorganic	Soil	V	Vanadium	mg/kg	4/4	19.2–20	17	mg/kg	19.2	20	4	19.2	20	4
Subsurface	Inorganic	Soil	ZN	Zinc	mg/kg	4/4	19.9–23.3	63.5	mg/kg	19.9	23.3	4	19.9	23.3	4
Subsurface	Rad	Soil	AM-241	Americium-241	pCi/g	1/14	[-0.097]–31.9	0.05	pCi/g	-0.097	31.9	14	31.9	31.9	1

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Rad	Soil	CS-137	Cesium-137	pCi/g	7/10	[-0.025]–0.023	0.1	pCi/g	-0.025	0.023	10	0.004	0.023	7
Subsurface	Rad	Soil	PU-238	Plutonium-238	pCi/g	1/11	[0.001]–4.4	0.05	pCi/g	0.001	4.4	11	4.4	4.4	1
Subsurface	Rad	Soil	PU-239	Plutonium-239	pCi/g	2/9	[0.001]–164.7	0.05	pCi/g	0.001	164.7	9	0.014	164.7	2
Subsurface	Rad	Soil	PU-239/240	Plutonium-239,Plutonium-240	pCi/g	1/2	[0.012]–0.026	—[b]	—	0.012	0.026	2	0.026	0.026	1
Subsurface	Rad	Soil	U-234	Uranium-234	pCi/g	11/11	0.369–0.885	1.98	pCi/g	0.369	0.885	11	0.369	0.885	11
Subsurface	Rad	Soil	U-235	Uranium-235	pCi/g	9/9	0.025–0.052	0.09	pCi/g	0.025	0.052	9	0.025	0.052	9
Subsurface	Rad	Soil	U-238	Uranium-238	pCi/g	11/11	0.329–0.924	1.93	pCi/g	0.329	0.924	11	0.329	0.924	11
Subsurface	Rad	Soil	U-235/236	Uranium235,Uranium-236	pCi/g	2/2	0.029–0.041	—	—	0.029	0.041	2	0.029	0.041	2
Subsurface	Inorganic	Tuff	SB	Antimony	mg/kg	0/28	[4.3–5.2]	0.5	mg/kg	4.3	5.2	28	—	—	0
Subsurface	Inorganic	Tuff	AS	Arsenic	mg/kg	1/28	[0.41]–2.5	2.79	mg/kg	0.41	2.5	28	2.5	2.5	1
Subsurface	Inorganic	Tuff	BA	Barium	mg/kg	0/28	[4.9–26.2]	46	mg/kg	4.9	26.2	28	—	—	0
Subsurface	Inorganic	Tuff	BE	Beryllium	mg/kg	1/28	[0.27]–1.8	1.21	mg/kg	0.27	1.8	28	1.8	1.8	1
Subsurface	Inorganic	Tuff	CD	Cadmium	mg/kg	0/28	[0.59–0.76]	1.63	mg/kg	0.59	0.76	28	—	—	0
Subsurface	Inorganic	Tuff	CR	Chromium, total	mg/kg	7/28	[1.4]–3.4	7.14	mg/kg	1.4	3.4	28	2.3	3.4	7
Subsurface	Inorganic	Tuff	PB	Lead	mg/kg	27/28	[0.42]–6.3	11.2	mg/kg	0.42	6.3	28	0.62	6.3	27
Subsurface	Inorganic	Tuff	HG	Mercury	mg/kg	0/28	[0.03–0.04]	0.1	mg/kg	0.03	0.04	28	—	—	0
Subsurface	Inorganic	Tuff	NI	Nickel	mg/kg	0/28	[3.2–5]	6.58	mg/kg	3.2	5	28	—	—	0
Subsurface	Inorganic	Tuff	SE	Selenium	mg/kg	0/28	[0.43–1.9]	0.3	mg/kg	0.43	1.9	28	—	—	0
Subsurface	Inorganic	Tuff	AG	Silver	mg/kg	0/28	[0.57–0.69]	1	mg/kg	0.57	0.69	28	—	—	0
Subsurface	Inorganic	Tuff	TL	Thallium	mg/kg	0/28	[0.41–0.49]	1.1	mg/kg	0.41	0.49	28	—	—	0
Subsurface	Organic	Tuff	83-32-9	Acenaphthene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	208-96-8	Acenaphthylene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	67-64-1	Acetone	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	120-12-7	Anthracene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	71-43-2	Benzene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Organic	Tuff	56-55-3	Benzo(a)anthracene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	50-32-8	Benzo(a)pyrene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	205-99-2	Benzo(b)fluoranthene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	191-24-2	Benzo(g,h,i)perylene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	207-08-9	Benzo(k)fluoranthene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	65-85-0	Benzoic Acid	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	100-51-6	Benzyl Alcohol	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	111-91-1	Bis(2-chloroethoxy)methane	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	111-44-4	Bis(2-chloroethyl)ether	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	117-81-7	Bis(2-ethylhexyl)phthalate	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	75-27-4	Bromodichloromethane	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	75-25-2	Bromoform	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	74-83-9	Bromomethane	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	101-55-3	Bromophenyl-phenylether[4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	78-93-3	Butanone[2-]	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	85-68-7	Butylbenzylphthalate	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	75-15-0	Carbon Disulfide	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	56-23-5	Carbon Tetrachloride	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	59-50-7	Chloro-3-methylphenol[4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	106-47-8	Chloroaniline[4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	108-90-7	Chlorobenzene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	124-48-1	Chlorodibromomethane	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	75-00-3	Chloroethane	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	67-66-3	Chloroform	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	74-87-3	Chloromethane	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Organic	Tuff	91-58-7	Chloronaphthalene[2-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	95-57-8	Chlorophenol[2-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	7005-72-3	Chlorophenyl-phenyl[4-] Ether	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	218-01-9	Chrysene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	84-74-2	Di-n-butylphthalate	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	117-84-0	Di-n-octylphthalate	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	53-70-3	Dibenz(a,h)anthracene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	132-64-9	Dibenzofuran	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	95-50-1	Dichlorobenzene[1,2-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	541-73-1	Dichlorobenzene[1,3-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	106-46-7	Dichlorobenzene[1,4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	91-94-1	Dichlorobenzidine[3,3'-]	mg/kg	0/4	[0.69–0.7]	—	—	0.69	0.7	4	—	—	0
Subsurface	Organic	Tuff	75-34-3	Dichloroethane[1,1-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	107-06-2	Dichloroethane[1,2-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	75-35-4	Dichloroethene[1,1-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	540-59-0	Dichloroethene[cis/trans-1,2-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	120-83-2	Dichlorophenol[2,4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	78-87-5	Dichloropropane[1,2-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	10061-01-5	Dichloropropene[cis-1,3-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	10061-02-6	Dichloropropene[trans-1,3-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	84-66-2	Diethylphthalate	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	131-11-3	Dimethyl Phthalate	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	105-67-9	Dimethylphenol[2,4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	534-52-1	Dinitro-2-methylphenol[4,6-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	51-28-5	Dinitrophenol[2,4-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Organic	Tuff	121-14-2	Dinitrotoluene[2,4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	606-20-2	Dinitrotoluene[2,6-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	100-41-4	Ethylbenzene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	206-44-0	Fluoranthene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	86-73-7	Fluorene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	118-74-1	Hexachlorobenzene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	87-68-3	Hexachlorobutadiene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	77-47-4	Hexachlorocyclopentadiene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	67-72-1	Hexachloroethane	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	591-78-6	Hexanone[2-]	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	78-59-1	Isophorone	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	108-10-1	Methyl-2-pentanone[4-]	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	75-09-2	Methylene Chloride	mg/kg	0/4	[0.008–0.009]	—	—	0.008	0.009	4	—	—	0
Subsurface	Organic	Tuff	91-57-6	Methylnaphthalene[2-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	95-48-7	Methylphenol[2-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	106-44-5	Methylphenol[4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	91-20-3	Naphthalene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	88-74-4	Nitroaniline[2-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	99-09-2	Nitroaniline[3-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	100-01-6	Nitroaniline[4-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	98-95-3	Nitrobenzene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	88-75-5	Nitrophenol[2-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	100-02-7	Nitrophenol[4-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	621-64-7	Nitroso-di-n-propylamine[N-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Organic	Tuff	86-30-6	Nitrosodiphenylamine[N-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	108-60-1	Oxybis(1-chloropropane)[2,2'-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	87-86-5	Pentachlorophenol	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	85-01-8	Phenanthrene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	108-95-2	Phenol	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	129-00-0	Pyrene	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	100-42-5	Styrene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	79-34-5	Tetrachloroethane[1,1,2,2-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	127-18-4	Tetrachloroethene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	108-88-3	Toluene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	120-82-1	Trichlorobenzene[1,2,4-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	71-55-6	Trichloroethane[1,1,1-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	79-00-5	Trichloroethane[1,1,2-]	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	79-01-6	Trichloroethene	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Organic	Tuff	95-95-4	Trichlorophenol[2,4,5-]	mg/kg	0/4	[1.7–1.8]	—	—	1.7	1.8	4	—	—	0
Subsurface	Organic	Tuff	88-06-2	Trichlorophenol[2,4,6-]	mg/kg	0/4	[0.35–0.35]	—	—	0.35	0.35	4	—	—	0
Subsurface	Organic	Tuff	108-05-4	Vinyl Acetate	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	75-01-4	Vinyl Chloride	mg/kg	0/4	[0.01–0.011]	—	—	0.01	0.011	4	—	—	0
Subsurface	Organic	Tuff	1330-20-7	Xylene (Total)	mg/kg	0/4	[0.005–0.005]	—	—	0.005	0.005	4	—	—	0
Subsurface	Rad	Tuff	AM-241	Americium-241	pCi/g	1/58	[-0.115]–0.19	0.05	pCi/g	-0.115	0.19	58	0.034	0.042	1
Subsurface	Rad	Tuff	CS-137	Cesium-137	pCi/g	19/28	[-0.047]–0.036	0.1	pCi/g	-0.047	0.036	28	0.001	0.036	19
Subsurface	Rad	Tuff	PU-238	Plutonium-238	pCi/g	7/55	[-0.004]–0.209	0.05	pCi/g	-0.004	0.209	55	0.007	0.209	7
Subsurface	Rad	Tuff	PU-239	Plutonium-239	pCi/g	7/55	[-0.0059]–0.399	0.05	pCi/g	-0.0059	0.399	55	0.001	0.399	7
Subsurface	Rad	Tuff	U-234	Uranium-234	pCi/g	30/30	0.31–1.53	1.98	pCi/g	0.31	1.53	30	0.31	1.53	30
Subsurface	Rad	Tuff	U-235	Uranium-235	pCi/g	18/30	[0.0088]–0.063	0.09	pCi/g	0.0088	0.063	30	0.0185	0.063	18

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface	Rad	Tuff	U-238	Uranium-238	pCi/g	30/30	0.268–1.68	1.93	pCi/g	0.268	1.68	30	0.268	1.68	30
Subsurface Background	Inorganic	Tuff	SB	Antimony	mg/kg	0/15	[0.6–0.67]	0.5	mg/kg	0.6	0.67	15	—	—	0
Subsurface Background	Inorganic	Tuff	AS	Arsenic	mg/kg	0/15	[0.8–2.2]	2.79	mg/kg	0.8	2.2	15	—	—	0
Subsurface Background	Inorganic	Tuff	BA	Barium	mg/kg	1/15	[4.9]–197	46	mg/kg	4.9	197	15	197	197	1
Subsurface Background	Inorganic	Tuff	BE	Beryllium	mg/kg	1/15	[0.2]–1.1	1.21	mg/kg	0.2	1.1	15	1.1	1.1	1
Subsurface Background	Inorganic	Tuff	CD	Cadmium	mg/kg	1/15	[0.6]–2.3	1.63	mg/kg	0.6	2.3	15	2.3	2.3	1
Subsurface Background	Inorganic	Tuff	CR	Chromium, total	mg/kg	3/15	[0.82]–11.9	7.14	mg/kg	0.82	11.9	15	2.8	11.9	3
Subsurface Background	Inorganic	Tuff	PB	Lead	mg/kg	13/15	[0.35]–12.4	11.2	mg/kg	0.35	12.4	15	0.69	12.4	13
Subsurface Background	Inorganic	Tuff	HG	Mercury	mg/kg	1/15	[0.02]–0.06	0.1	mg/kg	0.02	0.06	15	0.06	0.06	1
Subsurface Background	Inorganic	Tuff	NI	Nickel	mg/kg	1/15	[1.2]–10.9	6.58	mg/kg	1.2	10.9	15	10.9	10.9	1
Subsurface Background	Inorganic	Tuff	SE	Selenium	mg/kg	0/15	[0.4–0.47]	0.3	mg/kg	0.4	0.47	15	—	—	0
Subsurface Background	Inorganic	Tuff	AG	Silver	mg/kg	0/15	[1–1.1]	1	mg/kg	1	1.1	15	—	—	0
Subsurface Background	Inorganic	Tuff	TL	Thallium	mg/kg	0/15	[0.2–0.27]	1.1	mg/kg	0.2	0.27	15	—	—	0
Subsurface Background	Rad	Tuff	AM-241	Americium-241	pCi/g	2/30	[0.0011]–0.12	0.05	pCi/g	0.0011	0.12	30	0.039	0.039	2
Subsurface Background	Rad	Tuff	CS-137	Cesium-137	pCi/g	15/20	[0.0011]–0.12	0.1	pCi/g	0.0011	0.12	20	0.067	0.12	15

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Subsurface Background	Rad	Tuff	ALPHA	Gross Alpha Radiation	pCi/g	0/5	[-120– -40]	—	—	-120	-40	5	—	—	0
Subsurface Background	Rad	Tuff	BETA	Gross Beta Radiation	pCi/g	5/5	5.5–11	—	—	5.5	11	5	5.5	11	5
Subsurface Background	Rad	Tuff	GAMMA	Gross Gamma Radiation	pCi/g	5/5	11–15	—	—	11	15	5	11	15	5
Subsurface Background	Rad	Tuff	PU-238	Plutonium-238	pCi/g	2/30	[0]–1.38	0.05	pCi/g	0	1.38	30	0.038	1.38	2
Subsurface Background	Rad	Tuff	PU-239	Plutonium-239	pCi/g	0/30	[-0.0109–0.0701]	0.05	pCi/g	-0.0109	0.0701	30	—	—	0
Subsurface Background	Rad	Tuff	U-234	Uranium-234	pCi/g	15/15	0.265–1.067	1.98	pCi/g	0.265	1.067	15	0.265	1.067	15
Subsurface Background	Rad	Tuff	U-235	Uranium-235	pCi/g	5/15	[0.0022]–0.053	0.09	pCi/g	0.0022	0.053	15	0.0256	0.053	5
Subsurface Background	Rad	Tuff	U-238	Uranium-238	pCi/g	15/15	0.262–1.069	1.93	pCi/g	0.262	1.069	15	0.262	1.069	15
Surface	Inorganic	Soil	SB	Antimony	mg/kg	0/34	[11.2–11.2]	0.83	mg/kg	11.2	11.2	34	—	—	0
Surface	Inorganic	Soil	AS	Arsenic	mg/kg	32/34	[0.6]–3.5	8.17	mg/kg	0.6	3.5	34	0.81	3.5	32
Surface	Inorganic	Soil	BA	Barium	mg/kg	34/34	45.4–171	295	mg/kg	45.4	171	34	45.4	171	34
Surface	Inorganic	Soil	BE	Beryllium	mg/kg	34/34	0.28–0.86	1.83	mg/kg	0.28	0.86	34	0.28	0.86	34
Surface	Inorganic	Soil	CD	Cadmium	mg/kg	17/34	[0.8]–1.3	0.4	mg/kg	0.8	1.3	34	0.81	1.3	17
Surface	Inorganic	Soil	CR	Chromium, total	mg/kg	34/34	2.6–7.6	19.3	mg/kg	2.6	7.6	34	2.6	7.6	34
Surface	Inorganic	Soil	PB	Lead	mg/kg	34/34	3.6–21.5	22.3	mg/kg	3.6	21.5	34	3.6	21.5	34
Surface	Inorganic	Soil	HG	Mercury	mg/kg	6/34	[0.02]–0.03	0.1	mg/kg	0.02	0.03	34	0.02	0.03	6
Surface	Inorganic	Soil	NI	Nickel	mg/kg	33/34	[2.8]–8.4	15.4	mg/kg	2.8	8.4	34	3.1	8.4	33
Surface	Inorganic	Soil	SE	Selenium	mg/kg	0/34	[0.6–0.6]	1.52	mg/kg	0.6	0.6	34	—	—	0
Surface	Inorganic	Soil	AG	Silver	mg/kg	0/34	[1.4–1.4]	1	mg/kg	1.4	1.4	34	—	—	0
Surface	Inorganic	Soil	TL	Thallium	mg/kg	0/34	[1–1]	0.73	mg/kg	1	1	34	—	—	0

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Surface	Rad	Soil	AM-241	Americium-241	pCi/g	34/34	1.24–4.45	0.013	pCi/g	1.24	4.45	34	1.24	4.45	34
Surface	Rad	Soil	CS-137	Cesium-137	pCi/g	28/34	[0.119]–1.797	1.65	pCi/g	0.119	1.797	34	0.324	1.797	28
Surface	Rad	Soil	PU-238	Plutonium-238	pCi/g	14/34	[0.002]–0.249	0.023	pCi/g	0.002	0.249	34	0.003	0.249	14
Surface	Rad	Soil	PU-239	Plutonium-239	pCi/g	33/34	[0.013]–13.723	0.054	pCi/g	0.013	13.723	34	0.013	13.723	33
Surface	Rad	Soil	K-40	Potassium-40	pCi/g	33/34	[2.963]–44.18	36.8	pCi/g	2.963	44.18	34	17.565	44.18	33
Surface	Rad	Soil	RA-226	Radium-226	pCi/g	27/34	[1.056]–3.463	2.59	pCi/g	1.056	3.463	34	1.27	3.463	27
Surface	Rad	Soil	TH-232	Thorium-232	pCi/g	23/34	[1.557]–4.438	2.33	pCi/g	1.557	4.438	34	2.01	4.438	23
Surface	Rad	Soil	U	Uranium	mg/kg	34/34	1.4–5.3	—	—	1.4	5.3	34	1.4	5.3	34
Surface Background	Inorganic	Soil	AL	Aluminum	mg/kg	1/1	7900–7900	29200	mg/kg	7900	7900	1	7900	7900	1
Surface Background	Inorganic	Soil	SB	Antimony	mg/kg	0/10	[10–11.2]	0.83	mg/kg	10	11.2	10	—	—	0
Surface Background	Inorganic	Soil	AS	Arsenic	mg/kg	10/10	1.3–8	8.17	mg/kg	1.3	8	10	1.3	8	10
Surface Background	Inorganic	Soil	BA	Barium	mg/kg	10/10	86–168	295	mg/kg	86	168	10	86	168	10
Surface Background	Inorganic	Soil	BE	Beryllium	mg/kg	10/10	0.56–0.78	1.83	mg/kg	0.56	0.78	10	0.56	0.78	10
Surface Background	Inorganic	Soil	CD	Cadmium	mg/kg	8/10	[0.5]–1.4	0.4	mg/kg	0.5	1.4	10	0.96	1.4	8
Surface Background	Inorganic	Soil	CA	Calcium	mg/kg	1/1	1200–1200	6120	mg/kg	1200	1200	1	1200	1200	1
Surface Background	Inorganic	Soil	CR	Chromium, total	mg/kg	10/10	6.3–10	19.3	mg/kg	6.3	10	10	6.3	10	10
Surface Background	Inorganic	Soil	CO	Cobalt	mg/kg	1/1	6–6	8.64	mg/kg	6	6	1	6	6	1
Surface Background	Inorganic	Soil	CU	Copper	mg/kg	1/1	6–6	14.7	mg/kg	6	6	1	6	6	1

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Surface Background	Inorganic	Soil	FE	Iron	mg/kg	1/1	12000–12000	21500	mg/kg	12000	12000	1	12000	12000	1
Surface Background	Inorganic	Soil	PB	Lead	mg/kg	10/10	10–20.3	22.3	mg/kg	10	20.3	10	10	20.3	10
Surface Background	Inorganic	Soil	MG	Magnesium	mg/kg	1/1	1400–1400	4610	mg/kg	1400	1400	1	1400	1400	1
Surface Background	Inorganic	Soil	MN	Manganese	mg/kg	1/1	250–250	671	mg/kg	250	250	1	250	250	1
Surface Background	Inorganic	Soil	HG	Mercury	mg/kg	0/10	[0.02–0.1]	0.1	mg/kg	0.02	0.1	10	—	—	0
Surface Background	Inorganic	Soil	NI	Nickel	mg/kg	10/10	6–9.7	15.4	mg/kg	6	9.7	10	6	9.7	10
Surface Background	Inorganic	Soil	K	Potassium	mg/kg	1/1	1900–1900	3460	mg/kg	1900	1900	1	1900	1900	1
Surface Background	Inorganic	Soil	SE	Selenium	mg/kg	0/10	[0.6–1]	1.52	mg/kg	0.6	1	10	—	—	0
Surface Background	Inorganic	Soil	AG	Silver	mg/kg	0/10	[1.4–2]	1	mg/kg	1.4	2	10	—	—	0
Surface Background	Inorganic	Soil	NA	Sodium	mg/kg	1/1	150–150	915	mg/kg	150	150	1	150	150	1
Surface Background	Inorganic	Soil	TL	Thallium	mg/kg	1/10	[0.25]–1	0.73	mg/kg	0.25	1	10	0.25	0.25	1
Surface Background	Inorganic	Soil	V	Vanadium	mg/kg	1/1	25–25	39.6	mg/kg	25	25	1	25	25	1
Surface Background	Inorganic	Soil	ZN	Zinc	mg/kg	1/1	23–23	48.8	mg/kg	23	23	1	23	23	1
Surface Background	Rad	Soil	AM-241	Americium-241	pCi/g	9/9	1.4–3.86	0.013	pCi/g	1.4	3.86	9	1.4	3.86	9
Surface Background	Rad	Soil	CS-137	Cesium-137	pCi/g	8/9	[0.442]–2.448	1.65	pCi/g	0.442	2.448	9	0.442	2.448	8

Table B-1.0-2 (continued)

Investigation	RFI Class	Investigation Strata	Analyte Code	Analyte Code Description	Standard Reporting Units	Frequency of Detects	Range of Values	UTL	UTL Units	Minimum of Standard Result	Maximum of Standard Result	Count of Standard Result	Minimum of Detect	Maximum of Detect	Count of Detect
Surface Background	Rad	Soil	PU-238	Plutonium-238	pCi/g	9/9	0.002–0.023	0.023	pCi/g	0.002	0.023	9	0.002	0.023	9
Surface Background	Rad	Soil	PU-239	Plutonium-239	pCi/g	6/9	[0.005]–0.058	0.054	pCi/g	0.005	0.058	9	0.005	0.058	6
Surface Background	Rad	Soil	K-40	Potassium-40	pCi/g	9/9	14.248–32.231	36.8	pCi/g	14.248	32.231	9	14.248	32.231	9
Surface Background	Rad	Soil	RA-226	Radium-226	pCi/g	7/9	[1.6]–2.995	2.59	pCi/g	1.6	2.995	9	1.6	2.995	7
Surface Background	Rad	Soil	TH-232	Thorium-232	pCi/g	7/9	[2.35]–3.28	2.33	pCi/g	2.35	3.28	9	2.35	3.28	7
Surface Background	Rad	Soil	H-3	Tritium	pCi/g	0/9	[-0.00088–0.01412]	0.76	pCi/ml	-0.00088	0.01412	9	—	—	0
Surface Background	Rad	Soil	U-234	Uranium-234	pCi/g	9/9	1.195–1.989	2.59	pCi/g	1.195	1.989	9	1.195	1.989	9
Surface Background	Rad	Soil	U-235	Uranium-235	pCi/g	0/9	[0.066–0.18]	0.2	pCi/g	0.066	0.18	9	—	—	0
Surface Background	Rad	Soil	U-238	Uranium-238	pCi/g	9/9	1.341–2.218	2.29	pCi/g	1.341	2.218	9	1.341	2.218	9

[a] UTL = upper tolerance limit.

[b] A dash in the table means "not applicable."

Table B-1.0-3
RFI Sample Data for TA-49 Area 2

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
0549-95-0351	49-9909	0	0.5	ALLH	Mercury	0.1	mg/kg	U	0.1	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Thallium	0.25	mg/kg	—[c]	0.73	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Cadmium	0.5	mg/kg	U	0.4	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Beryllium	0.7	mg/kg	—	1.83	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Selenium	1	mg/kg	UJ	1.52	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Silver	2	mg/kg	U	1	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Cobalt	6	mg/kg	—	8.64	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Copper	6	mg/kg	—	14.7	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Nickel	7	mg/kg	—	15.4	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Arsenic	8	mg/kg	—	8.17	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Antimony	10	mg/kg	UJ	0.83	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Chromium, Total	10	mg/kg	J-	19.3	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Lead	10	mg/kg	—	22.3	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Zinc	23	mg/kg	J-	48.8	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Vanadium	25	mg/kg	J-	39.6	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Barium	86	mg/kg	—	295	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Sodium	150	mg/kg	—	915	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Manganese	250	mg/kg	—	671	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Calcium	1200	mg/kg	—	6120	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Magnesium	1400	mg/kg	—	4610	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Potassium	1900	mg/kg	—	3460	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Aluminum	7900	mg/kg	—	29200	mg/kg
0549-95-0351	49-9909	0	0.5	ALLH	Iron	12000	mg/kg	—	21500	mg/kg
0549-98-0000	49-2902	3.8	4.1	ALLH	Uranium-235	0.043	pCi/g	U	0.09	pCi/g
0549-98-0000	49-2902	3.8	4.1	ALLH	Uranium-234	0.615	pCi/g	—	1.98	pCi/g
0549-98-0000	49-2902	3.8	4.1	ALLH	Uranium-238	0.687	pCi/g	—	1.93	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Plutonium-238	0.006	pCi/g	U	0.05	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Mercury	0.012	mg/kg	U	0.1	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Plutonium-239,Plutonium-240	0.018	pCi/g	U	—	—
0549-98-0001	49-2902	4.4	4.8	ALLH	Americium-241	0.023	pCi/g	U	0.05	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Plutonium-239,Plutonium-240	0.026	pCi/g	U	—	—
0549-98-0001	49-2902	4.4	4.8	ALLH	Americium-241	0.026	pCi/g	U	0.05	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Uranium-235	0.026	pCi/g	U	0.09	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Uranium-235	0.033	pCi/g	—	0.09	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Cadmium	0.096	mg/kg	U	1.63	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Selenium	0.39	mg/kg	U	0.3	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Thallium	0.4	mg/kg	J	1.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
0549-98-0001	49-2902	4.4	4.8	ALLH	Silver	0.42	mg/kg	J	1	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Antimony	0.48	mg/kg	J	0.5	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Uranium-238	0.686	pCi/g	—	1.93	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Uranium-234	0.694	pCi/g	—	1.98	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Uranium-238	0.721	pCi/g	—	1.93	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Uranium-234	0.752	pCi/g	—	1.98	pCi/g
0549-98-0001	49-2902	4.4	4.8	ALLH	Beryllium	0.99	mg/kg	—	1.21	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Arsenic	3.4	mg/kg	—	2.79	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Copper	5.9	mg/kg	—	4.66	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Cobalt	6.4	mg/kg	—	3.14	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Nickel	6.9	mg/kg	—	6.58	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Chromium, Total	7.3	mg/kg	—	7.14	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Lead	12.4	mg/kg	—	11.2	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Vanadium	19.8	mg/kg	—	17	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Zinc	23.3	mg/kg	—	63.5	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Sodium	133	mg/kg	J	2770	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Barium	168	mg/kg	—	46	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Manganese	427	mg/kg	—	482	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Potassium	1450	mg/kg	—	3500	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Magnesium	1790	mg/kg	—	1690	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Calcium	1910	mg/kg	—	2200	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Aluminum	9180	mg/kg	—	7340	mg/kg
0549-98-0001	49-2902	4.4	4.8	ALLH	Iron	10900	mg/kg	—	14500	mg/kg
0549-98-0002	49-2902	7.2	7.4	ALLH	Uranium-235	0.048	pCi/g	U	0.09	pCi/g
0549-98-0002	49-2902	7.2	7.4	ALLH	Uranium-234	0.885	pCi/g	—	1.98	pCi/g
0549-98-0002	49-2902	7.2	7.4	ALLH	Uranium-238	0.924	pCi/g	—	1.93	pCi/g
0549-98-0003	49-2903	1.5	2	ALLH	Americium-241	0.008	pCi/g	U	0.05	pCi/g
0549-98-0003	49-2903	1.5	2	ALLH	Mercury	0.02	mg/kg	—	0.1	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Uranium-235	0.025	pCi/g	U	0.09	pCi/g
0549-98-0003	49-2903	1.5	2	ALLH	Cadmium	0.09	mg/kg	U	1.63	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Silver	0.23	mg/kg	J	1	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Antimony	0.36	mg/kg	U	0.5	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Selenium	0.36	mg/kg	U	0.3	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Thallium	0.36	mg/kg	U	1.1	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Uranium-238	0.624	pCi/g	—	1.93	pCi/g
0549-98-0003	49-2903	1.5	2	ALLH	Uranium-234	0.631	pCi/g	—	1.98	pCi/g
0549-98-0003	49-2903	1.5	2	ALLH	Beryllium	0.84	mg/kg	—	1.21	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Arsenic	3.3	mg/kg	—	2.79	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Copper	5.7	mg/kg	—	4.66	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
0549-98-0003	49-2903	1.5	2	ALLH	Nickel	7.2	mg/kg	—	6.58	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Chromium, Total	7.4	mg/kg	—	7.14	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Cobalt	7.5	mg/kg	—	3.14	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Lead	12.7	mg/kg	—	11.2	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Vanadium	19.8	mg/kg	—	17	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Zinc	21.7	mg/kg	—	63.5	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Barium	145	mg/kg	—	46	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Sodium	301	mg/kg	J	2770	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Manganese	492	mg/kg	—	482	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Potassium	1620	mg/kg	—	3500	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Magnesium	1840	mg/kg	—	1690	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Calcium	2070	mg/kg	—	2200	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Aluminum	7530	mg/kg	—	7340	mg/kg
0549-98-0003	49-2903	1.5	2	ALLH	Iron	10400	mg/kg	—	14500	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Americium-241	0.02	pCi/g	U	0.05	pCi/g
0549-98-0004	49-2903	7.2	7.8	ALLH	Mercury	0.027	mg/kg	—	0.1	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Uranium235, Uranium-236	0.041	pCi/g	U	—	—
0549-98-0004	49-2903	7.2	7.8	ALLH	Cadmium	0.1	mg/kg	U	1.63	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Silver	0.3	mg/kg	J	1	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Selenium	0.4	mg/kg	U	0.3	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Thallium	0.4	mg/kg	U	1.1	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Antimony	0.5	mg/kg	J	0.5	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Uranium-234	0.61	pCi/g	—	1.98	pCi/g
0549-98-0004	49-2903	7.2	7.8	ALLH	Uranium-238	0.638	pCi/g	—	1.93	pCi/g
0549-98-0004	49-2903	7.2	7.8	ALLH	Beryllium	1	mg/kg	—	1.21	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Arsenic	3.9	mg/kg	—	2.79	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Cobalt	5	mg/kg	J	3.14	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Nickel	7.1	mg/kg	—	6.58	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Copper	7.3	mg/kg	—	4.66	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Chromium, Total	8.2	mg/kg	—	7.14	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Lead	11.7	mg/kg	—	11.2	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Vanadium	20	mg/kg	—	17	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Zinc	22.4	mg/kg	—	63.5	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Barium	179	mg/kg	—	46	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Manganese	238	mg/kg	—	482	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Sodium	354	mg/kg	J	2770	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Potassium	1460	mg/kg	—	3500	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Magnesium	2300	mg/kg	—	1690	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Calcium	5210	mg/kg	—	2200	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
0549-98-0004	49-2903	7.2	7.8	ALLH	Aluminum	12000	mg/kg	—	7340	mg/kg
0549-98-0004	49-2903	7.2	7.8	ALLH	Iron	12100	mg/kg	—	14500	mg/kg
0549-98-0005	49-2904	1.9	2.1	ALLH	Uranium-235	0.03	pCi/g	U	0.09	pCi/g
0549-98-0005	49-2904	1.9	2.1	ALLH	Uranium-238	0.694	pCi/g	—	1.93	pCi/g
0549-98-0005	49-2904	1.9	2.1	ALLH	Uranium-234	0.712	pCi/g	—	1.98	pCi/g
0549-98-0006	49-2904	5.6	6	ALLH	Uranium-235	0.037	pCi/g	U	0.09	pCi/g
0549-98-0006	49-2904	5.6	6	ALLH	Uranium-234	0.678	pCi/g	—	1.98	pCi/g
0549-98-0006	49-2904	5.6	6	ALLH	Uranium-238	0.682	pCi/g	—	1.93	pCi/g
0549-98-0007	49-2905	3.1	3.3	ALLH	Uranium235, Uranium-236	0.029	pCi/g	U	—	—
0549-98-0007	49-2905	3.1	3.3	ALLH	Uranium-238	0.329	pCi/g	—	1.93	pCi/g
0549-98-0007	49-2905	3.1	3.3	ALLH	Uranium-234	0.369	pCi/g	—	1.98	pCi/g
0549-98-0008	49-2905	6.9	7	ALLH	Uranium-235	0.052	pCi/g	U	0.09	pCi/g
0549-98-0008	49-2905	6.9	7	ALLH	Uranium-234	0.826	pCi/g	—	1.98	pCi/g
0549-98-0008	49-2905	6.9	7	ALLH	Uranium-238	0.921	pCi/g	—	1.93	pCi/g
0549-98-0009	49-2906	4.7	4.8	ALLH	Uranium-235	0.042	pCi/g	U	0.09	pCi/g
0549-98-0009	49-2906	4.7	4.8	ALLH	Uranium-238	0.714	pCi/g	—	1.93	pCi/g
0549-98-0009	49-2906	4.7	4.8	ALLH	Uranium-234	0.722	pCi/g	—	1.98	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Plutonium-238	0	pCi/g	—	0.05	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Plutonium-239, Plutonium-240	0.012	pCi/g	U	—	—
0549-98-0010	49-2907	3.7	4.6	ALLH	Mercury	0.012	mg/kg	J	0.1	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Americium-241	0.014	pCi/g	U	0.05	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Plutonium-238	0.015	pCi/g	U	0.05	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Plutonium-239, Plutonium-240	0.015	pCi/g	U	—	—
0549-98-0010	49-2907	3.7	4.6	ALLH	Mercury	0.018	mg/kg	J	0.1	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Uranium-235	0.035	pCi/g	U	0.09	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Uranium-235	0.038	pCi/g	—	0.09	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Cadmium	0.093	mg/kg	U	1.63	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Cadmium	0.101	mg/kg	U	1.63	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Silver	0.24	mg/kg	J	1	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Silver	0.258	mg/kg	J	1	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Antimony	0.37	mg/kg	U	0.5	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Thallium	0.37	mg/kg	U	1.1	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Selenium	0.373	mg/kg	U	0.3	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Antimony	0.402	mg/kg	U	0.5	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Selenium	0.402	mg/kg	U	0.3	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Thallium	0.402	mg/kg	U	1.1	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Uranium-238	0.632	pCi/g	—	1.93	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Uranium-234	0.66	pCi/g	—	1.98	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Uranium-238	0.686	pCi/g	—	1.93	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
0549-98-0010	49-2907	3.7	4.6	ALLH	Uranium-234	0.773	pCi/g	—	1.98	pCi/g
0549-98-0010	49-2907	3.7	4.6	ALLH	Beryllium	0.891	mg/kg	—	1.21	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Beryllium	0.9	mg/kg	—	1.21	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Arsenic	3.3	mg/kg	—	2.79	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Arsenic	3.31	mg/kg	—	2.79	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Copper	5.66	mg/kg	—	4.66	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Copper	5.8	mg/kg	—	4.66	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Cobalt	5.9	mg/kg	—	3.14	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Cobalt	6.28	mg/kg	—	3.14	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Nickel	6.64	mg/kg	—	6.58	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Nickel	6.8	mg/kg	—	6.58	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Chromium, Total	7.01	mg/kg	—	7.14	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Chromium, Total	7.4	mg/kg	—	7.14	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Lead	12.2	mg/kg	—	11.2	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Lead	13.2	mg/kg	—	11.2	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Zinc	18.4	mg/kg	—	63.5	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Vanadium	19.2	mg/kg	—	17	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Vanadium	19.7	mg/kg	—	17	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Zinc	19.9	mg/kg	—	63.5	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Barium	183	mg/kg	—	46	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Barium	209	mg/kg	—	46	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Manganese	354	mg/kg	—	482	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Sodium	358	mg/kg	J	2770	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Sodium	366	mg/kg	J	2770	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Manganese	383	mg/kg	—	482	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Potassium	1530	mg/kg	—	3500	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Potassium	1590	mg/kg	—	3500	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Magnesium	1790	mg/kg	—	1690	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Magnesium	1900	mg/kg	—	1690	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Calcium	2460	mg/kg	—	2200	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Calcium	2530	mg/kg	—	2200	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Aluminum	8260	mg/kg	—	7340	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Aluminum	9100	mg/kg	—	7340	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Iron	10100	mg/kg	—	14500	mg/kg
0549-98-0010	49-2907	3.7	4.6	ALLH	Iron	10200	mg/kg	—	14500	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Tritium	0.0021	pCi/g	U	0.76	pCi/ml
AAA1739	49-9901	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Plutonium-239	0.01	pCi/g	U	0.054	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1739	49-9901	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Uranium-235	0.065	pCi/g	U	0.2	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Uranium-235	0.067	pCi/g	U	0.2	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Cesium-137	0.444	pCi/g	U	1.65	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Beryllium	0.77	mg/kg	—	1.83	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Beryllium	0.81	mg/kg	—	1.83	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Cadmium	1.2	mg/kg	—	0.4	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Uranium-238	1.299	pCi/g	—	2.29	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Cadmium	1.3	mg/kg	—	0.4	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Uranium-234	1.315	pCi/g	—	2.59	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Uranium-234	1.341	pCi/g	—	2.59	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Americium-241	1.4	pCi/g	U	0.013	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Uranium-238	1.477	pCi/g	—	2.29	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Arsenic	2.5	mg/kg	—	8.17	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Radium-226	2.995	pCi/g	—	2.59	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Arsenic	3.2	mg/kg	—	8.17	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Thorium-232	3.28	pCi/g	—	2.33	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Chromium, Total	8.1	mg/kg	—	19.3	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Nickel	8.2	mg/kg	—	15.4	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Chromium, Total	8.4	mg/kg	—	19.3	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Nickel	8.7	mg/kg	—	15.4	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Lead	14.7	mg/kg	—	22.3	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Lead	15.1	mg/kg	—	22.3	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Potassium-40	19.377	pCi/g	—	36.8	pCi/g
AAA1739	49-9901	0	0.5	ALLH	Barium	168	mg/kg	—	295	mg/kg
AAA1739	49-9901	0	0.5	ALLH	Barium	169	mg/kg	—	295	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Tritium	0.0038	pCi/g	U	0.76	pCi/ml
AAA1740	49-9901	0	0.5	ALLH	Plutonium-239	0.009	pCi/g	U	0.054	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Uranium-235	0.08	pCi/g	U	0.2	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1740	49-9901	0	0.5	ALLH	Cesium-137	0.475	pCi/g	U	1.65	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Beryllium	0.86	mg/kg	—	1.83	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Cadmium	0.93	mg/kg	—	0.4	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Uranium-234	1.355	pCi/g	—	2.59	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Uranium-238	1.433	pCi/g	—	2.29	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Radium-226	1.765	pCi/g	—	2.59	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Arsenic	2.4	mg/kg	—	8.17	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Americium-241	2.64	pCi/g	U	0.013	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Thorium-232	2.838	pCi/g	U	2.33	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Chromium, Total	7.6	mg/kg	—	19.3	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Nickel	10.3	mg/kg	—	15.4	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Lead	14.6	mg/kg	—	22.3	mg/kg
AAA1740	49-9901	0	0.5	ALLH	Potassium-40	21.714	pCi/g	—	36.8	pCi/g
AAA1740	49-9901	0	0.5	ALLH	Barium	175	mg/kg	—	295	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Tritium	0.0032	pCi/g	U	0.76	pCi/ml
AAA1741	49-9902	0	0.5	ALLH	Plutonium-238	0.004	pCi/g	—	0.023	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Plutonium-239	0.035	pCi/g	—	0.054	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Uranium-235	0.086	pCi/g	U	0.2	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Beryllium	0.73	mg/kg	—	1.83	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Cesium-137	0.859	pCi/g	U	1.65	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Cadmium	1.1	mg/kg	—	0.4	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Uranium-234	1.989	pCi/g	—	2.59	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Uranium-238	2.218	pCi/g	—	2.29	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Radium-226	2.288	pCi/g	U	2.59	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Thorium-232	3.185	pCi/g	U	2.33	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Arsenic	3.2	mg/kg	—	8.17	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Americium-241	3.86	pCi/g	U	0.013	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Nickel	8.1	mg/kg	—	15.4	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Chromium, Total	8.4	mg/kg	—	19.3	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1741	49-9902	0	0.5	ALLH	Lead	20.3	mg/kg	—	22.3	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1741	49-9902	0	0.5	ALLH	Potassium-40	24.222	pCi/g	—	36.8	pCi/g
AAA1741	49-9902	0	0.5	ALLH	Barium	162	mg/kg	—	295	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Tritium	0.0004	pCi/g	U	0.76	pCi/ml
AAA1742	49-9903	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Plutonium-239	0.005	pCi/g	—	0.054	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Uranium-235	0.09	pCi/g	U	0.2	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Cesium-137	0.442	pCi/g	U	1.65	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Beryllium	0.68	mg/kg	—	1.83	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Uranium-234	1.249	pCi/g	—	2.59	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Cadmium	1.3	mg/kg	—	0.4	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Uranium-238	1.399	pCi/g	—	2.29	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Radium-226	1.64	pCi/g	U	2.59	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Thorium-232	2.35	pCi/g	U	2.33	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Americium-241	2.67	pCi/g	U	0.013	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Arsenic	5	mg/kg	—	8.17	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Chromium, Total	8.7	mg/kg	—	19.3	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Nickel	9.7	mg/kg	—	15.4	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Lead	13.6	mg/kg	—	22.3	mg/kg
AAA1742	49-9903	0	0.5	ALLH	Potassium-40	22.706	pCi/g	—	36.8	pCi/g
AAA1742	49-9903	0	0.5	ALLH	Barium	158	mg/kg	—	295	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Tritium	0.0004	pCi/g	U	0.76	pCi/ml
AAA1743	49-9904	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	—	0.023	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Plutonium-239	0.009	pCi/g	U	0.054	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Uranium-235	0.18	pCi/g	U	0.2	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Cesium-137	0.581	pCi/g	U	1.65	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Beryllium	0.63	mg/kg	—	1.83	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Cadmium	1.2	mg/kg	—	0.4	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Uranium-234	1.365	pCi/g	—	2.59	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Uranium-238	1.555	pCi/g	—	2.29	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Radium-226	1.827	pCi/g	U	2.59	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1743	49-9904	0	0.5	ALLH	Americium-241	2.08	pCi/g	U	0.013	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Thorium-232	2.585	pCi/g	U	2.33	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Arsenic	3.1	mg/kg	—	8.17	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Nickel	6.9	mg/kg	—	15.4	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Chromium, Total	7.9	mg/kg	—	19.3	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Potassium-40	14.248	pCi/g	—	36.8	pCi/g
AAA1743	49-9904	0	0.5	ALLH	Lead	14.6	mg/kg	—	22.3	mg/kg
AAA1743	49-9904	0	0.5	ALLH	Barium	131	mg/kg	—	295	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	U	0.023	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Tritium	0.0141	pCi/g	U	0.76	pCi/ml
AAA1744	49-9905	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Plutonium-239	0.024	pCi/g	—	0.054	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Plutonium-239	0.029	pCi/g	—	0.054	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Uranium-235	0.103	pCi/g	U	0.2	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Beryllium	0.56	mg/kg	—	1.83	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Cesium-137	1.079	pCi/g	—	1.65	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Cadmium	1.1	mg/kg	—	0.4	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Uranium-234	1.507	pCi/g	—	2.59	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Uranium-238	1.817	pCi/g	—	2.29	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Radium-226	1.945	pCi/g	—	2.59	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Americium-241	2.32	pCi/g	U	0.013	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Thorium-232	3.129	pCi/g	—	2.33	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Arsenic	3.4	mg/kg	—	8.17	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Nickel	6.9	mg/kg	—	15.4	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Chromium, Total	7.3	mg/kg	—	19.3	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Lead	16	mg/kg	—	22.3	mg/kg
AAA1744	49-9905	0	0.5	ALLH	Potassium-40	29.31	pCi/g	—	36.8	pCi/g
AAA1744	49-9905	0	0.5	ALLH	Barium	140	mg/kg	—	295	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Tritium	-0.0009	pCi/g	U	0.76	pCi/ml
AAA1745	49-9906	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Plutonium-239	0.011	pCi/g	U	0.054	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Uranium-235	0.114	pCi/g	U	0.2	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1745	49-9906	0	0.5	ALLH	Cesium-137	0.584	pCi/g	U	1.65	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Beryllium	0.62	mg/kg	—	1.83	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Cadmium	0.96	mg/kg	—	0.4	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Uranium-234	1.239	pCi/g	—	2.59	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Uranium-238	1.387	pCi/g	—	2.29	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Radium-226	1.7	pCi/g	U	2.59	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Thorium-232	2.39	pCi/g	U	2.33	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Arsenic	2.4	mg/kg	—	8.17	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Americium-241	3.73	pCi/g	U	0.013	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Nickel	6	mg/kg	—	15.4	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Chromium, Total	6.3	mg/kg	—	19.3	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Lead	10.6	mg/kg	—	22.3	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1745	49-9906	0	0.5	ALLH	Potassium-40	26.247	pCi/g	—	36.8	pCi/g
AAA1745	49-9906	0	0.5	ALLH	Barium	100	mg/kg	—	295	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Tritium	-0.0005	pCi/g	U	0.76	pCi/ml
AAA1746	49-9906	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	—	0.023	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Plutonium-239	0.008	pCi/g	—	0.054	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Uranium-235	0.108	pCi/g	U	0.2	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Cesium-137	0.6258	pCi/g	U	1.65	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Beryllium	0.71	mg/kg	—	1.83	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Uranium-234	1.24	pCi/g	—	2.59	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Cadmium	1.3	mg/kg	—	0.4	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Uranium-238	1.302	pCi/g	—	2.29	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Arsenic	2.5	mg/kg	—	8.17	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Thorium-232	2.72	pCi/g	U	2.33	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Americium-241	2.98	pCi/g	U	0.013	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Radium-226	3.104	pCi/g	—	2.59	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Nickel	7.7	mg/kg	—	15.4	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Chromium, Total	8.5	mg/kg	—	19.3	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1746	49-9906	0	0.5	ALLH	Lead	12.2	mg/kg	—	22.3	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1746	49-9906	0	0.5	ALLH	Potassium-40	17.845	pCi/g	—	36.8	pCi/g
AAA1746	49-9906	0	0.5	ALLH	Barium	112	mg/kg	—	295	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Tritium	0.0128	pCi/g	—	0.76	pCi/ml
AAA1747	49-9907	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Plutonium-238	0.023	pCi/g	—	0.023	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Plutonium-239	0.058	pCi/g	—	0.054	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Uranium-235	0.098	pCi/g	U	0.2	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Beryllium	0.69	mg/kg	—	1.83	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Cadmium	1.1	mg/kg	—	0.4	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Uranium-234	1.495	pCi/g	—	2.59	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Radium-226	1.6	pCi/g	U	2.59	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Uranium-238	1.94	pCi/g	—	2.29	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Arsenic	2.2	mg/kg	—	8.17	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Cesium-137	2.448	pCi/g	—	1.65	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Americium-241	2.52	pCi/g	U	0.013	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Thorium-232	2.867	pCi/g	—	2.33	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Chromium, Total	6.5	mg/kg	—	19.3	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Nickel	6.8	mg/kg	—	15.4	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Lead	15.8	mg/kg	—	22.3	mg/kg
AAA1747	49-9907	0	0.5	ALLH	Potassium-40	28.313	pCi/g	—	36.8	pCi/g
AAA1747	49-9907	0	0.5	ALLH	Barium	132	mg/kg	—	295	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Plutonium-238	0.004	pCi/g	—	0.023	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Tritium	0.0093	pCi/g	—	0.76	pCi/ml
AAA1748	49-9908	0	0.5	ALLH	Plutonium-239	0.018	pCi/g	—	0.054	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Uranium-235	0.066	pCi/g	U	0.2	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Beryllium	0.59	mg/kg	—	1.83	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Cesium-137	0.862	pCi/g	U	1.65	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Uranium-234	1.195	pCi/g	—	2.59	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Uranium-238	1.341	pCi/g	—	2.29	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Cadmium	1.4	mg/kg	—	0.4	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1748	49-9908	0	0.5	ALLH	Americium-241	1.56	pCi/g	U	0.013	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Thorium-232	2.741	pCi/g	—	2.33	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Radium-226	2.844	pCi/g	—	2.59	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Nickel	6.3	mg/kg	—	15.4	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Chromium, Total	8.6	mg/kg	—	19.3	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Lead	12.1	mg/kg	—	22.3	mg/kg
AAA1748	49-9908	0	0.5	ALLH	Potassium-40	21.292	pCi/g	—	36.8	pCi/g
AAA1748	49-9908	0	0.5	ALLH	Barium	94.7	mg/kg	—	295	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Plutonium-239	0.004	pCi/g	—	0.054	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Plutonium-239	0.007	pCi/g	—	0.054	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Tritium	0.0072	pCi/g	U	0.76	pCi/ml
AAA1749	49-9909	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Uranium-235	0.082	pCi/g	U	0.2	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Cesium-137	0.48	pCi/g	U	1.65	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Beryllium	0.78	mg/kg	—	1.83	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Uranium-234	1.28	pCi/g	—	2.59	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Uranium-238	1.372	pCi/g	—	2.29	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Radium-226	1.718	pCi/g	—	2.59	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Americium-241	1.73	pCi/g	U	0.013	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Arsenic	2.2	mg/kg	—	8.17	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Thorium-232	2.812	pCi/g	—	2.33	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Nickel	7.8	mg/kg	—	15.4	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Chromium, Total	8.4	mg/kg	—	19.3	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Lead	10.9	mg/kg	—	22.3	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1749	49-9909	0	0.5	ALLH	Potassium-40	32.231	pCi/g	—	36.8	pCi/g
AAA1749	49-9909	0	0.5	ALLH	Barium	99.3	mg/kg	—	295	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Plutonium-238	0.004	pCi/g	—	0.023	pCi/g
AAA1750	49-2001	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Plutonium-239	0.054	pCi/g	—	0.054	pCi/g
AAA1750	49-2001	0	0.5	ALLH	Beryllium	0.35	mg/kg	—	1.83	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Cesium-137	0.504	pCi/g	U	1.65	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1750	49-2001	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Arsenic	0.96	mg/kg	—	8.17	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Radium-226	1.094	pCi/g	U	2.59	pCi/g
AAA1750	49-2001	0	0.5	ALLH	Cadmium	1.1	mg/kg	—	0.4	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Uranium	1.9	mg/kg	—	—	—
AAA1750	49-2001	0	0.5	ALLH	Thorium-232	2.24	pCi/g	U	2.33	pCi/g
AAA1750	49-2001	0	0.5	ALLH	Americium-241	2.63	pCi/g	U	0.013	pCi/g
AAA1750	49-2001	0	0.5	ALLH	Chromium, Total	4.1	mg/kg	—	19.3	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Nickel	5.1	mg/kg	—	15.4	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Lead	6.7	mg/kg	—	22.3	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1750	49-2001	0	0.5	ALLH	Potassium-40	28.791	pCi/g	—	36.8	pCi/g
AAA1750	49-2001	0	0.5	ALLH	Barium	58.4	mg/kg	—	295	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Plutonium-239	0.08	pCi/g	—	0.054	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Beryllium	0.28	mg/kg	—	1.83	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Cesium-137	0.354	pCi/g	U	1.65	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Cadmium	0.99	mg/kg	—	0.4	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Arsenic	1.2	mg/kg	—	8.17	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Uranium	1.7	mg/kg	—	—	—
AAA1751	49-2004	0	0.5	ALLH	Radium-226	1.798	pCi/g	—	2.59	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Americium-241	2.3	pCi/g	U	0.013	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Thorium-232	3.172	pCi/g	—	2.33	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Chromium, Total	3.6	mg/kg	—	19.3	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Nickel	5.2	mg/kg	—	15.4	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Lead	7.7	mg/kg	—	22.3	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1751	49-2004	0	0.5	ALLH	Potassium-40	31.327	pCi/g	—	36.8	pCi/g
AAA1751	49-2004	0	0.5	ALLH	Barium	45.5	mg/kg	—	295	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Plutonium-238	0.013	pCi/g	U	0.023	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Cesium-137	0.466	pCi/g	U	1.65	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Beryllium	0.53	mg/kg	—	1.83	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1752	49-2006	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Plutonium-239	0.736	pCi/g	—	0.054	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Cadmium	1.1	mg/kg	—	0.4	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Radium-226	1.362	pCi/g	U	2.59	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Arsenic	1.5	mg/kg	—	8.17	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Thorium-232	1.988	pCi/g	U	2.33	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Americium-241	2.35	pCi/g	U	0.013	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Uranium	3.2	mg/kg	—	—	—
AAA1752	49-2006	0	0.5	ALLH	Chromium, Total	5.8	mg/kg	—	19.3	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Nickel	6.4	mg/kg	—	15.4	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Lead	9.5	mg/kg	—	22.3	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1752	49-2006	0	0.5	ALLH	Potassium-40	29.654	pCi/g	—	36.8	pCi/g
AAA1752	49-2006	0	0.5	ALLH	Barium	105	mg/kg	—	295	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Plutonium-238	0.005	pCi/g	U	0.023	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Plutonium-239	0.041	pCi/g	—	0.054	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Cesium-137	0.324	pCi/g	U	1.65	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Beryllium	0.33	mg/kg	—	1.83	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Cadmium	0.84	mg/kg	—	0.4	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Arsenic	1.1	mg/kg	—	8.17	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Uranium	1.6	mg/kg	—	—	—
AAA1753	49-2007	0	0.5	ALLH	Radium-226	2.022	pCi/g	—	2.59	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Thorium-232	2.526	pCi/g	—	2.33	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Americium-241	2.72	pCi/g	U	0.013	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Chromium, Total	4.2	mg/kg	—	19.3	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Nickel	5.8	mg/kg	—	15.4	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Lead	6.4	mg/kg	—	22.3	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1753	49-2007	0	0.5	ALLH	Potassium-40	33.503	pCi/g	—	36.8	pCi/g
AAA1753	49-2007	0	0.5	ALLH	Barium	50.8	mg/kg	—	295	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1754	49-2007	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Plutonium-239	0.03	pCi/g	—	0.054	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1754	49-2007	0	0.5	ALLH	Beryllium	0.3	mg/kg	—	1.83	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Cesium-137	0.452	pCi/g	U	1.65	pCi/g
AAA1754	49-2007	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Cadmium	1	mg/kg	—	0.4	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Radium-226	1.4	pCi/g	U	2.59	pCi/g
AAA1754	49-2007	0	0.5	ALLH	Arsenic	1.5	mg/kg	—	8.17	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Uranium	1.6	mg/kg	—	—	—
AAA1754	49-2007	0	0.5	ALLH	Americium-241	1.92	pCi/g	U	0.013	pCi/g
AAA1754	49-2007	0	0.5	ALLH	Thorium-232	2.541	pCi/g	U	2.33	pCi/g
AAA1754	49-2007	0	0.5	ALLH	Chromium, Total	3.9	mg/kg	—	19.3	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Nickel	5.3	mg/kg	—	15.4	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Lead	6.8	mg/kg	—	22.3	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1754	49-2007	0	0.5	ALLH	Potassium-40	37.716	pCi/g	—	36.8	pCi/g
AAA1754	49-2007	0	0.5	ALLH	Barium	49.9	mg/kg	—	295	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Plutonium-238	0.017	pCi/g	—	0.023	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Beryllium	0.47	mg/kg	—	1.83	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Cesium-137	0.756	pCi/g	U	1.65	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Plutonium-239	0.773	pCi/g	—	0.054	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Cadmium	0.85	mg/kg	—	0.4	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Radium-226	1.646	pCi/g	—	2.59	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Uranium	2.5	mg/kg	—	—	—
AAA1755	49-2008	0	0.5	ALLH	Thorium-232	2.86	pCi/g	U	2.33	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Lead	3.6	mg/kg	—	22.3	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Americium-241	3.66	pCi/g	U	0.013	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Chromium, Total	5.1	mg/kg	—	19.3	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Nickel	5.1	mg/kg	—	15.4	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1755	49-2008	0	0.5	ALLH	Potassium-40	44.18	pCi/g	—	36.8	pCi/g
AAA1755	49-2008	0	0.5	ALLH	Barium	47	mg/kg	—	295	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Plutonium-238	0.017	pCi/g	—	0.023	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1756	49-2009	0	0.5	ALLH	Beryllium	0.3	mg/kg	—	1.83	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Cesium-137	0.539	pCi/g	U	1.65	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Plutonium-239	0.699	pCi/g	—	0.054	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Arsenic	1.5	mg/kg	—	8.17	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Thorium-232	1.557	pCi/g	U	2.33	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Radium-226	2.17	pCi/g	—	2.59	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Uranium	2.2	mg/kg	—	—	—
AAA1756	49-2009	0	0.5	ALLH	Americium-241	3.19	pCi/g	U	0.013	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Nickel	4.6	mg/kg	—	15.4	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Chromium, Total	5.6	mg/kg	—	19.3	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Lead	6	mg/kg	—	22.3	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1756	49-2009	0	0.5	ALLH	Potassium-40	29.857	pCi/g	—	36.8	pCi/g
AAA1756	49-2009	0	0.5	ALLH	Barium	86.1	mg/kg	—	295	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Plutonium-238	0.007	pCi/g	U	0.023	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Plutonium-239	0.306	pCi/g	—	0.054	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Beryllium	0.5	mg/kg	—	1.83	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Cesium-137	0.868	pCi/g	U	1.65	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Cadmium	1.1	mg/kg	—	0.4	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Radium-226	1.491	pCi/g	U	2.59	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Thorium-232	2.095	pCi/g	U	2.33	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Americium-241	2.61	pCi/g	U	0.013	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Uranium	2.9	mg/kg	—	—	—
AAA1757	49-2010	0	0.5	ALLH	Chromium, Total	5.4	mg/kg	—	19.3	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Nickel	6.1	mg/kg	—	15.4	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Lead	7.9	mg/kg	—	22.3	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1757	49-2010	0	0.5	ALLH	Potassium-40	26.697	pCi/g	—	36.8	pCi/g
AAA1757	49-2010	0	0.5	ALLH	Barium	77.2	mg/kg	—	295	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Plutonium-238	0.005	pCi/g	—	0.023	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1758	49-2012	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Plutonium-239	0.097	pCi/g	—	0.054	pCi/g
AAA1758	49-2012	0	0.5	ALLH	Beryllium	0.35	mg/kg	—	1.83	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Cesium-137	0.475	pCi/g	U	1.65	pCi/g
AAA1758	49-2012	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Radium-226	1.056	pCi/g	U	2.59	pCi/g
AAA1758	49-2012	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Arsenic	1.5	mg/kg	—	8.17	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Uranium	1.8	mg/kg	—	—	—
AAA1758	49-2012	0	0.5	ALLH	Americium-241	2.38	pCi/g	U	0.013	pCi/g
AAA1758	49-2012	0	0.5	ALLH	Thorium-232	2.402	pCi/g	U	2.33	pCi/g
AAA1758	49-2012	0	0.5	ALLH	Chromium, Total	2.6	mg/kg	—	19.3	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Nickel	4	mg/kg	—	15.4	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Lead	6.7	mg/kg	—	22.3	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1758	49-2012	0	0.5	ALLH	Potassium-40	31.22	pCi/g	—	36.8	pCi/g
AAA1758	49-2012	0	0.5	ALLH	Barium	46.2	mg/kg	—	295	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Plutonium-238	0.005	pCi/g	U	0.023	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Plutonium-239	0.108	pCi/g	—	0.054	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Beryllium	0.58	mg/kg	—	1.83	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Beryllium	0.63	mg/kg	—	1.83	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Cadmium	0.87	mg/kg	—	0.4	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Cesium-137	0.937	pCi/g	—	1.65	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Arsenic	1.7	mg/kg	—	8.17	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Arsenic	2.2	mg/kg	—	8.17	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Radium-226	2.662	pCi/g	—	2.59	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Americium-241	2.83	pCi/g	U	0.013	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Uranium	3.6	mg/kg	—	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1759	49-2014	0	0.5	ALLH	Thorium-232	3.81	pCi/g	U	2.33	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Nickel	4.7	mg/kg	—	15.4	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Nickel	5	mg/kg	—	15.4	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Chromium, Total	5.4	mg/kg	—	19.3	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Chromium, Total	6	mg/kg	—	19.3	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Lead	9.3	mg/kg	—	22.3	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Lead	11.3	mg/kg	—	22.3	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Potassium-40	29.508	pCi/g	—	36.8	pCi/g
AAA1759	49-2014	0	0.5	ALLH	Barium	113	mg/kg	—	295	mg/kg
AAA1759	49-2014	0	0.5	ALLH	Barium	118	mg/kg	—	295	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	—	0.023	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Plutonium-239	0.021	pCi/g	—	0.054	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Beryllium	0.37	mg/kg	—	1.83	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Arsenic	0.6	mg/kg	U	8.17	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Cesium-137	0.725	pCi/g	U	1.65	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Radium-226	1.86	pCi/g	U	2.59	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Uranium	2.5	mg/kg	—	—	—
AAA1760	49-2016	0	0.5	ALLH	Chromium, Total	2.9	mg/kg	—	19.3	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Americium-241	3.34	pCi/g	U	0.013	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Thorium-232	3.922	pCi/g	—	2.33	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Lead	5.2	mg/kg	—	22.3	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Nickel	6.9	mg/kg	—	15.4	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1760	49-2016	0	0.5	ALLH	Potassium-40	30.805	pCi/g	—	36.8	pCi/g
AAA1760	49-2016	0	0.5	ALLH	Barium	58.5	mg/kg	—	295	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Plutonium-238	0.006	pCi/g	U	0.023	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Plutonium-239	0.324	pCi/g	—	0.054	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Beryllium	0.53	mg/kg	—	1.83	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Cesium-137	0.557	pCi/g	U	1.65	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Cadmium	0.81	mg/kg	—	0.4	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1761	49-2018	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Arsenic	1.5	mg/kg	—	8.17	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Thorium-232	2.25	pCi/g	U	2.33	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Uranium	2.8	mg/kg	—	—	—
AAA1761	49-2018	0	0.5	ALLH	Americium-241	2.8	pCi/g	U	0.013	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Radium-226	2.983	pCi/g	—	2.59	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Chromium, Total	5.7	mg/kg	—	19.3	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Nickel	6.8	mg/kg	—	15.4	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Lead	11.6	mg/kg	—	22.3	mg/kg
AAA1761	49-2018	0	0.5	ALLH	Potassium-40	24.285	pCi/g	—	36.8	pCi/g
AAA1761	49-2018	0	0.5	ALLH	Barium	105	mg/kg	—	295	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	U	0.023	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Plutonium-239	0.002	pCi/g	U	0.054	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Plutonium-238	0.011	pCi/g	U	0.023	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Plutonium-239	0.014	pCi/g	—	0.054	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Beryllium	0.38	mg/kg	—	1.83	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Cesium-137	0.571	pCi/g	U	1.65	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Arsenic	0.82	mg/kg	—	8.17	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Radium-226	1.49	pCi/g	U	2.59	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Uranium	1.8	mg/kg	—	—	—
AAA1762	49-2020	0	0.5	ALLH	Thorium-232	2.888	pCi/g	—	2.33	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Americium-241	3.18	pCi/g	U	0.013	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Chromium, Total	3.9	mg/kg	—	19.3	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Nickel	4	mg/kg	—	15.4	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Lead	8.9	mg/kg	—	22.3	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1762	49-2020	0	0.5	ALLH	Potassium-40	25.281	pCi/g	—	36.8	pCi/g
AAA1762	49-2020	0	0.5	ALLH	Barium	61.9	mg/kg	—	295	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	U	0.023	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Plutonium-239	0.01	pCi/g	U	0.054	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Beryllium	0.33	mg/kg	—	1.83	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1763	49-2020	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Cesium-137	0.7066	pCi/g	U	1.65	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Cadmium	0.9	mg/kg	—	0.4	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Arsenic	1.4	mg/kg	—	8.17	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Americium-241	1.4	pCi/g	U	0.013	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Radium-226	1.467	pCi/g	U	2.59	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Thorium-232	1.99	pCi/g	U	2.33	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Uranium	2	mg/kg	—	—	—
AAA1763	49-2020	0	0.5	ALLH	Chromium, Total	3.3	mg/kg	—	19.3	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Nickel	3.7	mg/kg	—	15.4	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Lead	8.4	mg/kg	—	22.3	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1763	49-2020	0	0.5	ALLH	Potassium-40	22.385	pCi/g	—	36.8	pCi/g
AAA1763	49-2020	0	0.5	ALLH	Barium	68.5	mg/kg	—	295	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Plutonium-238	0.004	pCi/g	U	0.023	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Plutonium-239	0.019	pCi/g	U	0.054	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Cesium-137	0.119	pCi/g	U	1.65	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Beryllium	0.3	mg/kg	—	1.83	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Cadmium	0.82	mg/kg	—	0.4	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Radium-226	1.27	pCi/g	U	2.59	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Uranium	2	mg/kg	—	—	—
AAA1764	49-2022	0	0.5	ALLH	Americium-241	2.24	pCi/g	U	0.013	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Thorium-232	2.816	pCi/g	—	2.33	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Chromium, Total	3.3	mg/kg	—	19.3	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Nickel	5.2	mg/kg	—	15.4	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Lead	8.4	mg/kg	—	22.3	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1764	49-2022	0	0.5	ALLH	Potassium-40	27.491	pCi/g	—	36.8	pCi/g
AAA1764	49-2022	0	0.5	ALLH	Barium	60.1	mg/kg	—	295	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	U	0.023	pCi/g
AAA1765	49-2024	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Plutonium-239	0.044	pCi/g	—	0.054	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1765	49-2024	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Cesium-137	0.639	pCi/g	U	1.65	pCi/g
AAA1765	49-2024	0	0.5	ALLH	Beryllium	0.73	mg/kg	—	1.83	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Arsenic	1.2	mg/kg	—	8.17	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Americium-241	1.75	pCi/g	U	0.013	pCi/g
AAA1765	49-2024	0	0.5	ALLH	Uranium	1.8	mg/kg	—	—	—
AAA1765	49-2024	0	0.5	ALLH	Thorium-232	2.32	pCi/g	U	2.33	pCi/g
AAA1765	49-2024	0	0.5	ALLH	Radium-226	3.34	pCi/g	—	2.59	pCi/g
AAA1765	49-2024	0	0.5	ALLH	Nickel	4.6	mg/kg	—	15.4	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Chromium, Total	5.7	mg/kg	—	19.3	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Lead	11	mg/kg	—	22.3	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1765	49-2024	0	0.5	ALLH	Potassium-40	35.172	pCi/g	—	36.8	pCi/g
AAA1765	49-2024	0	0.5	ALLH	Barium	89.5	mg/kg	—	295	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Plutonium-238	0.013	pCi/g	—	0.023	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Cesium-137	0.548	pCi/g	U	1.65	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Plutonium-239	0.681	pCi/g	—	0.054	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Beryllium	0.69	mg/kg	—	1.83	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Arsenic	1.2	mg/kg	—	8.17	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Uranium	1.7	mg/kg	—	—	—
AAA1766	49-2025	0	0.5	ALLH	Thorium-232	1.948	pCi/g	U	2.33	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Radium-226	2.854	pCi/g	—	2.59	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Americium-241	4.45	pCi/g	U	0.013	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Nickel	5.3	mg/kg	—	15.4	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Chromium, Total	5.6	mg/kg	—	19.3	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Lead	8.7	mg/kg	—	22.3	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1766	49-2025	0	0.5	ALLH	Potassium-40	32.497	pCi/g	—	36.8	pCi/g
AAA1766	49-2025	0	0.5	ALLH	Barium	80.8	mg/kg	—	295	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Plutonium-238	0.009	pCi/g	U	0.023	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1767	49-2026	0	0.5	ALLH	Plutonium-239	0.331	pCi/g	—	0.054	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Beryllium	0.59	mg/kg	—	1.83	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Cesium-137	0.612	pCi/g	U	1.65	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Arsenic	1	mg/kg	—	8.17	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Uranium	1.4	mg/kg	—	—	—
AAA1767	49-2026	0	0.5	ALLH	Americium-241	1.86	pCi/g	U	0.013	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Radium-226	2.748	pCi/g	—	2.59	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Nickel	3.7	mg/kg	—	15.4	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Thorium-232	3.82	pCi/g	—	2.33	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Chromium, Total	4.2	mg/kg	—	19.3	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Lead	8.2	mg/kg	—	22.3	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1767	49-2026	0	0.5	ALLH	Potassium-40	41.481	pCi/g	—	36.8	pCi/g
AAA1767	49-2026	0	0.5	ALLH	Barium	82.3	mg/kg	—	295	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Plutonium-238	0.005	pCi/g	U	0.023	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Plutonium-239	0.044	pCi/g	—	0.054	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Beryllium	0.3	mg/kg	—	1.83	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Cesium-137	1.027	pCi/g	—	1.65	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Americium-241	1.24	pCi/g	U	0.013	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Arsenic	1.6	mg/kg	—	8.17	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Radium-226	1.814	pCi/g	—	2.59	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Uranium	2.1	mg/kg	—	—	—
AAA1768	49-2028	0	0.5	ALLH	Thorium-232	2.67	pCi/g	—	2.33	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Chromium, Total	2.8	mg/kg	—	19.3	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Nickel	4.2	mg/kg	—	15.4	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Lead	7.6	mg/kg	—	22.3	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1768	49-2028	0	0.5	ALLH	Potassium-40	22.339	pCi/g	—	36.8	pCi/g
AAA1768	49-2028	0	0.5	ALLH	Barium	45.4	mg/kg	—	295	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Plutonium-238	0.012	pCi/g	U	0.023	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1769	49-2030	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Cesium-137	0.418	pCi/g	U	1.65	pCi/g
AAA1769	49-2030	0	0.5	ALLH	Beryllium	0.5	mg/kg	—	1.83	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Plutonium-239	0.501	pCi/g	—	0.054	pCi/g
AAA1769	49-2030	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Radium-226	1.127	pCi/g	U	2.59	pCi/g
AAA1769	49-2030	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Uranium	1.8	mg/kg	—	—	—
AAA1769	49-2030	0	0.5	ALLH	Americium-241	2.22	pCi/g	U	0.013	pCi/g
AAA1769	49-2030	0	0.5	ALLH	Thorium-232	3.457	pCi/g	—	2.33	pCi/g
AAA1769	49-2030	0	0.5	ALLH	Nickel	4.9	mg/kg	—	15.4	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Chromium, Total	6.8	mg/kg	—	19.3	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Lead	7	mg/kg	—	22.3	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1769	49-2030	0	0.5	ALLH	Potassium-40	17.565	pCi/g	—	36.8	pCi/g
AAA1769	49-2030	0	0.5	ALLH	Barium	140	mg/kg	—	295	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	U	0.023	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Plutonium-239	0.013	pCi/g	—	0.054	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Cesium-137	0.511	pCi/g	U	1.65	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Beryllium	0.72	mg/kg	—	1.83	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Radium-226	1.52	pCi/g	U	2.59	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Americium-241	1.95	pCi/g	U	0.013	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Thorium-232	2.01	pCi/g	U	2.33	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Uranium	2.1	mg/kg	—	—	—
AAA1770	49-2032	0	0.5	ALLH	Nickel	5.9	mg/kg	—	15.4	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Chromium, Total	6	mg/kg	—	19.3	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Lead	13.1	mg/kg	—	22.3	mg/kg
AAA1770	49-2032	0	0.5	ALLH	Potassium-40	30.412	pCi/g	—	36.8	pCi/g
AAA1770	49-2032	0	0.5	ALLH	Barium	119	mg/kg	—	295	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1771	49-2032	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	U	0.023	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Plutonium-239	0.016	pCi/g	—	0.054	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Mercury	0.02	mg/kg	—	0.1	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Cesium-137	0.524	pCi/g	U	1.65	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Beryllium	0.75	mg/kg	—	1.83	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Cadmium	1.3	mg/kg	—	0.4	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Arsenic	1.4	mg/kg	—	8.17	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Radium-226	1.95	pCi/g	—	2.59	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Americium-241	2.4	pCi/g	U	0.013	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Thorium-232	2.466	pCi/g	U	2.33	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Uranium	2.6	mg/kg	—	—	—
AAA1771	49-2032	0	0.5	ALLH	Chromium, Total	6.7	mg/kg	—	19.3	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Nickel	8.7	mg/kg	—	15.4	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Lead	10.3	mg/kg	—	22.3	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1771	49-2032	0	0.5	ALLH	Potassium-40	34.064	pCi/g	—	36.8	pCi/g
AAA1771	49-2032	0	0.5	ALLH	Barium	121	mg/kg	—	295	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Plutonium-238	0.007	pCi/g	U	0.023	pCi/g
AAA1772	49-2034	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Plutonium-239	0.159	pCi/g	—	0.054	pCi/g
AAA1772	49-2034	0	0.5	ALLH	Cesium-137	0.537	pCi/g	U	1.65	pCi/g
AAA1772	49-2034	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Beryllium	0.72	mg/kg	—	1.83	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Cadmium	1	mg/kg	—	0.4	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Arsenic	1.4	mg/kg	—	8.17	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Radium-226	1.53	pCi/g	—	2.59	pCi/g
AAA1772	49-2034	0	0.5	ALLH	Uranium	2.1	mg/kg	—	—	—
AAA1772	49-2034	0	0.5	ALLH	Thorium-232	2.79	pCi/g	U	2.33	pCi/g
AAA1772	49-2034	0	0.5	ALLH	Americium-241	4.24	pCi/g	U	0.013	pCi/g
AAA1772	49-2034	0	0.5	ALLH	Chromium, Total	5.8	mg/kg	—	19.3	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Nickel	8.4	mg/kg	—	15.4	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Lead	9.8	mg/kg	—	22.3	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1772	49-2034	0	0.5	ALLH	Potassium-40	26.059	pCi/g	—	36.8	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1772	49-2034	0	0.5	ALLH	Barium	115	mg/kg	—	295	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	U	0.023	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Plutonium-239	0.051	pCi/g	—	0.054	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Beryllium	0.57	mg/kg	—	1.83	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Cesium-137	0.619	pCi/g	U	1.65	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Uranium	1.7	mg/kg	—	—	—
AAA1773	49-2037	0	0.5	ALLH	Arsenic	2.2	mg/kg	—	8.17	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Thorium-232	2.418	pCi/g	U	2.33	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Radium-226	2.617	pCi/g	—	2.59	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Americium-241	2.73	pCi/g	U	0.013	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Nickel	3.2	mg/kg	—	15.4	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Chromium, Total	4.9	mg/kg	—	19.3	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Lead	7.2	mg/kg	—	22.3	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1773	49-2037	0	0.5	ALLH	Potassium-40	29.635	pCi/g	—	36.8	pCi/g
AAA1773	49-2037	0	0.5	ALLH	Barium	87.9	mg/kg	—	295	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	U	0.023	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Plutonium-239	0.03	pCi/g	—	0.054	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Cesium-137	0.441	pCi/g	U	1.65	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Beryllium	0.56	mg/kg	—	1.83	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Arsenic	1	mg/kg	—	8.17	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Uranium	1.5	mg/kg	—	—	—
AAA1774	49-2037	0	0.5	ALLH	Radium-226	1.56	pCi/g	U	2.59	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Americium-241	3.08	pCi/g	U	0.013	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Thorium-232	3.38	pCi/g	U	2.33	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Nickel	4.3	mg/kg	—	15.4	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Chromium, Total	4.8	mg/kg	—	19.3	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Lead	9.6	mg/kg	—	22.3	mg/kg
AAA1774	49-2037	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1774	49-2037	0	0.5	ALLH	Potassium-40	37.532	pCi/g	—	36.8	pCi/g
AAA1774	49-2037	0	0.5	ALLH	Barium	88.2	mg/kg	—	295	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Plutonium-238	0.003	pCi/g	U	0.023	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Plutonium-239	0.003	pCi/g	U	0.054	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Plutonium-238	0.036	pCi/g	—	0.023	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Plutonium-239	0.037	pCi/g	—	0.054	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Beryllium	0.45	mg/kg	—	1.83	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Arsenic	0.6	mg/kg	U	8.17	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Cesium-137	1.021	pCi/g	—	1.65	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Uranium	1.4	mg/kg	—	—	—
AAA1775	49-2041	0	0.5	ALLH	Radium-226	1.526	pCi/g	U	2.59	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Americium-241	1.99	pCi/g	U	0.013	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Thorium-232	2.539	pCi/g	—	2.33	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Nickel	2.8	mg/kg	U	15.4	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Chromium, Total	3.7	mg/kg	—	19.3	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Lead	13.2	mg/kg	—	22.3	mg/kg
AAA1775	49-2041	0	0.5	ALLH	Potassium-40	31.172	pCi/g	—	36.8	pCi/g
AAA1775	49-2041	0	0.5	ALLH	Barium	52.6	mg/kg	—	295	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Plutonium-238	0.002	pCi/g	U	0.023	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Plutonium-239	0.049	pCi/g	—	0.054	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Beryllium	0.47	mg/kg	—	1.83	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Cesium-137	0.804	pCi/g	—	1.65	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Arsenic	1.1	mg/kg	—	8.17	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Americium-241	1.35	pCi/g	U	0.013	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Radium-226	1.53	pCi/g	U	2.59	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Uranium	1.6	mg/kg	—	—	—
AAA1776	49-2043	0	0.5	ALLH	Thorium-232	2.18	pCi/g	U	2.33	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Nickel	3.6	mg/kg	—	15.4	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1776	49-2043	0	0.5	ALLH	Chromium, Total	4.6	mg/kg	—	19.3	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Lead	7.9	mg/kg	—	22.3	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1776	49-2043	0	0.5	ALLH	Potassium-40	33.901	pCi/g	—	36.8	pCi/g
AAA1776	49-2043	0	0.5	ALLH	Barium	51.8	mg/kg	—	295	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Plutonium-238	0.009	pCi/g	U	0.023	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Mercury	0.02	mg/kg	—	0.1	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Plutonium-239	0.384	pCi/g	—	0.054	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Beryllium	0.55	mg/kg	—	1.83	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Cesium-137	1.135	pCi/g	—	1.65	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Radium-226	1.46	pCi/g	U	2.59	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Uranium	1.7	mg/kg	—	—	—
AAA1777	49-2046	0	0.5	ALLH	Arsenic	1.8	mg/kg	—	8.17	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Americium-241	2.59	pCi/g	U	0.013	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Thorium-232	3.374	pCi/g	—	2.33	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Chromium, Total	5.8	mg/kg	—	19.3	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Nickel	7.8	mg/kg	—	15.4	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Lead	21.5	mg/kg	—	22.3	mg/kg
AAA1777	49-2046	0	0.5	ALLH	Potassium-40	26.183	pCi/g	—	36.8	pCi/g
AAA1777	49-2046	0	0.5	ALLH	Barium	66.3	mg/kg	—	295	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Plutonium-238	0.017	pCi/g	—	0.023	pCi/g
AAA1778	49-2046	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Cesium-137	0.475	pCi/g	U	1.65	pCi/g
AAA1778	49-2046	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Beryllium	0.68	mg/kg	—	1.83	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Plutonium-239	0.772	pCi/g	—	0.054	pCi/g
AAA1778	49-2046	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Arsenic	1.2	mg/kg	—	8.17	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Radium-226	1.58	pCi/g	U	2.59	pCi/g
AAA1778	49-2046	0	0.5	ALLH	Uranium	1.7	mg/kg	—	—	—
AAA1778	49-2046	0	0.5	ALLH	Americium-241	3.27	pCi/g	U	0.013	pCi/g
AAA1778	49-2046	0	0.5	ALLH	Thorium-232	3.833	pCi/g	—	2.33	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1778	49-2046	0	0.5	ALLH	Chromium, Total	4.9	mg/kg	—	19.3	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Nickel	6.3	mg/kg	—	15.4	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Lead	10.4	mg/kg	—	22.3	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1778	49-2046	0	0.5	ALLH	Potassium-40	35.508	pCi/g	—	36.8	pCi/g
AAA1778	49-2046	0	0.5	ALLH	Barium	56.3	mg/kg	—	295	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Mercury	0.03	mg/kg	—	0.1	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Plutonium-238	0.053	pCi/g	—	0.023	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Beryllium	0.36	mg/kg	—	1.83	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Beryllium	0.39	mg/kg	—	1.83	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Cesium-137	0.658	pCi/g	U	1.65	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Arsenic	0.86	mg/kg	—	8.17	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Arsenic	1.24	mg/kg	—	8.17	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Radium-226	2.826	pCi/g	—	2.59	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Plutonium-239	3.007	pCi/g	—	0.054	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Uranium	3.1	mg/kg	—	—	—
AAA1779	49-2050	0	0.5	ALLH	Americium-241	3.78	pCi/g	U	0.013	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Thorium-232	4.438	pCi/g	—	2.33	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Chromium, Total	4.6	mg/kg	—	19.3	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Nickel	5.5	mg/kg	—	15.4	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Chromium, Total	5.7	mg/kg	—	19.3	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Lead	6.1	mg/kg	—	22.3	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Nickel	6.2	mg/kg	—	15.4	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Lead	6.7	mg/kg	—	22.3	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Potassium-40	41.982	pCi/g	—	36.8	pCi/g
AAA1779	49-2050	0	0.5	ALLH	Barium	76	mg/kg	—	295	mg/kg
AAA1779	49-2050	0	0.5	ALLH	Barium	77.8	mg/kg	—	295	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1780	49-2050	0	0.5	ALLH	Plutonium-238	0.052	pCi/g	—	0.023	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Beryllium	0.35	mg/kg	—	1.83	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Cesium-137	0.625	pCi/g	U	1.65	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Arsenic	1.1	mg/kg	—	8.17	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Radium-226	1.878	pCi/g	—	2.59	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Thorium-232	2.52	pCi/g	U	2.33	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Plutonium-239	2.748	pCi/g	—	0.054	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Uranium	2.8	mg/kg	—	—	—
AAA1780	49-2050	0	0.5	ALLH	Americium-241	2.995	pCi/g	U	0.013	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Nickel	3.4	mg/kg	—	15.4	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Chromium, Total	5	mg/kg	—	19.3	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Lead	6.1	mg/kg	—	22.3	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1780	49-2050	0	0.5	ALLH	Potassium-40	40.543	pCi/g	—	36.8	pCi/g
AAA1780	49-2050	0	0.5	ALLH	Barium	75.6	mg/kg	—	295	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Mercury	0.02	mg/kg	—	0.1	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Plutonium-238	0.054	pCi/g	—	0.023	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Beryllium	0.65	mg/kg	—	1.83	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Cesium-137	1.245	pCi/g	—	1.65	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Cadmium	1.3	mg/kg	—	0.4	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Arsenic	1.5	mg/kg	—	8.17	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Radium-226	1.94	pCi/g	U	2.59	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Thorium-232	2.55	pCi/g	U	2.33	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Plutonium-239	3.079	pCi/g	—	0.054	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Americium-241	3.36	pCi/g	U	0.013	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Uranium	4.1	mg/kg	—	—	—
AAA1781	49-2051	0	0.5	ALLH	Chromium, Total	6.3	mg/kg	—	19.3	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Nickel	7.5	mg/kg	—	15.4	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Lead	11.5	mg/kg	—	22.3	mg/kg
AAA1781	49-2051	0	0.5	ALLH	Potassium-40	31.094	pCi/g	—	36.8	pCi/g
AAA1781	49-2051	0	0.5	ALLH	Barium	142	mg/kg	—	295	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1782	49-2052	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Plutonium-238	0.249	pCi/g	—	0.023	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Beryllium	0.43	mg/kg	—	1.83	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Arsenic	0.81	mg/kg	—	8.17	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Cadmium	0.81	mg/kg	—	0.4	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Cesium-137	1.299	pCi/g	—	1.65	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Radium-226	1.519	pCi/g	U	2.59	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Thorium-232	2.47	pCi/g	U	2.33	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Uranium	3.1	mg/kg	—	—	—
AAA1782	49-2052	0	0.5	ALLH	Americium-241	3.33	pCi/g	U	0.013	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Chromium, Total	5.6	mg/kg	—	19.3	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Nickel	5.7	mg/kg	—	15.4	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Lead	12.6	mg/kg	—	22.3	mg/kg
AAA1782	49-2052	0	0.5	ALLH	Plutonium-239	13.723	pCi/g	—	0.054	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Potassium-40	36.501	pCi/g	—	36.8	pCi/g
AAA1782	49-2052	0	0.5	ALLH	Barium	103	mg/kg	—	295	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Plutonium-238	0.013	pCi/g	—	0.023	pCi/g
AAA1783	49-2054	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Beryllium	0.31	mg/kg	—	1.83	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Plutonium-239	0.492	pCi/g	—	0.054	pCi/g
AAA1783	49-2054	0	0.5	ALLH	Cesium-137	0.545	pCi/g	U	1.65	pCi/g
AAA1783	49-2054	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Cadmium	0.89	mg/kg	—	0.4	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Arsenic	0.94	mg/kg	—	8.17	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Radium-226	1.869	pCi/g	—	2.59	pCi/g
AAA1783	49-2054	0	0.5	ALLH	Thorium-232	2.518	pCi/g	U	2.33	pCi/g
AAA1783	49-2054	0	0.5	ALLH	Americium-241	2.66	pCi/g	U	0.013	pCi/g
AAA1783	49-2054	0	0.5	ALLH	Uranium	2.7	mg/kg	—	—	—
AAA1783	49-2054	0	0.5	ALLH	Chromium, Total	3.6	mg/kg	—	19.3	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Nickel	3.6	mg/kg	—	15.4	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Lead	5.9	mg/kg	—	22.3	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1783	49-2054	0	0.5	ALLH	Potassium-40	36.454	pCi/g	—	36.8	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1783	49-2054	0	0.5	ALLH	Barium	76.3	mg/kg	—	295	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Plutonium-238	0.01	pCi/g	U	0.023	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Mercury	0.02	mg/kg	—	0.1	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Plutonium-239	0.261	pCi/g	—	0.054	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Cesium-137	0.639	pCi/g	U	1.65	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Beryllium	0.86	mg/kg	—	1.83	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Cadmium	1	mg/kg	—	0.4	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Arsenic	1.2	mg/kg	—	8.17	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Americium-241	2.02	pCi/g	U	0.013	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Uranium	2.5	mg/kg	—	—	—
AAA1784	49-2055	0	0.5	ALLH	Thorium-232	2.56	pCi/g	U	2.33	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Radium-226	3.463	pCi/g	—	2.59	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Nickel	6.4	mg/kg	—	15.4	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Chromium, Total	7.1	mg/kg	—	19.3	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Lead	10.1	mg/kg	—	22.3	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1784	49-2055	0	0.5	ALLH	Potassium-40	21.093	pCi/g	—	36.8	pCi/g
AAA1784	49-2055	0	0.5	ALLH	Barium	115	mg/kg	—	295	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Plutonium-238	0.005	pCi/g	U	0.023	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Plutonium-238	0.011	pCi/g	—	0.023	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Plutonium-239	0.178	pCi/g	—	0.054	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Plutonium-239	0.369	pCi/g	—	0.054	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Beryllium	0.54	mg/kg	—	1.83	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Cadmium	1	mg/kg	—	0.4	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Cesium-137	1.151	pCi/g	—	1.65	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Arsenic	1.2	mg/kg	—	8.17	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Americium-241	2.21	pCi/g	U	0.013	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Thorium-232	2.32	pCi/g	U	2.33	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Radium-226	3.288	pCi/g	—	2.59	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Nickel	3.7	mg/kg	—	15.4	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Uranium	4.6	mg/kg	—	—	—
AAA1785	49-2056	0	0.5	ALLH	Chromium, Total	6.6	mg/kg	—	19.3	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1785	49-2056	0	0.5	ALLH	Lead	10.8	mg/kg	—	22.3	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1785	49-2056	0	0.5	ALLH	Potassium-40	23.817	pCi/g	—	36.8	pCi/g
AAA1785	49-2056	0	0.5	ALLH	Barium	111	mg/kg	—	295	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Plutonium-238	0.004	pCi/g	U	0.023	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Plutonium-239	0.082	pCi/g	—	0.054	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Cesium-137	0.503	pCi/g	U	1.65	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Beryllium	0.59	mg/kg	—	1.83	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Cadmium	0.89	mg/kg	—	0.4	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Arsenic	1.1	mg/kg	—	8.17	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Americium-241	1.48	pCi/g	U	0.013	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Radium-226	2.182	pCi/g	—	2.59	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Uranium	2.8	mg/kg	—	—	—
AAA1786	49-2058	0	0.5	ALLH	Thorium-232	3.375	pCi/g	—	2.33	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Nickel	5.8	mg/kg	—	15.4	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Chromium, Total	7.6	mg/kg	—	19.3	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Lead	8.1	mg/kg	—	22.3	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1786	49-2058	0	0.5	ALLH	Potassium-40	34.819	pCi/g	—	36.8	pCi/g
AAA1786	49-2058	0	0.5	ALLH	Barium	103	mg/kg	—	295	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Plutonium-238	0.028	pCi/g	—	0.023	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Mercury	0.03	mg/kg	—	0.1	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Beryllium	0.7	mg/kg	—	1.83	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Cadmium	1.2	mg/kg	—	0.4	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Cesium-137	1.276	pCi/g	—	1.65	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Plutonium-239	1.304	pCi/g	—	0.054	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Potassium-40	2.963	pCi/g	U	36.8	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Thorium-232	3.048	pCi/g	U	2.33	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Radium-226	3.271	pCi/g	—	2.59	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Arsenic	3.5	mg/kg	—	8.17	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Americium-241	3.69	pCi/g	U	0.013	pCi/g
AAA1787	49-2060	0	0.5	ALLH	Uranium	4.8	mg/kg	—	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1787	49-2060	0	0.5	ALLH	Nickel	6.2	mg/kg	—	15.4	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Chromium, Total	7.5	mg/kg	—	19.3	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Lead	16.5	mg/kg	—	22.3	mg/kg
AAA1787	49-2060	0	0.5	ALLH	Barium	171	mg/kg	—	295	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Plutonium-238	0.011	pCi/g	—	0.023	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Plutonium-239	0.454	pCi/g	—	0.054	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Beryllium	0.52	mg/kg	—	1.83	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Cadmium	0.85	mg/kg	—	0.4	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Cesium-137	1.206	pCi/g	—	1.65	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Arsenic	1.3	mg/kg	—	8.17	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Radium-226	1.834	pCi/g	—	2.59	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Americium-241	1.96	pCi/g	U	0.013	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Thorium-232	2.683	pCi/g	U	2.33	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Nickel	3.1	mg/kg	—	15.4	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Uranium	4.3	mg/kg	—	—	—
AAA1788	49-2062	0	0.5	ALLH	Chromium, Total	6.1	mg/kg	—	19.3	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Lead	14.3	mg/kg	—	22.3	mg/kg
AAA1788	49-2062	0	0.5	ALLH	Potassium-40	34.047	pCi/g	—	36.8	pCi/g
AAA1788	49-2062	0	0.5	ALLH	Barium	124	mg/kg	—	295	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Plutonium-238	0.022	pCi/g	—	0.023	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Mercury	0.03	mg/kg	—	0.1	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Beryllium	0.48	mg/kg	—	1.83	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Selenium	0.6	mg/kg	U	1.52	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Cadmium	0.8	mg/kg	U	0.4	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Thallium	1	mg/kg	U	0.73	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Plutonium-239	1.009	pCi/g	—	0.054	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Silver	1.4	mg/kg	U	1	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Cesium-137	1.797	pCi/g	—	1.65	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Arsenic	1.8	mg/kg	—	8.17	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Radium-226	2.361	pCi/g	—	2.59	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Americium-241	2.84	pCi/g	U	0.013	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Thorium-232	3.713	pCi/g	—	2.33	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Nickel	5.3	mg/kg	—	15.4	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA1789	49-2064	0	0.5	ALLH	Uranium	5.3	mg/kg	—	—	—
AAA1789	49-2064	0	0.5	ALLH	Chromium, Total	5.8	mg/kg	—	19.3	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Antimony	11.2	mg/kg	U	0.83	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Lead	19	mg/kg	—	22.3	mg/kg
AAA1789	49-2064	0	0.5	ALLH	Potassium-40	30.587	pCi/g	—	36.8	pCi/g
AAA1789	49-2064	0	0.5	ALLH	Barium	146	mg/kg	—	295	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Plutonium-239	0.0701	pCi/g	U	0.05	pCi/g
AAA4553	49-2901	24.5	25	QBT3	Americium-241	0.089	pCi/g	U	0.05	pCi/g
AAA4553	49-2901	24.5	25	QBT3	Cesium-137	0.1	pCi/g	U	0.1	pCi/g
AAA4553	49-2901	24.5	25	QBT3	Thallium	0.22	mg/kg	U	1.1	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Thallium	0.22	mg/kg	U	1.1	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Selenium	0.4	mg/kg	U	0.3	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Antimony	0.67	mg/kg	U	0.5	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Antimony	0.67	mg/kg	U	0.5	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Arsenic	0.8	mg/kg	U	2.79	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Beryllium	1.1	mg/kg	U	1.21	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Beryllium	1.3	mg/kg	—	1.21	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Plutonium-238	1.38	pCi/g	—	0.05	pCi/g
AAA4553	49-2901	24.5	25	QBT3	Lead	2.1	mg/kg	—	11.2	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Chromium, Total	2.8	mg/kg	—	7.14	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Uranium	4.61	mg/kg	R	—	—
AAA4553	49-2901	24.5	25	QBT3	Nickel	4.9	mg/kg	U	6.58	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Nickel	5.4	mg/kg	—	6.58	mg/kg
AAA4553	49-2901	24.5	25	QBT3	Barium	24.2	mg/kg	U	46	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Plutonium-239	0.0187	pCi/g	U	0.05	pCi/g
AAA4554	49-2901	34.6	36	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Cesium-137	0.085	pCi/g	U	0.1	pCi/g
AAA4554	49-2901	34.6	36	QBT3	Plutonium-238	0.086	pCi/g	U	0.05	pCi/g
AAA4554	49-2901	34.6	36	QBT3	Americium-241	0.089	pCi/g	U	0.05	pCi/g
AAA4554	49-2901	34.6	36	QBT3	Beryllium	0.2	mg/kg	U	1.21	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Selenium	0.4	mg/kg	U	0.3	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Antimony	0.6	mg/kg	U	0.5	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Cadmium	0.7	mg/kg	U	1.63	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Lead	0.77	mg/kg	—	11.2	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Arsenic	0.8	mg/kg	U	2.79	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4554	49-2901	34.6	36	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Chromium, Total	1.8	mg/kg	U	7.14	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Nickel	2	mg/kg	U	6.58	mg/kg
AAA4554	49-2901	34.6	36	QBT3	Uranium	2.94	mg/kg	R	—	—
AAA4554	49-2901	34.6	36	QBT3	Barium	10	mg/kg	U	46	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Plutonium-239	0.0169	pCi/g	UJ	0.05	pCi/g
AAA4555	49-2901	88.6	89.4	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Cesium-137	0.073	pCi/g	U	0.1	pCi/g
AAA4555	49-2901	88.6	89.4	QBT3	Americium-241	0.081	pCi/g	U	0.05	pCi/g
AAA4555	49-2901	88.6	89.4	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Plutonium-238	0.226	pCi/g	UJ	0.05	pCi/g
AAA4555	49-2901	88.6	89.4	QBT3	Beryllium	0.23	mg/kg	U	1.21	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Arsenic	1.1	mg/kg	UJ	2.79	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Uranium	4.86	mg/kg	R	—	—
AAA4555	49-2901	88.6	89.4	QBT3	Barium	8.1	mg/kg	U	46	mg/kg
AAA4555	49-2901	88.6	89.4	QBT3	Lead	11.8	mg/kg	—	11.2	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Plutonium-239	0.0069	pCi/g	U	0.05	pCi/g
AAA4557	49-2901	63.9	65	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Plutonium-238	0.062	pCi/g	U	0.05	pCi/g
AAA4557	49-2901	63.9	65	QBT3	Cesium-137	0.1	pCi/g	U	0.1	pCi/g
AAA4557	49-2901	63.9	65	QBT3	Americium-241	0.12	pCi/g	U	0.05	pCi/g
AAA4557	49-2901	63.9	65	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Lead	0.35	mg/kg	U	11.2	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Beryllium	0.36	mg/kg	U	1.21	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Cadmium	0.73	mg/kg	U	1.63	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Chromium, Total	0.96	mg/kg	U	7.14	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4557	49-2901	63.9	65	QBT3	Uranium	5.01	mg/kg	R	—	—
AAA4557	49-2901	63.9	65	QBT3	Barium	12.6	mg/kg	U	46	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4559	49-2901	136	136.7	QBT3	Plutonium-239	0.0087	pCi/g	U	0.05	pCi/g
AAA4559	49-2901	136	136.7	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Plutonium-238	0.081	pCi/g	U	0.05	pCi/g
AAA4559	49-2901	136	136.7	QBT3	Americium-241	0.1	pCi/g	U	0.05	pCi/g
AAA4559	49-2901	136	136.7	QBT3	Cesium-137	0.12	pCi/g	U	0.1	pCi/g
AAA4559	49-2901	136	136.7	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Beryllium	0.43	mg/kg	U	1.21	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Antimony	0.6	mg/kg	U	0.5	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Lead	2.8	mg/kg	—	11.2	mg/kg
AAA4559	49-2901	136	136.7	QBT3	Uranium	6.29	mg/kg	R	—	—
AAA4559	49-2901	136	136.7	QBT3	Barium	8.1	mg/kg	U	46	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4560	49-2901	116	116.7	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Cesium-137	0.094	pCi/g	U	0.1	pCi/g
AAA4560	49-2901	116	116.7	QBT3	Americium-241	0.098	pCi/g	U	0.05	pCi/g
AAA4560	49-2901	116	116.7	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Plutonium-238	0.289	pCi/g	U	0.05	pCi/g
AAA4560	49-2901	116	116.7	QBT3	Beryllium	0.37	mg/kg	U	1.21	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Arsenic	0.83	mg/kg	U	2.79	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Chromium, Total	0.83	mg/kg	U	7.14	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Lead	2.7	mg/kg	—	11.2	mg/kg
AAA4560	49-2901	116	116.7	QBT3	Uranium	3.66	mg/kg	R	—	—
AAA4560	49-2901	116	116.7	QBT3	Barium	9.5	mg/kg	U	46	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4561	49-2901	78.2	79	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Americium-241	0.075	pCi/g	U	0.05	pCi/g
AAA4561	49-2901	78.2	79	QBT3	Cesium-137	0.097	pCi/g	U	0.1	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4561	49-2901	78.2	79	QBT3	Plutonium-238	0.101	pCi/g	U	0.05	pCi/g
AAA4561	49-2901	78.2	79	QBT3	Thallium	0.21	mg/kg	U	1.1	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Beryllium	0.22	mg/kg	U	1.21	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Antimony	0.62	mg/kg	U	0.5	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Lead	1.5	mg/kg	—	11.2	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Lead	2	mg/kg	—	11.2	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Uranium	4.88	mg/kg	R	—	—
AAA4561	49-2901	78.2	79	QBT3	Barium	4.9	mg/kg	U	46	mg/kg
AAA4561	49-2901	78.2	79	QBT3	Barium	7	mg/kg	—	46	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4562	49-2901	55	56.3	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Plutonium-238	0.0392	pCi/g	U	0.05	pCi/g
AAA4562	49-2901	55	56.3	QBT3	Cesium-137	0.084	pCi/g	U	0.1	pCi/g
AAA4562	49-2901	55	56.3	QBT3	Americium-241	0.087	pCi/g	U	0.05	pCi/g
AAA4562	49-2901	55	56.3	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Beryllium	0.21	mg/kg	U	1.21	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Selenium	0.4	mg/kg	U	0.3	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Lead	0.43	mg/kg	U	11.2	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Arsenic	0.8	mg/kg	U	2.79	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Chromium, Total	1.5	mg/kg	U	7.14	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Nickel	2.8	mg/kg	U	6.58	mg/kg
AAA4562	49-2901	55	56.3	QBT3	Uranium	4.78	mg/kg	R	—	—
AAA4562	49-2901	55	56.3	QBT3	Barium	8.5	mg/kg	U	46	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Plutonium-238	0.0364	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4563	49-2901	69.5	70.2	QBT3	Plutonium-239	0.0496	pCi/g	U	0.05	pCi/g
AAA4563	49-2901	69.5	70.2	QBT3	Cesium-137	0.071	pCi/g	U	0.1	pCi/g
AAA4563	49-2901	69.5	70.2	QBT3	Americium-241	0.089	pCi/g	U	0.05	pCi/g
AAA4563	49-2901	69.5	70.2	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Beryllium	0.28	mg/kg	U	1.21	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Antimony	0.6	mg/kg	U	0.5	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Lead	0.69	mg/kg	—	11.2	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Chromium, Total	1.6	mg/kg	U	7.14	mg/kg
AAA4563	49-2901	69.5	70.2	QBT3	Uranium	4.76	mg/kg	R	—	—
AAA4563	49-2901	69.5	70.2	QBT3	Barium	13.8	mg/kg	U	46	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4564	49-2901	44.6	46.5	QBT3	Plutonium-238	0.0157	pCi/g	U	0.05	pCi/g
AAA4564	49-2901	44.6	46.5	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Cesium-137	0.067	pCi/g	U	0.1	pCi/g
AAA4564	49-2901	44.6	46.5	QBT3	Americium-241	0.073	pCi/g	U	0.05	pCi/g
AAA4564	49-2901	44.6	46.5	QBT3	Beryllium	0.2	mg/kg	U	1.21	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Selenium	0.4	mg/kg	UJ	0.3	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Lead	0.8	mg/kg	—	11.2	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Arsenic	0.83	mg/kg	UJ	2.79	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Chromium, Total	1.9	mg/kg	U	7.14	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Nickel	1.9	mg/kg	U	6.58	mg/kg
AAA4564	49-2901	44.6	46.5	QBT3	Uranium	4.39	mg/kg	R	—	—
AAA4564	49-2901	44.6	46.5	QBT3	Barium	14.4	mg/kg	U	46	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Plutonium-239	-0.0109	pCi/g	U	0.05	pCi/g
AAA4565	49-2901	145.6	147.9	QBT3	Plutonium-239	0	pCi/g	—	0.05	pCi/g
AAA4565	49-2901	145.6	147.9	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Cesium-137	0.086	pCi/g	U	0.1	pCi/g
AAA4565	49-2901	145.6	147.9	QBT3	Americium-241	0.11	pCi/g	U	0.05	pCi/g
AAA4565	49-2901	145.6	147.9	QBT3	Plutonium-238	0.175	pCi/g	—	0.05	pCi/g
AAA4565	49-2901	145.6	147.9	QBT3	Plutonium-238	0.181	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4565	49-2901	145.6	147.9	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Beryllium	0.28	mg/kg	U	1.21	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Selenium	0.41	mg/kg	UJ	0.3	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Lead	2.1	mg/kg	—	11.2	mg/kg
AAA4565	49-2901	145.6	147.9	QBT3	Uranium	4.33	mg/kg	R	—	—
AAA4565	49-2901	145.6	147.9	QBT3	Barium	4.9	mg/kg	U	46	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Plutonium-239	0.0176	pCi/g	UJ-	0.05	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Plutonium-239	0.0237	pCi/g	U	0.05	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Plutonium-238	0.0457	pCi/g	UJ-	0.05	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Mercury	0.06	mg/kg	—	0.1	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Cesium-137	0.067	pCi/g	U	0.1	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Americium-241	0.072	pCi/g	U	0.05	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Americium-241	0.079	pCi/g	U	0.05	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Cesium-137	0.086	pCi/g	U	0.1	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Plutonium-238	0.133	pCi/g	—	0.05	pCi/g
AAA4566	49-2901	93.5	94.8	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Beryllium	0.21	mg/kg	U	1.21	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Antimony	0.6	mg/kg	U	0.5	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Chromium, Total	2	mg/kg	U	7.14	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Lead	2.8	mg/kg	—	11.2	mg/kg
AAA4566	49-2901	93.5	94.8	QBT3	Uranium	5.28	mg/kg	R	—	—
AAA4566	49-2901	93.5	94.8	QBT3	Uranium	5.45	mg/kg	R	—	—
AAA4566	49-2901	93.5	94.8	QBT3	Barium	8.7	mg/kg	U	46	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Plutonium-239	0.0092	pCi/g	U	0.05	pCi/g
AAA4567	49-2901	14.1	15.2	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Cesium-137	0.071	pCi/g	U	0.1	pCi/g
AAA4567	49-2901	14.1	15.2	QBT3	Americium-241	0.077	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4567	49-2901	14.1	15.2	QBT3	Plutonium-238	0.092	pCi/g	U	0.05	pCi/g
AAA4567	49-2901	14.1	15.2	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Cadmium	0.64	mg/kg	U	1.63	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Cadmium	0.64	mg/kg	—	1.63	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Beryllium	0.72	mg/kg	U	1.21	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Chromium, Total	3	mg/kg	—	7.14	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Chromium, Total	3	mg/kg	—	7.14	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Lead	3.2	mg/kg	—	11.2	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Lead	3.4	mg/kg	—	11.2	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Nickel	4.4	mg/kg	U	6.58	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Uranium	5.18	mg/kg	R	—	—
AAA4567	49-2901	14.1	15.2	QBT3	Barium	23.8	mg/kg	—	46	mg/kg
AAA4567	49-2901	14.1	15.2	QBT3	Barium	27.3	mg/kg	U	46	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Cesium-137	-0.018	pCi/g	U	0.1	pCi/g
AAA4574	49-2903	6.2	7	ALLH	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4574	49-2903	6.2	7	ALLH	Plutonium-238	0.014	pCi/g	U	0.05	pCi/g
AAA4574	49-2903	6.2	7	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Americium-241	0.051	pCi/g	U	0.05	pCi/g
AAA4574	49-2903	6.2	7	ALLH	Thallium	0.52	mg/kg	U	1.1	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Silver	0.72	mg/kg	U	1	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Silver	0.72	mg/kg	U	1	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Thallium	0.72	mg/kg	—	1.1	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Selenium	0.83	mg/kg	—	0.3	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Selenium	0.93	mg/kg	U	0.3	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Uranium	1.177	mg/kg	R	—	—
AAA4574	49-2903	6.2	7	ALLH	Beryllium	1.7	mg/kg	J	1.21	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Beryllium	1.8	mg/kg	—	1.21	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Cadmium	2	mg/kg	—	1.63	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Cadmium	2.2	mg/kg	—	1.63	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Arsenic	3.4	mg/kg	—	2.79	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Arsenic	3.7	mg/kg	—	2.79	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4574	49-2903	6.2	7	ALLH	Antimony	5.5	mg/kg	UJ-	0.5	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Antimony	6.7	mg/kg	—	0.5	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Chromium, Total	9	mg/kg	—	7.14	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Chromium, Total	9.6	mg/kg	—	7.14	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Nickel	11.7	mg/kg	—	6.58	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Nickel	11.7	mg/kg	—	6.58	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Lead	15.7	mg/kg	—	11.2	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Lead	15.7	mg/kg	—	11.2	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Barium	287	mg/kg	—	46	mg/kg
AAA4574	49-2903	6.2	7	ALLH	Barium	300	mg/kg	—	46	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Plutonium-239	0.009	pCi/g	U	0.05	pCi/g
AAA4575	49-2904	6.4	7	ALLH	Plutonium-238	0.016	pCi/g	U	0.05	pCi/g
AAA4575	49-2904	6.4	7	ALLH	Cesium-137	0.023	pCi/g	J-	0.1	pCi/g
AAA4575	49-2904	6.4	7	ALLH	Mercury	0.04	mg/kg	U	0.1	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Americium-241	0.088	pCi/g	U	0.05	pCi/g
AAA4575	49-2904	6.4	7	ALLH	Thallium	0.62	mg/kg	U	1.1	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Beryllium	0.71	mg/kg	UJ	1.21	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Silver	0.86	mg/kg	U	1	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Cadmium	0.89	mg/kg	U	1.63	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Selenium	0.92	mg/kg	U	0.3	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Arsenic	1.6	mg/kg	U	2.79	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Uranium	3.07	mg/kg	R	—	—
AAA4575	49-2904	6.4	7	ALLH	Lead	4	mg/kg	—	11.2	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Chromium, Total	4.1	mg/kg	—	7.14	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Nickel	5.4	mg/kg	U	6.58	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Antimony	6.5	mg/kg	U	0.5	mg/kg
AAA4575	49-2904	6.4	7	ALLH	Barium	181	mg/kg	—	46	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Cesium-137	-0.014	pCi/g	U	0.1	pCi/g
AAA4576	49-2902	7.4	7.7	ALLH	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4576	49-2902	7.4	7.7	ALLH	Americium-241	0.001	pCi/g	U	0.05	pCi/g
AAA4576	49-2902	7.4	7.7	ALLH	Plutonium-238	0.009	pCi/g	U	0.05	pCi/g
AAA4576	49-2902	7.4	7.7	ALLH	Cesium-137	0.027	pCi/g	—	0.1	pCi/g
AAA4576	49-2902	7.4	7.7	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Mercury	0.05	mg/kg	—	0.1	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Americium-241	0.096	pCi/g	U	0.05	pCi/g
AAA4576	49-2902	7.4	7.7	ALLH	Silver	0.77	mg/kg	U	1	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Silver	0.77	mg/kg	U	1	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Selenium	0.8	mg/kg	J+[l]	0.3	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Cadmium	0.83	mg/kg	—	1.63	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4576	49-2902	7.4	7.7	ALLH	Cadmium	0.87	mg/kg	U	1.63	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Selenium	1.1	mg/kg	J+	0.3	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Uranium	2.582	mg/kg	R	—	—
AAA4576	49-2902	7.4	7.7	ALLH	Arsenic	2.7	mg/kg	J-	2.79	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Arsenic	3.2	mg/kg	J-	2.79	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Chromium, Total	5	mg/kg	—	7.14	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Chromium, Total	5.3	mg/kg	—	7.14	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Lead	5.9	mg/kg	—	11.2	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Lead	6.3	mg/kg	—	11.2	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Barium	205	mg/kg	—	46	mg/kg
AAA4576	49-2902	7.4	7.7	ALLH	Barium	244	mg/kg	J	46	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4581	49-2905	6.2	6.7	ALLH	Cesium-137	0.004	pCi/g	J-	0.1	pCi/g
AAA4581	49-2905	6.2	6.7	ALLH	Plutonium-239	0.014	pCi/g	—	0.05	pCi/g
AAA4581	49-2905	6.2	6.7	ALLH	Mercury	0.04	mg/kg	U	0.1	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Americium-241	0.101	pCi/g	U	0.05	pCi/g
AAA4581	49-2905	6.2	6.7	ALLH	Beryllium	0.59	mg/kg	UJ	1.21	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Thallium	0.7	mg/kg	U	1.1	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Silver	0.98	mg/kg	U	1	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Selenium	1	mg/kg	U	0.3	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Cadmium	1.4	mg/kg	U	1.63	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Arsenic	1.7	mg/kg	U	2.79	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Uranium	2.071	mg/kg	R	—	—
AAA4581	49-2905	6.2	6.7	ALLH	Lead	4.3	mg/kg	—	11.2	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Chromium, Total	4.4	mg/kg	—	7.14	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Nickel	7.3	mg/kg	U	6.58	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Antimony	7.4	mg/kg	U	0.5	mg/kg
AAA4581	49-2905	6.2	6.7	ALLH	Barium	273	mg/kg	—	46	mg/kg
AAA4593	49-2901	133	134	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4593	49-2901	133	134	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4593	49-2901	133	134	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4593	49-2901	133	134	QBT3	Plutonium-238	0.071	pCi/g	U	0.05	pCi/g
AAA4593	49-2901	133	134	QBT3	Cesium-137	0.075	pCi/g	U	0.1	pCi/g
AAA4593	49-2901	133	134	QBT3	Americium-241	0.086	pCi/g	U	0.05	pCi/g
AAA4593	49-2901	133	134	QBT3	Thallium	0.2	mg/kg	U	1.1	mg/kg
AAA4593	49-2901	133	134	QBT3	Beryllium	0.35	mg/kg	U	1.21	mg/kg
AAA4593	49-2901	133	134	QBT3	Selenium	0.41	mg/kg	U	0.3	mg/kg
AAA4593	49-2901	133	134	QBT3	Selenium	0.47	mg/kg	UJ	0.3	mg/kg
AAA4593	49-2901	133	134	QBT3	Antimony	0.61	mg/kg	U	0.5	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4593	49-2901	133	134	QBT3	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4593	49-2901	133	134	QBT3	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4593	49-2901	133	134	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4593	49-2901	133	134	QBT3	Arsenic	0.82	mg/kg	U	2.79	mg/kg
AAA4593	49-2901	133	134	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4593	49-2901	133	134	QBT3	Chromium, Total	0.82	mg/kg	U	7.14	mg/kg
AAA4593	49-2901	133	134	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4593	49-2901	133	134	QBT3	Silver	1	mg/kg	U	1	mg/kg
AAA4593	49-2901	133	134	QBT3	Nickel	1.2	mg/kg	U	6.58	mg/kg
AAA4593	49-2901	133	134	QBT3	Lead	2.5	mg/kg	—	11.2	mg/kg
AAA4593	49-2901	133	134	QBT3	Lead	3.96	mg/kg	—	11.2	mg/kg
AAA4593	49-2901	133	134	QBT3	Uranium	5.28	mg/kg	R	—	—
AAA4593	49-2901	133	134	QBT3	Barium	6.1	mg/kg	U	46	mg/kg
AAA4593	49-2901	133	134	QBT3	Barium	6.78	mg/kg	U	46	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Mercury	0.02	mg/kg	U	0.1	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Plutonium-239	0.021	pCi/g	U	0.05	pCi/g
AAA4594	49-2901	2.3	6.5	QBT3	Americium-241	0.077	pCi/g	U	0.05	pCi/g
AAA4594	49-2901	2.3	6.5	QBT3	Cesium-137	0.096	pCi/g	U	0.1	pCi/g
AAA4594	49-2901	2.3	6.5	QBT3	Plutonium-238	0.105	pCi/g	U	0.05	pCi/g
AAA4594	49-2901	2.3	6.5	QBT3	Thallium	0.27	mg/kg	U	1.1	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Selenium	0.45	mg/kg	UJ	0.3	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Antimony	0.62	mg/kg	U	0.5	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Silver	1.1	mg/kg	U	1	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Beryllium	1.1	mg/kg	—	1.21	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Arsenic	2.2	mg/kg	U	2.79	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Cadmium	2.3	mg/kg	—	1.63	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Uranium	5.42	mg/kg	R	—	—
AAA4594	49-2901	2.3	6.5	QBT3	Nickel	10.9	mg/kg	—	6.58	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Chromium, Total	11.9	mg/kg	—	7.14	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Lead	12.4	mg/kg	—	11.2	mg/kg
AAA4594	49-2901	2.3	6.5	QBT3	Barium	197	mg/kg	—	46	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Cesium-137	-0.025	pCi/g	U	0.1	pCi/g
AAA4602	49-2907	5	5.5	ALLH	Americium-241	0.004	pCi/g	UJ	0.05	pCi/g
AAA4602	49-2907	5	5.5	ALLH	Cesium-137	0.01	pCi/g	—	0.1	pCi/g
AAA4602	49-2907	5	5.5	ALLH	Mercury	0.04	mg/kg	U	0.1	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Americium-241	0.041	pCi/g	U	0.05	pCi/g
AAA4602	49-2907	5	5.5	ALLH	Uranium	0.546	mg/kg	R	—	—
AAA4602	49-2907	5	5.5	ALLH	Thallium	0.63	mg/kg	U	1.1	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Beryllium	0.72	mg/kg	UJ	1.21	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4602	49-2907	5	5.5	ALLH	Silver	0.88	mg/kg	U	1	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Cadmium	0.91	mg/kg	U	1.63	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Selenium	0.94	mg/kg	U	0.3	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Plutonium-239	2.502	pCi/g	R	0.05	pCi/g
AAA4602	49-2907	5	5.5	ALLH	Arsenic	2.7	mg/kg	U	2.79	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Plutonium-238	3.811	pCi/g	R	0.05	pCi/g
AAA4602	49-2907	5	5.5	ALLH	Nickel	4.9	mg/kg	U	6.58	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Chromium, Total	5	mg/kg	—	7.14	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Antimony	6.6	mg/kg	U	0.5	mg/kg
AAA4602	49-2907	5	5.5	ALLH	Barium	211	mg/kg	—	46	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4603	49-2907	76.5	79	QBT4	Plutonium-238	0	pCi/g	U	0.05	pCi/g
AAA4603	49-2907	76.5	79	QBT4	Cesium-137	0.015	pCi/g	—	0.1	pCi/g
AAA4603	49-2907	76.5	79	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Americium-241	0.036	pCi/g	U	0.05	pCi/g
AAA4603	49-2907	76.5	79	QBT4	Uranium	0.115	mg/kg	R	—	—
AAA4603	49-2907	76.5	79	QBT4	Uranium	0.141	mg/kg	R	—	—
AAA4603	49-2907	76.5	79	QBT4	Beryllium	0.39	mg/kg	UJ	1.21	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Silver	0.58	mg/kg	U	1	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Arsenic	0.71	mg/kg	U	2.79	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Lead	0.82	mg/kg	—	11.2	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Selenium	1.7	mg/kg	U	0.3	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4603	49-2907	76.5	79	QBT4	Barium	10.3	mg/kg	U	46	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Americium-241	-0.115	pCi/g	U	0.05	pCi/g
AAA4604	49-2907	138	138.7	QBT3	Cesium-137	-0.004	pCi/g	U	0.1	pCi/g
AAA4604	49-2907	138	138.7	QBT3	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4604	49-2907	138	138.7	QBT3	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4604	49-2907	138	138.7	QBT3	Antimony	0.02	mg/kg	U	0.5	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Nickel	0.02	mg/kg	U	6.58	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Uranium	0.131	mg/kg	R	—	—
AAA4604	49-2907	138	138.7	QBT3	Beryllium	0.28	mg/kg	UJ	1.21	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4604	49-2907	138	138.7	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Arsenic	0.43	mg/kg	—	2.79	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Beryllium	0.96	mg/kg	—	1.21	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Lead	1	mg/kg	—	11.2	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Lead	1.2	mg/kg	—	11.2	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Barium	4.9	mg/kg	U	46	mg/kg
AAA4604	49-2907	138	138.7	QBT3	Barium	26.5	mg/kg	—	46	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Cesium-137	-0.013	pCi/g	U	0.1	pCi/g
AAA4605	49-2907	65.6	66.2	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4605	49-2907	65.6	66.2	QBT4	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4605	49-2907	65.6	66.2	QBT4	Americium-241	0.027	pCi/g	U	0.05	pCi/g
AAA4605	49-2907	65.6	66.2	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Uranium	0.198	mg/kg	R	—	—
AAA4605	49-2907	65.6	66.2	QBT4	Lead	0.42	mg/kg	U	11.2	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Arsenic	0.42	mg/kg	U	2.79	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Thallium	0.42	mg/kg	U	1.1	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Beryllium	0.54	mg/kg	UJ	1.21	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Silver	0.58	mg/kg	U	1	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Chromium, Total	1.5	mg/kg	U	7.14	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Selenium	1.7	mg/kg	U	0.3	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4605	49-2907	65.6	66.2	QBT4	Barium	17.6	mg/kg	U	46	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4606	49-2907	53.5	54.2	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4606	49-2907	53.5	54.2	QBT4	Plutonium-238	0	pCi/g	U	0.05	pCi/g
AAA4606	49-2907	53.5	54.2	QBT4	Plutonium-238	0	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4606	49-2907	53.5	54.2	QBT4	Cesium-137	0.009	pCi/g	—	0.1	pCi/g
AAA4606	49-2907	53.5	54.2	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Americium-241	0.032	pCi/g	U	0.05	pCi/g
AAA4606	49-2907	53.5	54.2	QBT4	Uranium	0.237	mg/kg	R	—	—
AAA4606	49-2907	53.5	54.2	QBT4	Selenium	0.43	mg/kg	U	0.3	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Thallium	0.43	mg/kg	U	1.1	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Silver	0.6	mg/kg	U	1	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Cadmium	0.62	mg/kg	U	1.63	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Beryllium	0.86	mg/kg	UJ	1.21	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Arsenic	0.95	mg/kg	U	2.79	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Lead	1.5	mg/kg	—	11.2	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Chromium, Total	1.6	mg/kg	U	7.14	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Nickel	3.4	mg/kg	U	6.58	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Antimony	4.5	mg/kg	U	0.5	mg/kg
AAA4606	49-2907	53.5	54.2	QBT4	Barium	26.2	mg/kg	U	46	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Americium-241	-0.074	pCi/g	U	0.05	pCi/g
AAA4607	49-2907	145	145.6	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4607	49-2907	145	145.6	QBT3	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4607	49-2907	145	145.6	QBT3	Cesium-137	0.007	pCi/g	—	0.1	pCi/g
AAA4607	49-2907	145	145.6	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Uranium	0.2	mg/kg	R	—	—
AAA4607	49-2907	145	145.6	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Beryllium	0.5	mg/kg	—	1.21	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Beryllium	0.5	mg/kg	UJ	1.21	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Silver	0.58	mg/kg	U	1	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Silver	0.58	mg/kg	U	1	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Lead	1.3	mg/kg	—	11.2	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Lead	1.4	mg/kg	—	11.2	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Selenium	1.7	mg/kg	U	0.3	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Selenium	1.7	mg/kg	U	0.3	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4607	49-2907	145	145.6	QBT3	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Barium	5.3	mg/kg	—	46	mg/kg
AAA4607	49-2907	145	145.6	QBT3	Barium	5.9	mg/kg	U	46	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Americium-241	-0.068	pCi/g	U	0.05	pCi/g
AAA4608	49-2907	106	106.5	QBT3	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4608	49-2907	106	106.5	QBT3	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
AAA4608	49-2907	106	106.5	QBT3	Cesium-137	0.009	pCi/g	—	0.1	pCi/g
AAA4608	49-2907	106	106.5	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Beryllium	0.28	mg/kg	UJ	1.21	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Uranium	0.358	mg/kg	R	—	—
AAA4608	49-2907	106	106.5	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Silver	0.58	mg/kg	U	1	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Lead	1.3	mg/kg	—	11.2	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4608	49-2907	106	106.5	QBT3	Barium	9.8	mg/kg	U	46	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Cesium-137	-0.011	pCi/g	U	0.1	pCi/g
AAA4609	49-2907	95	95.5	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4609	49-2907	95	95.5	QBT3	Plutonium-238	0.009	pCi/g	U	0.05	pCi/g
AAA4609	49-2907	95	95.5	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Americium-241	0.045	pCi/g	U	0.05	pCi/g
AAA4609	49-2907	95	95.5	QBT3	Uranium	0.23	mg/kg	R	—	—
AAA4609	49-2907	95	95.5	QBT3	Beryllium	0.28	mg/kg	UJ	1.21	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Lead	0.96	mg/kg	—	11.2	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4609	49-2907	95	95.5	QBT3	Barium	7.9	mg/kg	U	46	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4610	49-2907	125	126.5	QBT3	Americium-241	-0.028	pCi/g	U	0.05	pCi/g
AAA4610	49-2907	125	126.5	QBT3	Cesium-137	-0.01	pCi/g	U	0.1	pCi/g
AAA4610	49-2907	125	126.5	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4610	49-2907	125	126.5	QBT3	Plutonium-238	0.005	pCi/g	—	0.05	pCi/g
AAA4610	49-2907	125	126.5	QBT3	Americium-241	0.011	pCi/g	U	0.05	pCi/g
AAA4610	49-2907	125	126.5	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Cesium-137	0.039	pCi/g	—	0.1	pCi/g
AAA4610	49-2907	125	126.5	QBT3	Uranium	0.316	mg/kg	R	—	—
AAA4610	49-2907	125	126.5	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Beryllium	0.6	mg/kg	UJ	1.21	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Lead	1.1	mg/kg	—	11.2	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4610	49-2907	125	126.5	QBT3	Barium	9.7	mg/kg	U	46	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Americium-241	-0.022	pCi/g	U	0.05	pCi/g
AAA4611	49-2907	36.5	37	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4611	49-2907	36.5	37	QBT4	Cesium-137	0.002	pCi/g	—	0.1	pCi/g
AAA4611	49-2907	36.5	37	QBT4	Plutonium-238	0.009	pCi/g	U	0.05	pCi/g
AAA4611	49-2907	36.5	37	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Uranium	0.333	mg/kg	R	—	—
AAA4611	49-2907	36.5	37	QBT4	Thallium	0.44	mg/kg	U	1.1	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Silver	0.62	mg/kg	U	1	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Cadmium	0.64	mg/kg	U	1.63	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Beryllium	0.76	mg/kg	UJ	1.21	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Arsenic	0.84	mg/kg	U	2.79	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Selenium	1.8	mg/kg	U	0.3	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Chromium, Total	3.1	mg/kg	—	7.14	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Lead	3.2	mg/kg	—	11.2	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Nickel	3.5	mg/kg	U	6.58	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Antimony	4.7	mg/kg	U	0.5	mg/kg
AAA4611	49-2907	36.5	37	QBT4	Barium	20.5	mg/kg	U	46	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Plutonium-238	0	pCi/g	U	0.05	pCi/g
AAA4612	49-2907	76.5	79	QBT4	Plutonium-239	0.004	pCi/g	—	0.05	pCi/g
AAA4612	49-2907	76.5	79	QBT4	Cesium-137	0.005	pCi/g	—	0.1	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4612	49-2907	76.5	79	QBT4	Americium-241	0.016	pCi/g	U	0.05	pCi/g
AAA4612	49-2907	76.5	79	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Uranium	0.213	mg/kg	R	—	—
AAA4612	49-2907	76.5	79	QBT4	Beryllium	0.37	mg/kg	UJ	1.21	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Arsenic	0.46	mg/kg	U	2.79	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Silver	0.58	mg/kg	U	1	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Lead	0.91	mg/kg	—	11.2	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Selenium	1.7	mg/kg	U	0.3	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4612	49-2907	76.5	79	QBT4	Barium	7.5	mg/kg	U	46	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Cesium-137	-0.008	pCi/g	U	0.1	pCi/g
AAA4613	49-2907	24.5	25	QBT4	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4613	49-2907	24.5	25	QBT4	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
AAA4613	49-2907	24.5	25	QBT4	Americium-241	0.008	pCi/g	U	0.05	pCi/g
AAA4613	49-2907	24.5	25	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Uranium	0.3	mg/kg	R	—	—
AAA4613	49-2907	24.5	25	QBT4	Thallium	0.47	mg/kg	U	1.1	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Silver	0.66	mg/kg	U	1	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Cadmium	0.69	mg/kg	U	1.63	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Arsenic	0.97	mg/kg	U	2.79	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Beryllium	1.8	mg/kg	J	1.21	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Selenium	1.9	mg/kg	U	0.3	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Chromium, Total	3.4	mg/kg	—	7.14	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Lead	4.8	mg/kg	—	11.2	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Antimony	5	mg/kg	U	0.5	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Nickel	5	mg/kg	U	6.58	mg/kg
AAA4613	49-2907	24.5	25	QBT4	Barium	24.2	mg/kg	U	46	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Americium-241	-0.073	pCi/g	U	0.05	pCi/g
AAA4614	49-2907	14.5	16.5	QBT4	Plutonium-239	0.001	pCi/g	R	0.05	pCi/g
AAA4614	49-2907	14.5	16.5	QBT4	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
AAA4614	49-2907	14.5	16.5	QBT4	Cesium-137	0.026	pCi/g	—	0.1	pCi/g
AAA4614	49-2907	14.5	16.5	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Uranium	0.413	mg/kg	R	—	—
AAA4614	49-2907	14.5	16.5	QBT4	Uranium	0.447	mg/kg	R	—	—
AAA4614	49-2907	14.5	16.5	QBT4	Thallium	0.49	mg/kg	U	1.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4614	49-2907	14.5	16.5	QBT4	Silver	0.68	mg/kg	U	1	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Silver	0.68	mg/kg	U	1	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Cadmium	0.71	mg/kg	U	1.63	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Cadmium	0.71	mg/kg	U	1.63	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Beryllium	0.71	mg/kg	UJ	1.21	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Selenium	0.73	mg/kg	U	0.3	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Selenium	0.73	mg/kg	U	0.3	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Arsenic	0.84	mg/kg	—	2.79	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Arsenic	0.98	mg/kg	U	2.79	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Chromium, Total	1.7	mg/kg	U	7.14	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Chromium, Total	1.7	mg/kg	U	7.14	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Nickel	4.1	mg/kg	U	6.58	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Antimony	5.2	mg/kg	U	0.5	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Lead	5.5	mg/kg	—	11.2	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Lead	6.3	mg/kg	—	11.2	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Barium	21	mg/kg	U	46	mg/kg
AAA4614	49-2907	14.5	16.5	QBT4	Barium	22	mg/kg	—	46	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4615	49-2907	115.3	115.8	QBT3	Plutonium-238	0.005	pCi/g	U	0.05	pCi/g
AAA4615	49-2907	115.3	115.8	QBT3	Cesium-137	0.008	pCi/g	—	0.1	pCi/g
AAA4615	49-2907	115.3	115.8	QBT3	Americium-241	0.016	pCi/g	U	0.05	pCi/g
AAA4615	49-2907	115.3	115.8	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Uranium	0.223	mg/kg	R	—	—
AAA4615	49-2907	115.3	115.8	QBT3	Beryllium	0.3	mg/kg	UJ	1.21	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Arsenic	0.54	mg/kg	U	2.79	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Lead	0.96	mg/kg	—	11.2	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4615	49-2907	115.3	115.8	QBT3	Barium	6.4	mg/kg	U	46	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Cesium-137	-0.015	pCi/g	U	0.1	pCi/g
AAA4616	49-2907	84.7	85.2	QBT4	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4616	49-2907	84.7	85.2	QBT4	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4616	49-2907	84.7	85.2	QBT4	Americium-241	0.019	pCi/g	U	0.05	pCi/g
AAA4616	49-2907	84.7	85.2	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4616	49-2907	84.7	85.2	QBT4	Uranium	0.146	mg/kg	R	—	—
AAA4616	49-2907	84.7	85.2	QBT4	Uranium	0.16	mg/kg	R	—	—
AAA4616	49-2907	84.7	85.2	QBT4	Beryllium	0.27	mg/kg	UJ	1.21	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Silver	0.57	mg/kg	U	1	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Lead	0.68	mg/kg	—	11.2	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4616	49-2907	84.7	85.2	QBT4	Barium	7.9	mg/kg	U	46	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Americium-241	-0.021	pCi/g	U	0.05	pCi/g
AAA4618	49-2907	47	47.5	QBT4	Cesium-137	-0.021	pCi/g	U	0.1	pCi/g
AAA4618	49-2907	47	47.5	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
AAA4618	49-2907	47	47.5	QBT4	Plutonium-238	0	pCi/g	U	0.05	pCi/g
AAA4618	49-2907	47	47.5	QBT4	Cesium-137	0.023	pCi/g	—	0.1	pCi/g
AAA4618	49-2907	47	47.5	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Americium-241	0.035	pCi/g	U	0.05	pCi/g
AAA4618	49-2907	47	47.5	QBT4	Uranium	0.22	mg/kg	R	—	—
AAA4618	49-2907	47	47.5	QBT4	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Beryllium	0.52	mg/kg	UJ	1.21	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Silver	0.57	mg/kg	U	1	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Lead	3	mg/kg	—	11.2	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4618	49-2907	47	47.5	QBT4	Barium	16	mg/kg	U	46	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Americium-241	-0.07	pCi/g	U	0.05	pCi/g
AAA4619	49-2907	125	126.5	QBT3	Cesium-137	-0.018	pCi/g	U	0.1	pCi/g
AAA4619	49-2907	125	126.5	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4619	49-2907	125	126.5	QBT3	Plutonium-239	0.001	pCi/g	—	0.05	pCi/g
AAA4619	49-2907	125	126.5	QBT3	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4619	49-2907	125	126.5	QBT3	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
AAA4619	49-2907	125	126.5	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4619	49-2907	125	126.5	QBT3	Uranium	0.173	mg/kg	R	—	—
AAA4619	49-2907	125	126.5	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Beryllium	0.6	mg/kg	UJ	1.21	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Lead	1.1	mg/kg	—	11.2	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4619	49-2907	125	126.5	QBT3	Barium	8.9	mg/kg	U	46	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Americium-241	-0.015	pCi/g	U	0.05	pCi/g
AAA4621	49-2906	107.2	107.7	QBT3	Cesium-137	-0.013	pCi/g	U	0.1	pCi/g
AAA4621	49-2906	107.2	107.7	QBT3	Cesium-137	-0.012	pCi/g	U	0.1	pCi/g
AAA4621	49-2906	107.2	107.7	QBT3	Americium-241	-0.009	pCi/g	U	0.05	pCi/g
AAA4621	49-2906	107.2	107.7	QBT3	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4621	49-2906	107.2	107.7	QBT3	Plutonium-239	0.005	pCi/g	U	0.05	pCi/g
AAA4621	49-2906	107.2	107.7	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Uranium	0.255	mg/kg	R	—	—
AAA4621	49-2906	107.2	107.7	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Arsenic	0.47	mg/kg	U	2.79	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Beryllium	0.48	mg/kg	UJ	1.21	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Silver	0.58	mg/kg	U	1	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Lead	1.4	mg/kg	—	11.2	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4621	49-2906	107.2	107.7	QBT3	Barium	12.3	mg/kg	U	46	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Americium-241	-0.047	pCi/g	U	0.05	pCi/g
AAA4622	49-2906	53.5	54	QBT4	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4622	49-2906	53.5	54	QBT4	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4622	49-2906	53.5	54	QBT4	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4622	49-2906	53.5	54	QBT4	Plutonium-239	0.005	pCi/g	U	0.05	pCi/g
AAA4622	49-2906	53.5	54	QBT4	Cesium-137	0.01	pCi/g	—	0.1	pCi/g
AAA4622	49-2906	53.5	54	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Uranium	0.428	mg/kg	R	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4622	49-2906	53.5	54	QBT4	Thallium	0.44	mg/kg	U	1.1	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Silver	0.61	mg/kg	U	1	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Cadmium	0.63	mg/kg	U	1.63	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Selenium	0.65	mg/kg	U	0.3	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Beryllium	1	mg/kg	UJ	1.21	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Arsenic	1.1	mg/kg	U	2.79	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Lead	1.4	mg/kg	—	11.2	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Chromium, Total	2.8	mg/kg	—	7.14	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Nickel	3.4	mg/kg	U	6.58	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Antimony	4.6	mg/kg	U	0.5	mg/kg
AAA4622	49-2906	53.5	54	QBT4	Barium	21.4	mg/kg	U	46	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4623	49-2906	67.5	68	QBT4	Cesium-137	0.002	pCi/g	—	0.1	pCi/g
AAA4623	49-2906	67.5	68	QBT4	Ethylbenzene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Styrene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloropropene[cis-1,3-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloropropene[trans-1,3-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Toluene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chlorodibromomethane	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Xylene (Total)	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Carbon Tetrachloride	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bromoform	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Carbon Disulfide	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Trichloroethane[1,1,1-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Trichloroethene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Trichloroethane[1,1,2-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloropropane[1,2-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloroethene[1,1-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloroethane[1,1-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bromodichloromethane	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chloroform	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloroethene[cis/trans-1,2-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Tetrachloroethene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chlorobenzene	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichloroethane[1,2-]	0.005	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Plutonium-238	0.007	pCi/g	—	0.05	pCi/g
AAA4623	49-2906	67.5	68	QBT4	Methylene Chloride	0.008	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4623	49-2906	67.5	68	QBT4	Acetone	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Hexanone[2-]	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Vinyl Chloride	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chloroethane	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chloromethane	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bromomethane	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Butanone[2-]	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Methyl-2-pentanone[4-]	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Vinyl Acetate	0.01	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Americium-241	0.022	pCi/g	U	0.05	pCi/g
AAA4623	49-2906	67.5	68	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Nitrobenzene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chlorophenol[2-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichlorobenzene[1,2-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Methylphenol[2-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chloronaphthalene[2-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Methylnaphthalene[2-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Naphthalene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzo(a)pyrene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzo(g,h,i)perylene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dibenzofuran	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dimethyl Phthalate	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Pyrene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dinitrotoluene[2,4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichlorophenol[2,4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dinitrotoluene[2,6-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chloro-3-methylphenol[4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzo(a)anthracene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichlorobenzene[1,3-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dibenz(a,h)anthracene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Nitrophenol[2-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Trichlorophenol[2,4,6-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Fluorene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Nitrosodiphenylamine[N-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Butylbenzylphthalate	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Phenanthrene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Di-n-butylphthalate	0.35	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4623	49-2906	67.5	68	QBT4	Diethylphthalate	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Acenaphthene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Isophorone	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Hexachlorocyclopentadiene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chlorophenyl-phenyl[4-] Ether	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Hexachloroethane	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Anthracene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Hexachlorobenzene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Di-n-octylphthalate	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bis(2-chloroethoxy)methane	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bis(2-chloroethyl)ether	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Phenol	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Bromophenyl-phenylether[4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dimethylphenol[2,4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Methylphenol[4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chloroaniline[4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dichlorobenzene[1,4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzyl Alcohol	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Fluoranthene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzo(k)fluoranthene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chrysene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Acenaphthylene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzo(b)fluoranthene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Hexachlorobutadiene	0.35	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Thallium	0.42	mg/kg	U	1.1	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Beryllium	0.46	mg/kg	UJ	1.21	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Uranium	0.574	mg/kg	R	—	—
AAA4623	49-2906	67.5	68	QBT4	Silver	0.58	mg/kg	U	1	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Arsenic	0.6	mg/kg	U	2.79	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Selenium	0.62	mg/kg	U	0.3	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Lead	0.91	mg/kg	—	11.2	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Nitroaniline[4-]	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Nitroaniline[3-]	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Trichlorophenol[2,4,5-]	1.7	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4623	49-2906	67.5	68	QBT4	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Dinitrophenol[2,4-]	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Nitroaniline[2-]	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Pentachlorophenol	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Benzoic Acid	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Nitrophenol[4-]	1.7	mg/kg	U	—	—
AAA4623	49-2906	67.5	68	QBT4	Chromium, Total	2.3	mg/kg	—	7.14	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4623	49-2906	67.5	68	QBT4	Barium	15.2	mg/kg	U	46	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Americium-241	-0.028	pCi/g	U	0.05	pCi/g
AAA4624	49-2906	5.2	5.7	ALLH	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4624	49-2906	5.2	5.7	ALLH	Plutonium-238	0.009	pCi/g	U	0.05	pCi/g
AAA4624	49-2906	5.2	5.7	ALLH	Cesium-137	0.013	pCi/g	J-	0.1	pCi/g
AAA4624	49-2906	5.2	5.7	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Thallium	0.49	mg/kg	U	1.1	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Silver	0.69	mg/kg	U	1	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Selenium	0.74	mg/kg	U	0.3	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Beryllium	1.1	mg/kg	UJ	1.21	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Cadmium	1.3	mg/kg	—	1.63	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Uranium	1.909	mg/kg	R	—	—
AAA4624	49-2906	5.2	5.7	ALLH	Arsenic	2.5	mg/kg	—	2.79	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Antimony	5.2	mg/kg	U	0.5	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Chromium, Total	8.3	mg/kg	—	7.14	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Nickel	8.5	mg/kg	U	6.58	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Lead	14.4	mg/kg	—	11.2	mg/kg
AAA4624	49-2906	5.2	5.7	ALLH	Barium	237	mg/kg	—	46	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Americium-241	-0.045	pCi/g	U	0.05	pCi/g
AAA4625	49-2906	15.9	16.5	QBT4	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4625	49-2906	15.9	16.5	QBT4	Plutonium-238	0.005	pCi/g	U	0.05	pCi/g
AAA4625	49-2906	15.9	16.5	QBT4	Cesium-137	0.01	pCi/g	J	0.1	pCi/g
AAA4625	49-2906	15.9	16.5	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Beryllium	0.49	mg/kg	UJ	1.21	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Thallium	0.49	mg/kg	U	1.1	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Silver	0.69	mg/kg	U	1	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Cadmium	0.72	mg/kg	U	1.63	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Selenium	0.74	mg/kg	U	0.3	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Uranium	0.863	mg/kg	R	—	—
AAA4625	49-2906	15.9	16.5	QBT4	Arsenic	1	mg/kg	U	2.79	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4625	49-2906	15.9	16.5	QBT4	Lead	1.6	mg/kg	—	11.2	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Chromium, Total	1.7	mg/kg	U	7.14	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Nickel	4	mg/kg	U	6.58	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Antimony	5.2	mg/kg	U	0.5	mg/kg
AAA4625	49-2906	15.9	16.5	QBT4	Barium	20.6	mg/kg	U	46	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Americium-241	-0.054	pCi/g	U	0.05	pCi/g
AAA4626	49-2906	75.5	76.8	QBT4	Cesium-137	-0.022	pCi/g	U	0.1	pCi/g
AAA4626	49-2906	75.5	76.8	QBT4	Plutonium-238	0.011	pCi/g	U	0.05	pCi/g
AAA4626	49-2906	75.5	76.8	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Beryllium	0.04	mg/kg	UJ	1.21	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Plutonium-239	0.106	pCi/g	—	0.05	pCi/g
AAA4626	49-2906	75.5	76.8	QBT4	Thallium	0.42	mg/kg	U	1.1	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Uranium	0.544	mg/kg	R	—	—
AAA4626	49-2906	75.5	76.8	QBT4	Silver	0.59	mg/kg	U	1	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Silver	0.59	mg/kg	U	1	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Selenium	0.63	mg/kg	U	0.3	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Selenium	0.63	mg/kg	U	0.3	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Arsenic	0.72	mg/kg	—	2.79	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Arsenic	0.75	mg/kg	U	2.79	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Lead	0.76	mg/kg	—	11.2	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Lead	0.86	mg/kg	—	11.2	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Chromium, Total	1.5	mg/kg	U	7.14	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Chromium, Total	2.3	mg/kg	—	7.14	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Barium	15.9	mg/kg	U	46	mg/kg
AAA4626	49-2906	75.5	76.8	QBT4	Barium	17.1	mg/kg	—	46	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Americium-241	-0.085	pCi/g	U	0.05	pCi/g
AAA4627	49-2906	40.5	42.3	QBT4	Cesium-137	0.001	pCi/g	—	0.1	pCi/g
AAA4627	49-2906	40.5	42.3	QBT4	Plutonium-239	0.007	pCi/g	U	0.05	pCi/g
AAA4627	49-2906	40.5	42.3	QBT4	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
AAA4627	49-2906	40.5	42.3	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Thallium	0.44	mg/kg	U	1.1	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Beryllium	0.51	mg/kg	UJ	1.21	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Uranium	0.548	mg/kg	R	—	—
AAA4627	49-2906	40.5	42.3	QBT4	Uranium	0.614	mg/kg	R	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4627	49-2906	40.5	42.3	QBT4	Silver	0.62	mg/kg	U	1	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Selenium	0.66	mg/kg	U	0.3	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Cadmium	0.76	mg/kg	U	1.63	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Lead	0.8	mg/kg	—	11.2	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Arsenic	2.2	mg/kg	U	2.79	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Chromium, Total	2.8	mg/kg	—	7.14	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Nickel	3.5	mg/kg	U	6.58	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Antimony	4.7	mg/kg	U	0.5	mg/kg
AAA4627	49-2906	40.5	42.3	QBT4	Barium	21.1	mg/kg	U	46	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Americium-241	-0.072	pCi/g	U	0.05	pCi/g
AAA4628	49-2906	75.5	76.8	QBT4	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4628	49-2906	75.5	76.8	QBT4	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4628	49-2906	75.5	76.8	QBT4	Cesium-137	0.003	pCi/g	—	0.1	pCi/g
AAA4628	49-2906	75.5	76.8	QBT4	Ethylbenzene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloropropane[1,2-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Styrene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chloroform	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Carbon Tetrachloride	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloroethene[cis/trans-1,2-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Xylene (Total)	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Tetrachloroethene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chlorodibromomethane	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bromoform	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Carbon Disulfide	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Trichloroethane[1,1,1-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Trichloroethene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Trichloroethane[1,1,2-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloroethene[1,1-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloroethane[1,1-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bromodichloromethane	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloroethane[1,2-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chlorobenzene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Toluene	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloropropene[trans-1,3-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichloropropene[cis-1,3-]	0.005	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Methylene Chloride	0.009	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bromomethane	0.011	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4628	49-2906	75.5	76.8	QBT4	Acetone	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Hexanone[2-]	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Vinyl Chloride	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chloroethane	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chloromethane	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Butanone[2-]	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Vinyl Acetate	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Methyl-2-pentanone[4-]	0.011	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Di-n-octylphthalate	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Butylbenzylphthalate	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzo(b)fluoranthene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Fluoranthene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Acenaphthylene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chrysene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzo(k)fluoranthene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chlorophenol[2-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichlorobenzene[1,2-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Methylphenol[2-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chloronaphthalene[2-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Methylnaphthalene[2-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Naphthalene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitrobenzene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitrophenol[2-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Trichlorophenol[2,4,6-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Hexachlorobutadiene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Fluorene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitrosodiphenylamine[N-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Phenanthrene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzo(a)pyrene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzo(g,h,i)perylene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dibenzofuran	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dimethyl Phthalate	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Pyrene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dinitrotoluene[2,4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichlorophenol[2,4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dinitrotoluene[2,6-]	0.35	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4628	49-2906	75.5	76.8	QBT4	Chloro-3-methylphenol[4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzo(a)anthracene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichlorobenzene[1,3-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dibenz(a,h)anthracene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Di-n-butylphthalate	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Diethylphthalate	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Acenaphthene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Isophorone	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Hexachlorocyclopentadiene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chlorophenyl-phenyl[4-] Ether	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Hexachloroethane	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Anthracene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Hexachlorobenzene	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bis(2-chloroethoxy)methane	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bis(2-chloroethyl)ether	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Phenol	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Bromophenyl-phenylether[4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dimethylphenol[2,4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Methylphenol[4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chloroaniline[4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dichlorobenzene[1,4-]	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzyl Alcohol	0.35	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Thallium	0.42	mg/kg	U	1.1	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Beryllium	0.44	mg/kg	UJ	1.21	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Uranium	0.481	mg/kg	R	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Silver	0.59	mg/kg	U	1	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Cadmium	0.61	mg/kg	U	1.63	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Selenium	0.63	mg/kg	U	0.3	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Arsenic	0.66	mg/kg	U	2.79	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Dichlorobenzidine[3,3'-]	0.7	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Lead	0.76	mg/kg	—	11.2	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Nitroaniline[4-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Trichlorophenol[2,4,5-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitroaniline[3-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitroaniline[2-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Pentachlorophenol	1.8	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4628	49-2906	75.5	76.8	QBT4	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Dinitrophenol[2,4-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Benzoic Acid	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Nitrophenol[4-]	1.8	mg/kg	U	—	—
AAA4628	49-2906	75.5	76.8	QBT4	Chromium, Total	1.9	mg/kg	U	7.14	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4628	49-2906	75.5	76.8	QBT4	Barium	22.9	mg/kg	U	46	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Americium-241	0.001	pCi/g	U	0.05	pCi/g
AAA4629	49-2906	144.7	145.3	QBT3	Plutonium-239	0.002	pCi/g	U	0.05	pCi/g
AAA4629	49-2906	144.7	145.3	QBT3	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4629	49-2906	144.7	145.3	QBT3	Cesium-137	0.013	pCi/g	—	0.1	pCi/g
AAA4629	49-2906	144.7	145.3	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Uranium	0.197	mg/kg	R	—	—
AAA4629	49-2906	144.7	145.3	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Beryllium	0.52	mg/kg	UJ	1.21	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Silver	0.58	mg/kg	U	1	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Arsenic	0.78	mg/kg	U	2.79	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Selenium	1.7	mg/kg	U	0.3	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Lead	5.8	mg/kg	—	11.2	mg/kg
AAA4629	49-2906	144.7	145.3	QBT3	Barium	5.9	mg/kg	U	46	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Plutonium-238	0.005	pCi/g	U	0.05	pCi/g
AAA4630	49-2906	38.3	38.8	QBT4	Cesium-137	0.012	pCi/g	—	0.1	pCi/g
AAA4630	49-2906	38.3	38.8	QBT4	Americium-241	0.016	pCi/g	U	0.05	pCi/g
AAA4630	49-2906	38.3	38.8	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Plutonium-239	0.399	pCi/g	—	0.05	pCi/g
AAA4630	49-2906	38.3	38.8	QBT4	Thallium	0.44	mg/kg	U	1.1	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Uranium	0.454	mg/kg	R	—	—
AAA4630	49-2906	38.3	38.8	QBT4	Beryllium	0.57	mg/kg	UJ	1.21	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Silver	0.62	mg/kg	U	1	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Cadmium	0.64	mg/kg	U	1.63	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Selenium	0.66	mg/kg	U	0.3	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Lead	1.5	mg/kg	—	11.2	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Arsenic	2.5	mg/kg	—	2.79	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Chromium, Total	3.1	mg/kg	—	7.14	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4630	49-2906	38.3	38.8	QBT4	Nickel	3.5	mg/kg	U	6.58	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Antimony	4.7	mg/kg	U	0.5	mg/kg
AAA4630	49-2906	38.3	38.8	QBT4	Barium	15	mg/kg	U	46	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Cesium-137	-0.047	pCi/g	U	0.1	pCi/g
AAA4631	49-2906	28.2	28.6	QBT4	Americium-241	-0.019	pCi/g	U	0.05	pCi/g
AAA4631	49-2906	28.2	28.6	QBT4	Cesium-137	-0.011	pCi/g	U	0.1	pCi/g
AAA4631	49-2906	28.2	28.6	QBT4	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4631	49-2906	28.2	28.6	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Plutonium-239	0.032	pCi/g	—	0.05	pCi/g
AAA4631	49-2906	28.2	28.6	QBT4	Americium-241	0.119	pCi/g	U	0.05	pCi/g
AAA4631	49-2906	28.2	28.6	QBT4	Beryllium	0.44	mg/kg	UJ	1.21	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Thallium	0.46	mg/kg	U	1.1	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Silver	0.64	mg/kg	U	1	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Silver	0.64	mg/kg	U	1	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Uranium	0.665	mg/kg	R	—	—
AAA4631	49-2906	28.2	28.6	QBT4	Cadmium	0.67	mg/kg	U	1.63	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Cadmium	0.67	mg/kg	U	1.63	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Selenium	0.69	mg/kg	U	0.3	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Arsenic	0.75	mg/kg	U	2.79	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Arsenic	0.78	mg/kg	—	2.79	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Selenium	0.85	mg/kg	J	0.3	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Lead	2	mg/kg	—	11.2	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Lead	2.1	mg/kg	—	11.2	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Chromium, Total	3	mg/kg	—	7.14	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Chromium, Total	3.2	mg/kg	—	7.14	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Nickel	3.6	mg/kg	U	6.58	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Antimony	4.9	mg/kg	U	0.5	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Barium	14.4	mg/kg	U	46	mg/kg
AAA4631	49-2906	28.2	28.6	QBT4	Barium	17.5	mg/kg	—	46	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Plutonium-239	0.002	pCi/g	R	0.05	pCi/g
AAA4632	49-2906	85	85.5	QBT4	Plutonium-239	0.005	pCi/g	R	0.05	pCi/g
AAA4632	49-2906	85	85.5	QBT4	Americium-241	0.011	pCi/g	UJ-	0.05	pCi/g
AAA4632	49-2906	85	85.5	QBT4	Plutonium-238	0.014	pCi/g	R	0.05	pCi/g
AAA4632	49-2906	85	85.5	QBT4	Plutonium-238	0.016	pCi/g	R	0.05	pCi/g
AAA4632	49-2906	85	85.5	QBT4	Cesium-137	0.024	pCi/g	J	0.1	pCi/g
AAA4632	49-2906	85	85.5	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Uranium	0.181	mg/kg	R	—	—
AAA4632	49-2906	85	85.5	QBT4	Arsenic	0.41	mg/kg	U	2.79	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4632	49-2906	85	85.5	QBT4	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Arsenic	0.42	mg/kg	U	2.79	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Beryllium	0.43	mg/kg	UJ	1.21	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Silver	0.57	mg/kg	U	1	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Silver	0.57	mg/kg	U	1	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Selenium	0.61	mg/kg	U	0.3	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Selenium	0.61	mg/kg	U	0.3	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Lead	0.9	mg/kg	—	11.2	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Lead	1.1	mg/kg	—	11.2	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Barium	5.6	mg/kg	U	46	mg/kg
AAA4632	49-2906	85	85.5	QBT4	Barium	6.8	mg/kg	—	46	mg/kg
AAA4633	49-2906	125	126	QBT3	Cesium-137	-0.011	pCi/g	U	0.1	pCi/g
AAA4633	49-2906	125	126	QBT3	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4633	49-2906	125	126	QBT3	Plutonium-239	0.009	pCi/g	U	0.05	pCi/g
AAA4633	49-2906	125	126	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4633	49-2906	125	126	QBT3	Americium-241	0.046	pCi/g	U	0.05	pCi/g
AAA4633	49-2906	125	126	QBT3	Uranium	0.191	mg/kg	R	—	—
AAA4633	49-2906	125	126	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4633	49-2906	125	126	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4633	49-2906	125	126	QBT3	Beryllium	0.53	mg/kg	UJ	1.21	mg/kg
AAA4633	49-2906	125	126	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4633	49-2906	125	126	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4633	49-2906	125	126	QBT3	Lead	0.62	mg/kg	—	11.2	mg/kg
AAA4633	49-2906	125	126	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4633	49-2906	125	126	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4633	49-2906	125	126	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4633	49-2906	125	126	QBT3	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4633	49-2906	125	126	QBT3	Barium	13.4	mg/kg	U	46	mg/kg
AAA4634	49-2906	125	126	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4634	49-2906	125	126	QBT3	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4634	49-2906	125	126	QBT3	Cesium-137	0.01	pCi/g	—	0.1	pCi/g
AAA4634	49-2906	125	126	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4634	49-2906	125	126	QBT3	Americium-241	0.041	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4634	49-2906	125	126	QBT3	Uranium	0.323	mg/kg	R	—	—
AAA4634	49-2906	125	126	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4634	49-2906	125	126	QBT3	Arsenic	0.43	mg/kg	U	2.79	mg/kg
AAA4634	49-2906	125	126	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4634	49-2906	125	126	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4634	49-2906	125	126	QBT3	Beryllium	0.69	mg/kg	UJ	1.21	mg/kg
AAA4634	49-2906	125	126	QBT3	Lead	0.98	mg/kg	—	11.2	mg/kg
AAA4634	49-2906	125	126	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4634	49-2906	125	126	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4634	49-2906	125	126	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4634	49-2906	125	126	QBT3	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4634	49-2906	125	126	QBT3	Barium	21.6	mg/kg	U	46	mg/kg
AAA4635	49-2906	116	117	QBT3	Americium-241	-0.044	pCi/g	U	0.05	pCi/g
AAA4635	49-2906	116	117	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4635	49-2906	116	117	QBT3	Plutonium-238	0.002	pCi/g	U	0.05	pCi/g
AAA4635	49-2906	116	117	QBT3	Cesium-137	0.003	pCi/g	—	0.1	pCi/g
AAA4635	49-2906	116	117	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4635	49-2906	116	117	QBT3	Uranium	0.333	mg/kg	R	—	—
AAA4635	49-2906	116	117	QBT3	Uranium	0.401	mg/kg	R	—	—
AAA4635	49-2906	116	117	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4635	49-2906	116	117	QBT3	Beryllium	0.48	mg/kg	UJ	1.21	mg/kg
AAA4635	49-2906	116	117	QBT3	Arsenic	0.54	mg/kg	U	2.79	mg/kg
AAA4635	49-2906	116	117	QBT3	Silver	0.57	mg/kg	U	1	mg/kg
AAA4635	49-2906	116	117	QBT3	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4635	49-2906	116	117	QBT3	Lead	0.89	mg/kg	—	11.2	mg/kg
AAA4635	49-2906	116	117	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4635	49-2906	116	117	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4635	49-2906	116	117	QBT3	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4635	49-2906	116	117	QBT3	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4635	49-2906	116	117	QBT3	Barium	9.3	mg/kg	U	46	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Cesium-137	-0.041	pCi/g	U	0.1	pCi/g
AAA4636	49-2906	135.2	135.7	QBT3	Americium-241	-0.03	pCi/g	U	0.05	pCi/g
AAA4636	49-2906	135.2	135.7	QBT3	Plutonium-239	0.014	pCi/g	—	0.05	pCi/g
AAA4636	49-2906	135.2	135.7	QBT3	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Plutonium-238	0.068	pCi/g	—	0.05	pCi/g
AAA4636	49-2906	135.2	135.7	QBT3	Uranium	0.141	mg/kg	R	—	—
AAA4636	49-2906	135.2	135.7	QBT3	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Beryllium	0.51	mg/kg	UJ	1.21	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4636	49-2906	135.2	135.7	QBT3	Silver	0.58	mg/kg	U	1	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Cadmium	0.6	mg/kg	U	1.63	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Selenium	1.6	mg/kg	U	0.3	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Lead	1.6	mg/kg	—	11.2	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Nickel	3.3	mg/kg	U	6.58	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Antimony	4.4	mg/kg	U	0.5	mg/kg
AAA4636	49-2906	135.2	135.7	QBT3	Barium	8.6	mg/kg	U	46	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Plutonium-239	0.001	pCi/g	R	0.05	pCi/g
AAA4637	49-2906	91	91.5	QBT4	Plutonium-238	0.002	pCi/g	R	0.05	pCi/g
AAA4637	49-2906	91	91.5	QBT4	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Cesium-137	0.036	pCi/g	J-	0.1	pCi/g
AAA4637	49-2906	91	91.5	QBT4	Mercury	0.04	mg/kg	U	0.1	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Americium-241	0.065	pCi/g	UJ-	0.05	pCi/g
AAA4637	49-2906	91	91.5	QBT4	Uranium	0.202	mg/kg	R	—	—
AAA4637	49-2906	91	91.5	QBT4	Beryllium	0.31	mg/kg	UJ	1.21	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Arsenic	0.41	mg/kg	U	2.79	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Thallium	0.41	mg/kg	U	1.1	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Silver	0.57	mg/kg	U	1	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Silver	0.57	mg/kg	U	1	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Cadmium	0.59	mg/kg	U	1.63	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Selenium	0.61	mg/kg	U	0.3	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Selenium	0.61	mg/kg	U	0.3	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Chromium, Total	1.4	mg/kg	U	7.14	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Nickel	3.2	mg/kg	U	6.58	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Antimony	4.3	mg/kg	U	0.5	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Lead	5.3	mg/kg	—	11.2	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Lead	5.3	mg/kg	—	11.2	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Barium	7.9	mg/kg	—	46	mg/kg
AAA4637	49-2906	91	91.5	QBT4	Barium	7.9	mg/kg	U	46	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Cesium-137	-0.01	pCi/g	U	0.1	pCi/g
AAA4638	49-2903	2.1	2.7	ALLH	Plutonium-239	0.005	pCi/g	U	0.05	pCi/g
AAA4638	49-2903	2.1	2.7	ALLH	Americium-241	0.007	pCi/g	U	0.05	pCi/g
AAA4638	49-2903	2.1	2.7	ALLH	Plutonium-238	0.016	pCi/g	U	0.05	pCi/g
AAA4638	49-2903	2.1	2.7	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Thallium	0.51	mg/kg	U	1.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4638	49-2903	2.1	2.7	ALLH	Silver	0.72	mg/kg	U	1	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Selenium	0.8	mg/kg	U	0.3	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Beryllium	1.4	mg/kg	J	1.21	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Cadmium	1.6	mg/kg	—	1.63	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Uranium	1.821	mg/kg	R	—	—
AAA4638	49-2903	2.1	2.7	ALLH	Uranium	1.847	mg/kg	R	—	—
AAA4638	49-2903	2.1	2.7	ALLH	Arsenic	2.8	mg/kg	—	2.79	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Antimony	5.4	mg/kg	U	0.5	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Chromium, Total	9.2	mg/kg	—	7.14	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Nickel	10	mg/kg	U	6.58	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Lead	13.8	mg/kg	—	11.2	mg/kg
AAA4638	49-2903	2.1	2.7	ALLH	Barium	260	mg/kg	—	46	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Plutonium-239	0.001	pCi/g	—	0.05	pCi/g
AAA4639	49-2903	6.2	7	ALLH	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4639	49-2903	6.2	7	ALLH	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4639	49-2903	6.2	7	ALLH	Plutonium-239	0.002	pCi/g	—	0.05	pCi/g
AAA4639	49-2903	6.2	7	ALLH	Cesium-137	0.02	pCi/g	—	0.1	pCi/g
AAA4639	49-2903	6.2	7	ALLH	Americium-241	0.03	pCi/g	U	0.05	pCi/g
AAA4639	49-2903	6.2	7	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Thallium	0.49	mg/kg	U	1.1	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Silver	0.68	mg/kg	U	1	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Selenium	0.73	mg/kg	U	0.3	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Beryllium	1.3	mg/kg	J	1.21	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Uranium	1.615	mg/kg	R	—	—
AAA4639	49-2903	6.2	7	ALLH	Cadmium	2.2	mg/kg	—	1.63	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Arsenic	2.9	mg/kg	—	2.79	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Antimony	5.2	mg/kg	U	0.5	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Chromium, Total	9	mg/kg	—	7.14	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Nickel	11.7	mg/kg	—	6.58	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Lead	13.4	mg/kg	—	11.2	mg/kg
AAA4639	49-2903	6.2	7	ALLH	Barium	255	mg/kg	—	46	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Cesium-137	0.004	pCi/g	J-	0.1	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Thallium	0.5	mg/kg	U	1.1	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Beryllium	0.6	mg/kg	UJ	1.21	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Uranium	0.664	mg/kg	R	—	—
AAA4640	49-2905	2.5	3	ALLH	Silver	0.7	mg/kg	U	1	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Cadmium	0.72	mg/kg	U	1.63	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Selenium	0.75	mg/kg	U	0.3	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4640	49-2905	2.5	3	ALLH	Arsenic	1	mg/kg	U	2.79	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	3.106	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	3.2	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Lead	3.5	mg/kg	—	11.2	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Chromium, Total	3.9	mg/kg	—	7.14	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Nickel	3.9	mg/kg	U	6.58	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	4.2	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	4.3	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	4.4	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	4.8	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-238	5.1	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Antimony	5.3	mg/kg	U	0.5	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Americium-241	15.5	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Americium-241	28.7	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Americium-241	31.7	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Americium-241	31.9	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Americium-241	33.5	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Americium-241	59	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Barium	65.1	mg/kg	—	46	mg/kg
AAA4640	49-2905	2.5	3	ALLH	Americium-241	66.639	pCi/g	—	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	69.9	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	137.2	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	157.5	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	164.7	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	176.8	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	178.16	pCi/g	J	0.05	pCi/g
AAA4640	49-2905	2.5	3	ALLH	Plutonium-239	291.4	pCi/g	J	0.05	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Americium-241	-0.097	pCi/g	U	0.05	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Plutonium-239	0.007	pCi/g	U	0.05	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Plutonium-238	0.009	pCi/g	U	0.05	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Plutonium-239	0.011	pCi/g	U	0.05	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Plutonium-238	0.018	pCi/g	U	0.05	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Cesium-137	0.019	pCi/g	J	0.1	pCi/g
AAA4641	49-2904	2.4	3	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Thallium	0.48	mg/kg	U	1.1	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Silver	0.67	mg/kg	U	1	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Selenium	0.72	mg/kg	U	0.3	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Beryllium	1.2	mg/kg	J	1.21	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Cadmium	1.8	mg/kg	—	1.63	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4641	49-2904	2.4	3	ALLH	Uranium	1.802	mg/kg	R	—	—
AAA4641	49-2904	2.4	3	ALLH	Uranium	2.087	mg/kg	R	—	—
AAA4641	49-2904	2.4	3	ALLH	Arsenic	3.1	mg/kg	—	2.79	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Antimony	5.1	mg/kg	U	0.5	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Chromium, Total	8.5	mg/kg	—	7.14	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Nickel	10.4	mg/kg	—	6.58	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Lead	14.9	mg/kg	—	11.2	mg/kg
AAA4641	49-2904	2.4	3	ALLH	Barium	205	mg/kg	—	46	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
AAA4642	49-2902	3.2	3.5	ALLH	Plutonium-238	0.001	pCi/g	U	0.05	pCi/g
AAA4642	49-2902	3.2	3.5	ALLH	Cesium-137	0.017	pCi/g	—	0.1	pCi/g
AAA4642	49-2902	3.2	3.5	ALLH	Americium-241	0.024	pCi/g	U	0.05	pCi/g
AAA4642	49-2902	3.2	3.5	ALLH	Mercury	0.03	mg/kg	U	0.1	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Silver	0.75	mg/kg	U	1	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Selenium	0.91	mg/kg	J+	0.3	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Cadmium	1.5	mg/kg	—	1.63	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Uranium	1.799	mg/kg	R	—	—
AAA4642	49-2902	3.2	3.5	ALLH	Arsenic	3.8	mg/kg	J-	2.79	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Chromium, Total	8.7	mg/kg	—	7.14	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Lead	14.8	mg/kg	—	11.2	mg/kg
AAA4642	49-2902	3.2	3.5	ALLH	Barium	228	mg/kg	J	46	mg/kg
AAA4643	49-2907	—	—	QBT3	Cesium-137	-1.695	pCi/l	U	0.1	pCi/g
AAA4643	49-2907	—	—	QBT3	Cesium-137	-1.174	pCi/l	U	0.1	pCi/g
AAA4643	49-2907	—	—	QBT3	Plutonium-238	0.005	pCi/l	—	0.05	pCi/g
AAA4643	49-2907	—	—	QBT3	Uranium	0.035	µg/l	R	—	—
AAA4643	49-2907	—	—	QBT3	Plutonium-239	0.036	pCi/l	—	0.05	pCi/g
AAA4643	49-2907	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg
AAA4643	49-2907	—	—	QBT3	Americium-241	0.08	pCi/l	U	0.05	pCi/g
AAA4643	49-2907	—	—	QBT3	Beryllium	0.2	µg/l	UJ	1.21	mg/kg
AAA4643	49-2907	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4643	49-2907	—	—	QBT3	Lead	2	µg/l	U	11.2	mg/kg
AAA4643	49-2907	—	—	QBT3	Thallium	2	µg/l	U	1.1	mg/kg
AAA4643	49-2907	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4643	49-2907	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4643	49-2907	—	—	QBT3	Selenium	3	µg/l	U	0.3	mg/kg
AAA4643	49-2907	—	—	QBT3	Barium	5.5	µg/l	U	46	mg/kg
AAA4643	49-2907	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg
AAA4643	49-2907	—	—	QBT3	Nickel	15.8	µg/l	U	6.58	mg/kg
AAA4643	49-2907	—	—	QBT3	Antimony	21.2	µg/l	U	0.5	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4645	49-2904	—	—	QBT3	Uranium	0.004	µg/l	R	—	—
AAA4645	49-2904	—	—	QBT3	Plutonium-238	0.005	pCi/l	—	0.05	pCi/g
AAA4645	49-2904	—	—	QBT3	Plutonium-238	0.009	pCi/l	—	0.05	pCi/g
AAA4645	49-2904	—	—	QBT3	Uranium	0.01	µg/l	R	—	—
AAA4645	49-2904	—	—	QBT3	Plutonium-239	0.023	pCi/l	—	0.05	pCi/g
AAA4645	49-2904	—	—	QBT3	Plutonium-239	0.032	pCi/l	—	0.05	pCi/g
AAA4645	49-2904	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg
AAA4645	49-2904	—	—	QBT3	Americium-241	0.05	pCi/l	—	0.05	pCi/g
AAA4645	49-2904	—	—	QBT3	Americium-241	0.07	pCi/l	—	0.05	pCi/g
AAA4645	49-2904	—	—	QBT3	Beryllium	0.2	µg/l	UJ	1.21	mg/kg
AAA4645	49-2904	—	—	QBT3	Cesium-137	0.589	pCi/l	—	0.1	pCi/g
AAA4645	49-2904	—	—	QBT3	Lead	2	µg/l	U	11.2	mg/kg
AAA4645	49-2904	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4645	49-2904	—	—	QBT3	Thallium	2	µg/l	U	1.1	mg/kg
AAA4645	49-2904	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4645	49-2904	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4645	49-2904	—	—	QBT3	Selenium	3	µg/l	U	0.3	mg/kg
AAA4645	49-2904	—	—	QBT3	Barium	3.6	µg/l	U	46	mg/kg
AAA4645	49-2904	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg
AAA4645	49-2904	—	—	QBT3	Nickel	15.8	µg/l	U	6.58	mg/kg
AAA4645	49-2904	—	—	QBT3	Antimony	21.2	µg/l	U	0.5	mg/kg
AAA4646	49-2906	—	—	QBT3	Cesium-137	-1.936	pCi/l	U	0.1	pCi/g
AAA4646	49-2906	—	—	QBT3	Plutonium-238	-0.005	pCi/l	U	0.05	pCi/g
AAA4646	49-2906	—	—	QBT3	Plutonium-239	0	pCi/l	—	0.05	pCi/g
AAA4646	49-2906	—	—	QBT3	Uranium	0	µg/l	R	—	—
AAA4646	49-2906	—	—	QBT3	Uranium	0	µg/l	R	—	—
AAA4646	49-2906	—	—	QBT3	Plutonium-238	0.001	pCi/l	U	0.05	pCi/g
AAA4646	49-2906	—	—	QBT3	Plutonium-239	0.005	pCi/l	U	0.05	pCi/g
AAA4646	49-2906	—	—	QBT3	Mercury	0.05	µg/l	UJ	0.1	mg/kg
AAA4646	49-2906	—	—	QBT3	Beryllium	0.46	µg/l	UJ	1.21	mg/kg
AAA4646	49-2906	—	—	QBT3	Barium	0.72	µg/l	U	46	mg/kg
AAA4646	49-2906	—	—	QBT3	Americium-241	0.775	pCi/l	—	0.05	pCi/g
AAA4646	49-2906	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4646	49-2906	—	—	QBT3	Lead	2	µg/l	U	11.2	mg/kg
AAA4646	49-2906	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4646	49-2906	—	—	QBT3	Thallium	2	µg/l	U	1.1	mg/kg
AAA4646	49-2906	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4646	49-2906	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4646	49-2906	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4646	49-2906	—	—	QBT3	Nickel	15.8	µg/l	U	6.58	mg/kg
AAA4646	49-2906	—	—	QBT3	Antimony	21.2	µg/l	U	0.5	mg/kg
AAA4648	49-2901	—	—	QBT3	Plutonium-239	0.0152	pCi/l	U	0.05	pCi/g
AAA4648	49-2901	—	—	QBT3	Plutonium-238	0.0191	pCi/l	U	0.05	pCi/g
AAA4648	49-2901	—	—	QBT3	Americium-241	0.0403	pCi/l	U	0.05	pCi/g
AAA4648	49-2901	—	—	QBT3	Mercury	0.2	µg/l	U	0.1	mg/kg
AAA4648	49-2901	—	—	QBT3	Lead	1	µg/l	U	11.2	mg/kg
AAA4648	49-2901	—	—	QBT3	Lead	1	µg/l	U	11.2	mg/kg
AAA4648	49-2901	—	—	QBT3	Uranium	1.17	µg/l	R	—	—
AAA4648	49-2901	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4648	49-2901	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4648	49-2901	—	—	QBT3	Cadmium	3	µg/l	U	1.63	mg/kg
AAA4648	49-2901	—	—	QBT3	Cadmium	3	µg/l	U	1.63	mg/kg
AAA4648	49-2901	—	—	QBT3	Arsenic	4	µg/l	U	2.79	mg/kg
AAA4648	49-2901	—	—	QBT3	Chromium, Total	4	µg/l	U	7.14	mg/kg
AAA4648	49-2901	—	—	QBT3	Chromium, Total	4	µg/l	U	7.14	mg/kg
AAA4648	49-2901	—	—	QBT3	Arsenic	4.2	µg/l	UJ	2.79	mg/kg
AAA4648	49-2901	—	—	QBT3	Silver	5	µg/l	U	1	mg/kg
AAA4648	49-2901	—	—	QBT3	Silver	5	µg/l	U	1	mg/kg
AAA4648	49-2901	—	—	QBT3	Barium	5	µg/l	U	46	mg/kg
AAA4648	49-2901	—	—	QBT3	Barium	5	µg/l	U	46	mg/kg
AAA4648	49-2901	—	—	QBT3	Cesium-137	14	pCi/l	U	0.1	pCi/g
AAA4649	49-2906	—	—	QBT3	Americium-241	-0.712	pCi/l	U	0.05	pCi/g
AAA4649	49-2906	—	—	QBT3	Americium-241	-0.413	pCi/l	U	0.05	pCi/g
AAA4649	49-2906	—	—	QBT3	Plutonium-239	-0.005	pCi/l	U	0.05	pCi/g
AAA4649	49-2906	—	—	QBT3	Plutonium-238	0.001	pCi/l	U	0.05	pCi/g
AAA4649	49-2906	—	—	QBT3	Plutonium-239	0.005	pCi/l	U	0.05	pCi/g
AAA4649	49-2906	—	—	QBT3	Uranium	0.006	µg/l	R	—	—
AAA4649	49-2906	—	—	QBT3	Plutonium-238	0.009	pCi/l	—	0.05	pCi/g
AAA4649	49-2906	—	—	QBT3	Mercury	0.05	µg/l	UJ	0.1	mg/kg
AAA4649	49-2906	—	—	QBT3	Cesium-137	0.102	pCi/l	—	0.1	pCi/g
AAA4649	49-2906	—	—	QBT3	Beryllium	0.52	µg/l	UJ	1.21	mg/kg
AAA4649	49-2906	—	—	QBT3	Cesium-137	0.799	pCi/l	—	0.1	pCi/g
AAA4649	49-2906	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4649	49-2906	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4649	49-2906	—	—	QBT3	Thallium	2	µg/l	U	1.1	mg/kg
AAA4649	49-2906	—	—	QBT3	Lead	2.7	µg/l	U	11.2	mg/kg
AAA4649	49-2906	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4649	49-2906	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4649	49-2906	—	—	QBT3	Barium	4.1	µg/l	U	46	mg/kg
AAA4649	49-2906	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg
AAA4649	49-2906	—	—	QBT3	Nickel	15.8	µg/l	U	6.58	mg/kg
AAA4649	49-2906	—	—	QBT3	Antimony	21.2	µg/l	U	0.5	mg/kg
AAA4650	49-2907	—	—	QBT3	Plutonium-239	0.001	pCi/l	U	0.05	pCi/g
AAA4650	49-2907	—	—	QBT3	Cesium-137	0.001	pCi/l	—	0.1	pCi/g
AAA4650	49-2907	—	—	QBT3	Plutonium-238	0.005	pCi/l	—	0.05	pCi/g
AAA4650	49-2907	—	—	QBT3	Plutonium-238	0.009	pCi/l	U	0.05	pCi/g
AAA4650	49-2907	—	—	QBT3	Uranium	0.034	µg/l	R	—	—
AAA4650	49-2907	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg
AAA4650	49-2907	—	—	QBT3	Plutonium-239	0.153	pCi/l	—	0.05	pCi/g
AAA4650	49-2907	—	—	QBT3	Barium	1.7	µg/l	U	46	mg/kg
AAA4650	49-2907	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4650	49-2907	—	—	QBT3	Lead	2	µg/l	U	11.2	mg/kg
AAA4650	49-2907	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4650	49-2907	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4650	49-2907	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4650	49-2907	—	—	QBT3	Americium-241	5.795	pCi/l	—	0.05	pCi/g
AAA4650	49-2907	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg
AAA4653	49-2901	—	—	QBT3	Uranium	0	µg/l	R	—	—
AAA4653	49-2901	—	—	QBT3	Plutonium-238	0.035	pCi/l	U	0.05	pCi/g
AAA4653	49-2901	—	—	QBT3	Plutonium-239	0.053	pCi/l	U	0.05	pCi/g
AAA4653	49-2901	—	—	QBT3	Americium-241	0.055	pCi/l	U	0.05	pCi/g
AAA4653	49-2901	—	—	QBT3	Mercury	0.2	µg/l	U	0.1	mg/kg
AAA4653	49-2901	—	—	QBT3	Mercury	0.2	µg/l	U	0.1	mg/kg
AAA4653	49-2901	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4653	49-2901	—	—	QBT3	Selenium	2	µg/l	U	0.3	mg/kg
AAA4653	49-2901	—	—	QBT3	Cadmium	3	µg/l	U	1.63	mg/kg
AAA4653	49-2901	—	—	QBT3	Cadmium	3	µg/l	U	1.63	mg/kg
AAA4653	49-2901	—	—	QBT3	Lead	3.217	µg/l	—	11.2	mg/kg
AAA4653	49-2901	—	—	QBT3	Arsenic	4	µg/l	U	2.79	mg/kg
AAA4653	49-2901	—	—	QBT3	Arsenic	4	µg/l	U	2.79	mg/kg
AAA4653	49-2901	—	—	QBT3	Chromium, Total	4	µg/l	U	7.14	mg/kg
AAA4653	49-2901	—	—	QBT3	Chromium, Total	4	µg/l	U	7.14	mg/kg
AAA4653	49-2901	—	—	QBT3	Silver	5	µg/l	U	1	mg/kg
AAA4653	49-2901	—	—	QBT3	Silver	5	µg/l	U	1	mg/kg
AAA4653	49-2901	—	—	QBT3	Barium	5	µg/l	U	46	mg/kg
AAA4653	49-2901	—	—	QBT3	Barium	5	µg/l	U	46	mg/kg
AAA4653	49-2901	—	—	QBT3	Lead	6	µg/l	—	11.2	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4653	49-2901	—	—	QBT3	Cesium-137	17	pCi/l	U	0.1	pCi/g
AAA4654	49-2907	—	—	QBT3	Cesium-137	-0.49	pCi/l	U	0.1	pCi/g
AAA4654	49-2907	—	—	QBT3	Plutonium-238	0.001	pCi/l	—	0.05	pCi/g
AAA4654	49-2907	—	—	QBT3	Plutonium-239	0.041	pCi/l	—	0.05	pCi/g
AAA4654	49-2907	—	—	QBT3	Uranium	0.043	µg/l	R	—	—
AAA4654	49-2907	—	—	QBT3	Uranium	0.048	µg/l	R	—	—
AAA4654	49-2907	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg
AAA4654	49-2907	—	—	QBT3	Americium-241	0.05	pCi/l	U	0.05	pCi/g
AAA4654	49-2907	—	—	QBT3	Beryllium	0.2	µg/l	UJ	1.21	mg/kg
AAA4654	49-2907	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4654	49-2907	—	—	QBT3	Thallium	2	µg/l	U	1.1	mg/kg
AAA4654	49-2907	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4654	49-2907	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4654	49-2907	—	—	QBT3	Selenium	3	µg/l	U	0.3	mg/kg
AAA4654	49-2907	—	—	QBT3	Lead	4	µg/l	—	11.2	mg/kg
AAA4654	49-2907	—	—	QBT3	Barium	6.6	µg/l	U	46	mg/kg
AAA4654	49-2907	—	—	QBT3	Nickel	16.1	µg/l	U	6.58	mg/kg
AAA4654	49-2907	—	—	QBT3	Antimony	21.2	µg/l	U	0.5	mg/kg
AAA4654	49-2907	—	—	QBT3	Chromium, Total	71.6	µg/l	—	7.14	mg/kg
AAA4655	49-2907	—	—	QBT3	Cesium-137	-2.932	pCi/l	U	0.1	pCi/g
AAA4655	49-2907	—	—	QBT3	Americium-241	-1.049	pCi/l	U	0.05	pCi/g
AAA4655	49-2907	—	—	QBT3	Plutonium-239	-0.005	pCi/l	U	0.05	pCi/g
AAA4655	49-2907	—	—	QBT3	Plutonium-239	0.001	pCi/l	U	0.05	pCi/g
AAA4655	49-2907	—	—	QBT3	Plutonium-238	0.001	pCi/l	U	0.05	pCi/g
AAA4655	49-2907	—	—	QBT3	Plutonium-238	0.009	pCi/l	—	0.05	pCi/g
AAA4655	49-2907	—	—	QBT3	Uranium	0.044	µg/l	R	—	—
AAA4655	49-2907	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg
AAA4655	49-2907	—	—	QBT3	Barium	1.9	µg/l	U	46	mg/kg
AAA4655	49-2907	—	—	QBT3	Lead	2	µg/l	U	11.2	mg/kg
AAA4655	49-2907	—	—	QBT3	Arsenic	2.2	µg/l	U	2.79	mg/kg
AAA4655	49-2907	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4655	49-2907	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4655	49-2907	—	—	QBT3	Selenium	4.4	µg/l	J+	0.3	mg/kg
AAA4655	49-2907	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg
AAA4656	49-2904	—	—	QBT3	Cesium-137	-0.407	pCi/l	U	0.1	pCi/g
AAA4656	49-2904	—	—	QBT3	Cesium-137	-0.246	pCi/l	U	0.1	pCi/g
AAA4656	49-2904	—	—	QBT3	Plutonium-238	0.005	pCi/l	—	0.05	pCi/g
AAA4656	49-2904	—	—	QBT3	Plutonium-239	0.014	pCi/l	—	0.05	pCi/g
AAA4656	49-2904	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA4656	49-2904	—	—	QBT3	Mercury	0.05	µg/l	U	0.1	mg/kg
AAA4656	49-2904	—	—	QBT3	Uranium	0.085	µg/l	R	—	—
AAA4656	49-2904	—	—	QBT3	Uranium	0.085	µg/l	R	—	—
AAA4656	49-2904	—	—	QBT3	Americium-241	0.09	pCi/l	—	0.05	pCi/g
AAA4656	49-2904	—	—	QBT3	Beryllium	0.2	µg/l	UJ	1.21	mg/kg
AAA4656	49-2904	—	—	QBT3	Arsenic	2	µg/l	U	2.79	mg/kg
AAA4656	49-2904	—	—	QBT3	Lead	2	µg/l	U	11.2	mg/kg
AAA4656	49-2904	—	—	QBT3	Thallium	2	µg/l	U	1.1	mg/kg
AAA4656	49-2904	—	—	QBT3	Silver	2.8	µg/l	U	1	mg/kg
AAA4656	49-2904	—	—	QBT3	Cadmium	2.9	µg/l	U	1.63	mg/kg
AAA4656	49-2904	—	—	QBT3	Selenium	3	µg/l	U	0.3	mg/kg
AAA4656	49-2904	—	—	QBT3	Barium	6.3	µg/l	U	46	mg/kg
AAA4656	49-2904	—	—	QBT3	Chromium, Total	7	µg/l	U	7.14	mg/kg
AAA4656	49-2904	—	—	QBT3	Nickel	15.8	µg/l	U	6.58	mg/kg
AAA4656	49-2904	—	—	QBT3	Antimony	21.2	µg/l	U	0.5	mg/kg
AAA8142	49-2901	24.5	25	QBT3	Gross Alpha Radiation	-40	pCi/g	U	—	—
AAA8142	49-2901	24.5	25	QBT3	Cesium-137	0.037	pCi/g	U	0.1	pCi/g
AAA8142	49-2901	24.5	25	QBT3	Gross Beta Radiation	5.5	pCi/g	—	—	—
AAA8142	49-2901	24.5	25	QBT3	Gross Gamma Radiation	13	pCi/g	—	—	—
AAA8143	49-2901	84.2	84.4	QBT3	Gross Alpha Radiation	-120	pCi/g	U	—	—
AAA8143	49-2901	84.2	84.4	QBT3	Cesium-137	0.0385	pCi/g	U	0.1	pCi/g
AAA8143	49-2901	84.2	84.4	QBT3	Gross Beta Radiation	8	pCi/g	—	—	—
AAA8143	49-2901	84.2	84.4	QBT3	Gross Gamma Radiation	15	pCi/g	—	—	—
AAA8144	49-2901	116	116.2	QBT3	Gross Alpha Radiation	-80	pCi/g	U	—	—
AAA8144	49-2901	116	116.2	QBT3	Cesium-137	0.0363	pCi/g	U	0.1	pCi/g
AAA8144	49-2901	116	116.2	QBT3	Gross Beta Radiation	11	pCi/g	—	—	—
AAA8144	49-2901	116	116.2	QBT3	Gross Gamma Radiation	13	pCi/g	—	—	—
AAA8145	49-2901	49.7	49.9	QBT3	Gross Alpha Radiation	-50	pCi/g	U	—	—
AAA8145	49-2901	49.7	49.9	QBT3	Cesium-137	0.0011	pCi/g	U	0.1	pCi/g
AAA8145	49-2901	49.7	49.9	QBT3	Gross Beta Radiation	8	pCi/g	—	—	—
AAA8145	49-2901	49.7	49.9	QBT3	Gross Gamma Radiation	14	pCi/g	—	—	—
AAA8146	49-2901	148.6	148.8	QBT3	Gross Alpha Radiation	-90	pCi/g	U	—	—
AAA8146	49-2901	148.6	148.8	QBT3	Cesium-137	0.0109	pCi/g	U	0.1	pCi/g
AAA8146	49-2901	148.6	148.8	QBT3	Gross Beta Radiation	7.3	pCi/g	—	—	—
AAA8146	49-2901	148.6	148.8	QBT3	Gross Gamma Radiation	11	pCi/g	—	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Ethylbenzene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chlorobenzene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Toluene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloroethane[1,1-]	0.005	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA9976	49-2906	72.3	72.5	QBT4	Bromodichloromethane	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Carbon Disulfide	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Trichloroethene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Trichloroethane[1,1,2-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloropropane[1,2-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloroethene[1,1-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Trichloroethane[1,1,1-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chloroform	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Carbon Tetrachloride	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloroethene[cis/trans-1,2-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Xylene (Total)	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Tetrachloroethene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chlorodibromomethane	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloropropene[cis-1,3-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloroethane[1,2-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichloropropene[trans-1,3-]	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Styrene	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Bromoform	0.005	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Methylene Chloride	0.008	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Vinyl Chloride	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chloroethane	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chloromethane	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Bromomethane	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Butanone[2-]	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Hexanone[2-]	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Vinyl Acetate	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Methyl-2-pentanone[4-]	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Acetone	0.01	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitrophenol[2-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Trichlorophenol[2,4,6-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Hexachlorobutadiene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Fluorene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitrosodiphenylamine[N-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Butylbenzylphthalate	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitrobenzene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chlorophenol[2-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichlorobenzene[1,2-]	0.35	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA9976	49-2906	72.3	72.5	QBT4	Methylphenol[2-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chloronaphthalene[2-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Methylnaphthalene[2-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Naphthalene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Phenanthrene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Diethylphthalate	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Acenaphthene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Isophorone	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Hexachlorocyclopentadiene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chlorophenyl-phenyl[4-] Ether	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Hexachloroethane	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Anthracene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Hexachlorobenzene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Di-n-octylphthalate	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Bis(2-chloroethyl)ether	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Phenol	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dinitrotoluene[2,6-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chloro-3-methylphenol[4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzo(a)anthracene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichlorobenzene[1,3-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dibenz(a,h)anthracene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzo(a)pyrene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzo(g,h,i)perylene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dibenzofuran	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dimethyl Phthalate	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Pyrene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dinitrotoluene[2,4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichlorophenol[2,4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Bromophenyl-phenylether[4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dimethylphenol[2,4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Methylphenol[4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chloroaniline[4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichlorobenzene[1,4-]	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzyl Alcohol	0.35	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA9976	49-2906	72.3	72.5	QBT4	Benzo(b)fluoranthene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzo(k)fluoranthene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Acenaphthylene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Fluoranthene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Chrysene	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Bis(2-chloroethoxy)methane	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Di-n-butylphthalate	0.35	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitroaniline[4-]	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitroaniline[2-]	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Pentachlorophenol	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitroaniline[3-]	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Trichlorophenol[2,4,5-]	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Benzoic Acid	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Dinitrophenol[2,4-]	1.7	mg/kg	U	—	—
AAA9976	49-2906	72.3	72.5	QBT4	Nitrophenol[4-]	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Phenol	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Acenaphthene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzo(b)fluoranthene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Acenaphthylene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Chrysene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzo(k)fluoranthene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Fluoranthene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Phenanthrene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Di-n-butylphthalate	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Diethylphthalate	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Isophorone	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Hexachlorocyclopentadiene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Chlorophenyl-phenyl[4-] Ether	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Hexachloroethane	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Chlorophenol[2-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dichlorobenzene[1,2-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Methylphenol[2-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Chloronaphthalene[2-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Methylnaphthalene[2-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Naphthalene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitrobenzene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitrophenol[2-]	0.35	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA9979	49-2906	63	63.3	QBT4	Trichlorophenol[2,4,6-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Hexachlorobutadiene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Fluorene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitrosodiphenylamine[N-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Butylbenzylphthalate	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dinitrotoluene[2,6-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Chloro-3-methylphenol[4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzo(a)anthracene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dichlorobenzene[1,3-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dibenz(a,h)anthracene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Anthracene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Hexachlorobenzene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Di-n-octylphthalate	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Bis(2-chloroethoxy)methane	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Bis(2-chloroethyl)ether	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzo(a)pyrene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzo(g,h,i)perylene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dibenzofuran	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dimethyl Phthalate	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Pyrene	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dinitrotoluene[2,4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dichlorophenol[2,4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Bromophenyl-phenylether[4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dimethylphenol[2,4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Methylphenol[4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Chloroaniline[4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dichlorobenzene[1,4-]	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzyl Alcohol	0.35	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitroaniline[3-]	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitroaniline[4-]	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Benzoic Acid	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Trichlorophenol[2,4,5-]	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitroaniline[2-]	1.7	mg/kg	U	—	—

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAA9979	49-2906	63	63.3	QBT4	Pentachlorophenol	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Dinitrophenol[2,4-]	1.7	mg/kg	U	—	—
AAA9979	49-2906	63	63.3	QBT4	Nitrophenol[4-]	1.7	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Xylene (Total)	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Ethylbenzene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Trichloroethene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Trichloroethane[1,1,2-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloropropane[1,2-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloroethene[1,1-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloroethane[1,1-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Bromodichloromethane	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Chloroform	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Carbon Tetrachloride	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloroethene[cis/trans-1,2-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Tetrachloroethene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Chlorodibromomethane	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Chlorobenzene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Bromoform	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Carbon Disulfide	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Trichloroethane[1,1,1-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Benzene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloropropene[trans-1,3-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloroethane[1,2-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Toluene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Dichloropropene[cis-1,3-]	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Styrene	0.005	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Methylene Chloride	0.008	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Vinyl Chloride	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Butanone[2-]	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Acetone	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Hexanone[2-]	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Chloroethane	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Chloromethane	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Bromomethane	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Vinyl Acetate	0.01	mg/kg	U	—	—
AAA9980	49-2906	63	63.3	QBT4	Methyl-2-pentanone[4-]	0.01	mg/kg	U	—	—
AAB7451	49-2902	7.4	7.7	ALLH	Cadmium	0.08	mg/kg	U	1.63	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAB7451	49-2902	7.4	7.7	ALLH	Cadmium	0.08	mg/kg	U	1.63	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Mercury	0.12	mg/kg	U	0.1	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Silver	0.13	mg/kg	U	1	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Silver	0.13	mg/kg	U	1	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Mercury	0.13	mg/kg	U	0.1	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Antimony	0.33	mg/kg	U	0.5	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Antimony	0.33	mg/kg	U	0.5	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Selenium	0.65	mg/kg	U	0.3	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Selenium	0.65	mg/kg	U	0.3	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Thallium	0.78	mg/kg	U	1.1	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Thallium	0.78	mg/kg	U	1.1	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Beryllium	1.2	mg/kg	—	1.21	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Beryllium	1.3	mg/kg	—	1.21	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Copper	2.4	mg/kg	—	4.66	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Copper	2.6	mg/kg	U	4.66	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Arsenic	2.7	mg/kg	—	2.79	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Arsenic	3.1	mg/kg	—	2.79	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Cobalt	3.8	mg/kg	U	3.14	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Cobalt	4.1	mg/kg	—	3.14	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Lead	9.7	mg/kg	—	11.2	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Lead	10.7	mg/kg	—	11.2	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Nickel	11.3	mg/kg	—	6.58	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Nickel	11.6	mg/kg	—	6.58	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Vanadium	15.4	mg/kg	—	17	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Vanadium	22	mg/kg	—	17	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Zinc	22.9	mg/kg	—	63.5	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Chromium, Total	24	mg/kg	—	7.14	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Zinc	27	mg/kg	—	63.5	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Chromium, Total	28	mg/kg	—	7.14	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Sodium	175	mg/kg	—	2770	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Sodium	183	mg/kg	U	2770	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Barium	197	mg/kg	—	46	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Manganese	206	mg/kg	—	482	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Manganese	216	mg/kg	—	482	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Barium	247	mg/kg	—	46	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Potassium	2110	mg/kg	—	3500	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Magnesium	2170	mg/kg	—	1690	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Magnesium	2364	mg/kg	—	1690	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Potassium	2485	mg/kg	—	3500	mg/kg

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
AAB7451	49-2902	7.4	7.7	ALLH	Calcium	2582	mg/kg	—	2200	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Calcium	3440	mg/kg	—	2200	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Iron	10900	mg/kg	—	14500	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Iron	12848	mg/kg	—	14500	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Aluminum	19500	mg/kg	—	7340	mg/kg
AAB7451	49-2902	7.4	7.7	ALLH	Aluminum	22996	mg/kg	—	7340	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Cadmium	0.07	mg/kg	U	1.63	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Mercury	0.11	mg/kg	U	0.1	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Silver	0.12	mg/kg	U	1	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Antimony	0.32	mg/kg	U	0.5	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Selenium	0.63	mg/kg	U	0.3	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Thallium	0.75	mg/kg	U	1.1	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Beryllium	1.2	mg/kg	—	1.21	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Arsenic	3.3	mg/kg	—	2.79	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Copper	3.7	mg/kg	U	4.66	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Cobalt	6.7	mg/kg	U	3.14	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Nickel	9.5	mg/kg	U	6.58	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Chromium, Total	10.1	mg/kg	—	7.14	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Lead	15.2	mg/kg	—	11.2	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Vanadium	27.5	mg/kg	—	17	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Sodium	30.2	mg/kg	U	2770	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Zinc	36	mg/kg	—	63.5	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Barium	235	mg/kg	—	46	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Manganese	522	mg/kg	—	482	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Calcium	2480	mg/kg	—	2200	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Magnesium	2530	mg/kg	—	1690	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Potassium	3060	mg/kg	—	3500	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Iron	14500	mg/kg	—	14500	mg/kg
AAB7452	49-2902	3.2	3.5	ALLH	Aluminum	18600	mg/kg	—	7340	mg/kg
MD49-98-0069	49-2906	5.7	6	QBT4	Plutonium-239	0.0033	pCi/g	U	0.05	pCi/g
MD49-98-0069	49-2906	5.7	6	QBT4	Plutonium-238	0.018	pCi/g	U	0.05	pCi/g
MD49-98-0069	49-2906	5.7	6	QBT4	Americium-241	0.029	pCi/g	U	0.05	pCi/g
MD49-98-0069	49-2906	5.7	6	QBT4	Uranium-235	0.0304	pCi/g	—	0.09	pCi/g
MD49-98-0069	49-2906	5.7	6	QBT4	Uranium-234	0.906	pCi/g	—	1.98	pCi/g
MD49-98-0069	49-2906	5.7	6	QBT4	Uranium-238	1.128	pCi/g	—	1.93	pCi/g
MD49-98-0070	49-2906	16.5	16.7	QBT4	Americium-241	0.004	pCi/g	U	0.05	pCi/g
MD49-98-0070	49-2906	16.5	16.7	QBT4	Plutonium-239	0.028	pCi/g	U	0.05	pCi/g
MD49-98-0070	49-2906	16.5	16.7	QBT4	Uranium-235	0.0342	pCi/g	—	0.09	pCi/g
MD49-98-0070	49-2906	16.5	16.7	QBT4	Plutonium-238	0.071	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0070	49-2906	16.5	16.7	QBT4	Uranium-234	0.568	pCi/g	—	1.98	pCi/g
MD49-98-0070	49-2906	16.5	16.7	QBT4	Uranium-238	0.594	pCi/g	—	1.93	pCi/g
MD49-98-0071	49-2906	28.6	29	QBT4	Plutonium-239	0.012	pCi/g	U	0.05	pCi/g
MD49-98-0071	49-2906	28.6	29	QBT4	Uranium-235	0.0141	pCi/g	U	0.09	pCi/g
MD49-98-0071	49-2906	28.6	29	QBT4	Plutonium-238	0.018	pCi/g	U	0.05	pCi/g
MD49-98-0071	49-2906	28.6	29	QBT4	Americium-241	0.0224	pCi/g	U	0.05	pCi/g
MD49-98-0071	49-2906	28.6	29	QBT4	Uranium-238	0.381	pCi/g	—	1.93	pCi/g
MD49-98-0071	49-2906	28.6	29	QBT4	Uranium-234	0.426	pCi/g	—	1.98	pCi/g
MD49-98-0072	49-2906	38.8	39	QBT4	Plutonium-239	0.004	pCi/g	U	0.05	pCi/g
MD49-98-0072	49-2906	38.8	39	QBT4	Americium-241	0.0147	pCi/g	U	0.05	pCi/g
MD49-98-0072	49-2906	38.8	39	QBT4	Uranium-235	0.0211	pCi/g	—	0.09	pCi/g
MD49-98-0072	49-2906	38.8	39	QBT4	Plutonium-238	0.043	pCi/g	U	0.05	pCi/g
MD49-98-0072	49-2906	38.8	39	QBT4	Uranium-238	0.319	pCi/g	—	1.93	pCi/g
MD49-98-0072	49-2906	38.8	39	QBT4	Uranium-234	0.34	pCi/g	—	1.98	pCi/g
MD49-98-0073	49-2906	40.3	40.5	QBT4	Plutonium-239	0.0102	pCi/g	U	0.05	pCi/g
MD49-98-0073	49-2906	40.3	40.5	QBT4	Uranium-235	0.0102	pCi/g	U	0.09	pCi/g
MD49-98-0073	49-2906	40.3	40.5	QBT4	Americium-241	0.19	pCi/g	U	0.05	pCi/g
MD49-98-0073	49-2906	40.3	40.5	QBT4	Plutonium-238	0.209	pCi/g	—	0.05	pCi/g
MD49-98-0073	49-2906	40.3	40.5	QBT4	Uranium-238	0.325	pCi/g	—	1.93	pCi/g
MD49-98-0073	49-2906	40.3	40.5	QBT4	Uranium-234	0.355	pCi/g	—	1.98	pCi/g
MD49-98-0074	49-2906	53.4	53.5	QBT4	Americium-241	0.0102	pCi/g	U	0.05	pCi/g
MD49-98-0074	49-2906	53.4	53.5	QBT4	Plutonium-239	0.0132	pCi/g	U	0.05	pCi/g
MD49-98-0074	49-2906	53.4	53.5	QBT4	Uranium-235	0.0228	pCi/g	—	0.09	pCi/g
MD49-98-0074	49-2906	53.4	53.5	QBT4	Plutonium-238	0.042	pCi/g	—	0.05	pCi/g
MD49-98-0074	49-2906	53.4	53.5	QBT4	Uranium-238	0.328	pCi/g	—	1.93	pCi/g
MD49-98-0074	49-2906	53.4	53.5	QBT4	Uranium-234	0.33	pCi/g	—	1.98	pCi/g
MD49-98-0075	49-2906	67.2	67.5	QBT4	Plutonium-239	0.0054	pCi/g	U	0.05	pCi/g
MD49-98-0075	49-2906	67.2	67.5	QBT4	Uranium-235	0.0129	pCi/g	U	0.09	pCi/g
MD49-98-0075	49-2906	67.2	67.5	QBT4	Americium-241	0.042	pCi/g	—	0.05	pCi/g
MD49-98-0075	49-2906	67.2	67.5	QBT4	Plutonium-238	0.124	pCi/g	—	0.05	pCi/g
MD49-98-0075	49-2906	67.2	67.5	QBT4	Uranium-238	0.313	pCi/g	—	1.93	pCi/g
MD49-98-0075	49-2906	67.2	67.5	QBT4	Uranium-234	0.407	pCi/g	—	1.98	pCi/g
MD49-98-0076	49-2906	75.3	75.5	QBT4	Plutonium-239	0.0048	pCi/g	U	0.05	pCi/g
MD49-98-0076	49-2906	75.3	75.5	QBT4	Plutonium-238	0.0136	pCi/g	U	0.05	pCi/g
MD49-98-0076	49-2906	75.3	75.5	QBT4	Americium-241	0.019	pCi/g	U	0.05	pCi/g
MD49-98-0076	49-2906	75.3	75.5	QBT4	Uranium-235	0.0241	pCi/g	—	0.09	pCi/g
MD49-98-0076	49-2906	75.3	75.5	QBT4	Uranium-238	0.304	pCi/g	—	1.93	pCi/g
MD49-98-0076	49-2906	75.3	75.5	QBT4	Uranium-234	0.362	pCi/g	—	1.98	pCi/g
MD49-98-0077	49-2906	85	86.5	QBT3	Plutonium-239	-0.0059	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0077	49-2906	85	86.5	QBT3	Americium-241	0.0156	pCi/g	U	0.05	pCi/g
MD49-98-0077	49-2906	85	86.5	QBT3	Uranium-235	0.0445	pCi/g	—	0.09	pCi/g
MD49-98-0077	49-2906	85	86.5	QBT3	Plutonium-238	0.052	pCi/g	—	0.05	pCi/g
MD49-98-0077	49-2906	85	86.5	QBT3	Uranium-234	0.546	pCi/g	—	1.98	pCi/g
MD49-98-0077	49-2906	85	86.5	QBT3	Uranium-238	0.546	pCi/g	—	1.93	pCi/g
MD49-98-0078	49-2906	91.5	91.8	QBT3	Americium-241	0.003	pCi/g	U	0.05	pCi/g
MD49-98-0078	49-2906	91.5	91.8	QBT3	Plutonium-238	0.005	pCi/g	U	0.05	pCi/g
MD49-98-0078	49-2906	91.5	91.8	QBT3	Uranium-235	0.0302	pCi/g	—	0.09	pCi/g
MD49-98-0078	49-2906	91.5	91.8	QBT3	Plutonium-239	0.05	pCi/g	—	0.05	pCi/g
MD49-98-0078	49-2906	91.5	91.8	QBT3	Uranium-238	0.589	pCi/g	—	1.93	pCi/g
MD49-98-0078	49-2906	91.5	91.8	QBT3	Uranium-234	0.651	pCi/g	—	1.98	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Plutonium-239	0	pCi/g	U	0.05	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Plutonium-239	0.0031	pCi/g	U	0.05	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Americium-241	0.0077	pCi/g	U	0.05	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Plutonium-238	0.016	pCi/g	U	0.05	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Americium-241	0.0225	pCi/g	U	0.05	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Uranium-235	0.025	pCi/g	—	0.09	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Plutonium-238	0.0253	pCi/g	U	0.05	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Uranium-235	0.0416	pCi/g	—	0.09	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Uranium-234	0.569	pCi/g	—	1.98	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Uranium-238	0.587	pCi/g	—	1.93	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Uranium-238	0.678	pCi/g	—	1.93	pCi/g
MD49-98-0079	49-2906	107.7	107.8	QBT3	Uranium-234	0.683	pCi/g	—	1.98	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Americium-241	-0.0012	pCi/g	U	0.05	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Plutonium-238	0.0019	pCi/g	U	0.05	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Plutonium-239	0.0063	pCi/g	U	0.05	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Plutonium-238	0.0146	pCi/g	U	0.05	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Uranium-235	0.0152	pCi/g	U	0.09	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Americium-241	0.0191	pCi/g	U	0.05	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Plutonium-239	0.0206	pCi/g	U	0.05	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Uranium-235	0.0252	pCi/g	—	0.09	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Uranium-238	0.512	pCi/g	—	1.93	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Uranium-238	0.568	pCi/g	—	1.93	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Uranium-234	0.577	pCi/g	—	1.98	pCi/g
MD49-98-0080	49-2906	117	117.3	QBT3	Uranium-234	0.594	pCi/g	—	1.98	pCi/g
MD49-98-0081	49-2906	127	127.3	QBT3	Plutonium-239	0.0039	pCi/g	U	0.05	pCi/g
MD49-98-0081	49-2906	127	127.3	QBT3	Americium-241	0.0064	pCi/g	U	0.05	pCi/g
MD49-98-0081	49-2906	127	127.3	QBT3	Plutonium-238	0.0099	pCi/g	U	0.05	pCi/g
MD49-98-0081	49-2906	127	127.3	QBT3	Uranium-235	0.0361	pCi/g	—	0.09	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0081	49-2906	127	127.3	QBT3	Uranium-234	0.56	pCi/g	—	1.98	pCi/g
MD49-98-0081	49-2906	127	127.3	QBT3	Uranium-238	0.57	pCi/g	—	1.93	pCi/g
MD49-98-0082	49-2906	134.5	134.7	QBT3	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
MD49-98-0082	49-2906	134.5	134.7	QBT3	Americium-241	0.0131	pCi/g	U	0.05	pCi/g
MD49-98-0082	49-2906	134.5	134.7	QBT3	Plutonium-239	0.0169	pCi/g	U	0.05	pCi/g
MD49-98-0082	49-2906	134.5	134.7	QBT3	Uranium-235	0.0314	pCi/g	—	0.09	pCi/g
MD49-98-0082	49-2906	134.5	134.7	QBT3	Uranium-238	0.553	pCi/g	—	1.93	pCi/g
MD49-98-0082	49-2906	134.5	134.7	QBT3	Uranium-234	0.634	pCi/g	—	1.98	pCi/g
MD49-98-0083	49-2906	147.2	148	QBT3	Plutonium-239	0.0032	pCi/g	U	0.05	pCi/g
MD49-98-0083	49-2906	147.2	148	QBT3	Americium-241	0.0173	pCi/g	U	0.05	pCi/g
MD49-98-0083	49-2906	147.2	148	QBT3	Uranium-235	0.0186	pCi/g	U	0.09	pCi/g
MD49-98-0083	49-2906	147.2	148	QBT3	Plutonium-238	0.042	pCi/g	—	0.05	pCi/g
MD49-98-0083	49-2906	147.2	148	QBT3	Uranium-238	0.407	pCi/g	—	1.93	pCi/g
MD49-98-0083	49-2906	147.2	148	QBT3	Uranium-234	0.444	pCi/g	—	1.98	pCi/g
MD49-98-0084	49-2906	147.2	148	QBT3	Plutonium-239	0.0032	pCi/g	U	0.05	pCi/g
MD49-98-0084	49-2906	147.2	148	QBT3	Americium-241	0.0152	pCi/g	U	0.05	pCi/g
MD49-98-0084	49-2906	147.2	148	QBT3	Uranium-235	0.0225	pCi/g	—	0.09	pCi/g
MD49-98-0084	49-2906	147.2	148	QBT3	Plutonium-238	0.035	pCi/g	—	0.05	pCi/g
MD49-98-0084	49-2906	147.2	148	QBT3	Uranium-238	0.379	pCi/g	—	1.93	pCi/g
MD49-98-0084	49-2906	147.2	148	QBT3	Uranium-234	0.454	pCi/g	—	1.98	pCi/g
MD49-98-0085	49-2907	5.5	5.7	QBT4	Plutonium-238	0.0031	pCi/g	U	0.05	pCi/g
MD49-98-0085	49-2907	5.5	5.7	QBT4	Plutonium-239	0.0067	pCi/g	U	0.05	pCi/g
MD49-98-0085	49-2907	5.5	5.7	QBT4	Americium-241	0.036	pCi/g	U	0.05	pCi/g
MD49-98-0085	49-2907	5.5	5.7	QBT4	Uranium-235	0.063	pCi/g	—	0.09	pCi/g
MD49-98-0085	49-2907	5.5	5.7	QBT4	Uranium-234	1.53	pCi/g	—	1.98	pCi/g
MD49-98-0085	49-2907	5.5	5.7	QBT4	Uranium-238	1.68	pCi/g	—	1.93	pCi/g
MD49-98-0086	49-2907	16.5	16.8	QBT4	Plutonium-239	0.0112	pCi/g	U	0.05	pCi/g
MD49-98-0086	49-2907	16.5	16.8	QBT4	Plutonium-238	0.0145	pCi/g	U	0.05	pCi/g
MD49-98-0086	49-2907	16.5	16.8	QBT4	Americium-241	0.017	pCi/g	U	0.05	pCi/g
MD49-98-0086	49-2907	16.5	16.8	QBT4	Uranium-235	0.0185	pCi/g	—	0.09	pCi/g
MD49-98-0086	49-2907	16.5	16.8	QBT4	Uranium-238	0.485	pCi/g	—	1.93	pCi/g
MD49-98-0086	49-2907	16.5	16.8	QBT4	Uranium-234	0.486	pCi/g	—	1.98	pCi/g
MD49-98-0087	49-2907	25	25.5	QBT4	Plutonium-238	0.0034	pCi/g	U	0.05	pCi/g
MD49-98-0087	49-2907	25	25.5	QBT4	Uranium-235	0.0088	pCi/g	U	0.09	pCi/g
MD49-98-0087	49-2907	25	25.5	QBT4	Plutonium-239	0.0205	pCi/g	U	0.05	pCi/g
MD49-98-0087	49-2907	25	25.5	QBT4	Americium-241	0.023	pCi/g	U	0.05	pCi/g
MD49-98-0087	49-2907	25	25.5	QBT4	Uranium-238	0.414	pCi/g	—	1.93	pCi/g
MD49-98-0087	49-2907	25	25.5	QBT4	Uranium-234	0.44	pCi/g	—	1.98	pCi/g
MD49-98-0088	49-2907	37	37.2	QBT4	Plutonium-239	0.0171	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0088	49-2907	37	37.2	QBT4	Americium-241	0.0197	pCi/g	U	0.05	pCi/g
MD49-98-0088	49-2907	37	37.2	QBT4	Plutonium-238	0.0204	pCi/g	U	0.05	pCi/g
MD49-98-0088	49-2907	37	37.2	QBT4	Uranium-235	0.0233	pCi/g	—	0.09	pCi/g
MD49-98-0088	49-2907	37	37.2	QBT4	Uranium-238	0.323	pCi/g	—	1.93	pCi/g
MD49-98-0088	49-2907	37	37.2	QBT4	Uranium-234	0.326	pCi/g	—	1.98	pCi/g
MD49-98-0089	49-2907	47.5	47.7	QBT4	Plutonium-239	0	pCi/g	U	0.05	pCi/g
MD49-98-0089	49-2907	47.5	47.7	QBT4	Americium-241	0.0045	pCi/g	U	0.05	pCi/g
MD49-98-0089	49-2907	47.5	47.7	QBT4	Uranium-235	0.0285	pCi/g	—	0.09	pCi/g
MD49-98-0089	49-2907	47.5	47.7	QBT4	Plutonium-238	0.031	pCi/g	U	0.05	pCi/g
MD49-98-0089	49-2907	47.5	47.7	QBT4	Uranium-238	0.268	pCi/g	—	1.93	pCi/g
MD49-98-0089	49-2907	47.5	47.7	QBT4	Uranium-234	0.31	pCi/g	—	1.98	pCi/g
MD49-98-0090	49-2907	54.2	54.5	QBT4	Americium-241	-0.007	pCi/g	U	0.05	pCi/g
MD49-98-0090	49-2907	54.2	54.5	QBT4	Plutonium-239	0.0107	pCi/g	U	0.05	pCi/g
MD49-98-0090	49-2907	54.2	54.5	QBT4	Uranium-235	0.0172	pCi/g	U	0.09	pCi/g
MD49-98-0090	49-2907	54.2	54.5	QBT4	Plutonium-238	0.027	pCi/g	U	0.05	pCi/g
MD49-98-0090	49-2907	54.2	54.5	QBT4	Uranium-238	0.282	pCi/g	—	1.93	pCi/g
MD49-98-0090	49-2907	54.2	54.5	QBT4	Uranium-234	0.372	pCi/g	—	1.98	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Plutonium-239	0.0036	pCi/g	U	0.05	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Plutonium-238	0.0049	pCi/g	U	0.05	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Uranium-235	0.0118	pCi/g	U	0.09	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Americium-241	0.0144	pCi/g	U	0.05	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Uranium-235	0.0175	pCi/g	U	0.09	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Plutonium-239	0.0185	pCi/g	U	0.05	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Americium-241	0.0195	pCi/g	U	0.05	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Plutonium-238	0.025	pCi/g	U	0.05	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Uranium-238	0.316	pCi/g	—	1.93	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Uranium-238	0.382	pCi/g	—	1.93	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Uranium-234	0.386	pCi/g	—	1.98	pCi/g
MD49-98-0091	49-2907	65.4	65.6	QBT4	Uranium-234	0.423	pCi/g	—	1.98	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Plutonium-239	0.0012	pCi/g	U	0.05	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Plutonium-238	0.0017	pCi/g	U	0.05	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Plutonium-239	0.0131	pCi/g	U	0.05	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Uranium-235	0.0158	pCi/g	U	0.09	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Americium-241	0.0202	pCi/g	U	0.05	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Americium-241	0.023	pCi/g	U	0.05	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Uranium-235	0.0311	pCi/g	—	0.09	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Plutonium-238	0.036	pCi/g	U	0.05	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Uranium-238	0.461	pCi/g	—	1.93	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Uranium-234	0.464	pCi/g	—	1.98	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0092	49-2907	76.2	76.5	QBT4	Uranium-238	0.47	pCi/g	—	1.93	pCi/g
MD49-98-0092	49-2907	76.2	76.5	QBT4	Uranium-234	0.53	pCi/g	—	1.98	pCi/g
MD49-98-0093	49-2907	84.5	84.7	QBT3	Plutonium-239	0.003	pCi/g	U	0.05	pCi/g
MD49-98-0093	49-2907	84.5	84.7	QBT3	Plutonium-238	0.012	pCi/g	U	0.05	pCi/g
MD49-98-0093	49-2907	84.5	84.7	QBT3	Americium-241	0.0167	pCi/g	U	0.05	pCi/g
MD49-98-0093	49-2907	84.5	84.7	QBT3	Uranium-235	0.0209	pCi/g	—	0.09	pCi/g
MD49-98-0093	49-2907	84.5	84.7	QBT3	Uranium-234	0.514	pCi/g	—	1.98	pCi/g
MD49-98-0093	49-2907	84.5	84.7	QBT3	Uranium-238	0.533	pCi/g	—	1.93	pCi/g
MD49-98-0094	49-2907	95.5	95.8	QBT3	Plutonium-239	0.0151	pCi/g	U	0.05	pCi/g
MD49-98-0094	49-2907	95.5	95.8	QBT3	Americium-241	0.018	pCi/g	U	0.05	pCi/g
MD49-98-0094	49-2907	95.5	95.8	QBT3	Plutonium-238	0.0194	pCi/g	U	0.05	pCi/g
MD49-98-0094	49-2907	95.5	95.8	QBT3	Uranium-235	0.0358	pCi/g	—	0.09	pCi/g
MD49-98-0094	49-2907	95.5	95.8	QBT3	Uranium-234	0.645	pCi/g	—	1.98	pCi/g
MD49-98-0094	49-2907	95.5	95.8	QBT3	Uranium-238	0.649	pCi/g	—	1.93	pCi/g
MD49-98-0095	49-2907	106.5	106.7	QBT3	Plutonium-239	-0.0018	pCi/g	U	0.05	pCi/g
MD49-98-0095	49-2907	106.5	106.7	QBT3	Americium-241	0.014	pCi/g	U	0.05	pCi/g
MD49-98-0095	49-2907	106.5	106.7	QBT3	Plutonium-238	0.024	pCi/g	U	0.05	pCi/g
MD49-98-0095	49-2907	106.5	106.7	QBT3	Uranium-235	0.056	pCi/g	—	0.09	pCi/g
MD49-98-0095	49-2907	106.5	106.7	QBT3	Uranium-234	0.941	pCi/g	—	1.98	pCi/g
MD49-98-0095	49-2907	106.5	106.7	QBT3	Uranium-238	1.014	pCi/g	—	1.93	pCi/g
MD49-98-0096	49-2907	115	115.3	QBT3	Plutonium-239	0.0039	pCi/g	U	0.05	pCi/g
MD49-98-0096	49-2907	115	115.3	QBT3	Americium-241	0.0086	pCi/g	U	0.05	pCi/g
MD49-98-0096	49-2907	115	115.3	QBT3	Plutonium-238	0.0093	pCi/g	U	0.05	pCi/g
MD49-98-0096	49-2907	115	115.3	QBT3	Uranium-235	0.012	pCi/g	U	0.09	pCi/g
MD49-98-0096	49-2907	115	115.3	QBT3	Uranium-238	0.553	pCi/g	—	1.93	pCi/g
MD49-98-0096	49-2907	115	115.3	QBT3	Uranium-234	0.681	pCi/g	—	1.98	pCi/g
MD49-98-0097	49-2907	126.5	126.6	QBT3	Plutonium-238	0.0013	pCi/g	U	0.05	pCi/g
MD49-98-0097	49-2907	126.5	126.6	QBT3	Plutonium-239	0.0071	pCi/g	U	0.05	pCi/g
MD49-98-0097	49-2907	126.5	126.6	QBT3	Americium-241	0.0208	pCi/g	U	0.05	pCi/g
MD49-98-0097	49-2907	126.5	126.6	QBT3	Uranium-235	0.049	pCi/g	—	0.09	pCi/g
MD49-98-0097	49-2907	126.5	126.6	QBT3	Uranium-238	0.819	pCi/g	—	1.93	pCi/g
MD49-98-0097	49-2907	126.5	126.6	QBT3	Uranium-234	0.885	pCi/g	—	1.98	pCi/g
MD49-98-0098	49-2907	138.7	138.9	QBT3	Plutonium-239	0.0109	pCi/g	U	0.05	pCi/g
MD49-98-0098	49-2907	138.7	138.9	QBT3	Plutonium-238	0.0192	pCi/g	U	0.05	pCi/g
MD49-98-0098	49-2907	138.7	138.9	QBT3	Uranium-235	0.0252	pCi/g	U	0.09	pCi/g
MD49-98-0098	49-2907	138.7	138.9	QBT3	Americium-241	0.034	pCi/g	—	0.05	pCi/g
MD49-98-0098	49-2907	138.7	138.9	QBT3	Uranium-238	0.557	pCi/g	—	1.93	pCi/g
MD49-98-0098	49-2907	138.7	138.9	QBT3	Uranium-234	0.628	pCi/g	—	1.98	pCi/g
MD49-98-0099	49-2907	146.6	146.8	QBT3	Plutonium-238	-0.004	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0099	49-2907	146.6	146.8	QBT3	Americium-241	0.016	pCi/g	U	0.05	pCi/g
MD49-98-0099	49-2907	146.6	146.8	QBT3	Uranium-235	0.0181	pCi/g	U	0.09	pCi/g
MD49-98-0099	49-2907	146.6	146.8	QBT3	Plutonium-239	0.022	pCi/g	U	0.05	pCi/g
MD49-98-0099	49-2907	146.6	146.8	QBT3	Uranium-238	0.329	pCi/g	—	1.93	pCi/g
MD49-98-0099	49-2907	146.6	146.8	QBT3	Uranium-234	0.51	pCi/g	—	1.98	pCi/g
MD49-98-0100	49-2907	76.2	76.5	QBT3	Plutonium-239	0.0075	pCi/g	U	0.05	pCi/g
MD49-98-0100	49-2907	76.2	76.5	QBT3	Americium-241	0.012	pCi/g	U	0.05	pCi/g
MD49-98-0100	49-2907	76.2	76.5	QBT3	Plutonium-238	0.0131	pCi/g	U	0.05	pCi/g
MD49-98-0100	49-2907	76.2	76.5	QBT3	Uranium-235	0.0167	pCi/g	U	0.09	pCi/g
MD49-98-0100	49-2907	76.2	76.5	QBT3	Uranium-238	0.576	pCi/g	—	1.93	pCi/g
MD49-98-0100	49-2907	76.2	76.5	QBT3	Uranium-234	0.636	pCi/g	—	1.98	pCi/g
MD49-98-0101	49-2901	2.5	2.6	QBT4	Plutonium-239	-0.0058	pCi/g	U	0.05	pCi/g
MD49-98-0101	49-2901	2.5	2.6	QBT4	Americium-241	0.0087	pCi/g	U	0.05	pCi/g
MD49-98-0101	49-2901	2.5	2.6	QBT4	Plutonium-238	0.013	pCi/g	U	0.05	pCi/g
MD49-98-0101	49-2901	2.5	2.6	QBT4	Uranium-235	0.053	pCi/g	—	0.09	pCi/g
MD49-98-0101	49-2901	2.5	2.6	QBT4	Uranium-234	1.067	pCi/g	—	1.98	pCi/g
MD49-98-0101	49-2901	2.5	2.6	QBT4	Uranium-238	1.069	pCi/g	—	1.93	pCi/g
MD49-98-0102	49-2901	14.3	14.5	QBT4	Plutonium-239	0.0026	pCi/g	U	0.05	pCi/g
MD49-98-0102	49-2901	14.3	14.5	QBT4	Americium-241	0.0075	pCi/g	U	0.05	pCi/g
MD49-98-0102	49-2901	14.3	14.5	QBT4	Uranium-235	0.0291	pCi/g	—	0.09	pCi/g
MD49-98-0102	49-2901	14.3	14.5	QBT4	Plutonium-238	0.038	pCi/g	—	0.05	pCi/g
MD49-98-0102	49-2901	14.3	14.5	QBT4	Uranium-234	0.477	pCi/g	—	1.98	pCi/g
MD49-98-0102	49-2901	14.3	14.5	QBT4	Uranium-238	0.512	pCi/g	—	1.93	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Plutonium-239	-0.0032	pCi/g	U	0.05	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Plutonium-239	0.0006	pCi/g	U	0.05	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Plutonium-238	0.0048	pCi/g	U	0.05	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Plutonium-238	0.007	pCi/g	U	0.05	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Uranium-235	0.0173	pCi/g	U	0.09	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Uranium-235	0.0189	pCi/g	U	0.09	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Americium-241	0.0192	pCi/g	U	0.05	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Americium-241	0.039	pCi/g	—	0.05	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Uranium-238	0.369	pCi/g	—	1.93	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Uranium-234	0.404	pCi/g	—	1.98	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Uranium-238	0.411	pCi/g	—	1.93	pCi/g
MD49-98-0103	49-2901	24	24.2	QBT4	Uranium-234	0.494	pCi/g	—	1.98	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Plutonium-239	0.0005	pCi/g	U	0.05	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Uranium-235	0.0022	pCi/g	U	0.09	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Plutonium-239	0.0062	pCi/g	U	0.05	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Plutonium-238	0.0101	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0104	49-2901	35.2	35.6	QBT4	Plutonium-238	0.0108	pCi/g	U	0.05	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Uranium-235	0.0114	pCi/g	U	0.09	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Americium-241	0.0212	pCi/g	U	0.05	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Americium-241	0.0269	pCi/g	U	0.05	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Uranium-238	0.263	pCi/g	—	1.93	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Uranium-238	0.312	pCi/g	—	1.93	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Uranium-234	0.344	pCi/g	—	1.98	pCi/g
MD49-98-0104	49-2901	35.2	35.6	QBT4	Uranium-234	0.351	pCi/g	—	1.98	pCi/g
MD49-98-0105	49-2901	45.6	46	QBT4	Plutonium-239	0.0031	pCi/g	U	0.05	pCi/g
MD49-98-0105	49-2901	45.6	46	QBT4	Plutonium-238	0.0051	pCi/g	U	0.05	pCi/g
MD49-98-0105	49-2901	45.6	46	QBT4	Americium-241	0.006	pCi/g	U	0.05	pCi/g
MD49-98-0105	49-2901	45.6	46	QBT4	Uranium-235	0.0206	pCi/g	U	0.09	pCi/g
MD49-98-0105	49-2901	45.6	46	QBT4	Uranium-238	0.27	pCi/g	—	1.93	pCi/g
MD49-98-0105	49-2901	45.6	46	QBT4	Uranium-234	0.312	pCi/g	—	1.98	pCi/g
MD49-98-0106	49-2901	45.6	46	QBT4	Plutonium-238	-0.0096	pCi/g	U	0.05	pCi/g
MD49-98-0106	49-2901	45.6	46	QBT4	Plutonium-239	0.0005	pCi/g	U	0.05	pCi/g
MD49-98-0106	49-2901	45.6	46	QBT4	Americium-241	0.0056	pCi/g	U	0.05	pCi/g
MD49-98-0106	49-2901	45.6	46	QBT4	Uranium-235	0.0147	pCi/g	U	0.09	pCi/g
MD49-98-0106	49-2901	45.6	46	QBT4	Uranium-238	0.232	pCi/g	—	1.93	pCi/g
MD49-98-0106	49-2901	45.6	46	QBT4	Uranium-234	0.342	pCi/g	—	1.98	pCi/g
MD49-98-0107	49-2901	55.5	55.8	QBT4	Plutonium-239	0.0092	pCi/g	U	0.05	pCi/g
MD49-98-0107	49-2901	55.5	55.8	QBT4	Plutonium-238	0.0113	pCi/g	U	0.05	pCi/g
MD49-98-0107	49-2901	55.5	55.8	QBT4	Americium-241	0.0165	pCi/g	U	0.05	pCi/g
MD49-98-0107	49-2901	55.5	55.8	QBT4	Uranium-235	0.0277	pCi/g	—	0.09	pCi/g
MD49-98-0107	49-2901	55.5	55.8	QBT4	Uranium-238	0.277	pCi/g	—	1.93	pCi/g
MD49-98-0107	49-2901	55.5	55.8	QBT4	Uranium-234	0.296	pCi/g	—	1.98	pCi/g
MD49-98-0108	49-2901	65	65.2	QBT4	Americium-241	0.0056	pCi/g	U	0.05	pCi/g
MD49-98-0108	49-2901	65	65.2	QBT4	Uranium-235	0.0098	pCi/g	U	0.09	pCi/g
MD49-98-0108	49-2901	65	65.2	QBT4	Plutonium-239	0.0102	pCi/g	U	0.05	pCi/g
MD49-98-0108	49-2901	65	65.2	QBT4	Plutonium-238	0.0106	pCi/g	U	0.05	pCi/g
MD49-98-0108	49-2901	65	65.2	QBT4	Uranium-234	0.285	pCi/g	—	1.98	pCi/g
MD49-98-0108	49-2901	65	65.2	QBT4	Uranium-238	0.325	pCi/g	—	1.93	pCi/g
MD49-98-0109	49-2901	71.2	71.3	QBT4	Americium-241	0.0011	pCi/g	U	0.05	pCi/g
MD49-98-0109	49-2901	71.2	71.3	QBT4	Plutonium-239	0.0025	pCi/g	U	0.05	pCi/g
MD49-98-0109	49-2901	71.2	71.3	QBT4	Plutonium-238	0.0045	pCi/g	U	0.05	pCi/g
MD49-98-0109	49-2901	71.2	71.3	QBT4	Uranium-235	0.0115	pCi/g	U	0.09	pCi/g
MD49-98-0109	49-2901	71.2	71.3	QBT4	Uranium-238	0.262	pCi/g	—	1.93	pCi/g
MD49-98-0109	49-2901	71.2	71.3	QBT4	Uranium-234	0.265	pCi/g	—	1.98	pCi/g
MD49-98-0110	49-2901	76.4	76.6	QBT4	Plutonium-239	0.0092	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0110	49-2901	76.4	76.6	QBT4	Plutonium-238	0.0172	pCi/g	U	0.05	pCi/g
MD49-98-0110	49-2901	76.4	76.6	QBT4	Uranium-235	0.0204	pCi/g	U	0.09	pCi/g
MD49-98-0110	49-2901	76.4	76.6	QBT4	Americium-241	0.024	pCi/g	U	0.05	pCi/g
MD49-98-0110	49-2901	76.4	76.6	QBT4	Uranium-238	0.276	pCi/g	—	1.93	pCi/g
MD49-98-0110	49-2901	76.4	76.6	QBT4	Uranium-234	0.349	pCi/g	—	1.98	pCi/g
MD49-98-0111	49-2901	88.4	88.6	QBT3	Plutonium-238	0	pCi/g	U	0.05	pCi/g
MD49-98-0111	49-2901	88.4	88.6	QBT3	Plutonium-239	0.0052	pCi/g	U	0.05	pCi/g
MD49-98-0111	49-2901	88.4	88.6	QBT3	Uranium-235	0.0256	pCi/g	—	0.09	pCi/g
MD49-98-0111	49-2901	88.4	88.6	QBT3	Americium-241	0.033	pCi/g	U	0.05	pCi/g
MD49-98-0111	49-2901	88.4	88.6	QBT3	Uranium-238	0.577	pCi/g	—	1.93	pCi/g
MD49-98-0111	49-2901	88.4	88.6	QBT3	Uranium-234	0.67	pCi/g	—	1.98	pCi/g
MD49-98-0112	49-2901	94.4	94.6	QBT3	Plutonium-239	-0.0015	pCi/g	U	0.05	pCi/g
MD49-98-0112	49-2901	94.4	94.6	QBT3	Plutonium-238	0.0089	pCi/g	U	0.05	pCi/g
MD49-98-0112	49-2901	94.4	94.6	QBT3	Americium-241	0.0133	pCi/g	U	0.05	pCi/g
MD49-98-0112	49-2901	94.4	94.6	QBT3	Uranium-235	0.0172	pCi/g	U	0.09	pCi/g
MD49-98-0112	49-2901	94.4	94.6	QBT3	Uranium-238	0.53	pCi/g	—	1.93	pCi/g
MD49-98-0112	49-2901	94.4	94.6	QBT3	Uranium-234	0.666	pCi/g	—	1.98	pCi/g
MD49-98-0113	49-2901	115.8	116	QBT3	Plutonium-238	0.0055	pCi/g	U	0.05	pCi/g
MD49-98-0113	49-2901	115.8	116	QBT3	Plutonium-239	0.008	pCi/g	U	0.05	pCi/g
MD49-98-0113	49-2901	115.8	116	QBT3	Americium-241	0.0085	pCi/g	U	0.05	pCi/g
MD49-98-0113	49-2901	115.8	116	QBT3	Uranium-235	0.034	pCi/g	—	0.09	pCi/g
MD49-98-0113	49-2901	115.8	116	QBT3	Uranium-238	0.565	pCi/g	—	1.93	pCi/g
MD49-98-0113	49-2901	115.8	116	QBT3	Uranium-234	0.638	pCi/g	—	1.98	pCi/g
MD49-98-0114	49-2901	133.2	133.5	QBT3	Plutonium-239	0.0067	pCi/g	U	0.05	pCi/g
MD49-98-0114	49-2901	133.2	133.5	QBT3	Americium-241	0.0128	pCi/g	U	0.05	pCi/g
MD49-98-0114	49-2901	133.2	133.5	QBT3	Uranium-235	0.0143	pCi/g	U	0.09	pCi/g
MD49-98-0114	49-2901	133.2	133.5	QBT3	Plutonium-238	0.0236	pCi/g	U	0.05	pCi/g
MD49-98-0114	49-2901	133.2	133.5	QBT3	Uranium-238	0.426	pCi/g	—	1.93	pCi/g
MD49-98-0114	49-2901	133.2	133.5	QBT3	Uranium-234	0.515	pCi/g	—	1.98	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Plutonium-239	0.0038	pCi/g	U	0.05	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Plutonium-238	0.0046	pCi/g	U	0.05	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Plutonium-239	0.0055	pCi/g	U	0.05	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Plutonium-238	0.0114	pCi/g	U	0.05	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Americium-241	0.0232	pCi/g	U	0.05	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Uranium-235	0.028	pCi/g	U	0.09	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Americium-241	0.039	pCi/g	—	0.05	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Uranium-238	0.47	pCi/g	—	1.93	pCi/g
MD49-98-0115	49-2901	136.8	137	QBT3	Uranium-234	0.543	pCi/g	—	1.98	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Americium-241	-0.002	pCi/g	U	0.05	pCi/g

Table B-1.0-3 (continued)

Sample ID	Location ID	Begin Depth[a]	End Depth	Media Code	Analyte Code Description	Result	Reporting Units	RFI Qualifier	UTL[b]	Units
MD49-98-0116	49-2901	150	150.2	QBT3	Plutonium-239	0.001	pCi/g	U	0.05	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Plutonium-239	0.003	pCi/g	U	0.05	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Americium-241	0.0035	pCi/g	U	0.05	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Plutonium-238	0.0075	pCi/g	U	0.05	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Plutonium-238	0.0188	pCi/g	U	0.05	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Uranium-235	0.0214	pCi/g	U	0.09	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Uranium-235	0.0296	pCi/g	—	0.09	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Uranium-234	0.435	pCi/g	—	1.98	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Uranium-238	0.454	pCi/g	—	1.93	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Uranium-238	0.483	pCi/g	—	1.93	pCi/g
MD49-98-0116	49-2901	150	150.2	QBT3	Uranium-234	0.486	pCi/g	—	1.98	pCi/g

[a] Depth is in feet.

[b] UTL = upper tolerance limit.

[c] A dash in the RFI qualifier column means the data is not qualified. A dash in the other columns means "not applicable."

Table B-3.1-1
Target Analytes and Detection Limits for Inorganic Analyses

Analyte	Sample Preparation EPA[a] Method	Analytical Technique	EDL (mg/kg) ICPES[b]/ICPMS[c]	EDL (mg/kg) GFAA[d]/other
Aluminum	3050A	ICPES	40	n/a[e]
Antimony	3050A	ICPES	12	n/a
Arsenic	7060/3050A	GFAA/ICPES	NR[f]	2
Barium	3050A	ICPES	40	n/a
Beryllium	3050A	ICPES	1	n/a
Cadmium	3050A	ICPES	1	n/a
Calcium	3050A	ICPES	1000	n/a
Chromium	3050A	ICPES	2	n/a
Cobalt	3050A	ICPES	10	n/a
Copper	3050A	ICPES	5	n/a
Cyanide	9012	Colorimetric	n/a	0.05
Iron	3050A	ICPES	20	n/a
Lead	7421/3050A	GFAA/ICPES	0.6	0.2
Magnesium	3050A	ICPES	1000	n/a
Manganese	3050A	ICPES	3	n/a
Mercury	7471	CVAA[g]	n/a	0.1
Nickel	3050A	ICPES	8	n/a
Potassium	3050A	ICPES	1000	n/a
Selenium	7740/3050A	GFAA/ICPES	NR	1
Silver	3050A	ICPES	2	n/a
Sodium	3050A	ICPES	1000	n/a
Thallium	7841/3050A	GFAA/ICPES	NR	2
Uranium	3050A	ICPMS	0.5	n/a
Vanadium	3050A	ICPES	10	n/a
Zinc	3050A	ICPES	4	n/a

[a] EPA = Environmental Protection Agency.

[b] ICPES = inductively coupled plasma emission spectroscopy by EPA Method 6010

[c] ICPMS = inductively coupled plasma mass spectrometry by EPA Method 6020

[d] GFAA = graphite furnace atomic absorption spectroscopy by EPA Methods 7000-series

[e] n/a = not applicable

[f] NR = not recommended, EDLs are sample-specific

[g] CVAA = cold vapor atomic absorption spectroscopy

Table B-3.1-2
Target Analytes and Detection Limits for Radiochemical Analyses

Analyte	Sediment/Soil EQL (pCi/g)	EPA Preparation Method	Analytical Technique[a]
Gross alpha/beta	10.0	n/a[b]	Gas proportional
Strontium-90[c]	2.0	n/a	Gas proportional
Americium-241	0.1	n/a	Alpha spectroscopy
Plutonium-238, -239,240	0.1	n/a	Alpha spectroscopy
Thorium-228, -230, -232	0.1	n/a	Alpha spectroscopy
Uranium-234, -235, -238	0.1	n/a	Alpha spectroscopy
Tritium	300 pCi/l	n/a	Liquid scintillation
Gamma-emitting isotopes[d]	Americium-241, 1.0 Cesium-137, 1.0 Lead-210, 2.0 Radium-226, 1.0 Thorium-234, 1.0	n/a	Gamma spectroscopy
Total and extractable uranium	0.5 mg/kg	EPA SW-846 200.8/3050	ICPMS

[a] The Los Alamos National Laboratory methods for these analytes are contained in *Health and Environmental Chemistry: Analytical Techniques, Data Management, and Quality Assurance* (LANL 1993, 31793).

[b] n/a = not applicable.

[c] It may be presumed that strontium-89 is not present.

[d] EQLs are not specified for the other 41 gamma-emitting isotopes commonly analyzed; they are determined on a case-specific basis.

Table B-3.1-3
Target Analytes and Detection Limits for Semivolatile Analyses

Target Analyte	Soil EQL* (mg/kg)	Target Analyte	Soil EQL* (mg/kg)
Acenaphthene	330	4,6-Dinitro-2-methylphenol	1600
Acenaphthylene	330	2,4-Dinitrotoluene	330
Aniline	660	2,6-Dinitrotoluene	330
Anthracene	330	Di-n-octyl phthalate	330
Azobenzene	660	Bis(2-ethylhexyl)phthalate	330
Benz(a)anthracene	330	Fluoranthene	330
Benzoic acid	3300	Fluorene	330
Benzo(b)fluoranthene	330	Hexachlorobenzene	330
Benzo(K)fluoranthene	330	Hexachlorobutadiene	330
Benzo(g,h,i)perylene	330	Hexachlorocyclopentadiene	330
Benzo(a)pyrene	330	Hexachloroethane	330
Benzyl alcohol	1300	Indeno(1,2,3-cd)pyrene	330
Bis(2-chloroethoxy)methane	330	Isophorone	330
Bis(2-chloroethyl)ether	330	2-Methylnaphthalene	330
4-Bromophenyl phenylether	330	2-Methylphenol	330
Butylbenzylphthalate	330	4-Methylphenol	330
4-Chloroaniline	1300	Naphthalene	330
4-Chloro-3-methylphenol	660	2-Nitroaniline	1600
2-Chloronaphthalene	330	3-Nitroaniline	1600
2-Chlorophenol	330	4-Nitroaniline	660
4-Chlorophenyl phenylether	330	Nitrobenzene	330
Chrysene	330	2-Nitrophenol	330
Dibenz(a,h)anthracene	330	4-Nitrophenol	1600
Dibenzofuran	330	N-Nitrosodimethylamine	330
1,2-Dichlorobenzene	330	N-Nitrosodiphenylamine	330
1,3-Dichlorobenzene	330	N-Nitroso-di-n-propylamine	330
1,4-Dichlorobenzene	330	2,2'-oxybis(1-Chloropropane)	330
3,3'-Dichlorobenzidine	660	Pentachlorophenol	1600
2,4-Dichlorophenol	330	Phenanthrene	330
Diethylphthalate	330	Phenol	330
Dimethyl phthalate	330	Pyrene	330
2,4-Dimethylphenol	330	1,2,4-Trichlorobenzene	330
2,4-Dinitrophenol	1600	2,4,5-Trichlorophenol	1600
Di-n-butylphthalate	330	2,4,6-Trichlorophenol	330

Note: All analyses done by EPA contract laboratory program Method OLM02.0 or the equivalent EPA Method 8270. These methods are based on solvent extraction, concentration, and gas chromatography/mass spectrometry detection and quantitation.

*EQLs for the sediment samples are based on no gel permeation chromatography (GPC) cleanup being performed. The laboratories' GPC equipment determines the sample-specific EQL based on the volume of extract the GPC equipment uses. However, the laboratories are requested, if possible, to report sample-specific EQLs of no more than twice the value listed in the table.

Table B-4.0-1
TA-49 Area 2 1998 RFI Borehole Screening Data, Gross Alpha

Borehole ID	Depth Interval (in.)	Counts per Minute	Instrument Background	Efficiency	Sample Alpha Radioactivity (dpm)
#51	0–12	17	2	0.257	58
#51	12–24	22	2	0.257	78
#51	24–36	24	2	0.257	86
#51	36–48	16	2	0.257	54
#51	48–60	23	2	0.257	82
#51	60–72	23	2	0.257	82
#51	72–84	17	2	0.257	58
#51	84–96	15	2	0.257	51
#51	96–108	19	2	0.257	66
#52	0–12	11	2	0.257	35
#52	12–24	17	2	0.257	58
#52	24–30	28	2	0.257	101
2-A	0–12	12	4.6	0.240	31
2-A	12–24	30	4.6	0.240	106
2-A	24–36	17	4.6	0.240	52
2-A	36–48	12	4.6	0.240	31
2-A	48–60	21	4.6	0.240	68
2-A	60–72	15	4.6	0.240	43
2-A	72–84	8	4.6	0.240	14
2-A	84–96	3	4.6	0.240	-7
2-B	0–12	7	1.2	0.236	25
2-B	12–24	19	1.2	0.236	75
2-B	24–36	23	1.2	0.236	92
2-B	36–48	11	1.2	0.236	42
2-C	0–12	11	1.2	0.236	42
2-C	12–24	30	1.2	0.236	122
2-D	12–24	13	2	0.257	43
2-E	0–12	16	4	0.230	52
2-E	24–30	16	3	0.223	58
2-E	42–54	23	3	0.223	90
2-E	56–62	9	1.2	0.236	33
2-F	0–12	12	2.8	0.183	50
2-F	12–24	15	2.8	0.183	67
2-F	24–30	9	4.6	0.240	18
2-H	0–12	24	2	0.257	86
2-H	12–24	41	2	0.257	152
2-I	0–12	8	2	0.257	23

Table B-4.0-1 (continued)

Borehole ID	Depth Interval (in.)	Counts per Minute	Instrument Background	Efficiency	Sample Alpha Radioactivity (dpm)
2-I	12–24	83	2	0.257	315
2-J	0–12	11	1.2	0.236	42
2-J	12–24	23	1.2	0.236	92
2-K	0–12	15	2.8	0.183	67
2-K	12–24	23	2.8	0.183	110
2-L	0–12	10	4	0.230	26
2-L	12–24	20	4	0.230	70
2-M	0–12	10	4	0.230	26
2-M	12–24	10	4	0.230	26
2-M	24–36	13	4	0.230	39
2-M	36–48	14	4	0.230	43
2-M	48–60	14	4	0.230	43
2-M	60–72	15	4	0.230	48
2-N	0–12	12	2	0.257	39
2-N	12–24	9	2	0.257	27
2-N	24–30	39,128	2	0.257	152241
2-N	30–36	27,297	2	0.257	106206
2-O	0–12	15	1.2	0.236	58
2-O	0–12	8	1.2	0.236	29
2-O	12–24	28	1.2	0.236	114
2-P	0–12	10	2.8	0.183	39
2-P	12–24	24	4.6	0.240	81
2-P	24–36	38	4.6	0.240	139
2-P	24–36	16	3	0.223	58
2-Q	0–12	23	4	0.230	83
2-Q	12–24	18	4	0.230	61
2-Q	24–30	38	4	0.230	148
2-S	0–12	19	4	0.230	65
2-S	12–24	15	4	0.230	48
2-S	24–36	27	4	0.230	100
2-T	0–12	19	1.2	0.236	75
2-T	12–24	23	1.2	0.236	92
2-T	24–30	24	1.2	0.236	97
2-U	0–12	8	2.8	0.183	28
2-U	12–24	18	2.8	0.183	83
2-U	24–36	37	4.6	0.240	135
2-U	36–48	2	4.6	0.240	-11
2-U	48–60	12	4.6	0.240	31
2-V	0–12	18	4.6	0.240	56

Table B-4.0-1 (continued)

Borehole ID	Depth Interval (in.)	Counts per Minute	Instrument Background	Efficiency	Sample Alpha Radioactivity (dpm)
2-V	12–24	27	4.6	0.240	93
2-V	24–36	32	2.8	0.183	160
2-V	36–42	9	4.6	0.240	18
2-W	0–12	10	4	0.230	26
2-W	12–24	7	1.2	0.236	25
2-W	24–36	18	4	0.230	61
2-W	36–48	23	4	0.230	83
2-W	48–60	21	3	0.223	81
2-X	0–12	2	3	0.223	0
2-X	12–24	20	3	0.223	76
2-X	24–36	14	4	0.230	43
2-X	36–48	15	1.2	0.236	58
2-Y	0–12	20	1.2	0.236	80
2-Y	12–24	7	1.2	0.236	25
2-Y	24–36	30	3	0.223	121
2-Y	36–48	24	3	0.223	94
53	0–12	16	2.6	0.230	58
53	12–24	33	2.6	0.230	132
54	0–12	19	2.6	0.230	71
54	12–24	23	2.6	0.230	89
55	0–12	30	2.6	0.230	119
55	12–24	23	2.6	0.230	89
55	24–36	19	2.6	0.230	71
55	36–48	26	2.6	0.230	102
55	48–60	15	2.6	0.230	54
56	0–12	9	2.6	0.230	28
56	12–24	18	2.6	0.230	67
56	24–36	4	2.6	0.230	6
56	36–48	6	2.6	0.230	15

Table B-4.0-2
TA-49 Area 2 1998 RFI Borehole Screening Data, Gross Beta

Borehole ID	Depth Interval (in.)	Counts per Minute	Sample Beta (dpm)	Instrument Background	Efficiency	Beta Activity (dpm)
#51	0–12	218	175	119	0.445	97
#51	12–24	235	148	119	0.445	196
#51	24–36	218	191	119	0.445	61
#51	36–48	206	180	119	0.445	58
#51	48–60	196	159	119	0.445	83
#51	60–72	189	148	119	0.445	92
#51	72–84	167	134	119	0.445	74
#51	84–96	175	117	119	0.445	130
#51	96–108	246	150	119	0.445	216
#52	0–12	308	135	119	0.445	389
#52	12–24	216	124	119	0.445	207
#52	24–30	190	162	119	0.445	63
2-A	0–12	214	140	117.2	0.510	145
2-A	12–24	192	130	117.2	0.510	122
2-A	24–36	273	137	117.2	0.510	267
2-A	36–48	183	120	117.2	0.510	124
2-A	48–60	234	163	117.2	0.510	139
2-A	60–72	205	135	117.2	0.510	137
2-A	72–84	194	127	117.2	0.510	131
2-A	84–96	183	125	117.2	0.510	114
2-B	0–12	205	129	116	0.477	159
2-B	12–24	233	143	116	0.477	189
2-B	24–36	201	152	116	0.477	103
2-B	36–48	200	115	116	0.477	178
2-C	0–12	246	132	116	0.477	239
2-C	12–24	199	144	116	0.477	115
2-D	0–12	233	132	116	0.477	212
2-D	12–24	208	141	119	0.445	151
2-E	0–12	218	145	116.8	0.470	155
2-E	24–30	176	126	121	0.472	106
2-E	42–54	236	135	121	0.472	214
2-E	54–62	199	114	116	0.477	178
2-F	0–12	226	115	109.6	0.450	247
2-F	12–24	196	159	109.6	0.450	82
2-F	24–30	191	168	117.2	0.510	45
2-H	0–12	209	116	119	0.445	209
2-H	12–24	200	123	119	0.445	173

Table B-4.0-2 (continued)

Borehole ID	Depth Interval (in.)	Counts per Minute	Sample Beta (dpm)	Instrument Background	Efficiency	Beta Activity (dpm)
2-I	0–12	246	117	119	0.445	290
2-I	12–24	267	154	119	0.445	254
2-J	0–12	210	127	116	0.477	174
2-J	12–24	217	149	116	0.477	143
2-K	0–12	212	137	109.6	0.450	167
2-K	12–24	233	129	109.6	0.450	231
2-L	0–12	218	124	116.8	0.470	200
2-L	12–24	247	114	116.8	0.470	283
2-M	0–12	166	135	116.8	0.470	66
2-M	12–24	231	128	116.8	0.470	219
2-M	24–36	262	127	116.8	0.470	287
2-M	36–48	178	90	116.8	0.470	187
2-M	48–60	244	126	116.8	0.470	251
2-M	60–72	192	131	116.8	0.470	130
2-N	0–12	220	150	119	0.445	157
2-N	12–24	196	108	119	0.445	198
2-N	24–30	11,838	1551	119	0.445	23117
2-N	30–36	9225	1638	119	0.445	17049
2-O	0–12	190	126	116	0.477	134
2-O	12–24	228	144	116	0.477	176
2-P	0–12	248	138	109.6	0.450	244
2-P	12–24	197	136	117.2	0.510	120
2-P	24–36	197	137	117.2	0.510	118
2-P	24–36	188	140	121	0.472	102
2-Q	0–12	239	133	116.8	0.470	226
2-Q	12–24	237	139	116.8	0.470	209
2-Q	24–30	189	113	116.8	0.470	162
2-S	0–12	207	159	116.8	0.470	102
2-S	12–24	241	131	116.8	0.470	234
2-S	24–36	222	160	116.8	0.470	132
2-T	0–12	212	144	116	0.477	143
2-T	12–24	244	143	116	0.477	212
2-T	24–30	228	154	116	0.477	155
2-U	0–12	195	116	109.6	0.450	176
2-U	12–24	223	143	109.6	0.450	178
2-U	24–36	226	164	117.2	0.510	122
2-U	36–48	219	145	117.2	0.510	145
2-U	48–60	209	161	117.2	0.510	94
2-V	0–12	241	121	117.2	0.510	235

Table B-4.0-2 (continued)

Borehole ID	Depth Interval (in.)	Counts per Minute	Sample Beta (dpm)	Instrument Background	Efficiency	Beta Activity (dpm)
2-V	12–24	225	129	117.2	0.510	188
2-V	24–36	219	132	109.6	0.450	193
2-V	36–42	187	118	117.2	0.510	135
2-W	0–12	230	134	116.8	0.470	204
2-W	12–24	199	91	116	0.477	226
2-W	24–36	238	150	116.8	0.470	187
2-W	36–48	215	129	116.8	0.470	183
2-W	48–60	240	100	121	0.472	296
2-X	0–12	232	178	121	0.472	114
2-X	12–24	261	136	121	0.472	265
2-X	24–36	258	149	116.8	0.470	232
2-X	36–48	248	143	116	0.477	220
2-Y	0–12	222	134	116	0.477	184
2-Y	12–24	206	149	116	0.477	119
2-Y	24–36	216	191	121	0.472	53
2-Y	36–48	252	142	121	0.472	233
53	0–12	202	131	122	0.490	145
53	12–24	248	163	122	0.490	173
54	0–12	237	131	122	0.490	216
54	12–24	211	131	122	0.490	163
55	0–12	196	126	122	0.490	143
55	12–24	203	141	122	0.490	127
55	36–48	207	151	122	0.490	114
55	48–60	258	159	122	0.490	202
56	0–12	229	142	122	0.490	178
56	12–24	201	106	122	0.490	194
56	24–36	203	135	122	0.490	139
56	36–48	255	160	122	0.490	194
?	24–36	232	136	122	0.490	196

Table B-4.0-3
TA-49 Area 2 1998 RFI Borehole Screening Data, Gross Gamma

Sample ID	Depth Interval (in.)	Counts per Minute	Instrument Background	Efficiency (E)	Sample Gamma Radioactivity (dpm)
53	0–12	8739.0	6937.0	0.100	18,020
53	12–24	8933.0	6937.0	0.100	19,960
54	0–12	8819.0	6937.0	0.100	18,820
54	12–24	8991.0	6937.0	0.100	20,540
55	0–12	8869.0	6937.0	0.100	19,320
55	12–24	8976.0	6937.0	0.100	20,390
55	24–36	8952.0	6937.0	0.100	20,150
55	36–48	8828.0	6937.0	0.100	18,910
55	48–60	8714.0	6937.0	0.100	17,770
56	0–12	8791.0	6937.0	0.100	18,540
56	12–24	9124.0	6937.0	0.100	21,870
56	24–36	8675.0	6937.0	0.100	17,380
56	36–48	8657.0	6937.0	0.100	17,200
#51	0–12	10,689.0	9355.0	0.106	12,585
#51	12–24	11,432.0	9355.0	0.106	19,594
#51	24–36	9901.0	9355.0	0.106	5151
#51	36–48	11,003.0	9355.0	0.106	15,547
#51	48–60	10,181.0	9355.0	0.106	7792
#51	60–72	10,574.0	9355.0	0.106	11,500
#51	72–84	10,824.0	9355.0	0.106	13,858
#51	84–96	10,700.0	9355.0	0.106	12,689
#51	96–108	10,569.0	9355.0	0.106	11,453
#52	0–12	9909.0	9355.0	0.106	5226
#52	12–24	9911.0	9355.0	0.106	5245
#52	24–30	10,001.0	9355.0	0.106	6094
2-A	0–12	8603.0	6766.0	0.095	19,378
2-A	12–24	8548.0	6766.0	0.095	18,797
2-A	24–36	8213.0	6766.0	0.095	15,264
2-A	36–48	8190.0	6766.0	0.095	15,021
2-A	48–60	8352.0	6766.0	0.095	16,730
2-A	60–72	8260.0	6766.0	0.095	15,759
2-A	72–84	8082.0	6766.0	0.095	13,882
2-A	84–96	8186.0	6766.0	0.095	14,979
2-B	0–12	8205.0	6978.0	0.106	11,575
2-B	12–24	8711.0	6978.0	0.106	16,349
2-B	24–36	8296.0	6978.0	0.106	12,434
2-B	36–48	8499.0	6978.0	0.106	14,349

Table B-4.0-3 (continued)

Sample ID	Depth Interval (in.)	Counts per Minute	Instrument Background	Efficiency (E)	Sample Gamma Radioactivity (dpm)
2-C	0–12	8272.0	6978.0	0.106	12,208
2-C	12–24	8516.0	6978.0	0.106	14,509
2-D	0–12	8219.0	6978.0	0.106	11,708
2-E	0–12	9834.0	8090.4	0.100	17,436
2-E	24–30	8655.0	7120.0	0.105	14,577
2-E	42–45	8743.0	7120.0	0.105	15,413
2-E	54–62	8327.0	6978.0	0.106	12,726
2-F	0–12	8364.0	7929.0	0.110	3955
2-F	12–24	8493.0	7929.0	0.110	5127
2-F	24–30	8352.0	6766.0	0.095	16,730
2-H	0–12	9829.0	9355.0	0.106	4472
2-H	12–24	9645.0	9355.0	0.106	2736
2-I	0–12	10,255.0	9355.0	0.106	8491
2-I	12–24	9974.0	9355.0	0.106	5840
2-J	0–12	8681.0	6978.0	0.106	16,066
2-J	12–24	8377.0	6978.0	0.106	13,198
2-K	0–12	8407.0	7929.0	0.110	4345
2-K	12–24	8616.0	7929.0	0.110	6245
2-L	0–12	9955.0	8090.4	0.100	18,646
2-L	12–24	9618.0	8090.4	0.100	15,276
2-M	0–12	9387.0	8090.4	0.100	12,966
2-M	12–24	9997.0	8090.4	0.100	19,066
2-M	24–36	9315.0	8090.4	0.100	12,246
2-M	36–48	9807.0	8090.4	0.100	17,166
2-M	48–60	10,055.0	8090.4	0.100	19,646
2-M	60–72	9740.0	8090.4	0.100	16,496
2-N	0–12	10,023.0	9355.0	0.106	6302
2-N	12–24	9999.0	9355.0	0.106	6075
2-N	24–30	919,647.0	9355.0	0.106	8,587,660
2-N	30–36	838,974.0	9355.0	0.106	7,826,594
2-O	0–12	8185.0	6978.0	0.106	11,387
2-O	12–24	8633.0	6978.0	0.106	15,613
2-O	12–24	11,424.0	9355.0	0.106	19,519
2-P	0–12	8627.0	7929.0	0.110	6345
2-P	12–24	8203.0	6766.0	0.095	15,158
2-P	24–36	8,646.0	6766.0	0.095	19,831
2-P	24–36	8576.0	7120.0	0.105	13,827
2-Q	0–12	9320.0	8090.4	0.100	12,296
2-Q	12–24	9926.0	8090.4	0.100	18,356

Table B-4.0-3 (continued)

Sample ID	Depth Interval (in.)	Counts per Minute	Instrument Background	Efficiency (E)	Sample Gamma Radioactivity (dpm)
2-Q	24–30	10,001.0	8090.4	0.100	19,106
2-S	0–12	9899.0	8090.4	0.100	18,086
2-S	12–24	9975.0	8090.4	0.100	18,846
2-S	24–36	10,017.0	8090.4	0.100	19,266
2-T	0–12	8461.0	6978.0	0.106	13,991
2-T	12–24	8661.0	6978.0	0.106	15,877
2-T	24–30	8788.0	6978.0	0.106	17,075
2-U	0–12	8582.0	7929.0	0.110	5936
2-U	12–24	8488.0	7929.0	0.110	5082
2-U	24–36	8349.0	6766.0	0.095	16,698
2-U	36–48	8469.0	6766.0	0.095	17,964
2-U	48–60	8636.0	6766.0	0.095	19,726
2-V	0–12	8511.0	6766.0	0.095	18,407
2-V	12–24	8412.0	6766.0	0.095	17,363
2-V	24–36	8422.0	7929.0	0.110	4482
2-V	36–42	8493.0	6766.0	0.095	18,217
2-W	0–12	9457.0	8090.4	0.100	13,666
2-W	12–24	8454.0	6978.0	0.106	13,925
2-W	24–36	9966.0	8090.4	0.100	18,756
2-W	36–48	10,072.0	8090.4	0.100	19,816
2-W	48–60	8885.0	7120.0	0.105	16,762
2-X	0–12	8647.0	7120.0	0.105	14,501
2-X	12–24	8740.0	7120.0	0.105	15,385
2-X	24–36	9805.0	8090.4	0.100	17,146
2-X	36–48	8332.0	6978.0	0.106	12,774
2-Y	0–12	8246.0	6978.0	0.106	11,962
2-Y	12–24	8476.0	6978.0	0.106	14,132
2-Y	24–36	8738.0	7120.0	0.105	15,366
2-Y	36–48	8775.0	7120.0	0.105	15,717

Table B-4.0-4
TA-49 Area 2 1998 RFI Borehole Analytical Screening Data
Gross Alpha, Gross Beta, and Gross Gamma

Borehole ID	Sample ID	Depth Interval (ft)	Gross Alpha	Alpha MDC[a]	Gross Beta	Beta MDC	Gross Gamma	Gamma MDC	Total Activity[b]
2-K	MD49-98-0120	1–2	ND[c]	n/a[d]	ND	n/a	ND	n/a	ND
2-P	MD49-98-0121	2–3	ND	n/a	ND	n/a	ND	n/a	ND
2-T	MD49-98-0122	2–2.5	ND	n/a	27.5	22.5	ND	n/a	27.5
2-U	MD49-98-0123	0–1	16.5	7.96	17.9	12.7	ND	n/a	34.4
2-Y	MD49-98-0124	2–3	ND	n/a	ND	n/a	ND	n/a	ND
2-M	MD49-98-0125	3–4	ND	n/a	20.3	16.5	ND	n/a	20.3
2-D	MD49-98-0126	1–2	ND	n/a	ND	n/a	ND	n/a	ND
2-X	MD49-98-0127	0–1	ND	n/a	18.2	16.6	ND	n/a	18.2
2-A	MD49-98-0128	0–1	ND	n/a	ND	n/a	ND	n/a	ND
#56	MD49-98-0129	0–1	ND	n/a	ND	n/a	ND	n/a	ND
2-S	MD49-98-0130	2–3	ND	n/a	ND	n/a	ND	n/a	ND
2-Q	MD49-98-0131	2–2.5	ND	n/a	ND	n/a	ND	n/a	ND
#56	MD49-98-0132	2–3	ND	n/a	25	14.5	ND	n/a	25
2-I	MD49-98-0133	1–2	22.6	10.9	19.2	17.3	ND	n/a	41.8
#51	MD49-98-0134	8–9	ND	n/a	18.5	17.1	ND	n/a	ND
#51	MD49-98-0135	5–6	ND	n/a	ND	n/a	ND	n/a	ND
2-A	MD49-98-0136	7.5–8	8.72	5.32	17.8	9.37	ND	n/a	26.52
2-C	MD49-98-0137	0–1	ND	n/a	19.3	16.1	ND	n/a	19.3
2-N	MD49-98-0138	2.5–3	—[e]	—	—	—	—	—	28,194
2-N	MD49-98-0139	2–2.5	—	—	—	—	—	—	30,625

Note: Values reported are screening level estimates in pCi/g.

[a] MDC = minimum detectable concentration.

[b] Reported values are gross total activity estimates in pCi/g.

[c] ND = not detected.

[d] n/a = not applicable.

[e] A dash in the table means measurements not conducted due to elevated activity level in sample.

Table B-4.0-5
Summary of 1998 Shallow Borehole Depths to Shaft Caps

Borehole ID	Total Depth (in.)	Top of Shaft (in.)	Concrete Cap Encountered (Y/N)	Comments
2-A	96	Unknown	N	
2-B	48	36	N	Sand at 36 in.
2-C	24	24	Y	
2-D	24	24	Y	Approximately 18 in. clay over cap
2-E	62	Unknown	Unknown	Void at 30–42 in.
2-F	30	30	Y	
2-G	48	36	N	Sand at 36 in.
2-H	24	24	Y	
2-I	24	24	Y	
2-J	24	24	Y	Saturated
2-K	24	24	Y	Standing water in hole
2-L	24	24	Y	
2-M	72	72	Y	
2-N	30	30	N	Radioactive material encountered
2-O	24	24	Y	Standing water in hole
2-P	24	24	Y	Clay at 2.5 ft
2-Q	30	30	Y	
2-S	36	36	Y	
2-T	30	30	Y	Cap directly beneath clay
2-U	60	42	N	Sand at 42 in.
2-V	42	42	Y	
2-W	72	50	N	Sand at 50 in., standing water in hole
2-X	48	48	Y	Saturated clay at 18 in.
2-Y	60	42	N	Sand/crushed tuff at 42 in.

Table B-4.0-5
1998 RFI Radiological Screening Survey Data

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
1	1625932.16	1755326.65	4000	9	1625066.99	1755385.21	4520
2	1624920.26	1755404.57	4460	9	1625813.97	1754585.47	5660
2	1625767.65	1754618.83	4340	9	1625908.24	1755243.11	4560
2	1625923.29	1755272.01	3960	9	1625919.91	1755505.21	4840
2	1625932.63	1755333.1	4840	9	1625925.52	1755357.68	4760
2	1626050.13	1755338.91	4320	9	1625998.02	1755340.72	3210
3	1624932.82	1755403.34	4340	10	1625088.33	1755382.5	5080
3	1625779.27	1754613.3	4900	10	1625821.47	1754577.13	4700
3	1625920.7	1755264.23	4820	10	1625910.32	1755236.09	4540
3	1625934.48	1755331.85	4100	10	1625915.48	1755511.76	5320
3	1626044.67	1755338.48	4280	10	1625934.2	1755356.35	4140
4	1624945.87	1755395	4100	10	1625990.78	1755342.21	3820
4	1625776.43	1754607.07	4600	11	1625105.58	1755380.75	3760
4	1625885.38	1755491.27	5260	11	1625830.1	1754573.55	5760
4	1625905.71	1755265.11	4740	11	1625905.33	1755233.67	4340
4	1625926.93	1755326.27	4560	11	1625914.43	1755358.14	4400
4	1626037.58	1755338.9	4080	11	1625921.28	1755520.13	4560
5	1624972.64	1755395.06	4640	11	1625981.91	1755338.82	3940
5	1625785.02	1754604.98	5340	12	1625119.95	1755380.5	4500
5	1625891.57	1755494.26	5720	12	1625836.34	1754570.35	5440
5	1625906.41	1755257.23	4200	12	1625901.15	1755229.78	4180
5	1625922.78	1755336.98	4340	12	1625914.49	1755360.05	3940
5	1626030.61	1755338.62	3740	12	1625921.73	1755525.45	4960
6	1624993.22	1755391.28	4320	12	1625975.26	1755338.58	4460
6	1625791.9	1754603.61	4960	13	1625136.66	1755378.46	5000
6	1625897.67	1755496.76	4180	13	1625841.95	1754565.65	5020
6	1625912.02	1755252.99	4280	13	1625904.54	1755220.35	4680
6	1625928.49	1755343.43	4920	13	1625914.59	1755532.12	4640
6	1626024.28	1755338.31	4500	13	1625924.14	1755364.03	4060
7	1625017.65	1755393.14	4480	13	1625966.6	1755339.23	4260
7	1625795.75	1754596.53	5300	14	1625148.81	1755376.18	4180
7	1625906.82	1755500.14	4840	14	1625851.39	1754560.31	4240
7	1625915.99	1755251.37	5000	14	1625897.35	1755217.76	4400
7	1625934.16	1755344.43	4300	14	1625920.67	1755539.46	5060
7	1626013.76	1755340.03	4580	14	1625933.68	1755364.72	4020
8	1625043.94	1755388.06	4620	14	1625958.71	1755338.81	4220
8	1625805.77	1754591.35	5040	15	1625168.81	1755374.84	3980
8	1625912.83	1755247.72	4180	15	1625857.82	1754549.51	4440
8	1625913.88	1755505.67	4360	15	1625890.92	1755192.17	4420
8	1625921.96	1755352.91	5400	15	1625917.11	1755379.07	4760
8	1626006.12	1755339.43	4480	15	1625929.95	1755538.94	4540

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
16	1625200.26	1755371.99	4560	22	1625975.63	1755323.93	4520
16	1625866.23	1754537.21	4660	23	1625338.19	1755380.4	4560
16	1625883.88	1755190.42	5180	23	1625844.88	1755104.8	4240
16	1625921.44	1755381.84	4100	23	1625902.51	1754452.97	4720
16	1625926.52	1755531.99	4800	23	1625913.76	1755402.45	5920
16	1625965.72	1755336.32	4300	23	1625946.77	1755569.5	4560
17	1625214.08	1755373.44	4220	23	1625967.66	1755323.73	4420
17	1625872.36	1754526.28	4680	24	1625362.99	1755382.05	4100
17	1625880.89	1755177.01	4480	24	1625839.71	1755094.61	4520
17	1625926.45	1755381.04	4280	24	1625904.78	1754441.06	5360
17	1625929.07	1755544.76	4720	24	1625911.87	1755408.61	5160
17	1625973.27	1755333.74	4300	24	1625947.82	1755578.95	5220
18	1625240.38	1755373.91	4580	24	1625959.87	1755324.61	3880
18	1625881.6	1755173.5	4360	25	1625381.32	1755383.22	4480
18	1625882.25	1754512.98	4500	25	1625835.36	1755085.08	3980
18	1625928.49	1755552.64	5380	25	1625911.92	1754432.43	4800
18	1625930.8	1755381.22	4740	25	1625916.84	1755412.38	4140
18	1625983.98	1755332.41	3840	25	1625951.44	1755584.44	4600
19	1625259.24	1755376.65	4380	25	1625959.68	1755319.28	4040
19	1625863.94	1755142.64	4720	26	1625403.06	1755385.16	4060
19	1625885.27	1754501.45	4040	26	1625829.28	1755078.97	4560
19	1625917.8	1755390.59	4340	26	1625920.96	1755414.22	4360
19	1625932.86	1755558.53	4240	26	1625921.88	1754417.31	4400
19	1625985.61	1755331.17	4720	26	1625953.39	1755593.7	5180
20	1625279.3	1755378.42	4660	26	1625968.3	1755318.53	4300
20	1625859.43	1755132.93	4640	27	1625425.19	1755385.87	4060
20	1625895.41	1754491.79	4980	27	1625827.39	1755070.52	4940
20	1625921.93	1755398.15	5260	27	1625924.28	1755418.35	5380
20	1625936.98	1755547.8	4840	27	1625926.34	1754411.25	4920
20	1625993.27	1755323.1	4600	27	1625956.62	1755604.42	4460
21	1625302.23	1755380.9	4320	27	1625978.34	1755318.8	4260
21	1625854.85	1755126.33	4640	28	1625435.31	1755387.35	4540
21	1625891.4	1754482.99	4600	28	1625822.25	1755059.35	4140
21	1625924.93	1755397.43	4700	28	1625919	1755418.74	5380
21	1625946.46	1755551.97	4780	28	1625934.02	1754404.86	5040
21	1625983.79	1755322.7	4140	28	1625959	1755613.82	4800
22	1625320.26	1755380.15	4240	28	1625986.27	1755318.82	4120
22	1625850.74	1755116.92	4220	29	1625453.42	1755388.77	4460
22	1625896.29	1754468.32	4280	29	1625815.9	1755048.05	4060
22	1625926.09	1755402.39	5340	29	1625920.35	1755425.22	6040
22	1625944.61	1755560.57	4600	29	1625950.85	1754402.24	4900

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
29	1625961.15	1755620.76	4200	36	1625961.6	1755699.55	4340
29	1625994.11	1755319.34	4460	36	1626017.18	1754378.48	4320
30	1625480.98	1755393.59	4920	36	1626035.91	1755323.64	4620
30	1625811.25	1755036.82	4380	37	1625567.19	1755414.1	5200
30	1625906.34	1755420.14	5700	37	1625769.19	1754945.02	4620
30	1625960.63	1754397.8	5160	37	1625916.97	1755432.63	4800
30	1625963.27	1755633.67	4580	37	1625964.32	1755709.04	4640
30	1625996.04	1755320.76	4020	37	1626041.94	1755323.2	6750
31	1625493.69	1755396.8	4220	38	1625564.82	1755420.26	4520
31	1625808.62	1755027.15	4640	38	1625755.97	1754925.12	3980
31	1625912.34	1755421.76	3900	38	1625904.09	1755436.48	4480
31	1625964.15	1755646.02	4400	38	1625965.9	1755717.18	3820
31	1625970.27	1754393.87	4020	38	1626044.58	1755319.43	10100
31	1626003.89	1755317.82	5260	39	1625565.22	1755426.42	4760
32	1625513.23	1755393.25	4600	39	1625739.41	1754894.66	3720
32	1625803.35	1755018.63	4800	39	1625895.15	1755442.9	5000
32	1625899.24	1755420.46	5200	39	1625958.75	1755724.69	4440
32	1625962.05	1755658.74	3940	39	1626051.56	1755317.7	4940
32	1625980.15	1754393.53	4560	40	1625565.04	1755441.01	4900
32	1626012.35	1755321.7	4020	40	1625735.43	1754880.14	4720
33	1625546.79	1755398.53	4460	40	1625895.44	1755437.45	3720
33	1625795.68	1755006.19	4120	40	1625955.34	1755734.53	4500
33	1625888.64	1755422.13	5700	40	1626052.77	1755321.29	4560
33	1625959.77	1755669.04	4620	41	1625565.29	1755447.43	4600
33	1625991.02	1754388.65	4360	41	1625726.98	1754867.04	4920
33	1626020.96	1755323.63	4320	41	1625891.06	1755434.44	4160
34	1625555.58	1755400.99	5060	41	1625951.02	1755741.44	4440
34	1625790.68	1754993.94	4600	41	1626053.66	1755326.4	5000
34	1625903.53	1755426.79	4920	42	1625561.81	1755460.84	5540
34	1625960.95	1755680.69	4900	42	1625717.98	1754857.14	4500
34	1625998.1	1754392.54	6170	42	1625883.63	1755427.06	4380
34	1626028.85	1755322.85	4280	42	1625956.99	1755745.3	4980
35	1625565.82	1755407.12	4780	42	1626046.43	1755322.17	6890
35	1625781.7	1754975.82	4440	43	1625564.54	1755468.07	5080
35	1625907.89	1755430.5	5000	43	1625718.25	1754845.76	4420
35	1625962.56	1755685.49	4900	43	1625873.46	1755426.02	4620
35	1626005.61	1754382.11	4360	43	1625964.45	1755746.65	4640
35	1626028.87	1755323.31	4280	43	1626040.81	1755326.22	4700
36	1625567.86	1755409.32	5580	44	1625564.62	1755473.24	4520
36	1625778.75	1754955.68	4380	44	1625712.11	1754831.65	4640
36	1625914.07	1755428.63	4820	44	1625876.95	1755433.66	4880

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
44	1625940.87	1755757.11	4780	53	1625586.04	1755543.83	4400
44	1626032.9	1755327.01	3740	53	1625704.23	1754796.72	4040
45	1625557.82	1755484.85	4920	53	1625873.39	1755452.04	5020
45	1625710.22	1754815.5	4580	53	1625989.63	1755774.8	73300
45	1625879.03	1755439.04	4940	53	1626011.93	1755311.29	4460
45	1625953.44	1755760.74	4720	54	1625588.28	1755553.55	5700
45	1626023.74	1755328.25	4200	54	1625701.98	1754787.93	3780
46	1625560.1	1755492.51	5060	54	1625872.47	1755447.32	4600
46	1625699.35	1754818.62	3980	54	1625984.83	1755777	4440
46	1625880.04	1755443.98	5000	54	1626004.25	1755310.49	7530
46	1625965.59	1755758.85	4940	55	1625588.49	1755558.44	4960
46	1626016.59	1755325.54	4340	55	1625695.87	1754789.46	4620
47	1625569.31	1755500.89	6490	55	1625869.73	1755454.17	4360
47	1625698.45	1754810.71	4520	55	1625995.2	1755781.47	4840
47	1625881.44	1755449.4	5300	55	1625995.37	1755310.18	4200
47	1625951.63	1755769.6	4460	56	1625590.48	1755565	5160
47	1626055.44	1755313.45	4440	56	1625690.25	1754789.84	4300
48	1625574.9	1755506.3	4380	56	1625865.13	1755451.15	4580
48	1625706.84	1754806.7	4640	56	1625986.35	1755309.46	4320
48	1625885.34	1755452.53	4680	56	1625992.14	1755791.75	5140
48	1625953.54	1755774.89	5000	57	1625588.16	1755569.88	5040
48	1626044.68	1755312.64	4980	57	1625693.71	1754784.27	4040
49	1625576.89	1755512.2	4680	57	1625865.34	1755451.32	4340
49	1625704.55	1754798.99	4520	57	1625975.63	1755309.65	4140
49	1625890.56	1755453.57	4280	57	1625997.45	1755794.02	5040
49	1625953.17	1755784.96	4820	58	1625590.09	1755579.88	4700
49	1626040.47	1755313.91	9140	58	1625699.38	1754778.24	4620
50	1625582.16	1755519.23	5020	58	1625860.57	1755444.41	4580
50	1625698.88	1754802.37	5020	58	1625961.6	1755312.37	4500
50	1625880.8	1755461.72	4720	58	1625994.63	1755796.43	4560
50	1625962.32	1755785.79	4400	59	1625590.64	1755588.11	4520
50	1626035.74	1755312.62	33100	59	1625697.47	1754768.49	4200
51	1625580.87	1755526.89	5600	59	1625856.8	1755439.82	4280
51	1625694.09	1754806.7	4040	59	1625961.07	1755305.21	4700
51	1625878.72	1755453.36	5220	59	1625994	1755802.03	5020
51	1625975.34	1755777.56	4680	60	1625591.85	1755594.91	4980
51	1626028.08	1755312.61	5180	60	1625684.05	1754770.52	4380
52	1625585.16	1755538.86	4660	60	1625856.93	1755434.76	4060
52	1625877.06	1755448.45	4040	60	1625967.41	1755304.41	4320
52	1625983.62	1755772.68	4800	60	1625998.66	1755806.47	4520
52	1626019.83	1755310.94	4140	61	1625592.42	1755602.72	4160

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
61	1625688.72	1754762.16	4660	69	1625849.26	1755443.26	4560
61	1625859.08	1755428.06	3960	69	1625972.4	1755842.29	5080
61	1625981.41	1755304.76	5680	69	1626035.04	1755298.05	4100
61	1625993.19	1755811.18	4940	70	1625599.85	1755685.33	4820
62	1625594.96	1755616.95	4560	70	1625678.74	1754692.99	5140
62	1625684.18	1754755.23	4080	70	1625848.62	1755437.41	4120
62	1625853.45	1755423.42	4420	70	1625979.66	1755849.82	3940
62	1625991.03	1755303.38	4780	70	1626022.18	1755297.31	4260
62	1625999.74	1755814.29	5300	71	1625597.62	1755690.92	4600
63	1625597.51	1755625.35	4480	71	1625674.69	1754692.01	4580
63	1625695.83	1754753.8	4380	71	1625848.62	1755431.75	3980
63	1625852.53	1755429.58	4660	71	1625977.01	1755857.93	4500
63	1625997.57	1755302.31	32200	71	1626013.49	1755298.11	5180
63	1626000.72	1755819.81	4880	72	1625593.42	1755700.08	4060
64	1625598.87	1755633.97	5020	72	1625673.8	1754689.49	4740
64	1625689.18	1754728.88	4540	72	1625847.66	1755426.05	4600
64	1625854.4	1755448.36	3800	72	1625971.41	1755862.38	5180
64	1626003.05	1755824.99	5180	72	1626003.82	1755295.44	11100
64	1626009.63	1755303.33	4340	73	1625593.34	1755715.99	4480
65	1625601.08	1755645.71	5200	73	1625673.44	1754685.47	4460
65	1625682.72	1754719.58	4860	73	1625839.85	1755425.63	4900
65	1625857.16	1755454.37	4780	73	1625975.78	1755863.01	4760
65	1626002.55	1755827.67	4840	73	1625993.77	1755295.08	6450
65	1626017.46	1755304.97	4680	74	1625589.75	1755726.9	4060
66	1625601.49	1755653.58	4640	74	1625675.17	1754675.68	4180
66	1625683.66	1754710.93	4840	74	1625841.32	1755433.54	4460
66	1625864.09	1755459.56	4260	74	1625982	1755866.61	5240
66	1625996.29	1755833.32	5200	74	1625986.91	1755296.86	12000
66	1626029.69	1755305.18	4340	75	1625588.46	1755739.28	5140
67	1625600.57	1755659.89	5080	75	1625679.74	1754670.23	4960
67	1625678.5	1754708.25	5180	75	1625844.07	1755440.71	4720
67	1625851.54	1755459.4	4020	75	1625979.17	1755295.99	5040
67	1625992.12	1755837.33	4720	75	1626014.85	1755812.51	4880
67	1626041.82	1755305.82	4840	76	1625582.84	1755742.54	4800
68	1625604.15	1755669.78	4880	76	1625679.31	1754673.87	4600
68	1625677.02	1754705.21	4780	76	1625844.38	1755453.59	4860
68	1625845.97	1755449.12	4060	76	1625969.56	1755299.12	4300
68	1625981.83	1755839.24	4900	76	1626019.4	1755807.81	5040
68	1626046.34	1755296.64	4860	77	1625578.44	1755749.96	4740
69	1625601.64	1755677.06	4940	77	1625676.98	1754683.86	4340
69	1625676.24	1754698.59	4480	77	1625850.46	1755461.46	5000

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
77	1625969.97	1755291.69	3860	86	1625819.29	1755464.25	5540
77	1626014.99	1755801.99	5380	86	1625993.85	1755736.92	4600
78	1625584.02	1755752.68	4900	87	1625589.62	1755763.63	5100
78	1625676.27	1754686.34	5240	87	1625700.05	1755419.56	5040
78	1625840.35	1755464.12	4380	87	1625746.55	1754633.04	4240
78	1625983.48	1755291.48	4300	87	1625815.02	1755457.76	5060
78	1626007.58	1755792.63	4960	87	1625985.43	1755730.81	4580
79	1625589.28	1755752.98	5860	88	1625586.3	1755764.07	5720
79	1625677.06	1754689.41	4960	88	1625685.92	1755415.01	5140
79	1625834.2	1755457.12	4680	88	1625756.58	1754630.01	4580
79	1625994.98	1755292.71	4900	88	1625814.96	1755437.52	4400
79	1626019.82	1755786.15	4840	88	1625989.58	1755728.15	4560
80	1625595.21	1755752.14	4520	89	1625580.93	1755769.67	5260
80	1625830.69	1755447.34	4440	89	1625674.66	1755407.48	4760
80	1625985.7	1755767.75	4020	89	1625758.47	1754622.41	4800
80	1626005.27	1755292.45	4840	89	1625809.32	1755431.05	4140
81	1625598.07	1755747.6	4820	89	1625979.32	1755716.23	4440
81	1625828.29	1755443.31	4680	90	1625580.58	1755773.87	4420
81	1625985.51	1755761.26	4540	90	1625661.99	1755398.92	5200
81	1626016.44	1755293.05	4860	90	1625805.15	1755426.33	5100
82	1625604.08	1755751.35	4860	90	1625980.18	1755708.19	4260
82	1625722.76	1754668.46	4700	91	1625592.18	1755770.73	4900
82	1625829.29	1755428.37	4280	91	1625796.61	1755427.76	5600
82	1625974.37	1755757.37	4560	91	1625978.48	1755697.31	4880
82	1626030.34	1755297.67	4600	92	1625590.11	1755775.11	6020
83	1625600.85	1755757.85	5340	92	1625647.33	1755391.26	4640
83	1625728.18	1754662.04	4780	92	1625981.94	1755687.37	4760
83	1625824.32	1755433.72	4900	93	1625585.86	1755777.38	5360
83	1625989.36	1755758.11	4380	93	1625976.87	1755678.94	4800
83	1626044.66	1755297.99	4560	94	1625582.52	1755777.24	5380
84	1625597.5	1755755.51	4820	94	1625623.94	1755382.06	3700
84	1625738.62	1755444.06	4620	94	1625793.44	1755458.43	3760
84	1625828.22	1755445.74	4080	94	1625980.02	1755669.27	4900
84	1625995.16	1755753.81	5360	95	1625577.24	1755780.1	5260
85	1625596.45	1755753	4100	95	1625613.82	1755372.92	4660
85	1625726.66	1755438.47	4080	95	1625778.46	1755455.7	5180
85	1625827.81	1755454.78	5960	95	1625985.59	1755657.89	4420
85	1626001.82	1755750.38	4640	96	1625571.33	1755784.53	5400
86	1625597.46	1755762.96	5420	96	1625598.51	1755369.13	4500
86	1625712	1755430.75	4440	96	1625782.52	1755466.02	4960
86	1625738.89	1754639.52	5120	96	1625980.06	1755644.8	4820

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
97	1625564.36	1755791.69	5360	107	1625578.11	1755825.39	5300
97	1625770.86	1755451.36	5140	107	1625665.91	1755082.99	4000
97	1625978.2	1755635.52	4700	107	1625964.22	1755548.01	4980
98	1625566.5	1755798.55	5640	108	1625403.25	1755348.63	4320
98	1625582.34	1755365.45	5260	108	1625580.52	1755835.02	5420
98	1625975.22	1755620.53	4300	108	1625677.12	1755078.73	4860
99	1625580.55	1755797.1	5720	108	1625964.73	1755540.56	5060
99	1625582.01	1755355.98	4380	109	1625375.04	1755346.93	4420
99	1625779.84	1755435.32	4600	109	1625588.05	1755834.15	5780
99	1625974.74	1755609.82	4520	109	1625688.34	1755074.46	4600
100	1625568	1755359.97	4920	109	1625959.53	1755533.36	4600
100	1625582	1755800.1	5760	110	1625580.38	1755838.04	4540
100	1625587.4	1755112.87	4540	110	1625699.55	1755070.19	4380
100	1625780.7	1755427.58	4340	110	1625954.58	1755525.59	5200
100	1625970.22	1755595.02	4440	111	1625577.67	1755845.44	5620
101	1625585.57	1755809.29	6250	111	1625710.77	1755065.92	3960
101	1625598.61	1755108.6	3510	111	1625953.2	1755520.66	4500
101	1625768.88	1755425.48	4300	112	1625565.97	1755852.15	5680
101	1625965.6	1755588.42	4360	112	1625721.98	1755061.66	4340
102	1625557.32	1755361.79	4100	112	1625952.64	1755512.18	4460
102	1625574.92	1755813.96	5880	113	1625565.71	1755855.81	5480
102	1625609.83	1755104.33	4600	113	1625733.2	1755057.39	5160
102	1625761.33	1755436.17	3880	113	1625946.79	1755512.89	5180
102	1625960.77	1755580.11	4920	114	1625557.46	1755852.38	5540
103	1625528.92	1755358	3980	114	1625744.41	1755053.12	4580
103	1625578.1	1755818.75	5340	114	1625942.2	1755511.11	4320
103	1625621.04	1755100.07	5120	115	1625550.14	1755858	5420
103	1625959.52	1755569.3	5220	115	1625755.63	1755048.85	4840
104	1625497.88	1755357.91	4880	115	1625945.27	1755504.47	3880
104	1625584.85	1755817.42	4780	116	1625543.58	1755865.77	5200
104	1625632.26	1755095.8	4560	116	1625766.84	1755044.58	4360
104	1625959.32	1755562.76	5160	116	1625942.02	1755494.63	4940
105	1625475.58	1755357.53	5000	117	1625547.71	1755876.26	5540
105	1625594.03	1755824.17	5220	117	1625778.06	1755040.32	4600
105	1625643.47	1755091.53	3720	117	1625925.06	1755493.93	4160
105	1625956.53	1755559.67	4740	118	1625550.66	1755880.94	5440
106	1625453.3	1755355.81	4720	118	1625789.28	1755036.05	4040
106	1625587.13	1755825.59	4880	118	1625927.45	1755483.98	4100
106	1625654.69	1755087.26	4740	119	1625551.76	1755885.01	5020
106	1625955.83	1755553.94	4840	119	1625800.49	1755031.78	3980
107	1625431.73	1755350.43	4680	119	1625931.07	1755480.47	4860

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
120	1625550.92	1755889.06	5260	133	1625972.39	1755366.31	4680
120	1625588.82	1755116.61	4480	134	1625640.1	1755907.29	5480
120	1625939.58	1755482.76	4340	134	1625745.84	1755056.86	4700
121	1625557.44	1755890.1	5220	134	1625982.4	1755377.85	4940
121	1625600.04	1755112.34	4160	135	1625655.62	1755906.4	5640
121	1625943.27	1755477.9	4860	135	1625757.05	1755052.59	4420
122	1625562.95	1755889.64	5940	135	1625990.35	1755377.53	4940
122	1625611.25	1755108.07	4520	136	1625667.93	1755916.55	5180
122	1625945.97	1755470.1	4240	136	1625768.27	1755048.32	4500
123	1625565.45	1755895.19	5160	136	1625999.65	1755377.88	4360
123	1625622.47	1755103.8	4380	137	1625674.26	1755921.08	5700
123	1625948.8	1755461.57	4680	137	1625779.48	1755044.05	4080
124	1625570.28	1755889.87	5740	137	1626008.71	1755378.09	3900
124	1625633.68	1755099.54	4160	138	1625679.5	1755923.28	7370
124	1625950.9	1755450.88	4660	138	1625790.7	1755039.79	3840
125	1625576.63	1755887.68	5120	138	1626018.45	1755378.61	4240
125	1625644.9	1755095.27	3980	139	1625683.09	1755924.69	6310
125	1625952.57	1755443.98	4640	139	1625801.91	1755035.52	4640
126	1625585.25	1755893.66	5140	139	1626026.9	1755376.33	4240
126	1625656.11	1755091	4380	140	1625593.09	1755127.82	4420
126	1625962.11	1755437.14	4600	140	1625687.33	1755923.98	7310
127	1625592.67	1755892.46	5480	140	1626040.03	1755376.56	4920
127	1625667.33	1755086.73	5080	141	1625604.3	1755123.56	4140
127	1625956.23	1755424.68	4320	141	1625722.75	1755922.43	6230
128	1625592.66	1755895.97	5660	141	1626048.28	1755369.13	4500
128	1625678.54	1755082.47	4860	142	1625615.52	1755119.29	3230
128	1625957.58	1755415.47	4400	142	1625727.07	1755918.01	6530
129	1625594.51	1755898.62	6850	142	1626039.24	1755365.88	4220
129	1625689.76	1755078.2	4620	143	1625626.73	1755115.02	4540
129	1625960.96	1755403.18	4520	143	1625726.42	1755911.91	6350
130	1625601.07	1755905.9	6040	143	1626028.22	1755360.97	4880
130	1625700.97	1755073.93	4380	144	1625637.95	1755110.75	4480
130	1625969.73	1755394.61	4860	144	1625729.52	1755915.23	6750
131	1625606.03	1755906.67	5940	144	1626015.63	1755361	4180
131	1625712.19	1755069.66	4840	145	1625649.16	1755106.48	3720
131	1625962.26	1755379.65	4620	145	1625737.7	1755918.22	6350
132	1625621.92	1755908.16	5540	145	1626004.78	1755361.85	4340
132	1625723.41	1755065.39	4400	146	1625660.38	1755102.22	4780
132	1625962.97	1755369.15	4760	146	1625740.96	1755922.09	6870
133	1625631.9	1755916.13	6930	146	1625994.24	1755360.45	4860
133	1625734.62	1755061.13	5040	147	1625671.6	1755097.95	4200

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
147	1625745.01	1755920.65	6000	170	1625709.51	1755096.36	4660
147	1625983.08	1755358.35	4320	171	1625720.73	1755092.09	4440
148	1625682.81	1755093.68	4380	172	1625731.94	1755087.82	4460
148	1625744.99	1755915.87	5960	173	1625743.16	1755083.56	3510
148	1625977.74	1755358.86	4580	174	1625754.37	1755079.29	4460
149	1625694.03	1755089.41	4020	175	1625765.59	1755075.02	4640
149	1625760.86	1755922.17	5800	176	1625776.8	1755070.75	4360
149	1625977.91	1755350.01	4540	177	1625788.02	1755066.49	3900
150	1625705.24	1755085.14	4580	178	1625799.23	1755062.22	4040
150	1625764.65	1755921.09	5900	179	1625810.45	1755057.95	4140
150	1625987.48	1755349.52	4140	180	1625601.62	1755150.25	4380
151	1625716.46	1755080.88	4640	181	1625612.84	1755145.99	4520
151	1625773.61	1755925.89	5940	182	1625624.05	1755141.72	4500
151	1625998.13	1755347.33	3940	183	1625635.27	1755137.45	4360
152	1625727.67	1755076.61	4800	184	1625646.49	1755133.18	4720
152	1625789.05	1755921.46	6630	185	1625657.7	1755128.91	4740
152	1626005.93	1755346.77	4260	186	1625668.92	1755124.65	3700
153	1625738.89	1755072.34	4420	187	1625680.13	1755120.38	4280
153	1626016.53	1755346.17	4160	188	1625691.35	1755116.11	4320
154	1625750.1	1755068.07	4720	189	1625702.56	1755111.84	4640
154	1625819.72	1755928.5	5720	190	1625713.78	1755107.58	4060
154	1626024.38	1755343.83	5740	191	1625724.99	1755103.31	4240
155	1625761.32	1755063.81	4500	192	1625736.21	1755099.04	4220
155	1625825.9	1755913.9	6590	193	1625747.42	1755094.77	4300
155	1626033.68	1755342.22	4740	194	1625758.64	1755090.5	4540
156	1625772.53	1755059.54	4240	195	1625769.85	1755086.24	3530
156	1625821.04	1755912.25	6190	196	1625781.07	1755081.97	4660
157	1625783.75	1755055.27	4580	197	1625792.29	1755077.7	4560
157	1625825.87	1755898.35	5180	198	1625803.5	1755073.43	4560
158	1625794.97	1755051	5000	199	1625814.72	1755069.17	4360
159	1625806.18	1755046.73	5020	200	1625605.89	1755161.47	4540
160	1625597.36	1755139.04	3820	201	1625617.11	1755157.2	4120
161	1625608.57	1755134.77	4020	202	1625628.32	1755152.93	4540
162	1625619.79	1755130.5	4300	203	1625639.54	1755148.67	4320
163	1625631	1755126.23	4460	204	1625650.75	1755144.4	4700
164	1625642.22	1755121.97	4080	205	1625661.97	1755140.13	4380
165	1625653.43	1755117.7	4840	206	1625673.18	1755135.86	3960
166	1625664.65	1755113.43	4580	207	1625684.4	1755131.59	4440
167	1625675.86	1755109.16	4220	208	1625695.61	1755127.33	4500
168	1625687.08	1755104.9	4220	209	1625706.83	1755123.06	4280
169	1625698.29	1755100.63	4200	210	1625718.05	1755118.79	4360

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
211	1625729.26	1755114.52	4180	252	1625749.01	1755132.69	4580
212	1625740.48	1755110.26	4340	253	1625760.23	1755128.42	3350
213	1625751.69	1755105.99	4080	254	1625771.44	1755124.15	4640
214	1625762.91	1755101.72	4520	255	1625782.66	1755119.88	4540
215	1625774.12	1755097.45	4080	256	1625793.87	1755115.62	4300
216	1625785.34	1755093.18	4700	257	1625805.09	1755111.35	3780
217	1625796.55	1755088.92	4140	258	1625816.3	1755107.08	4400
218	1625807.77	1755084.65	4140	259	1625827.52	1755102.81	4460
219	1625818.98	1755080.38	4040	260	1625618.69	1755195.12	4200
220	1625610.16	1755172.68	4120	261	1625629.91	1755190.85	4380
221	1625621.37	1755168.42	4280	262	1625641.13	1755186.58	4680
222	1625632.59	1755164.15	4020	263	1625652.34	1755182.31	4000
223	1625643.81	1755159.88	4140	264	1625663.56	1755178.04	4880
224	1625655.02	1755155.61	4700	265	1625674.77	1755173.78	4020
225	1625666.24	1755151.35	4880	266	1625685.99	1755169.51	3980
226	1625677.45	1755147.08	4600	267	1625697.2	1755165.24	4840
227	1625688.67	1755142.81	3980	268	1625708.42	1755160.97	3860
228	1625699.88	1755138.54	3450	269	1625719.63	1755156.71	4860
229	1625711.1	1755134.27	3370	270	1625730.85	1755152.44	4500
230	1625722.31	1755130.01	3510	271	1625742.06	1755148.17	4280
231	1625733.53	1755125.74	4720	272	1625753.28	1755143.9	4200
232	1625744.74	1755121.47	4360	273	1625764.5	1755139.63	3570
233	1625755.96	1755117.2	4140	274	1625775.71	1755135.37	4760
234	1625767.17	1755112.94	3980	275	1625786.93	1755131.1	4320
235	1625778.39	1755108.67	4760	276	1625798.14	1755126.83	4700
236	1625789.61	1755104.4	4560	277	1625809.36	1755122.56	3010
237	1625800.82	1755100.13	4300	278	1625820.57	1755118.29	4460
238	1625812.04	1755095.86	4680	279	1625831.79	1755114.03	4380
239	1625823.25	1755091.6	4300	280	1625622.96	1755206.33	3210
240	1625614.43	1755183.9	4260	281	1625634.18	1755202.06	4440
241	1625625.64	1755179.63	4240	282	1625645.39	1755197.8	4120
242	1625636.86	1755175.36	3920	283	1625656.61	1755193.53	4160
243	1625648.07	1755171.1	4820	284	1625667.82	1755189.26	4380
244	1625659.29	1755166.83	4280	285	1625679.04	1755184.99	4080
245	1625670.5	1755162.56	4260	286	1625690.25	1755180.72	4080
246	1625681.72	1755158.29	4300	287	1625701.47	1755176.46	4200
247	1625692.93	1755154.03	4340	288	1625712.69	1755172.19	4500
248	1625704.15	1755149.76	4000	289	1625723.9	1755167.92	4200
249	1625715.37	1755145.49	3780	290	1625735.12	1755163.65	4180
250	1625726.58	1755141.22	4180	291	1625746.33	1755159.39	3920
251	1625737.8	1755136.95	4760	292	1625757.55	1755155.12	3410

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
293	1625768.76	1755150.85	3940	334	1625785.67	1755161.54	3960
294	1625779.98	1755146.58	4000	335	1625796.88	1755157.27	4640
295	1625791.19	1755142.31	4680	336	1625808.1	1755153	4440
296	1625802.41	1755138.05	3190	337	1625819.32	1755148.73	4300
297	1625813.62	1755133.78	3210	338	1625830.53	1755144.46	3450
298	1625824.84	1755129.51	3330	339	1625841.75	1755140.2	4200
299	1625836.06	1755125.24	3130	340	1625632.92	1755232.5	4900
300	1625624.39	1755210.07	4140	341	1625644.14	1755228.23	4680
301	1625635.6	1755205.8	4900	342	1625655.35	1755223.96	4400
302	1625646.82	1755201.53	4800	343	1625666.57	1755219.7	4720
303	1625658.03	1755197.27	3720	344	1625677.78	1755215.43	4540
304	1625669.25	1755193	4620	345	1625689	1755211.16	4380
305	1625680.46	1755188.73	4720	346	1625700.21	1755206.89	4460
306	1625691.68	1755184.46	4420	347	1625711.43	1755202.63	4400
307	1625702.89	1755180.19	4280	348	1625722.64	1755198.36	3470
308	1625714.11	1755175.93	3880	349	1625733.86	1755194.09	3820
309	1625725.32	1755171.66	4200	350	1625745.07	1755189.82	3820
310	1625736.54	1755167.39	4280	351	1625756.29	1755185.55	3390
311	1625747.75	1755163.12	4040	352	1625767.51	1755181.29	3650
312	1625758.97	1755158.86	3470	353	1625778.72	1755177.02	4240
313	1625770.19	1755154.59	3780	354	1625789.94	1755172.75	4200
314	1625781.4	1755150.32	4160	355	1625801.15	1755168.48	4280
315	1625792.62	1755146.05	4260	356	1625812.37	1755164.22	4220
316	1625803.83	1755141.78	4380	357	1625823.58	1755159.95	4080
317	1625815.05	1755137.52	4360	358	1625834.8	1755155.68	3940
318	1625826.26	1755133.25	4380	359	1625846.01	1755151.41	4380
319	1625837.48	1755128.98	2950	360	1625637.19	1755243.72	4580
320	1625628.65	1755221.28	3860	361	1625648.4	1755239.45	4620
321	1625639.87	1755217.02	4460	362	1625659.62	1755235.18	4400
322	1625651.08	1755212.75	4260	363	1625670.83	1755230.91	4360
323	1625662.3	1755208.48	5260	364	1625682.05	1755226.64	4780
324	1625673.51	1755204.21	4420	365	1625693.27	1755222.38	4260
325	1625684.73	1755199.95	4500	366	1625704.48	1755218.11	4220
326	1625695.95	1755195.68	4060	367	1625715.7	1755213.84	4600
327	1625707.16	1755191.41	4120	368	1625726.91	1755209.57	4400
328	1625718.38	1755187.14	4080	369	1625738.13	1755205.31	3920
329	1625729.59	1755182.87	4140	370	1625749.34	1755201.04	4260
330	1625740.81	1755178.61	3610	371	1625760.56	1755196.77	3780
331	1625752.02	1755174.34	3390	372	1625771.77	1755192.5	3530
332	1625763.24	1755170.07	3170	373	1625782.99	1755188.23	4240
333	1625774.45	1755165.8	3720	374	1625794.2	1755183.97	4180

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
375	1625805.42	1755179.7	3740	416	1625825.17	1755197.86	4540
376	1625816.64	1755175.43	5000	417	1625836.39	1755193.59	4040
377	1625827.85	1755171.16	4680	418	1625847.6	1755189.33	4340
378	1625839.07	1755166.9	4060	419	1625858.82	1755185.06	3350
379	1625850.28	1755162.63	4680	420	1625649.99	1755277.36	4220
380	1625641.46	1755254.93	4200	421	1625661.21	1755273.09	4440
381	1625652.67	1755250.66	4300	422	1625672.42	1755268.83	4560
382	1625663.89	1755246.4	4460	423	1625683.64	1755264.56	4560
383	1625675.1	1755242.13	4180	424	1625694.85	1755260.29	5180
384	1625686.32	1755237.86	3700	425	1625706.07	1755256.02	4740
385	1625697.53	1755233.59	4020	426	1625717.28	1755251.76	4440
386	1625708.75	1755229.32	4540	427	1625728.5	1755247.49	4520
387	1625719.96	1755225.06	4240	428	1625739.72	1755243.22	4100
388	1625731.18	1755220.79	3800	429	1625750.93	1755238.95	3840
389	1625742.4	1755216.52	4340	430	1625762.15	1755234.68	4180
390	1625753.61	1755212.25	4340	431	1625773.36	1755230.42	4200
391	1625764.83	1755207.99	4360	432	1625784.58	1755226.15	4200
392	1625776.04	1755203.72	4400	433	1625795.79	1755221.88	4200
393	1625787.26	1755199.45	4640	434	1625807.01	1755217.61	4360
394	1625798.47	1755195.18	4140	435	1625818.22	1755213.34	4620
395	1625809.69	1755190.91	4140	436	1625829.44	1755209.08	4540
396	1625820.9	1755186.65	4140	437	1625840.65	1755204.81	4240
397	1625832.12	1755182.38	3920	438	1625851.87	1755200.54	4600
398	1625843.33	1755178.11	4580	439	1625863.08	1755196.27	4160
399	1625854.55	1755173.84	3530	440	1625654.26	1755288.58	6040
400	1625645.72	1755266.15	4340	441	1625665.48	1755284.31	5840
401	1625656.94	1755261.88	4520	442	1625676.69	1755280.04	4320
402	1625668.15	1755257.61	4380	443	1625687.91	1755275.77	4920
403	1625679.37	1755253.34	4880	444	1625699.12	1755271.51	4600
404	1625690.59	1755249.08	4540	445	1625710.34	1755267.24	4540
405	1625701.8	1755244.81	4300	446	1625721.55	1755262.97	4580
406	1625713.02	1755240.54	4580	447	1625732.77	1755258.7	4000
407	1625724.23	1755236.27	3700	448	1625743.98	1755254.43	3840
408	1625735.45	1755232	4340	449	1625755.2	1755250.17	4420
409	1625746.66	1755227.74	4420	450	1625766.41	1755245.9	4060
410	1625757.88	1755223.47	4180	451	1625777.63	1755241.63	4560
411	1625769.09	1755219.2	4260	452	1625788.84	1755237.36	4260
412	1625780.31	1755214.93	4520	453	1625800.06	1755233.1	4300
413	1625791.52	1755210.67	4220	454	1625811.28	1755228.83	4360
414	1625802.74	1755206.4	4380	455	1625822.49	1755224.56	4480
415	1625813.96	1755202.13	4180	456	1625833.71	1755220.29	4480

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
457	1625844.92	1755216.02	4800	498	1625861.83	1755226.71	3210
458	1625856.14	1755211.76	4040	499	1625873.04	1755222.44	4260
459	1625867.35	1755207.49	3700	500	1625664.22	1755314.75	3900
460	1625658.53	1755299.79	4600	501	1625675.43	1755310.48	4860
461	1625669.74	1755295.53	4820	502	1625686.65	1755306.21	4360
462	1625680.96	1755291.26	4180	503	1625697.86	1755301.94	4140
463	1625692.17	1755286.99	4440	504	1625709.08	1755297.68	3960
464	1625703.39	1755282.72	4520	505	1625720.3	1755293.41	4220
465	1625714.6	1755278.45	4000	506	1625731.51	1755289.14	3390
466	1625725.82	1755274.19	4220	507	1625742.73	1755284.87	4080
467	1625737.04	1755269.92	4300	508	1625753.94	1755280.6	4400
468	1625748.25	1755265.65	4620	509	1625765.16	1755276.34	4360
469	1625759.47	1755261.38	5260	510	1625776.37	1755272.07	3960
470	1625770.68	1755257.11	4420	511	1625787.59	1755267.8	4660
471	1625781.9	1755252.85	4420	512	1625798.8	1755263.53	3760
472	1625793.11	1755248.58	4860	513	1625810.02	1755259.27	4720
473	1625804.33	1755244.31	4220	514	1625821.23	1755255	4520
474	1625815.54	1755240.04	4620	515	1625832.45	1755250.73	3860
475	1625826.76	1755235.78	4840	516	1625843.66	1755246.46	4220
476	1625837.97	1755231.51	3940	517	1625854.88	1755242.19	3840
477	1625849.19	1755227.24	4380	518	1625866.1	1755237.93	3980
478	1625860.41	1755222.97	3350	519	1625877.31	1755233.66	4240
479	1625871.62	1755218.7	4220	520	1625668.49	1755325.96	4160
480	1625659.95	1755303.53	4460	521	1625679.7	1755321.69	4320
481	1625671.17	1755299.26	4980	522	1625690.92	1755317.43	4320
482	1625682.38	1755295	4220	523	1625702.13	1755313.16	4420
483	1625693.6	1755290.73	4780	524	1625713.35	1755308.89	4180
484	1625704.81	1755286.46	4200	525	1625724.56	1755304.62	3630
485	1625716.03	1755282.19	4000	526	1625735.78	1755300.36	4000
486	1625727.24	1755277.92	3610	527	1625746.99	1755296.09	3430
487	1625738.46	1755273.66	4720	528	1625758.21	1755291.82	4220
488	1625749.67	1755269.39	4020	529	1625769.42	1755287.55	3800
489	1625760.89	1755265.12	4080	530	1625780.64	1755283.28	4300
490	1625772.1	1755260.85	4380	531	1625791.86	1755279.02	3740
491	1625783.32	1755256.59	4060	532	1625803.07	1755274.75	3840
492	1625794.54	1755252.32	4100	533	1625814.29	1755270.48	4820
493	1625805.75	1755248.05	4640	534	1625825.5	1755266.21	4620
494	1625816.97	1755243.78	4960	535	1625836.72	1755261.95	4540
495	1625828.18	1755239.51	4460	536	1625847.93	1755257.68	4260
496	1625839.4	1755235.25	3960	537	1625859.15	1755253.41	4000
497	1625850.61	1755230.98	3310	538	1625870.36	1755249.14	4320

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
539	1625881.58	1755244.87	3840	580	1625681.29	1755359.61	4280
540	1625672.75	1755337.18	3760	581	1625692.5	1755355.34	3780
541	1625683.97	1755332.91	4080	582	1625703.72	1755351.07	4400
542	1625695.18	1755328.64	4200	583	1625714.94	1755346.81	3450
543	1625706.4	1755324.37	4320	584	1625726.15	1755342.54	3170
544	1625717.62	1755320.11	3590	585	1625737.37	1755338.27	4760
545	1625728.83	1755315.84	3700	586	1625748.58	1755334	17000
546	1625740.05	1755311.57	3740	587	1625759.8	1755329.73	4280
547	1625751.26	1755307.3	4100	588	1625771.01	1755325.47	4120
548	1625762.48	1755303.04	3760	589	1625782.23	1755321.2	4580
549	1625773.69	1755298.77	3720	590	1625793.44	1755316.93	3920
550	1625784.91	1755294.5	3860	591	1625804.66	1755312.66	3960
551	1625796.12	1755290.23	3610	592	1625815.87	1755308.39	3900
552	1625807.34	1755285.96	4260	593	1625827.09	1755304.13	3840
553	1625818.55	1755281.7	4660	594	1625838.31	1755299.86	4060
554	1625829.77	1755277.43	4340	595	1625849.52	1755295.59	4360
555	1625840.98	1755273.16	4880	596	1625860.74	1755291.32	3840
556	1625852.2	1755268.89	4620	597	1625871.95	1755287.06	4140
557	1625863.42	1755264.62	4360	598	1625883.17	1755282.79	3630
558	1625874.63	1755260.36	4460	599	1625894.38	1755278.52	3290
559	1625885.85	1755256.09	4080	600	1625685.56	1755370.82	4820
560	1625677.02	1755348.39	4500	601	1625696.77	1755366.56	3650
561	1625688.24	1755344.13	4400	602	1625707.99	1755362.29	4320
562	1625699.45	1755339.86	4520	603	1625719.2	1755358.02	4040
563	1625710.67	1755335.59	4580	604	1625730.42	1755353.75	3150
564	1625721.88	1755331.32	4100	605	1625741.63	1755349.48	4180
565	1625733.1	1755327.05	4300	606	1625752.85	1755345.22	3840
566	1625744.31	1755322.79	3840	607	1625764.06	1755340.95	4000
567	1625755.53	1755318.52	3470	608	1625775.28	1755336.68	3740
568	1625766.74	1755314.25	3920	609	1625786.5	1755332.41	3630
569	1625777.96	1755309.98	4120	610	1625797.71	1755328.15	4120
570	1625789.18	1755305.71	3840	611	1625808.93	1755323.88	3920
571	1625800.39	1755301.45	3680	612	1625820.14	1755319.61	4080
572	1625811.61	1755297.18	4080	613	1625831.36	1755315.34	4040
573	1625822.82	1755292.91	3350	614	1625842.57	1755311.07	3610
574	1625834.04	1755288.64	3570	615	1625853.79	1755306.81	3630
575	1625845.25	1755284.38	4520	616	1625865	1755302.54	4080
576	1625856.47	1755280.11	5060	617	1625876.22	1755298.27	3720
577	1625867.68	1755275.84	4540	618	1625887.43	1755294	3840
578	1625878.9	1755271.57	4560	619	1625898.65	1755289.74	3370
579	1625890.11	1755267.3	4080	620	1625689.82	1755382.04	4360

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute	Survey ID	X Coordinate	Y Coordinate	Counts per Minute
621	1625701.04	1755377.77	3940	662	1625773.31	1755365.25	3610
622	1625712.26	1755373.5	4080	663	1625784.53	1755360.98	3780
623	1625723.47	1755369.24	3680	664	1625795.74	1755356.71	3720
624	1625734.69	1755364.97	3630	665	1625806.96	1755352.45	3510
625	1625745.9	1755360.7	4300	666	1625818.17	1755348.18	3680
626	1625757.12	1755356.43	3860	667	1625829.39	1755343.91	4380
627	1625768.33	1755352.16	4520	668	1625840.6	1755339.64	3650
628	1625779.55	1755347.9	3210	669	1625851.82	1755335.37	3820
629	1625790.76	1755343.63	4100	670	1625863.04	1755331.11	3610
630	1625801.98	1755339.36	4660	671	1625874.25	1755326.84	3840
631	1625813.19	1755335.09	3920	672	1625885.47	1755322.57	4080
632	1625824.41	1755330.83	4000	673	1625755.15	1755385	4060
633	1625835.63	1755326.56	3470	674	1625766.36	1755380.73	3610
634	1625846.84	1755322.29	3490	675	1625777.58	1755376.46	3980
635	1625858.06	1755318.02	3980	676	1625788.8	1755372.2	3960
636	1625869.27	1755313.75	3860	677	1625800.01	1755367.93	4120
637	1625880.49	1755309.49	4440	678	1625811.23	1755363.66	3490
638	1625891.7	1755305.22	4060	679	1625822.44	1755359.39	3980
639	1625902.92	1755300.95	4060	680	1625833.66	1755355.13	3390
640	1625694.09	1755393.25	4300	681	1625844.87	1755350.86	3720
641	1625705.31	1755388.99	4160	682	1625856.09	1755346.59	4220
642	1625716.52	1755384.72	4400	683	1625867.3	1755342.32	4380
643	1625727.74	1755380.45	3920	684	1625878.52	1755338.05	3900
644	1625738.95	1755376.18	4100	685	1625889.73	1755333.79	4000
645	1625750.17	1755371.92	4260	686	1625759.42	1755396.22	4360
646	1625761.39	1755367.65	3700	687	1625770.63	1755391.95	3570
647	1625772.6	1755363.38	4040	688	1625781.85	1755387.68	3860
648	1625783.82	1755359.11	4080	689	1625793.06	1755383.41	3760
649	1625795.03	1755354.84	4380	690	1625804.28	1755379.14	3880
650	1625806.25	1755350.58	3470	691	1625815.49	1755374.88	4040
651	1625817.46	1755346.31	4860	692	1625826.71	1755370.61	3880
652	1625828.68	1755342.04	3530	693	1625837.92	1755366.34	3550
653	1625839.89	1755337.77	4220	694	1625849.14	1755362.07	4180
654	1625851.11	1755333.51	3920	695	1625860.36	1755357.81	4100
655	1625862.32	1755329.24	3880	696	1625871.57	1755353.54	4740
656	1625873.54	1755324.97	3540	697	1625882.79	1755349.27	3820
657	1625884.75	1755320.7	3390	698	1625763.68	1755407.43	4020
658	1625895.97	1755316.43	3820	699	1625774.9	1755403.16	3650
659	1625907.19	1755312.17	3760	700	1625786.12	1755398.9	3860
660	1625750.88	1755373.78	4100	701	1625797.33	1755394.63	4160
661	1625762.1	1755369.52	3370	702	1625808.55	1755390.36	4120

Table B-4.0-6 (continued)

Survey ID	X Coordinate	Y Coordinate	Counts per Minute
703	1625819.76	1755386.09	4280
704	1625830.98	1755381.82	3490
705	1625842.19	1755377.56	4140
706	1625853.41	1755373.29	3700
707	1625864.62	1755369.02	4000
708	1625875.84	1755364.75	4480
709	1625887.05	1755360.49	3680
710	1625756.74	1755422.91	4680
711	1625767.95	1755418.65	3550
712	1625779.17	1755414.38	4120
713	1625790.38	1755410.11	4000
714	1625801.6	1755405.84	3610
715	1625812.81	1755401.58	3800
716	1625824.03	1755397.31	3760
717	1625835.24	1755393.04	3700
718	1625846.46	1755388.77	4180
719	1625857.68	1755384.5	4080
720	1625868.89	1755380.24	3940
721	1625880.11	1755375.97	4260
722	1625891.32	1755371.7	3700
723	1625783.44	1755425.59	3700
724	1625794.65	1755421.33	3720
725	1625805.87	1755417.06	4240
726	1625817.08	1755412.79	3350
727	1625828.3	1755408.52	3860
728	1625839.51	1755404.26	4060
729	1625850.73	1755399.99	4380
730	1625861.94	1755395.72	4300
731	1625873.16	1755391.45	4080
732	1625810.13	1755428.27	4660
733	1625821.35	1755424.01	3860
734	1625832.56	1755419.74	3650
735	1625843.78	1755415.47	4000
736	1625855	1755411.2	3980
737	1625866.21	1755406.93	3960
738	1625877.43	1755402.67	3470
739	1625834.7	1755425.35	4220
740	1625845.91	1755421.08	3450
741	1625857.13	1755416.81	3630
742	1625868.35	1755412.54	3980
743	1625879.56	1755408.27	3880

REFERENCES

LANL (Los Alamos National Laboratory), July 1995. "Statement of Work–Analytical Support," Revision 2, RFP No. 9-XS1-Q4257, Los Alamos, New Mexico. (LANL 1995, 49738)

LANL (Los Alamos National Laboratory), March 1996. "Quality Assurance Project Plan Requirements for Sampling and Analysis," Los Alamos National Laboratory report LA-UR-96-441, Los Alamos, New Mexico. (LANL 1996, 54609)

Insufficient

Interim Action Plan for

Potential Release Sites 35-003(d, l, and q)

Field Unit 4

Environmental Restoration Project

August 1996

A Department of Energy Environmental Cleanup Program

Los Alamos
NATIONAL LABORATORY

LA-UR-96-2826

1.0 RATIONALE AND OBJECTIVE

This document describes the interim action (IA) plan for Potential Release Site (PRS) Nos. 35-003(d, l, and q), which are located within Los Alamos National Laboratory (the Laboratory) Technical Area (TA) 35. Deep erosion channels have formed in the noncompacted backfill material at the east end of Ten Site Mesa where a pump pit (TA-35-8), a pipe trench (TA-35-9), and a liquid waste holding tank (TA-35-10) were located. The site drains into a small tributary of Ten Site Canyon, which is referred to as Pratt Canyon in the Resource Conservation and Recovery Act Facility Investigation (RFI) report for the PRSs in this area (LANL 1996, 54422). The best management practices proposed in this IA plan will prevent further erosion of the area, which encompasses the three PRSs.

2.0 SITE DESCRIPTION AND CHARACTERIZATION DATA

2.1 Description

A detailed description of the site and the characterization data can be found in the *RFI Report for Potential Release Sites 35-003(d, e, f, g, l, m, o, q, and r) 35-016(g and h)* (hereafter referred to as the RFI report) (LANL 1996, 54422).

The site to be addressed by this IA encompasses part of three potentially contaminated PRSs, Nos. 35-003(d, l, and q), which are located about 150 ft east of the former Air Filter Building (TA-35-7) (see Figure 2.1-1). These PRSs have undergone a Phase I RFI and have been proposed for further characterization in the RFI report.

Collectively the PRSs cover an area approximately 150 ft by 200 ft. After the structures were removed in 1985, the site was backfilled with up to 20 ft of clean, noncompacted fill material. The site slopes moderately eastward approximately 125 ft to the mesa edge, which slopes into Pratt Canyon (approximate slope of 1:1).

The primary source of erosion is a storm water corrugated metal pipe (CMP) located near the southeast corner of former TA-35-7. The main erosion channel ranges in depth from 1 ft to approximately 22 ft and extends about 160 ft across the site. Then it splits into two channels that continue eastward approximately 40 ft to the mesa edge. A smaller erosion channel originates at the north side of the site and was formed from storm water runoff associated with the unpaved service road. This erosion channel ranges in depth from 1 ft to approximately 10 ft at the point of confluence with the main erosion channel.

2.2 Operational History

The PRSs are associated with the former TA-35 wastewater treatment plant. PRS No. 35-003(d) is the site of the former liquid waste holding tank (TA-35-10) and an associated daylight diversion channel. PRS No. 35-003(l) is the site of the former pump pit (TA-35-8). PRS No. 35-003(q) is the site of the former pipe trench (TA-35-9). These structures, collectively referred to as the "tank farm," were used until 1963 when a new wastewater treatment plant at TA-50 became operational. However, the holding tank was used as late as 1974 to store low-level wastes (Kennedy 1968, 846; Emelity et al. 1975, 324).

PRS No. 35-003(r) (Pratt Canyon) is the disposal area for liquid and sludge effluent from the former TA-35 wastewater treatment plant. From 1951 until 1963, radioactive-contaminated liquids and sludge were

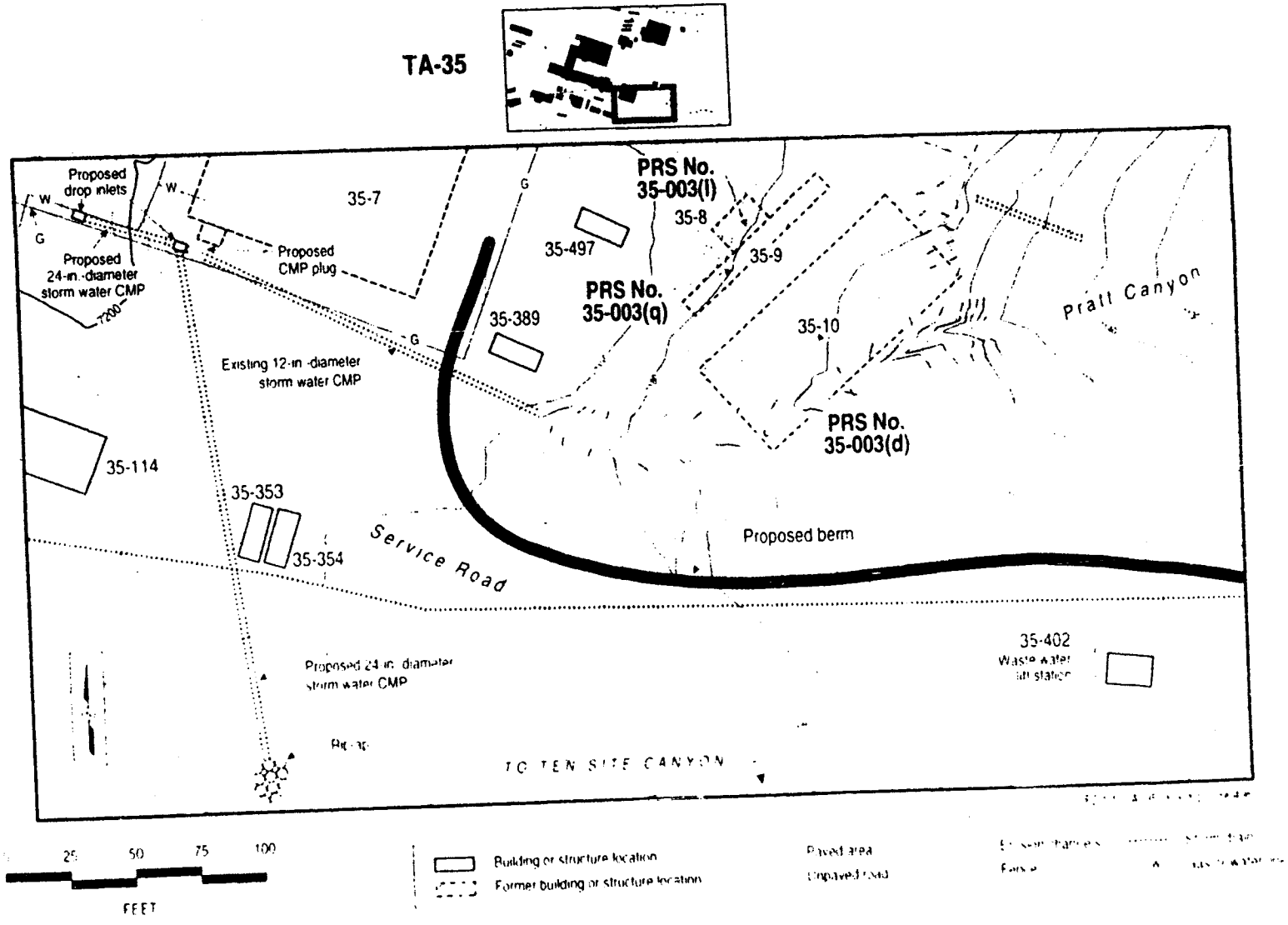


Figure 2.1-1. Location map for PRS Nos. 35-003(d, l, and q).

released from the wastewater treatment plant into Pratt Canyon. The RFI report describes documented releases from the wastewater treatment plant in more detail (LANL 1996, 54422). Effluent was routinely released from former TA-35-7 through Line 95 into the daylight diversion channel to the south rim of Pratt Canyon. The west end of the canyon ends abruptly at the backfill headwall at the east edge of the site, which is about 40 to 50 ft high. A colluvial fan composed of boulders and cobbles of tuff backfill material is present below the erosion channel that extends about 75 ft into the upper part of the canyon.

2.3 Spills and Accidental Releases

Spills and accidental releases from the holding tanks and associated piping were documented throughout the operational history of the former TA-35 wastewater treatment plant. The first documented release was in July 1951 when 5 mCi of radioactive liquid was reported to have been released from the holding tanks (Aeby 1954, 742). Reports of 11 spills or nonoperational releases were documented between 1951 and 1956. Spills or leaks from the pump pit, pipe trench, and the piping connected to the holding tanks were collected in the daylight diversion channel. Several reports mentioned that the holding tanks were accidentally overfilled and contaminated liquids spilled directly into Pratt Canyon (Aeby 1952, 741; Aeby 1954, 742; Aeby 1955, 743; Aeby and Garcia 1954, 745; Keenan 1975, 845; LASL 1962, 859).

2.4 Sampling Activities

RFI Phase I sampling for PRS Nos. 35-003(d, l, and q) was performed from April 6, 1994, through May 2, 1994, and supplemental sampling was performed in December 1995. A total of 13 locations were sampled, and 49 soil samples were collected (not including duplicate quality assurance/quality control samples). Results of the sampling are presented in the RFI report (LANL 1996, 54422).

RFI Phase I sampling for PRS No. 35-003(r) was performed on May 3, 1994, June 15 and 16, 1994, October 31 through November 7, 1994, February 27, 1995, and December 8, 1995. A total of 13 locations were sampled, and 62 samples were collected. Results of the sampling are presented in the RFI report (LANL 1996, 54422).

2.5 Characterization Data

Sample results did not exceed screening action level (SAL) values for any chemicals of potential concern (COPCs) at PRS Nos. 35-003(d, l, and q). Mixed polychlorinated biphenyls and benzo[a]pyrene were identified as COPCs among the chemical carcinogens because their maximum concentrations exceeded 10% of SAL values. These samples were collected in surface intervals (1- to 2-ft depths) in the backfill material that was placed at the site during decontamination and decommissioning (D&D) activities in 1985.

Activities associated with PRS Nos. 35-003(d, l, and q) are known to have resulted in releases of radionuclides to the environment. The releases have been documented in previous investigations and in the RFI report. In particular, soil containing up to 360 pCi/g of gross-beta activity was left in place following the 1985 D&D. The contaminated soil was covered by the backfill material (Elder et al. 1986, 3089). During Phase I field screening, gross-beta/gamma radiation was measured above background levels at the tuff/backfill interface in two sample locations (LANL 1996, 54422).

Eight organic chemicals and one inorganic chemical were identified as COPCs in the screening assessment for PRS No. 35-003(r). Elevated levels of radiation in soils and biota were detected with gross-beta/gamma meters during RFI surveys.

3.0 INTERIM ACTION

The purpose of this IA is to prevent any potential contaminants associated with PRS Nos. 35-003(d, l, and q) from being remobilized into Ten Site Canyon, Mortandad Canyon, or possibly a water course. The storm drain, shown in Figure 2.1-1, is the primary source of storm water runoff that is causing the deep erosion channels at the site. The recent erosion may have reached the 1995 D&D excavation depth (approximately 20 ft below the current land surface) where contamination from spills and releases remains in the soil.

Section 9.3 contains a detailed site erosion control engineering plan. The engineering plan contains three options ranging from minimal erosion control to more elaborate control. The first and least expensive option offers only a short-term remedy (up to three years) and involves filling in the eroded areas with large rocks. This option does not divert the storm water from the site, which is the primary cause the erosion. The PRSs at the site and directly downstream from the site are proposed for further investigation. However, a long-term remedy is more appropriate because a final decision about the disposition of the PRSs may not be made for several years. This IA is expected to provide adequate erosion control and contaminant stabilization for 10 to 15 years at a reasonable cost.

Decommissioning of various structures near the former TA-35 wastewater treatment plant is currently in progress. Former TA-35-7 has been removed, and the site will be graded as specified in the final grading and paving plan (LANL 1995, 54767).

As part of this IA, the existing 12-in.-diameter storm water CMP will be plugged with a CMP plug at a point just east of where a new drop inlet will be constructed. This new drop inlet will be located south of the southwest corner of former TA-35-7 (see Figure 2.1-1). A new 24-in.-diameter storm water CMP will be installed at this drop inlet. The 24-in.-diameter storm water CMP will extend approximately 200 ft south-southeast under the service road and discharge to Ten Site Canyon. Riprap will be placed at the discharge point to slow the storm water velocity and prevent erosion. A second drop inlet will be installed approximately 50 ft northwest of the first inlet and will be connected to the first inlet by a length of 24-in.-diameter storm water CMP.

The erosion channels will be backfilled, compacted, and stabilized to prevent further erosion. Approximately 700 yd^3 of clean backfill material will be placed in the channels. The material will be wetted then compacted to 80% to 85% maximum density. The channels will be planted with approximately 270 yd^2 of native grass seed.

The deep erosion channel at the mesa edge will be backfilled and graded to a slope of 2.5:1 to 3:1. The slope will be reseeded and covered with a stabilizing vegetative membrane.

A 2-ft-high berm may be constructed to prevent storm water runoff from flowing over and into radioactively contaminated PRS No. 35-003(r). The berm will extend from approximately 20 ft east of the southeast corner of former TA-35-7 southward approximately 135 ft, where the berm will be angled about 90°. It will extend between the southern edge of the current erosion area and the service road and continue eastward beyond the sanitary waste water lift station (see Figure 2.1-1) for approximately 50 ft. The berm will consist of backfill material that will be stabilized with either a stabilizing vegetative membrane, gravel, or riprap.

4.0 MONITORING ACTIVITIES

No sample activities are planned in conjunction with this IA. However, sampling is scheduled to begin in 1997, which will determine the need for further remediation at the site. Sampling and analysis plans are described in the RFI report (LANL 1996, 54422).

5.0 MAINTENANCE AND INSPECTION

The erosion stabilization area will be inspected regularly by Field Unit 4 personnel until ownership of the site is released to either the TA-35 operational groups or the Laboratory Facilities, Security, and Safeguards Division (to be negotiated). Field Unit 4 personnel will document the inspections in accordance with the Storm Water Pollution Prevention (SWPP) Plan. If an inspection reveals any loss of integrity to the erosion control measures, appropriate actions will be taken to reestablish integrity including repair or the addition of riprap. The SWPP Plan will be updated as appropriate.

6.0 WASTE MANAGEMENT

No waste (or very little waste) is expected to be generated from this IA. If waste is generated, it will be associated with the removal of the storm drain CMP. The waste is not expected to be hazardous or radioactive; therefore, it will probably be disposed of at the Los Alamos County landfill. If it is determined that waste may be generated, a Waste Characterization Strategy Form will be completed immediately. At that time, Waste Profile Forms also will be completed and submitted to ensure proper waste disposal.

7.0 COST AND SCHEDULE

It is expected that field activities will be completed in 7 (nonconsecutive) days, beginning the third week of August 1996. Table 7-1 shows the estimated cost for completing this IA.

TABLE 7-1

ESTIMATED COST WORKSHEET

Category	Rate	Units	Cost
Field Preparation Activities			
Engineering plan	$1,000/day	4 days	$4,000
IA plan preparation	$700/day	6 days	$4,200
IA plan technical edit and review	$700/day	3 days	$2,100
Preparation of waste characterization form (if necessary)	$700/day	1 day	$700
Preparation of Storm Water Pollution Prevention Plan	$700/day	1.5 days	$1,050
Preparation of Spill Prevention, Control, and Countermeasures Plan	$700/day	1.5 days	$1,050
Preparation of site-specific health and safety plan	$700/day	4 days	$2,800
		Subtotal	**$15,900**
Field Activities			
Field unit oversight	$500/day	7 days	$3,500
Subcontractor mobilization	See Attachment A		$741
696 yd^3 backfill (load, haul, spread, and compact)	See Attachment A		$21,910
60 yd^3 topsoil (load, haul, spread)	See Attachment A		$1,497
Site restoration (place stabilizing fabric, fine grade, and reseed)	See Attachment A		$996
Soil berm construction (load, haul, spread, and compact)	See Attachment A		$2,577
Culvert Installation (remove pavement, excavate, backfill, replace pavement)	See Attachment A		$5,019
24-in. coated CMP	See Attachment A		$6,600
Storm water inlet drop and grate	See Attachment A		$2,710
Riprap	See Attachment A		$521
Demobilization	See Attachment A		$741
		Subtotal	**$47,812**
Final Activities			
Acceptance inspection	$500/day	1 day	$500
Final report preparation	$700/day	3 days	$2,100
Final report technical edit and review	$700/day	2 days	$1,400
		Subtotal	**$4,000**
		Total Estimated Cost	**$67,712**

8.0 REFERENCES

Aeby, J. W., October 28, 1952. "Monitoring in Canyon Mortandad." Los Alamos Scientific Laboratory Memorandum to Dean D. Meyer (H-1) from Jack W. Aeby (H-1). Los Alamos, New Mexico. **(Aeby 1952, ER ID Number 741)**

Aeby, J. W., August 12, 1954. "Contaminated Water Dumped into Canyon Mortandad since 9-1-51." Los Alamos Scientific Laboratory Memorandum to Dean Meyer from Jack W. Aeby. Los Alamos, New Mexico. **(Aeby 1954, ER ID Number 742)**

Aeby, J. W., January 31, 1955. "Ten-Site Monitoring—Week Ending January 23, 1955." Los Alamos Scientific Laboratory Memorandum to Dean D. Meyer (H-1) from Jack W. Aeby (H-1). Los Alamos, New Mexico. **(Aeby 1955, ER ID Number 743)**

Aeby, J. W., and T. Garcia, May 28, 1954. "More digging in Canon Mortandad." Los Alamos Scientific Laboratory Memorandum to Dean Meyer from Jack W. Aeby and Tony Garcia. Los Alamos, New Mexico. **(Aeby and Garcia 1954, ER ID Number 745)**

Elder, J. C., E. J. Cox, D. P. Hohner, and A. M. Valentine. September 1986. "Radioactive Liquid Waste Lines Removal Project at Los Alamos (1981–1986)." Los Alamos National Laboratory Report LA-10821-MS. Los Alamos, New Mexico. **(Elder et al. 1986, ER ID Number 3089)**

Emelity, L. A., J. R. Buchholz, A. M. Valentine, W. R. Goldsmith, L. C. Borduin, M. E. Muller, and R. A. Hemphill, January 1975. "A Survey of Liquid Waste Management Problems at the LASL." Los Alamos Scientific Laboratory Report, Los Alamos, New Mexico. **(Emelity et al. 1975, ER ID Number 324)**

Keenan, T. K., September 10, 1975. "Releases of Effluents to Ten Site Canyon." Los Alamos Scientific Laboratory Memorandum H7-TKK-506 to LaMar Johnson (H-8) from T. K. Keenan (H-7). Los Alamos, New Mexico. **(Keenan 1975, ER ID Number 845)**

Kennedy, W. R., February 8, 1968. "Prevention, Control, and Abatement of Water Pollution by Federal Activities—Storage of Hazardous Materials." Los Alamos Scientific Laboratory Memorandum H-6 to Herman E. Roser (LAAO) from William R. Kennedy (H-6). Los Alamos, New Mexico. **(Kennedy 1968, ER ID Number 846)**

LANL (Los Alamos National Laboratory). May 1991. "Environmental Restoration Standard Operating Procedures." Vol. I–II. Los Alamos, New Mexico. **(LANL 1991, ER ID Number 21556)**

LANL (Los Alamos National Laboratory). April 11, 1995. Engineering Drawing SK-DD-1995-6, sheet number 6. Los Alamos, New Mexico. **(LANL 1995, ER ID Number 54767)**

LANL (Los Alamos National Laboratory). June 1996. "RFI Report for Potential Release Sites 35-003(d, e, f, g, l, o, q, and r) 35-016(g and h)." Los Alamos National Laboratory Report LA-UR-96-1605. Los Alamos, New Mexico. **(LANL 1996, ER ID Number 54422)**

LASL (Los Alamos Scientific Laboratory). May 15, 1962. "Report on Mortandad Canyon Soil Analyses." Los Alamos Scientific Laboratory Report (draft). Los Alamos, New Mexico. **(LASL 1962, ER ID Number 859)**

9.0 ANNEXES

9.1 Implementation Standard Operating Procedures

See Volumes I and II of the Environmental Restoration Project standard operating procedures, as updated to 1996 (LANL 1991, 21556).

9.2 Site-Specific Health and Safety Plan

This IA will be performed in accordance with the approved site-specific health and safety plan, which is attached.

SSHASP MODIFICATION FORM

Project Title: Site Wide Soil Sampling

TA(s): 35

SSHASP No.: 127

Modification No.: 127.01

Modifications of the SSHASP shall be made per Section 1.3 of the HASP.
Attach to this page the SSHASP modifications.

Comments of the following reviewers have been incorporated as stipulated, or resolved with written record and copy to the respective reviewer.

	(Print Name)	(Title)	(Signature)	(Date)
Prepared by	John K. Hayes	SSO/RCT		

Review and Approval by:

	(Print Name)	(Title)	(Signature)	(Date)
Field Unit HS Representative	Bill Brazile	ESH 5 Oversight	William J. Brazile	
Field Unit Health Physics Representative	Marty Peifer	ESH-1 Oversight	Marty Peifer	8/29/96
FM or DPL or FTL or JS (optional at discretion of FPL)	Deba Daymon	FTM	Deba Daymon	8/27/96
FPL	Allyn Pratt	FPL		

Concurrence by:

	(Print Name)	(Title/Company)	(Signature)	(Date)
Subcontractor Representative (Management or HS Rep.)	Paul Parker	Parker Construction		
Subcontractor Representative (Management or HS Rep.)		TBD		

Change Order Control Form number: 127.01

Project Title: Site Wide Soil Sampling
Operable Unit (OU): 1129
Technical Area (TA): 35
Change requested by: John K. Hayes

Plan number: 127
Draft number: Rev 2
Plan date: 31 May 1996
Task Number and Name: **Task 2 Site Characterization**

Duration of Authorization Requested. 1 August 1996 through 31 December 1996

Description of Modification: *(attach additional pages as necessary)*

Add an additional task 2-G to Table 2-2 of this SSHASP. This task will be **Interim Action at TA-35 PRS Nos. 35-003(d,l,q).** This task will consist of filling and compacting an erosion channel ranging in depth from 1 ft to 22ft and extending downward approximately 200 feet. In addition, the original storm drain will be plugged and excavated, and a new storm drain inlet will be relocated approximately 65 ft north of its current position. For a detailed description, see the attached Interim Action Plan TA-35 PRS Nos. 35-003(d, l, q) and the Engineering Erosion Control and Drainage Plan.

This Interim Action will prevent further erosion of an area encompassing the three PRS's previously identified. The potential contaminants of concern and monitoring requirements are consistent with those identified in Tables 4-3 and 6-1 of this SSHASP. One additional monitoring requirement will be performed (a high volume air sample). This will ensure that no airborne radionuclide contamination is being suspended during the filling of the drainage channel. This sampling is being performed as a precaution.

In addition, a Radiation Work Permit (RWP) and a Task Hazard Analysis will be generated to address any radiological concerns, task hazards, and ppe requirements necessary to safely complete this job. A pre-job radiological survey will be conducted by a FU-4 and ESH-1 oversight RCT's to determine the radiological conditions prior to preparing the RWP. An excavation permit (# 95E-625-35) has been obtained for TA-35 excavation work. Dust suppression (wetting) will be implemented.

All workers must read and abide by the requirements listed in SSHASP #127. Training requirements will be consistent with those stipulated in the SSHASP Table 2-2 Task 2-A (bore drilling/core sampling).

Justification: *(attach additional pages as necessary)*

- Necessary to prevent any potential contaminants associated with PRS Nos. 35-003(d, l, and q) from being remobilized into Ten Site Canyon, or Mortandad Canyon, and possibly a water course.

Instructions for Completing the Task Hazard Analysis/Control Form

- Write in location, task name and the date.
- Issue a Task Hazard Analysis No. For example, D94-04-01 to the first task and if sub-task(s) is associated with this task, issue D94-04-01a, etc. A THA inventory should be established for D&D projects.
- Two signatures are required before task work may begin. The SSO and the Job-S Supervisor, Field Team Leader or the Project Leader must review and approve th THA prior to work commencing. It should be noted that an ER/HS Representative signature is not required for a task to begin, however all THA's should be sent to d representative for review (Oliver Wilton or Joe Louck, Mail Stop K494).
- Task Description

  Describe the task and any steps within the task. Assess only one task per form. Examples of tasks are mobilization and demobilization, intrusive sampling, non-intrusive sampling, equipment and personal decon, duct removal, concrete cutting, etc.
- Hazard Analysis

  List all of the potential hazards associated with the task. Each category (chemical, physical, etc.) has to be addressed. For radiological, the SSO should review the RWP and include, in the *Hazard Controls* section, the PPE prescribed by health physics personnel and add any other PPE necessary for other hazards. If only radiological issues are of concern then a THA form is not required. If another permit (e.g., Confined Space Permit) is required for the task and the permit adequately addresses all hazards then a THA form is not required. Assign Risk Category (H, M or L) to each hazard: See DOE 5483.XX for methodology

RAC	Risk Category
1&2	High Risk (H)
3	Medium Risk (M)
4&5	Low Risk (L)

- Hazard Controls

  List all controls to be used for employee protection.
- Exposure Limits

  List all exposure limits.
- Monitoring

  Describe any industrial hygiene monitoring (either real time or time integrated) required by the task.
- Participant Acknowledgment

  All personnel involved with the task are required to sign the THA to verify that they understand the hazards associated with the task and how the hazards will be controlled. This should be accomplished by conducting a prework meeting.

Los Alamos National Laboratory

TASK HAZARD ANALYSIS

Location/Room TA-35 PRS #35-003 (d,l,c)

Task Name TA-35 Interim Action Agg.D *THA No.* _____ *Date* _____

SSO Approval JOHN HAYES *Date* _____

Project Leader/Supervisory Approval _____ *Date* _____

ER/HS Representative Review _____ *Date* _____

Health Physics Review _____ *Date* _____

User Group _____ *Date* _____

Task Description

Fill and compact an erosion channel on the East-side of TA 35. The original storm drain will be plugged & excavated. A new storm drain inlet will be relocated approximately 65 ft. North.

Hazard Analysis

Circle: **Chemical** **Biological** **Physical** **Radiological**

Describe: Biological - Ticks, Ants, Snakes, Spiders (L)/Physical - Slips, Trips, Falls, Pinch Points (L), Heave Equip. Operati Dozer/ Loader, Backhoe, Compactor (M)/Radiological - Gross Beta activity up to 360 pCi/g (L)/Overhead Electric - Minimum clearance as specified in Table 4-3 pg. 17 of SSHASP#127 (H).

List all other associated Special Work Permits and Number *(include RWP, SWP, CSP, LO/TO, Spark/Flame, etc.)*

RWP #35-ER-96-010

Excavation Permit# 95P-625-3

Will task affect other LANL operations, other employees, or other tasks? No XX Yes ____

If yes, explain precautions taken and contacts notified _____

Hazard Controls

Engineering/Administrative Controls, Special Equipment, etc. Water application for dus suppression. Pre-start and Daily heavy equipment inspections; employe will be kept a minimum of 5' away from the channel. A high-vol air sa will be obtained.

Additional Comments Attached: Yes XX No ___

PPE (Personal Protective Equipment)

Head when heavy equipment is operating (hard hat)
Face & Eye safety glasses with sidesheilds
Gloves Leather optional @ SSO discretion
Hearing Ear muffs or plugs when heavy equipment is operating
Body None
Foot Steel toed shoes or boots
Respiratory: Type of Respirator None required **Type of Cartridge** N/A

Additional Protection/Comments Utility mark-outs will be performed prior to excavation. The channel will be inspected by a competent person on a daily basis.

Exposure Limits

As determined in Table 6.1 of SSHASP #127

Monitoring

Noise - initially while heavy equipment is in operation. Airborne dust, Heat/Cold stress, and Radiological Monitoring as stipulated in Table 6.1 of SSHASP #127.

Participant Acknowledgment: ***Pre-job Conference: Date/Initials*** ___

Printed Name	Z Number	Signature	Date

Los Alamos
NATIONAL LABORATORY

RADIOLOGICAL WORK PERMIT

Permit Number: 35-ER-96-010
Effective Date/Time: 8-20-96
Expiration Date/Time: 12-31-96

GENERAL INFORMATION (to be completed by requester)

Requested by: JOHN HAYES
Group: ASI/FU#4
Telephone Number: 662-1348
Mail Stop: M-327
Work Location (TA, Building, Room Number): TA-35 PRS# 35-003(d,l,q)
SOP Number: N/A
Small Job Ticket: N/A
Work Order Number: N/A
Work to be performed (Add attachment if necessary): FILL IN DRAINAGE CHANNEL & CONSTRUCT BERM TO RE-ROUTE DRAINAGE IF NECESSARY
Approval required by (date): 8-26-96
Desired start date: 9-1-96
Probable end date: 12-31-96
Describe additional hazards (Ex: limited egress, confined space, chemicals, criticality, hot particles, etc.): SLIPS, TRIPS, FALLS HEAVY EQUIPMENT — SEE THA.

PRE-JOB RADIOLOGICAL CONDITIONS

Estimated Radiation Levels
Surface Contamination: TBD dpm/100 cm²
Airborne Contamination: TBD DAC
External Dose Equivalent Rate: 0.01 mrem/hr
Identify nuclides if possible: ^{90}Sr, ^{137}Cs, ^{238}U, ^{234}Th

Measured Radiation Levels*
Beta + gamma (mrem/hr): NA / 64,000 / 0.01
Neutrons (mrem/hr): N/A

Measured Contamination Levels*

	DIRECT (dpm/100 cm²)	SMEAR (dpm/100 cm²)
Alpha	NDA / NDA	NA
Beta + gamma	20,000 / 64,000	N/A
Tritium		N/A

* Record general area/highest level encountered—see survey report for additional information.

Identify any contamination under paint or on inaccessible surfaces: NONE

Airborne Contamination Data: TBD DAC
Surveyed by: [signature]
Z Number: 108821
Date: 8/27/96

RADIATION PROTECTION REQUIREMENTS

Protective Clothing Requirements
- [x] Level I (Coveralls, 2 pairs of surgeon's gloves, booties, and skull cap)
- [ ] Level II (2 Coveralls, 2 pairs of surgeon's gloves, 2 pairs of booties, and hood)
- [ ] None required
- [ ] Taped openings
- [ ] Other (See special requirements below)

Respiratory Requirements
- [ ] Full-face respirator
- [ ] Chemical cartridge
- [ ] SCBA
- [ ] Supplied-air mask
- [ ] ESH-5 respirator card
- [ ] Supplied-air suit
- [ ] None required
- [ ] Particulate cartridge
- [ ] CAM
- [x] Special air test
- [ ] Regular air test
- [ ] Combination cartridge
- [ ] Ventilation (Specify)

Dosimetry Requirements
- [x] WB dosimeter
- [ ] Secondary dosimeter
- [ ] PNAD packet
- [ ] TLD finger rings
- [ ] None required
- [ ] Alarming dosimeter
- [ ] NTA badges
- [ ] Nose swipes
- [ ] Whole-body count
- [ ] Urinalysis
- [ ] Workers are on PJ access list

RCT Monitoring Requirements
- [ ] Intermittent coverage
- [x] Continuous coverage
- [ ] None required
- [x] Personnel before leaving job
- [ ] Notify RCT at job end
- [ ] Self-frisking
- [x] Equipment and tools before removal
- [ ] Notify RCT before job starts @
- [ ] RCT monitor undress

Special Posting Requirements
- [x] Required (Specify) EXCLUSION ZONE
- [ ] None required

Training Requirements
- [ ] GERT
- [ ] RadWorker I
- [x] RadWorker II
- [ ] Other

Special Requirements
- [ ] None required
- [x] ALARA review/pre-job briefing
- [x] Heat stress monitoring required (contact ESH-5)
- [ ] Special ALARA controls (See attachment)

Instructions/Limiting Conditions (Add attachments if necessary): ~~AT THE EXISTING DRAINAGE CHANNEL ONLY~~
Completed by:
Z Number:
Date:

APPROVALS

	Z Number	Group	Date		Z Number	Group	Date
1. Line Manager				3.			
2. RCT Supervisor [signature]	108821	Group ESH-1	Date 8-27-96	4.			

Form 1571 (12/94)

9.3 Engineering Erosion Control and Drainage Plan

The attached Engineering Erosion Control and Drainage Plan, which was prepared by a registered professional civil engineer, describes three levels of erosion control. Alternative "B" was chosen for the reasons described in Section 3.0.

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Engineering Erosion Control and Drainage Plan

Technical Area 35 - Operable Unit 1129

Major erosion has occurred within the past few years to an area of approximately 0.4 acre situated due east of the location of old building TA-35-7. Runoff consisting primarily of drainage from the roof of building TA-35-2 and a surrounding area totaling approximately 3.0 acres has caused serious erosion to a small arroyo. If left as is the runoff will continue to badly erode SWMU NOS. 35-003 (d, l, and q) and 35-003 (r). A hundred year flood would produce 2 1/2 inches of storm water over the drainage area and force over 204,000 gallons of water to be channeled over this already severely eroded area. A flood of this magnitude would cause further major washouts to SWMU NOS. 35-003 (d, l, and q) and 35-003 (r), which could produce widespread problems for the Laboratory in the future.

An in depth engineering study has been conducted concerning the erosion problem in this area to determine the most feasible and economical ways to solve the problem. Three rational approaches were selected. Alternative "A" is a stop gap approach which will leave the existing drainage culverts in place, fill the eroded arroyos with large rock, and build a berm along the north side of the service road to the east. This approach would channel much of the sheet flow water into Ten Site Canyon. The second alternative, "B," is to pack the arroyos with fill material and compact it, bringing in topsoil and re-seeding the arroyo areas with a mixture if native grasses and installing a stabilizing membrane to obtain proper germination. This alternative would also require building the aforementioned berm, and installing approximately 240 feet of new 24 inch corrugated metal culvert. This alternative would divert much of the runoff to the southeast of former Building 35-7 into Ten Site Canyon, abandoning the existing culvert. The third alternative, Plan "C," would not only accomplish all items in Plan "B" but would also re-grade the slopes over the entire area, east of Building TA-35-7.

Alternative "A" requires 350 cubic yards of large rock to be hauled to the site and stockpiled along the north side of the service road southeast of SWMU NOS. 35-003 (d, l, and q) and 35-003 (r). This rock will then be placed into the eroded ditches. Some additional handwork by laborers will be necessary to complete this operation. Once the rock is in place, approximately 120 cubic yards of clean fill material will be hauled to the area and installed along the north side of the service road. This material will extend for approximately 400 feet to the east, beginning at the west end of SWMU NOS. 35-003 (d, l, and q) and 35-003 (r). This material will be wetted to proper moisture content and compacted to 80-85% maximum density in a berm approximately two feet high. The berm will force water that would normally drain into the eroded area to the east into Ten Site Canyon, southeast of the eroded area. The estimated cost of this alternative is $49,100.

Alternative "B" requires filling of all eroded gullies with approximately 696 cubic yards of borrow materials and compacting to 85% maximum density. Then 6 inches of topsoil will be spread over the arroyo areas only, and will be seeded with a native grass mixture. A stabilizing membrane will be used to allow proper germination.

To channel some of the surface sheet flow runoff, a 400 foot compacted berm approximately two feet high will be installed along the north side of the service road, south and east of SWMU NO. 35-003 (d, l, and q). This berm will consist of approximately 120 cubic yards of clean borrow materials, which will be hauled to the site and dumped. The material will be spread, moistened and compacted to 85% maximum density. The berm will force some runoff presently emptying into SWMU NO. 35-003 (d, l, and q) into Ten Site Canyon, east of SWMU. This will also prevent further erosion of the affected area and move the final discharge into a lower discharge site in Ten Site Canyon.

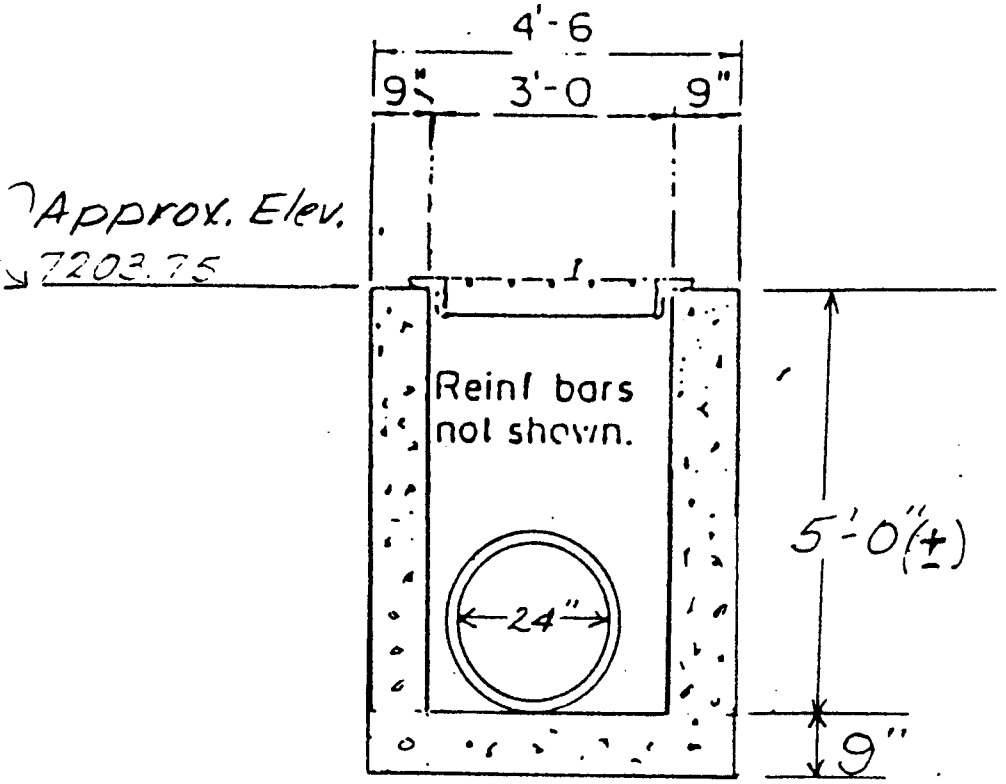
To further minimize erosion to SWMU NO. 35-003, a new 24 inch corrugated metal pipe culvert 40 feet long with two inlets will be installed southeast of Building TA-35-2 and continue southeast for approximately 200 feet emptying onto the north slope of Ten Site Canyon for a total length of 240 feet. To reduce the force of the discharge from the culvert, approximately 10 cubic yards of large rock will be placed under the pipe's discharge end. The existing culvert will be plugged on the upstream end and abandoned in place, further preventing runoff from reaching SWMU NOS. 35-003 (d, l, and q) and 35-003 (r). The estimated cost of this alternative is $57,800.

Alternative "C" is more involved than Alternative "B." but will provide a more complete solution to the drainage problems currently plaguing SWMU NOS. 35-003 (d, l, and q) and 35-003 (r). Filling the three erosional cuts in SWMU NO. 35-003 (d, l, and q) will require hauling, stockpiling, and placing approximately 793 cubic yards of clean borrow material in the cuts and over the surrounding area. This includes a swell factor of 30% after proper wetting and compacting the material to 85% maximum density. This amount of material will allow the grade of the slopes to be corrected to 2 1/2:1 or 3:1, preventing future erosion. Approximately 50 cubic yards of topsoil will be placed over the fill slopes and graded smooth. The entire area will be seeded with a native grass mixture with a stabilizing membrane to permit proper germination of the grass mixture

This alternative includes the berm as shown in alternative "B" and the 24 inch CMP installed exactly as in "B."

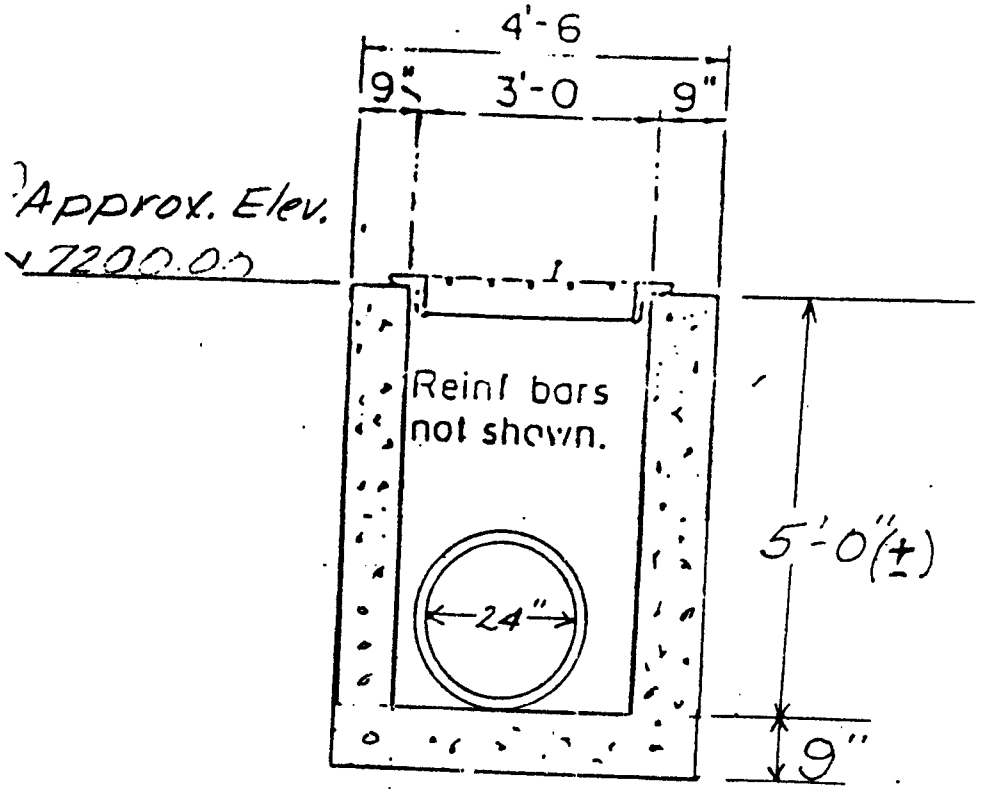
The estimated cost of Alternative "C" is $82,900.

An 8 1/2 X 11 area map is attached.



DROP INLET

1



DROP INLET

ATA

Prepared By [illegible] Date 7/1/96
Checked By _____ Date _____

Cost Estimate

TA35-7

Project Title: Engr. Erosion Controls Drainage Plan - "A" Δ - 7/15/96

Estimate No. 1
Sheet No. 1 of 3

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
1	Field Office Expense (move in, util, equip, etc.) per month (010 034 0010)	1	mo.							879	966
	Subtotal									879	966
2.	mobilization										
a.	loader (022 274 1200)	1	ea.	4.5	1.778	B 34K		36	174	210	247
b.	roller (022 274 1200)	1	ea.	4.5	1.778	"		36	174	210	247
	Subtotal									420	494
3.	Fill Rock										
a.	load (022 216 6000)	580	C.Y.	715	.022	B 12-N	3.70	0.53	0.87	2950	3393
b.	haul (022 246 0560)	580	C.Y.	32	.25	B 34-B	5.10	12.85		10,441	12760
c.	Place (022 712 0100)	580	C.Y.	62	.258	B 12G	10.00	6.15	7.50	13,717	16,530
	Subtotal									27,086	32,683

Checked By _____ Date _____

Cost Estimate

Estimate No. 1

Sheet No. 2 of 3

7/15/96

Project Title: F4-35-7 Gr. Erosion Control & Drainage Plan "A"

	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP.	TOTAL	TOTAL Incl. O&P
4.	Construct Soil Berm (400' long - 2' high) Borrow material										
a.	load (022 216 4010)	120	C.Y.	1135	.014	B-10	3.58	0.34	0.78	574	636
b.	haul (022 266 0560)	120	C.Y.	32	.25	B-34C	5.10	12.85	—	2154	2640
c.	spread (022 262 0170)	120	C.Y.	600	.02	B-10P	—	0.96	1.35	217	264
d.	compact (022 226 5000)	120	C.Y.	2600	.005	B-10Y	—	0.11	0.13	30	37
	Subtotal									2975	3,577
5.	Demobilization									420	494
	Subtotal									420	494
	Subtotal, items 1-5									31,780	38,214
	Contractor O.H. (30% mtl, L+E)										9534
	Subtotal										47,748
	Area Multiplier (102.5)										1194
	Subtotal										48,942

Prepared By Cam Date 7/2/96
Checked By _____ Date _____

Cost Estimate

TA-35-7

Project Title: Engr. Erosion Control & Drainage Plan - "A" Δ 7/15/96

Estimate No. 1
Sheet No. 3 of 3

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
Δ	Final Cleanup (0.390)										147
Δ	TOTAL										49,089
										Use	49,100
	Means Site Work & Landscaping - 1995										

Prepared By (CW) Date 2/3/96
Checked By _____ Date _____

Cost Estimate

TA-35-7

Project Title: Engr. Erosion Control & Drainage Plan - "B" Δ-7/15/96

Estimate No. 2
Sheet No. 16 of 4

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP.	TOTAL	TOTAL Incl. O&P
1.	Field Office Expense (movein, util., equip. etc.) per month (010 034 0010)	1	mo.							879	966
	Subtotal									879	966
2.	mobilization	1	ea.								
	loader (022 274 1200)		ea.	4.5	1.778		—	36	174	210	247
	roller (022 226 5000)							36	174	210	247
	grader (025 274 0200)							36	174	210	247
	Subtotal									630	741
3.	Borrow material (580 C.Y. x 0.20 swell)										
a.	load (022 216 4050)	696	C.Y.	550	.022	B-10R	3.58	0.51	0.42	3139	3619
b.	Haul (022 266 0560)	696	C.Y.	32	.250	B-34B		5.10	12.85	12493	15312
c.	spread (022 286 0400)	696	C.Y.	200	.060	B-10E		1.39	1.64	2109	2763
d.	compact (022 226 5000)	696	C.Y.	2600	.005	B-10Y		0.11	0.13	167	216
	Subtotal									17,908	21,910

Project Title: IA-35-7 Emer. Erosion Control & Drainage Plan

Sheet No. 2 of 4

"A" 1/15/96

Item	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
4.	Topsoil (50CYX.33well)										
a.	load (022 216 4050)	48	C.Y.	550	.022	B-10R	3.58	0.51	0.42	216	250
b.	haul (022 266 0560)	48	C.Y.	32	.250	B-34B		5.10	12.85	862	1056
c.	spread (022 286 0400)	48	C.Y.	200	.06	B-10S		1.39	1.64	145	191
d.	Place stabilizing fabric (022 308 6000)	267	S.Y.	10000	.002	B-6	1.49	0.05	0.02	417	465
e.	Fine grade & seeding, incl. lime, fert., seed w/equip (022 286 1000)	267	SY	1,000	.048	B-14	0.18	0.98	0.21	366	531
	Subtotal									2,006	2493
5.	Construct Soil Berm (400'x2'high Borrow material)										
a.	load (022 216 4010)	120	C.Y.	1135	.014	B 120	3.58	0.34	0.78	564	636
b.	haul (022 266 0560)	120	C.Y.	32	.25	B-34C	–	5.10	12.85	2154	2640
c.	spread (022 262 0170)	120	C.Y.	600	.02	B 10P	–	0.46	1.35	217	264
d.	compact (022 226 5000)	120	C.Y.	2600	.005	B-10Y	–	0.11	0.13	30	37
	Subtotal									2965	3577

ATA

Prepared By (Cm) Date 7/2/96
Checked By _____ Date _____

Cost Estimate

TA-35-7
Project Title: Expr. Erosion Control & Drainage Plan

Estimate No. 2
Sheet No. 3 of 4
" B " Δ 7/15/96

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
6.	Culvert installation 24" coated CMP										
a.	Remove pavement (020 550 2300)	200	S.F.	1900	.025	B-39		0.52	0.08	120	182
	sm. 11 quantity +200%							1.04	0.16	240	364
b.	Excavate (022 254 0060)	45	C.Y.	200	.080	B-11M		1.78	1.41	463	629
c.	24" CMP (027 164 2140)	240	L.F.	160	.125	B-21	18.50	3.96	0.67	5551	6600
d.	Backf. 11 (022 204 0010)	35	C.Y.	14	.571	1 clab		16.10		389	620
	air tamp + 0500	65	C.Y.	190	.211	B-9		4.17	0.80	323	491
	roller + 0400	100	C.Y.	100	.120	B-10A		2.79	0.54	363	525
e.	Replace paving (025 100 1050)	23	S.Y.	20	.686	B-37	6.45	14.05	2.00	518	736
	add 200% - smaller area									1036	1472
f.	Stormwater inlets (027 150 0500)	2	ea	2	12	B-6	340.00	252.00	103.00	1390	1760
g.	Grate (beehive) (027 150 1578)	2	ea	24	.667	2 clab	196.50	19.43	—	432	950
	Subtotal									10,825	14,329
7.	Rip Rap										
a.	load (022 216 6000)	10	C.Y.	715	.022	B-12N		0.53	0.87	14	16
b.	haul (022 266 0560)	10	C.Y.	32	.250	B-34C		5.10	12.85	180	220
c.	place (022 712 0100)	10	C.Y.	62	.258	B-12G	10.00	6.15	7.50	237	285
	Subtotal									431	521

Checked By _____ Date _____

Cost Estimate

Estimate No. 2
Sheet No. 4 of 4
7/15/96

Project Title 4-35-7
Ir. Erosion Control & Drainage Plan - "B"

	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
8.	Demobilization	1	ea.								
										630	741
	Subtotal										
										630	741
	Subtotal items 1-8										
										36,279	45,278
	Contractor O.H. (30% M.L.E)										
											10,885
	Subtotal										
											56,163
	Area multiplier (1.025)										
											1,404
	Subtotal										
											57,567
	Final Cleanup (0.3%)										
											172
	TOTAL										
											57,739
	Means Site Work & Landscape - 1995									Use	# 57,800

A1A

Prepared By (CM) Date 7/16/96 | Cost Estimate | Estimate No. 3

Checked By _____ Date _____ | Sheet No. 1 of 4

TA35-7

Project Title: Engr. Erosion Control & Drainage Plan - "C" | Δ 7/15/96

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP.	TOTAL	TOTAL Incl. O&P
1.	Field Office Expense (move-in, util, equip, etc.) per month (010 034 0010	1	mo.							879	966
	Subtotal									879	966
2.	Mobilization										
	loader (022 274 1200)	1	ea.	4.5	1.778	-	-	36	174	210	247
	roller (022 226 5000)	1	ea.					36	174	210	247
	grader (025 274 0200)	1	ea					36	174	210	247
	Subtotal									630	741
3.	Borrow Material 66 L.C.Y. x 1.2 swell										
a.	load (022-216 4050)	793	C.Y.	550	.022	B-10R	3.58	0.51	0.42	3,576	4,124
b.	haul (022 266 0560)	793	C.Y.	32	.250	B-34B		5.10	12.85	14,234	17,446
c.	spread (022 286 0400)	793	C.Y.	200	.060	B-10S		1.39	1.64	2,403	3,148
d.	compact (022 226 5000)	793	C.Y.	2600	.005	B-10X		.11	.13	190	246
	Subtotal									20,403	24,964

ATA

Prepared By (Jmt) Date 7/16/96
Checked By _____ Date _____

Cost Estimate

TA-35-7

Project Title: Engr. Erosion Control & Drainage Plan - "C" @ 7/15/96

Estimate No. 3
Sheet No. 2 of 4

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
4.	Topsoil (81 CY x 1.15 swell)										
a.	load (022 216 4050)	90	CY	550	.022	B-10R	3.58	0.51	0.42	406	468
b.	haul (022 266 0560)	90	CY	32	.0250	B-34B		5.10	12.85	1,616	1,980
c.	spread (022 286 0400)	90	CY	200	.040	B-10S		1.30	1.64	273	357
d.	place stabilization fabric (022 308 6000)	4400	SY	10,000	.002	B-6	1.48	0.05	0.02	6,864	7,656
e.	finegrade & seed, incl. lime fert, seed w/equip (022 286 1000)	4400	SY	1,000	.048	B-14	0.18	0.98	0.21	6,028	8,756
	Subtotal									15,187	19,217
5.	Construct Coil Berm (400 x 2' high - borrow mtl.)										
a.	load (022 216 4010)	120	CY	1135	.014	B-10	3.58	0.34	0.78	564	636
b.	haul (022 266 0560)	120	CY	32	.250	B-34C		5.10	12.85	2,154	2,640
c.	spread (022 262 0170)	120	CY	600	.020	B-10P	-	0.46	1.35	217	264
d.	compact (022 226 5000)	120	CY	2600	.005	B-10Y	-	0.11	0.13	30	37
										2,965	3,577

A TA

Prepared By (Cm) Date 7/16/96
Checked By _____ Date _____

Cost Estimate

TA-35-7

Project Title: Engr. Erosion Control & Drainage Plan "C"

Estimate No. 3
Sheet No. 3 of 4
Δ 7/15/96

Item No.	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
6.	Culvert Installation										
	24" bitum. coated (CMP)										
a.	remove pavement (020 550 2300)	200	S.F.	1900	.025	B-39		0.52	0.08	120	182
	small quantity + 200%							1.04	0.16	240	364
b.	excavate (022 254 0060)	145	C.Y.	200	.080	B-11M		1.78	1.41	463	629
c.	24" CMP (027 164 2140)	240	L.F.	160	.175	B-21	18.50	3.96	0.67	5,551	6,600
d.	backfill (022 204 0010)	35	C.Y.	14	.571	1C126		11.10		389	620
	air tamper (022 204 0500) +	65	C.Y.	190	.21	B-9		4.17	0.80	323	491
	roller (022 204 0400) +	100	C.Y.	100	.120	B-10A		2.79	0.84	363	525
e.	replace paving (025 100 1050	23	S.Y.	70	.686	B-37	6.45	14.05	2.00	518	736
	small area + 200%									1,036	1,472
f.	storm water inlets										
	(027 150 0800)	2	ea.	2	12	B-6	340.00	252.00	103.00	1,390	1,760
g.	grate (beehive) (027 150 1578	2	ea.	24	.667	2C126	196.50	19.43	—	432	950
	Subtotal									10,825	14,329
7.	Riprap										
a.	load (022 216 6000)	10	C.Y.	715	.022	B-12N		0.53	0.87	14	16
b.	haul (022 266 0560)	10	C.Y.	32	.250	B-34C		5.10	12.85	180	220
c.	place (022 712 0100)	10	C.Y.	62	.258	B-2G	10.00	6.15	7.50	237	285
	Subtotal									431	521

Date _____ Cost Estimate

Estimate No. 3

Sheet No. 4 of 4

Project Title: TA-35-7 Erosion Control & Drainage Plan "C"

Item	Description	Quan.	Unit	Daily Output	Man Hours	Crew	BARE COSTS MAT.	LABOR	EQUIP	TOTAL	TOTAL Incl. O&P
8.	Demobilization	1	ea.							630	741
	Subtotal										
9.	Subtotal items 1-8									630	741
10	Contractor O.H. (30% m, L, E)									51,950	65,056
	Subtotal										15,585
11.	Final cleanup (0.3%)										80,641
	Subtotal										242
12.	Area Multiplier (1.025)										80,883
	TOTAL										2,022
											82,905
									Use		$ 82,900

SECTION 206—EXCAVATION & BACKFILL FOR CULVERTS & MINOR STRUCTURES

206.1 DESCRIPTION.

206.11 This work shall consist of the excavation, backfill, select backfill, and disposal of all materials required for the construction of box culverts, pipe culverts, storm drains, cattleguards, and other drainage structures in accordance with the specifications and the lines, grades, and typical cross sections shown in the contract.

Ditches at inlets and outlets of culverts and other ditches indicated in the plans shall be constructed under the item for unclassified excavation.

Structure excavation shall include all pumping, bailing, draining, sheeting, bracing, and incidentals required for proper execution of the work.

206.2 MATERIALS.

206.21 Select Backfill. Select backfill material shall be composed of stone, crushed stone, crushed or screened gravel, caliche, sand, or a combination of such materials. The material shall be non-plastic, free from organic matter, silt, clay balls and other deleterious materials, and shall conform to the gradations shown on the plans as determined by AASHTO T 27, unless otherwise shown in the contract. On all gradations, material passing the No. 200 sieve shall have a P.I. of six (6) or less.

206.3 CONSTRUCTION REQUIREMENTS.

206.31 General. Unsuitable foundation material shall be removed, as directed by the Project Manager, below the bottom of the structure. Suitable surplus excavated material may be used in the construction of embankments, and all unsuitable material shall be wasted. Material removed below the bottom of the structure shall be replaced with approved material.

All sheeting and bracing used in performing structure excavation shall be removed by the Contractor following the completion of the work.

The upper six (6) inches of existing ground foundations shall be compacted to not less than ninety five (95) percent of maximum density as determined by AASHTO T 99. The density and the approved surface elevation and shape of the foundations shall be maintained immediately prior to the placement of structures and forms.

Bedding material shall be sand or sandy soil all of which passes a 3/8 inch sieve and not more than twenty (20) percent of which passes a No. 200 sieve.

Backfilling shall consist of suitable materials uniformly distributed in layers not to exceed eight (8) inches (loose measurement) in depth and uniformly compacted to 100 percent of maximum density as determined by AASHTO T 99, and AASHTO T 224. Field densities will be determined by AASHTO T 205, by use of nuclear methods in accordance with AASHTO T 238 and T 239, or other approved methods.

No backfill shall be placed against newly constructed masonry or concrete structures for a period of fourteen (14) days or until the concrete has developed a compressive

strength of 2500 pounds per square inch. Backfill compaction shall be accomplished in a manner that will not damage or move the structure.

Materials for backfill shall be fine, readily compactable soil or granular material selected from excavation or from a source of the Contractor's choice. The material shall not contain lumps or stones larger than two (2) inches in diameter, clay or other objectionable material. The backfill material shall have no more than twenty five (25) percent passing the No. 200 sieve.

Backfill material shall not be placed on frozen earth nor shall frozen material be placed within the backfill. Operations shall be suspended when backfill materials become frozen, and shall not be resumed until the materials are thoroughly thawed and sufficiently dried for satisfactory compaction.

206.32 Pipe Culverts, Storm Drains and Structural Plate Pipe. When rock or other unyielding foundation material is encountered, it shall be removed below the bottom of the structure for a depth not less that twelve (12) inches. This extra depth excavation shall be backfilled with approved free-draining material obtained from roadway excavation if available, otherwise it shall be base course or other granular material.

Trenches shall be excavated to a width sufficient to allow for proper jointing of the pipe and thorough compaction of the bedding and backfill material under and around the pipe. The completed trench bottom shall be firm for its full length and width. When required, in the case of cross drains, the trench shall have a longitudinal camber of the magnitude specified.

The pipe bedding shall be shaped to fit the pipe and shall have recesses shaped to receive the bell when bell and spigot type pipe is used.

206.33 Box Culverts & Other Drainage Structures. The elevations at the bottoms of footings as shown on the plans are approximate only, and all materials shall be removed to the field established elevations. Excavation in rock or other hard foundation material shall be cut to a firm surface, either level, stepped, or serrated, to the neat lines of the footings. All seams and cavities shall be cleaned and filled with concrete or grout.

Unsuitable foundation material shall be removed below the bottom of the structure. Suitable surplus excavated material shall be used in the construction of embankments. Material removed below the bottom of the structure shall be replaced with approved material.

Where footings are to be placed on excavated surface other than rock, special care shall be taken to prevent removal of material below the established grade, except where unsuitable material is encountered. The final six (6) inches above the established grade for the bottom of footings shall be removed by hand labor prior to the placing of the footing material. Where unsuitable material is encountered below footing foundations, it shall be removed and replaced with approved material.

Where the Contractor excavates below the established final elevation for bottom of footings or beyond the neat lines of the footings in rock or other hard foundation

material, the areas shall be backfilled, at the Contractor's expense, with concrete of the same class as the footings.

After each footing excavation is completed, the Contractor shall notify the Project Manager. Footings shall not be placed until the Project Manager has approved the depth of the excavation and the character of the foundation material. The density and the approved surface elevation and shape of the foundation shall be maintained immediately prior to the placement of the reinforcing steel.

206.4 METHOD OF MEASUREMENT.

206.41 Unsuitable material excavation will be measured by the cubic yard.

Select backfill material will be measured by the ton or cubic yard

Unsuitable material excavation will be measured in place between the flowline of the structure and the limits of unsuitable material excavation as determined by the Project Manager.

Excavation for culverts, drop inlets, headwalls, headgates, endwalls, and other similar structures will be considered incidental in the completion of the work and no separate measurement will be made therefor.

206.5 BASIS OF PAYMENT.

206.51 Unsuitable material excavation will be paid for at the contract unit price per cubic yard.

Select backfill material will be paid for at the contract unit price per ton or cubic yard.

Payment will be made under:

Pay Item	Pay Unit
Unsuitable Material Excavation	Cubic Yard
Select Backfill Material	Ton, Cubic Yard

When unsuitable material excavation is required, but no item is established, payment for unsuitable material excavation will be paid for at fifty percent (50%) of the latest average unit bid price for "Structure Excavation & Backfill for Bridges."

Excavation and backfill for culverts and minor structures will be included in the contract unit price per linear foot of culvert or in the contract unit price for Class "A" Concrete.

510—PORTLAND CEMENT CONCRETE

510.1 DESCRIPTION

510.11 General. This work shall consist of furnishing and placing portland cement concrete in compliance with the specifications and the lines, grades, and dimensions shown in the contract. Unless otherwise specified by the Project Manager the Contractor shall use a concrete mixture utilizing fly ash as a substitute for a portion of the portland cement.

510.12 Classifications. The following are the designated classes of concrete and shall be provided as specified in the contract:

TABLE 510–A
CONCRETE CLASSES

Class	[1]Minimum Compress. Strength @ 28 days (Production)	[2]Minimum Cement Content per Cu. Yd.	Maximum Water/ Cement Ratio	[3]Max. Slump (Site)	Size Coarse Aggregate	[4]Percent Fine Aggregate
	P.S.I.	Lbs.		Inches	US Customary	
A	3000	564	0.49	4	1"	36–42
AA	4000	658	0.42	4	1"	34–42
B	2500	470	0.60	4	1"	36–45
C	3500	611	0.49	4	3/4"	38–42
D	4000	658	0.49	4	3/4"	38–42
E	2500	—	—	4	—	—
[5]F	3000	658	0.44	2 1/2	1 1/2"	36–42
G	3000	611	0.44	***	[6]3/4"	40–42

AA—Superstructure
E —Nonstructural
F —Slip-formed Pavement
G —Drilled Shafts

[1]A minimum twenty percent (20%) laboratory overdesign strength shall be provided.
[2]The term "Cement" as used in Table 510–A and these specifications shall also be construed to include cementitious material, whichever applies. Cementitious material shall consist of cement plus fly ash
[3]As determined by AASHTO T 119.
[4]Percentage of fine aggregate other than that shown may be used only when approved by the Central Materials Laboratory.
[5]The minimum strength for Class F concrete shall be achieved at fourteen (14) days.
[6]Maximum size aggregate during free fall placement shall be in accordance with Subsection 502.221 Concrete.
***Slump shall be in accordance with Subsection 502.221 Concrete.

510.121 Concrete Class Substitutions. Class AA Superstructure concrete may be substituted for Class F concrete when a slip-formed paving method is not used

Class B Concrete may be substituted for Class E concrete.

Class A concrete may be substituted for Class B concrete.

Class C or Class D concrete may be substituted for Class A or Class B concrete.

510.13 Mix Design. The Contractor shall be responsible for the portland cement concrete (PCC) mixture and shall select one of the design options provided in Subsection 510.31 Proportioning. Regardless of the option chosen, the Contractor shall still be responsible for providing concrete which meets the specifications

510.2 MATERIALS.

510.21 The Contractor shall use pre-approved admixtures, cement, fly ash, or blended portland-fly ash cement, shown on current lists. The Contractor shall obtain from the manufacturer and furnish a certificate of compliance stating that the materials delivered to the work comply with the requirements herein provided.

No change in the source or character of the materials shall be made without due notice to the Project Manager.

510.22 Portland Cement. Portland cement shall be "low-alkali" and shall conform with the requirements of ASTM C 150 for the type required. Unless otherwise specified in the contract, Type II cement shall be furnished.

All cement for any given structure shall be of the same brand unless otherwise approved by the Project Manager. Brand changes in cement may be allowed only upon written request by the Contractor and written approval by the Project Manager

510.221 Blended Portland-Fly Ash Cement. Blended portland-fly ash cement shall meet the requirements of ASTM C 595 and shall consist of portland cement uniformly blended with fly ash, either by intergrinding the portland cement and fly ash or by blending the portland cement and fly ash. The portland cement and fly ash shall meet the requirements of their respective specifications.

The blended portland-fly ash cement must be preapproved by the Project Manager

(a) **Approval of Blended Portland-Fly Ash Cement Source.** The prospective blended portland-fly ash cement supplier shall furnish test data, acceptable to the Central Materials Laboratory showing that the blended portland fly ash cement does impart satisfactory strength and durability to concrete.

510.222 Packaging. When portland cement and blended portland-fly ash cement is delivered in packages, the packages shall plainly state the name brand, the manufacturer, and the cement type. When cement is delivered in bulk, the same information shall be contained in the shipping documents accompanying the shipment.

510.223 Storage. The cement shall be well protected from rain and moisture. Cement of different brands, types, or which comes from different mills shall be stored separately.

Separate, readily identifiable storage shall be furnished at the project or plant site for blended portland-fly ash cement and under no circumstances, shall portland cement and portland-fly ash cement be mixed or intermingled

510.224 Rejection. All cement which has come in contact with moisture, or which has partially set, contains lumps, or fails to meet the specified requirements shall be rejected and removed from the project site.

510.23 Admixtures. Admixtures or combinations of admixtures shall not contain more than 0.035 percent chloride by weight.

510.231 Air-entraining Admixtures. Air-entraining admixtures for concrete shall conform to the requirements of AASHTO M 154.

510.232 Chemical Admixtures. Water-reducing admixtures, superplasticizers, set-retarding admixtures, and non-chloride accelerating admixtures, or combinations thereof shall conform to the requirements of AASHTO M 194.

Superplasticizers and accelerators shall not be used in the production of superstructure concrete unless otherwise approved by the Project Manager.

510.24 Curing Materials.

510.241 Liquid Membrane Forming Compounds. Liquid membrane-forming compounds for curing concrete shall conform to the requirements of Type 1-D or Type 2, AASHTO M 148, unless otherwise specified.

510.242 Linseed Oil Emulsion. Linseed oil emulsion curing agent shall be formulated with high viscosity heat bodied linseed oil and shall be non-pigmented. Linseed oil emulsion composition shall conform to the requirements of Table 510-B.

TABLE 510-B
LINSEED OIL COMPOSITION

Composition	Volume Percent
Oil phase	50.0 ± 1.0
Water phase	50.0 ± 1.0
Oil Phase	
Boiled high viscosity heat bodied linseed oil	80.0 ± 0.1
Z-8 bodied linseed oil	20.0 ± 0.1
Water Phase	
Water	99.60 ± 0.01
Sodium Hydroxide	0.37 ± 0.01
Dipicolonic acid	0.03 ± 0.001

Water retention will be tested in accordance with ASTM C 156. The loss of water shall not exceed 0.50 kg/m² of surface area in 72 hours.

Each container shall be marked or labeled with the manufacturer's name, contents, "Linseed Oil Emulsion," lot number and date of manufacturer.

The emulsion shall be stable at the time of application.

510.243 Sheet Materials For Curing Concrete. Sheet materials for curing concrete shall meet the requirements of AASHTO M 171 except that only white reflective type shall be permitted.

510.25 Water. Potable water from municipal or other sources approved by the New Mexico Environmental Department (NMED) will not require testing. Water from other sources must be approved by the Project Manager before incorporating into the work. Water shall be sampled and tested in accordance with AASHTO T 26.

Water used in mixing and curing concrete or for washing concrete aggregates shall be clear and free from injurious amounts of acid, oil, alkali, organic matter, or other deleterious material. Water shall have a pH value of not less than 4.5 or more than 8.5 as determined by AASHTO T 26 prior to its use. The sulfate content and the chloride content each shall not exceed one thousand parts per million.

Where a source of water is relatively shallow, the intake shall be enclosed and the level of water shall be maintained at such a depth to exclude silt, clay, vegetable matter and other foreign material.

510.26 Coarse Aggregate. Coarse aggregate shall be crushed stone, crushed gravel, or natural washed gravel, conforming with the requirements herein provided.

At least fifty percent (50%) by weight of the minus ¾ inch (minus 1½ inch for PCCP) sieve size particles shall have a minimum of two (2) fractured faces.

Coarse aggregate for Class G concrete shall have two (2) or more fractured faces percentage by weight, between zero and sixty percent (0 & 60%) of the minus ¾ inch sieve size particles.

A fractured face shall be as defined in subsection 401.221 Gradation & Quality Requirements.

In lieu of producing coarse aggregate meeting the fracture faces requirements, the Contractor shall have the option of thoroughly and uniformly washing the coarse aggregate.

510.261 Deleterious Substances. The amount of deleterious substances shall not exceed the limits shown in Table 510–C.

TABLE 510–C
COARSE AGGREGATE DELETERIOUS SUBSTANCE TOLERANCES

Substance	Percent By Weight
Soft Fragments	2.0
Coal and Lignite	0.25
Clay Lumps	0.25
Material Passing No. 200 Sieve	1.00
Flat or Elongated Pieces[1]	15.00

[1]**Elongated Piece:** One in which the ratio of the length to width of its circumscribing rectangular prism is greater than 5 to 1.

Flat Piece: One in which the ratio of the width to thickness of its circumscribing rectangular prism is greater than 5 to 1.

Concrete aggregate shall be free from sticks and roots. Aggregate contaminated with sticks and roots will be rejected.

510.262 Coarse Aggregate Quality Requirements. Coarse aggregate shall have a percent wear of forty five (45) or less at 500 revolutions, when tested in accordance with AASHTO T 96 and shall have a soundness loss of fifteen (15) or less when tested in accordance with AASHTO T 104 using magnesium sulfate solution and a test duration of five (5) cycles.

510.263 Coarse Aggregate Gradation Requirements. Coarse aggregate or the combined component parts shall conform with the gradations shown in Table 510–D

TABLE 510–D
COARSE AGGREGATE GRADATION REQUIREMENTS

Size	1–1½"	1"	¾"
Sieve Size	Percent Passing		
2"	100		
1–½"	95–100	100	
1"	---	95–100	100
¾"	35–70	---	95–100
½"	---	25–60	---
⅜"	10–30	---	20–55
No. 4	0–5	0–10	0–10
No. 8	---	0–5	0–5
No. 200	0–1	0–1	0–1

When coarse aggregate is 100 percent crushed aggregate, material passing no. 200 sieve shall not exceed two percent (2.0) by weight.

Coarse aggregate with more than the maximum percentage passing the No. 200 sieve may be accepted provided the combined gradation with fine aggregate does not exceed two percent (2%).

(a) PCCP Gradations. The combined component of the coarse aggregate for PCCP shall meet the gradation requirements for 1½" coarse aggregate shown in Table 510–D. The aggregate shall be stored in two (2) different nominal size aggregate stockpiles and each stockpile shall contain at least thirty five percent (35%) of the total required coarse aggregates.

510.27 Fine Aggregate. Fine aggregate shall consist of natural sand or other inert materials with similar characteristics conforming with the requirements herein provided.

510.271 Deleterious Substances. The amount of deleterious substances shall not exceed the limits shown in Table 510–E.

TABLE 510–E
FINE AGGREGATE DELETERIOUS SUBSTANCE TOLERANCES

Substance	Percent By Weight
Clay Lumps	3.0
Coal and Lignite	1.0
Material Passing No. 200 Sieve	3.0
Other Deleterious Substances	1.0

510.272 Fine Aggregate Quality Requirements. Fine aggregate shall have a soundness loss of twelve (12) or less when tested in accordance with AASHTO T 104 using magnesium sulfate solution and a test duration of five (5) cycles.

The sand equivalent, when tested in accordance with AASHTO T 176, shall be at least seventy five percent (75%).

510.273 Fine Aggregate Gradation Requirements. Fine aggregate shall be well graded from coarse to fine and shall conform with the grading requirements shown in Table 510–F.

TABLE 510–F
FINE AGGREGATE GRADATION REQUIREMENTS

Sieve Size	Percent Passing
3/8 inch	100
No. 4	95–100
No. 16	45–80
No. 50	5–30
No. 100	0–10
No. 200	0–3

The gradation requirements shown represent the extreme limits which will be used to determine acceptability for use from all sources of supply.

The degree of uniformity will be determined by a fineness modulus test, conforming to the requirements of AASHTO M 6, of representative samples, obtained by the Project Manager from sources to be used by the Contractor. Fine aggregate from the designated source(s) having a variation in fineness modulus greater than 0.20 above or below the fineness modulus of the original representative sample in the approved design mix may be rejected.

Fine aggregate with more than the maximum percentage passing the No.200 sieve may be accepted provided the combined gradation with coarse aggregate does not exceed two (2) percent.

510.28 Fly Ash. Fly ash shall conform to the physical and chemical requirements of ASTM C 618, including the optional requirements for available alkalies and reactivity with cement alkalies as modified [illegible] with the exceptions shown in Table 510–G. The Contractor may use either Class C or Class F fly ash.

If fly ash is supplied in bags, the bags must be waterproof and the name brand, the manufacturer, type, and source shall be clearly identified thereon. Each fly ash shipment to the project site shall be accompanied by a copy of a properly executed certificate of compliance.

Brand changes in fly ash may be allowed only upon written request by the Contractor and written approval by the Project Mgr. Class changes between Class C and Class F fly ash and intermixing of fly ash of different classes and sources will not be permitted.

TABLE 510–G
FLY ASH REQUIREMENTS

Characteristic	Class F	Class C
Moisture Content, max., %	1.0	1.0
Loss on Ignition, max., %	3.0	3.0
[1]Magnesium Oxide (MgO), max., %	5.0	5.0

[1]When the autoclave expansion or contraction limit is not exceeded when combined with the cement which will be used on the project, an MgO content above 5.0% will be acceptable

510.281 Source Approval & Acceptance. Acceptance of fly ash will be on the basis of certification of approved sources and satisfactory test results on project verification samples. Fly ash from a particular source or supplier must be preapproved by the Project Manager before being used in portland cement concrete.

The request for source approval shall include the following information:

1. The name of supplier or company;
2. Location of the power plant;
3. Coal origin;
4. Storage facilities and capacity;
5. Production procedures;
6. Details regarding the suppliers quality control program including the following:
   a. Routine sampling and testing frequency.
   b. Evidence that the Laboratory responsible for the certified ASTM C 618 test results is participating in the Cement & Concrete Reference Laboratory (CCRL) pozzolanic inspection program and a copy of a letter authorizing CCRL to send a copy of the inspection report directly to the Project Manager.
   c. Measures taken to ensure that fly ash not meeting specification requirements is kept separated from material meeting the requirements.
7. Copies of test reports showing results obtained in the quality control program for the previous six (6) months including at least one (1) complete ASTM C 618 analysis per month.

Sources approved by the Project Manager will be placed on the Department's approved source list.

510.282 Sources on Approved List. Sources on the approved list shall furnish the following information to the Project Manager on a monthly basis:

1. Copies of test results obtained in their routine quality control program;
2. A certified ASTM C 618 analysis.

510.283 Withdrawal of Source Approval. Source approval may be revoked for any of the following reasons:

1. If there is a change in equipment or production procedures from those shown in the original request for approval.
2. If a project sample fails to comply with specification requirements.
3. If a source becomes inactive;
4. If a source does not furnish fly ash to the Department for a period of one year.

510.29 Aggregate Testing. Coarse and fine aggregate will be tested in accordance with AASHTO methods shown in Table 510-H and such other methods as may be required by the Project manager.

TABLE 510-H
AGGREGATE TEST METHODS

Sampling	AASHTO T 2
Clay Lumps	AASHTO T 112
Coal and Lignite	AASHTO T 113
Amount of Material Passing No 200 Sieve	AASHTO T 11
Organic Impurities	AASHTO T 21
Sieve Analysis	AASHTO T 27
Soundness (Magnesium Sulfate)	AASHTO T 104
Lightweight Particles	AASHTO T 113
Sand Equivalent	AASHTO T 176

510.3 CONSTRUCTION REQUIREMENTS.

510.31 Proportioning. Concrete mix proportions shall be determined by the Rational (absolute volume) procedure of design.

A minimum of twenty percent (20%) and a maximum of thirty percent (30%) by equal volume of Class F fly ash per volume of portland cement and a minimum of twenty five percent (25%) and a maximum of thirty five percent (35%) by equal volume of Class C fly ash per volume of portland cement will be permitted, except that mineral admixtures including fly ash or natural pozzolan shall not be used in the concrete mix for drilled shafts.

The proportions of coarse and fine aggregates, portland cement, fly ash and water shall be maintained within the limits provided on the summary of portland cement concrete mix design.

The water/cement ratio shall not exceed the maximum for the class of concrete required.

The cement content of concrete as determined by AASHTO T 121 shall be within a tolerance of plus or minus two percent (± 2 % of the specified or approved amount. If the cement content varies by more than two percent (2%) from the designated value, the proportions shall be adjusted as approved by the Project Manager so as to maintain a cement content which does not vary more than two percent (2%) from the designated value

All concrete shall have an entrained air content between 4½ and 7½ percent by volume, except that Class G concrete shall have entrained air content between 3 and 5 percent by volume. Air content will be determined by using AASHTO T 152 for gravel and stone coarse aggregate and AASHTO T 196 for slag and other highly porous coarse aggregate.

A concrete mix design will be developed using one of the design options outlined herein. The Contractor will indicate at the preconstruction conference the option chosen.

510.311 Mix Design Option A. The Contractor shall submit representative samples of the proposed materials to the Project Manager. After the component materials have been approved, the Testing Laboratory will then determine the proportions by means of trial mixes, including the approximate amount of air-entraining agent, any other admixtures, and fly ash, which will be necessary to meet the requirements of these specifications. It will take a minimum of fifty five (55) calendar days for the Department to issue a mix design.

510.312 Mix Design Option B. The Contractor shall make arrangements with and submit representative samples of the proposed materials to a Private Testing Laboratory (PTL) preapproved by the Project Manager. The PTL shall be supervised on site by a Civil Engineer licensed by the State of New Mexico

The PTL shall determine the proportions by means of trial mixes, including the approximate amounts of air-entraining agent, any other admixture, and fly ash, which will be necessary to meet the requirements of these specifications. The trial mixes shall be conducted under the supervision of the licensed Engineer. Each mix design must be certified as correct by the Professional Civil Engineer supervising the PTL. All testing for Option B concrete shall be accomplished by American Concrete Institute (ACI) level one (1) or equivalent certified personnel.

Option B concrete mix design(s) submittals shall include but not be limited to the following:

1. Class(s) of concrete;
2. List of all materials used;
3. Material Certifications (both chemical and physical);
4. Material test results for the following:
   a. Soundness Loss (Coarse and fine with calculations),
   b. Percentage of fracture faces;
   c. Gradations (coarse and fine including AASHTO T-11)
   d. Bulk SSD specific gravities;
   e. Los Angeles Wear Abrasion;
   f. Fineness Modulus (fine aggregate);
   g. Aggregate absorption (coarse and fine aggregate);

h. Aggregate correction factor;

i. Concrete temperature;

j. Slump (in the case where a superplasticizer is used, the slump before and after the superplasticizer is added);

k. Unit weights;

l. Two cylinder breaks at 7, 14, and 28 days each.

m. Concrete mix proportions (water, cement, flyash, coarse and fine aggregate and air content by pressure method);

n. Sand Equivalent (fine aggregate);

o. Dry-rodded unit weight (coarse aggregate).

5. Water/cementitious material ratio;

6. Type and amount of admixtures used (on approved list only)

7. Water source (including pH);

8. Procedure (calculations showing how proportions were determined);

9. Location of aggregate source and type of deposit.

510.313 Adjustments to Approved Mix Designs. Except as provided for herein, all proposed changes made by the Contractor to the approved mix design(s) must be reviewed and approved by the Project Manager before incorporation into the project.

The mix design may be varied to fit field conditions, and to obtain a workable mix, when approved by the Project Manager.

Adjustments made to the water and air content will not require approval. Water may be adjusted to obtain the desired slump, provided that the maximum water/cement ratio is not exceeded.

510.32 Batching. Measuring and batching of material shall be done at a batching plant or by continuous volumetric batching in a continuous mixer.

Methods and equipment for adding air-entraining agent or other admixtures to the batch, when required, must be approved by the Project Manager prior to initiating mixing operations.

510.321 Batching Plant. Batching plants shall include bins, weighing hoppers, and scales and shall be equipped to proportion aggregates, bulk cement, and fly ash by means of weighing devices approved by the Project Manager, unless otherwise required in the contract.

Aggregate scales and hoppers may provide for weighing each aggregate on a separate scale or for accumulative weighing on a single scale for all aggregates

If cement is used in bulk, a bin, hopper, and separate scale for cement shall be included. Fly ash may be weighed in the same hopper with the portland cement, however, cement shall be weighed before the fly ash. The weighing hoppers shall be properly sealed and vented to preclude dusting during operations.

The batch plant site, layout, equipment, and provisions for transporting material shall be such as to ensure a continuous supply of material to the work site.

The batch plant shall:

1. Accurately weigh and batch materials for portland cement or portland cement-fly ash concrete within the tolerances specified;

2. Provide a means or method of removing an overload of any one (1) material prior to contamination by any other material when more than one (1) material is weighed in one (1) hopper;

3. Provide scale dials or instrumentation devices for beam scales and load cells, which are readily visible to both the operator and the inspector;

4. Incorporate weighing hopper or hoppers of sufficient size to contain the material without loss or spillage;

5. Properly proportion the various materials to obtain the required uniformity and consistency;

The weighing hopper or hoppers shall be so designed to efficiently discharge all weighed materials for each batch.

The material charging equipment shall deliver the batch to the mixer without loss or spillage.

Scales for weighing aggregates, cement, water and fly ash shall conform to the requirements of Subsection 109.01 Measurement of Quantity.

510.322 Portland Cement & Fly Ash. Either sacked or bulk cement and fly ash may used. No fraction of a sack shall be used in a batch of concrete unless the cement or fly ash is weighed.

Cement and fly ash shall be measured by weight. Fly ash may be weighed cumulatively with the portland cement, however, cement shall be weighed before the fly ash. All bulk cement and fly ash shall be weighed on an approved weighing device except when continuous proportioning and mixing equipment is used. The accuracy of batching shall be within plus or minus one percent ($\pm$ 1% of the required weights.

Scales and hoppers shall be used for weighing the cement and fly ash with a device to indicate complete discharge of the batch of cement and fly ash into the batch box or container.

Cement and fly ash supplied in bulk shall be contained in weather tight bins and weighing hoppers. The weighing hoppers shall be properly sealed and vented to preclude dusting during operation.

Discharge chutes shall not be suspended from the weighing hoppers and shall be arranged so that cement and fly ash will not lodge in, or leak from them.

510.323 Water. Water may be measured either by volume or by weight. The accuracy of measuring the water shall be within plus or minus two percent (± 2%).

Unless the water is to be weighed or metered, the water measuring equipment shall include an auxiliary tank from which the measuring tank shall be filled. The measuring tank shall be equipped with an outside tap and valve to provide for checking the setting, unless other means are provided for readily and accurately determining the amount of water in the tank. The volume of the auxiliary tank shall be at least equal to that of the measuring tank.

In lieu of the volume method, the Contractor will be permitted to use a water metering device that is accurate within the prescribed limits. Water meters shall be checked for accuracy at least once a year.

510.324 Aggregates. Aggregates for all concrete shall be handled from stockpiles or other sources to the batching plant in such manner as to secure a uniform grading of the material. Aggregates that have become segregated or mixed with earth or foreign material shall not be used. Methods of handling aggregates which result in segregation, degradation, or excessive breakage of particles will not be permitted. No aggregate in the form of frozen lumps shall be used in the manufacture of concrete.

Fine aggregate and individual sizes of coarse aggregate shall be separately stored and accurately weighed in an adequate hopper or hoppers in the respective amounts required by the Project Manager. Batching shall be so conducted as to result in the weights of material required, within a tolerance of plus or minus two percent (± 2%).

Aggregates coated to the extent that they will not pass the materials passing the No. 200 sieve wash test for coarse aggregate or the sand equivalent test for fine aggregate at the time of batching shall be washed as required, or they will be rejected. No payment will be made for aggregates rejected or for the cost of washing.

(a) **Stockpiles.** Fine and coarse aggregate from different sources of supply shall not be mixed or stored in the same stockpile or used alternately in the same work without approval of the Project Manager.

All aggregates shall be stockpiled in such manner that segregation of coarse and fine particles of each size is avoided. Aggregates from different sources and of different gradings shall not be stockpiled together.

The Contractor shall take necessary measures to prevent intermingling of the different sizes of stockpiled aggregates. Such preventative measures may include, but are not necessarily limited to, physical separation of stockpiles or construction of bulkheads of adequate length and height.

The Contractor shall take necessary measures to prevent contamination of aggregates by contact with the ground and stockpiled aggregates shall be protected from dust and other foreign matter.

1. **PCCP Aggregate Stockpiles.** Stockpiles of aggregates for PCCP shall be built up in layers not to exceed four (4) feet in depth. Each layer shall be completely in place before beginning the next, and shall not be allowed to "cone" down over the next lower layer.

2. **Superstructure Concrete Aggregate Stockpiles.** The Contractor shall maintain separate stockpiles for superstructure concrete aggregate or designate portions of large stockpiles of aggregates specifically for superstructure concrete to provide for advance testing of aggregates for moisture content and quality. Uniform moisture content shall be maintained throughout the stockpile during the scheduled operation as herein provided.

The quantity of material in these stockpiles or designated portions of stockpiles shall be adequate to provide all of the concrete required for the section or sections of superstructure to be constructed during a scheduled operation.

(b) Moisture Control. Aggregate moisture content throughout the stockpiles of accepted aggregates, shall be constant within a tolerance of plus or minus one percent (± 1%), immediately prior to and at the time of batching for a scheduled operation.

The moisture content throughout the stockpiles of accepted aggregates for bridge superstructure concrete shall be constant within a tolerance of plus or minus one-half percent (± ½%), immediately prior to and at the time of batching for a scheduled operation.

When the moisture content in the aggregates varies by more than the specified tolerances, corrective action shall be taken to bring the moisture content to a constant and uniform quantity before any concrete is mixed.

If the moisture content in the aggregates is found to vary by more than the specified tolerances during a scheduled operation, the mixing and placement of concrete shall be immediately suspended. Operations shall not be resumed until such time as the moisture content throughout the aggregates to be used for the remainder of the scheduled operation has been brought within the specified tolerances.

All aggregates produced or handled by hydraulic methods and washed aggregates shall be stockpiled or binned for draining at least twelve (12) hours before being batched. Rail shipment requiring more than twelve (12) hours will be accepted as adequate binning only if the car bodies permit free drainage. If the aggregates contain high or non-uniform moisture contents, storage or stockpile periods in excess of twelve (12) hours may be required by the Project Manager.

510.325 Air-entraining & Chemical Admixtures. Admixtures shall be stored in separate containers and in a manner that will avoid contamination, evaporation, and damage. Liquid admixtures shall be protected from freezing and from temperature changes which adversely affects their characteristics.

Methods and equipment for adding air-entraining agent or other admixtures to the batch shall be approved by the Project Manager. For admixtures used in the form of suspensions of nonstable solutions, agitating equipment shall be provided to ensure thorough distribution of the ingredients.

Volumetric measures for each batch shall be marked in ounces, and shall be constructed so that the quantity of admixture required can be readily determined before being injected into the batch. All admixtures shall be measured into the mixer within plus or minus three percent (± 3%) of the required amount

510.33 Mixing. Concrete may be mixed at the site of the work, in a central mix plant, compulsory mixer, or in truck mixers. The mixer shall be of a type and capacity approved by the Project Manager except that the central plant mixer shall be at least three (3) cubic yards in capacity. Continuous mix concrete shall be mixed at the placement site.

Mixers shall be cleaned before the start of the project and at suitable intervals thereafter or as required by the Project Manager.

The pick up and throw-over blades in the drum shall be repaired or replaced when they are worn down ¾ inch or more. The Contractor shall:

1. Have available at the job site a copy of the manufacturer's design drawings showing dimensions and arrangements of blades in reference to original height and depth; or,

2. Provide permanent marks on blades to show points of ¾ inch wear from new conditions. Drilled holes of ¼ inch diameter near the end and at the midpoint of each blade are recommended.

510.331 Production Requirements. The production of ready-mixed concrete and the production of site-mixed concrete shall meet the applicable requirements of AASHTO M 157 in addition to the following requirements:

(a) Addition of Materials. There shall be no water in the drum prior to initiating batching of concrete. When initiating batching operations, the batch shall be charged into the drum so that a portion of the mixing water shall enter in advance of the cement and aggregates.

Introduction of the unmixed materials (cement, coarse aggregate, sand, admixtures, and the remainder of the water) shall then be performed by a uniform and simultaneous flow into the mixer, with all water introduced into the drum by the first fifteen (15) seconds of the mixing period.

The throat of the drum shall be kept free of such accumulations as may restrict the free flow of materials into the drum.

When the concrete is delivered in transit mixers or agitators additional water may be added to the batch materials and additional mixing performed to increase the slump to meet the specified requirements, if permitted by the Project Manager. The maximum water-cement ratio is not to be exceeded.

(b) Slump Requirements. Concrete that is not within the specified slump limits at time of placement shall not be used.

(c) Mixing Speed. The mixer shall be operated at a drum speed not to exceed the maximum speed shown on the manufacturer's name plate

(d) Mixer Capacity. The volume of concrete mixed per batch shall not exceed the mixer's nominal capacity in cubic feet, as shown on the manufacturer's standard rating plate on the mixer.

An overload of up to ten percent (10%) above the mixer's nominal capacity may be permitted provided concrete test data for strength, segregation, and uniform consistency are satisfactory, and provided no spillage of concrete takes place.

The volume of concrete mixed or transported shall not be less than one (1) cubic yard.

(e) Mixing Time. For purposes of these specifications, the term "mixing time" shall be defined as the time elapsing from the point the cement comes in contact with the aggregates until the concrete is deposited in place at the site of the work.

Concrete mixed less than the specified time shall be discarded and disposed of, at the Contractor's expense.

When the concrete is hauled in nonagitating trucks, the mixing time shall not exceed thirty (30) minutes. When the concrete is hauled in truck mixers or truck agitators, the mixing time shall not exceed 1½ hours, or 300 total mixing and agitating revolutions of the drum or blades, whichever comes first, except that the mixing time for superstructure concrete shall not exceed sixty (60) minutes.

Under conditions contributing to quick stiffening of the concrete, or when the temperature of the concrete is eighty five degrees (85°) F or above, the mixing time shall not exceed sixty (60) minutes.

510.34 Transporting. Mixed concrete from the central mixing plant or compulsory mixer shall be transported in truck mixers, truck agitators, or nonagitating trucks in accordance with the "Mixer & Agitator." and "Mixing & Delivery" requirements of AASHTO M 157, in addition to the following requirements.

510.341 Nonagitator Trucks. Bodies of nonagitating hauling equipment for concrete shall be smooth, mortar-tight metal containers and shall be capable of discharging the concrete at a satisfactory controlled rate without segregation. Covers shall be provided when needed for protection.

510.342 Truck Mixers & Agitators. The Contractor shall furnish the manufacturer's rated capacity of each mixer and agitator, and the recommended speed of rotation for the various uses of each mixer, to the Project Manager.

Truck mixers and agitators shall be equipped with readily available devices which indicate the number of revolutions of the drum, blades, or paddles.

510.35 Weather & Temperature Limitations. The requirements of Subsections 451.32 Weather & Temperature Limitations, and 511.33 Weather & Temperature Limitations, shall apply.

510.36 Concrete Sampling & Testing. Slump, unit weight, air content and cylinders for strength tests shall be performed with concrete obtained at the discharge end of the bucket, chute, or pump immediately prior to placement. For Class G concrete the air content will be measured from samples taken at the point of discharge from the truck.

If a superplasticizer is used, the slump shall be checked before and after the superplasticizer is added. The slump specifications outlined in Table 510–A shall not be exceeded prior to introduction of the superplasticizer. The slump shall not exceed seven (7) inches after the superplasticizer is added and vibrating shall be sufficient to consolidate the concrete without causing segregation.

510.4 CONCRETE STRENGTH.

510.41 Concrete strength shall be determined from the average of two (2) concrete cylinders made from the same sample of concrete and tested at twenty eight (28) days for structural concrete and at fourteen (14) days for PCCP concrete. The cylinders will be made, handled, and stored in accordance with AASHTO T 23 "Making and Curing Concrete Test Specimens in the Field" and tested in accordance with AASHTO T 22 "Compressive Strength of Cylindrical Concrete Specimens."

510.411 Individual Strength Test. An "individual strength test" will be determined by testing two (2) cylinders, at twenty eight (28) days or at fourteen (14) days for PCCP.

Four (4) cylinders shall be made per test. The first cylinder shall be tested at seven (7) days for use as an indicator of concrete compressive strength gain. The second and third cylinders shall be tested to determine the "individual strength test." The fourth cylinder shall remain available for testing if the difference between the second and third test cylinders is greater than 5.64%. If the fourth cylinder is tested, the two (2) cylinders with the closest strength will be used to determine the "individual strength test."

510.412 Field Cured Cylinders for Early Form Stripping or Opening of Highways. The Contractor may request that the Project Manager obtain additional cylinders, for field curing, in order to remove forms or open a highway earlier than twenty eight (28) days, fourteen (14) days for PCCP. The additional cylinders will be taken by the Project Manager and field cured at the site of concrete placement with the structure(s). Unless less stringent requirements are specified elsewhere in the contract, the forms may be stripped and traffic permitted on the structure or pavement when the field cured cylinder test is at least equal to the required twenty eight (28) day compressive strength.

Field cured cylinders will be used for construction information purposes only and not as a basis for final acceptance or rejection of the concrete.

510.413 Acceptance of Concrete Based on Cylinders. The concrete will be accepted with respect to compressive strength indicated by cylinder tests, when both of the following requirements are met:

1. The running average of three (3) consecutive individual strength tests, meets or exceeds the specified strength; and.

2. No individual strength test falls below the specified strength by more than 12.5%.

If three (3) sets of cylinders are not available for evaluation, only the criteria of requirement number 2, shall apply

When the cylinder based acceptance requirements are not met, the Proj. Mgr. will review the strength tests and notify the Contractor in writing whether the concrete will be accepted at full price, will be accepted at a reduced price, or shall be removed and replaced by the Contractor at no additional cost to the Department. Only that area or lot of concrete represented by the individual strength test failing to meet either or both cylinder based acceptance requirements, shall be subject to investigation, a price reduction, or removal. When the cylinder based acceptance requirements are not met, steps shall be taken by the Contractor to increase the average of subsequent strengths.

510.414 Investigation of Low Strength Cylinder Test Results. The Contractor may core the in-place concrete if the strength of the in-place concrete fails to meet or exceed either or both cylinder based acceptance requirements.

All cores shall be obtained by the Contractor in accordance with AASHTO T 24 "Obtaining and Testing Drilled Cores and Sawed Beams of Concrete." The cores will be tested in accordance with AASHTO T 22 "Compressive Strength of Cylindrical Concrete Specimens."

If the concrete in the structure will be dry under service conditions, the cores will be air dried at a temperature range of sixty degrees to eighty degrees (60° to 80°) F, and at a relative humidity of less than sixty percent (60%), for seven (7) days before testing and will be tested dry.

If the concrete in the structure will be more than superficially wet under service conditions, the cores will be cured in accordance with AASHTO T 24 and will be tested wet.

(a) **Procedure for Coring of PCCP.** If the Contractor elects to core, the Contractor shall core within forty two (42) calendar days of initial concrete placement. At least three (3) cores shall be taken for each individual strength test falling below the specified strength, and a minimum of one (1) set of three (3) cores obtained per each lot of 2500 square yards. The Project Manager will determine the locations to be cored.

(b) **Acceptance of Concrete Based on Cores.** The concrete will accepted with respect to compressive strength indicated by core tests, when the average of three (3) cores is at least eighty five percent (85%) of the specified strength and if no single core is less than seventy five (75%) of the specified strength.

If the core strengths are not adequate for acceptance at full price, the concrete shall be, as determined by the Project Manager either

1. Removed and replaced by the Contractor at no additional cost to the Department; or,

2. Paid for at the adjusted concrete contract unit price, in accordance with the appropriate price adjustment table in Subsection 510.5 Price Adjustments.

Additional cores may be extracted from locations represented by erratic core strength results, only as approved by the Department.

510.5 PRICE ADJUSTMENTS.

510.51 Price adjustments for noncompliance with strength specifications of the concrete, accepted by the Department, will be based on twenty eight (28) day, fourteen (14) day for PCCP, cylinder strengths or core strengths.

510.511 Cylinder Based Price Adjustments. If low strength concrete is accepted based on cylinders, the payment allowed for the entire low strength lot will be in accordance with Table 510–I.

TABLE 510–I
PRICE ADJUSTMENT PERCENTAGES FOR LOW STRENGTH CONCRETE BASED ON CYLINDERS

Percent of Specified Strength from Cylinders (to the nearest 1%)	Percent of Contract Unit Price Allowed
100 or more	100
97–99	96
94–96	91
90–93	84
85–89	75
80–84	64
75–79	51
Less than 74	*

*This concrete shall be removed and replaced, at the Contractor's expense, with concrete which meets the specification requirements or if permitted by the Project Manager in writing, Class B or E concrete may be allowed to remain in place and the concrete will be paid for at twenty five percent (25%) of the contract unit price.

510.512 Core Based Price Adjustments. If low strength concrete is accepted based on cores, the payment allowed for the entire low strength lot shall be in accordance with Table 510–J.

TABLE 510–J
PRICE ADJUSTMENT PERCENTAGES FOR LOW STRENGTH CONCRETE BASED ON CORES

Percent of Specified Strength from Cores (to the nearest 1%)	Percent of Contract Unit Price Allowed
85	100
82–84	90
79–81	80
76–78	70
73–75	60
70–72	50
67–69	40
64–66	30
62–63	20
60–61	10
less than 60	0

The cost incurred in coring, at full payment, shall be at the Contractor's expense.

SECTION 540—STEEL REINFORCEMENT

540.1 DESCRIPTION.

540.11 This work shall consist of furnishing and placing steel reinforcement in compliance with the specifications and the dimensions, spacing, and type shown in the contract and in accordance with the specifications.

540.2 MATERIALS.

540.21 Bar Reinforcement. Bar reinforcement shall be deformed bars conforming to the requirements of AASHTO M 31 or AASHTO M 42, including the "Supplementary Requirements."

Grade 60 reinforcing bars may be substituted for Grade 40 reinforcing bars at no additional cost to the Department except that vertical bars in abutment back walls and stirrup bars which project from prestressed concrete beams or other precast units shall always be Grade 40.

540.22 Welded Wire Fabric. Welded wire fabric shall conform with the requirements of AASHTO M 55.

540.23 Spiral Reinforcement. Spiral reinforcement shall be fabricated from steel bars conforming to the requirements of AASHTO M 31 or AASHTO M 42, or from cold-drawn steel wire conforming to the requirements of AASHTO M 32, as specified in the contract.

540.24 Reinforcement Supports. Metal chairs or other metal supports for reinforcement which contact the exposed surfaces of the concrete shall be galvanized.

540.25 Reinforcing Wire. Wire for reinforcement shall conform with the requirements of AASHTO M 32.

540.26 Dowel & Tie Bars. Smooth dowels for joint load transfer in PCCP and deformed tie bars for PCCP joints shall conform to the requirements of AASHTO M 31, including "Supplementary Requirements."

The diameter, length, and grade shall be as shown in the contract.

After cutting the dowel bars to length, bars shall be hot dipped galvanized in accordance with AASHTO M 111.

540.27 Epoxy Coated Reinforcing Bars. Epoxy coated reinforcing bars shall conform to the requirements of AASHTO M 284 except as modified herein.

540.271 Coating Material. The coating material shall be a light colored powdered epoxy resin which will highlight rusting of untreated bar areas. The coating material shall be selected by the Project Manager.

The Contractor shall provide for the submittal [illegible] of at least one (1) representative four (4) ounce sample of the resin powder used to coat each given lot of bars.

540.272 Accessories. Tie wire for tying epoxy coated reinforcing bars shall be plastic coated. Chairs, supports, and clips shall be one (1) of the following:

1. Steel, fully coated with plastic or fusion bonded epoxy.

2. Galvanized steel, with the cradle and the upper two (2) inches of the chair support or clip coated with fusion bonded epoxy or plastic.

540.28 Certificates of Compliance. The Contractor shall furnish Certificates of Compliance from the fabricator to the Project Manager indicating compliance with the applicable requirements of this specification. The copies shall accompany each shipment of reinforcing steel to the project.

The certificate of compliance shall indicate the project number, the shipping invoice number, the name of the manufacturer, pounds shipped, heat numbers, laboratory test reports, and grade of steel.

540.281 Epoxy Coated Reinforcing Bar Certificates of Compliance. The applicator shall furnish the Department's Inspector, three (3) copies of a notarized certificate of compliance for each shipment of coated bars. The certificate of compliance shall contain all the information required Subsection 540.28 Certificates of Compliance, and shall also state that representative samples of the coated bars have been tested and that the test results comply with the requirements of AASHTO M 284, this specification, and batch numbers of the epoxy resin.

Results of tests by the fabricator during coating shall be retained and made available to Department's inspectors for inclusion in final inspection reports.

540.3 CONSTRUCTION REQUIREMENTS.

540.31 General. Unless otherwise provided, dimensions on plans are to the centerline of bars.

540.311 Bundling & Tagging. Bar reinforcement shall be shipped in standard bundles, tagged and marked in accordance with the Code of Standard Practice of the Concrete Reinforcement Steel Institute.

540.32 Bar Bending. Bent bar reinforcement shall be cold bent around a pin to the shapes shown in the contract. Unless otherwise specified bending shall be done in an adequately equipped shop.

Field bending of Grade 60 bars and epoxy coated bars is not permitted.

Unless otherwise provided, the diameter of bend shall be in accordance with Table 540–A.

TABLE 540–A
MINIMUM DIAMETER OF BEND

Type of Reinforcement	Size	Minimum Pin Diameter
Uncoated Bars		
Stirrups & Ties	#3 through #5	5 bar diameters
Main Reinforcement	#3 through #5	6 bar diameters
All Types	#6 through #8	6 bar diameters
All Types	#9 through #11	8 bar diameters
All Types	#14 through #18	10 bar diameters
Coated Bars		
Stirrups & Ties	#3 through #5	7½ bar diameters
Main Reinforcement	#3 through #5	9 bar diameters
All Types	#6 through #8	9 bar diameters
All Types	#9 through #11	12 bar diameters
All Types	#14 through #18	15 bar diameters

540.33 Requirements for Epoxy Coated Reinforcing Bars. Where epoxy coated bars are detailed over forty (40) feet long, the Contractor may furnish such bars in two (2) sections with lap splices.

The Contractor shall submit to the Project Manager in writing, a request for such a substitution showing details of splice locations and lengths of lap splices. The Contractor shall submit the request prior to fabrication of the bars, and shall allow at least two (2) weeks for review and approval. Longer bar lengths resulting from the proposal shall be provided at no additional cost.

The applicator shall make a trial run of the coating process to ensure that the process meets the specified requirements.

All required tests shall be performed on the trial specimens before production is started on the reinforcing bars for the project. The Contractor shall notify the Project Manager at least thirty (30) days before the date of the trial run.

540.331 Coating Thickness. The thickness of the coating after curing shall be between six (6) mils and ten (10) mils. For acceptance, at least eighty percent (80%) of all recorded film thickness measurements shall be in this range.

540.332 Cure of Coating. The coating film shall be fully cured. The applicator shall ensure that the entire coated production lot is supplied in a fully cured condition.

540.333 Continuity of Coating. Coating shall be free from holes, voids, contamination, cracks and damaged areas as determined by a visual examination of a representative number of bars.

A 67½ volt holiday detector shall be used in the production line to continuously check the coating for holidays.

There shall be no more than two (2) holidays or pinholes per linear foot of coated bar.

540.334 Coating Inspection & Tagging. Before coating reinforcing bars with epoxy, the Department's inspectors will inspect and tag approved bar bundles

It will be the applicator's responsibility to maintain these tags through the coating process. The tagged bar in a bundle shall be the last to be fed through the cleaning unit. The tag shall be removed prior to cleaning and placed back on the last bar following coating and before rebundling.

After coating is complete a second tag will be attached to the bundle by the Inspector indicating that the bundle has been inspected and accepted for epoxy coating.

The Project Manager will not accept bundles arriving on the project without inspection tags indicating that the coating meets specification requirements.

540.335 Storage & Handling of Epoxy Coated Reinforcing Bars. Epoxy coated reinforcing steel shall be handled and stored by methods that will not damage the epoxy coating. Epoxy coated reinforcing steel shall be transported and stored on wooden or padded supports.

Devices used for handling epoxy coated reinforcement bars shall have adequately padded contact areas. Bundling bands shall be padded and all bundles shall be lifted with a strong back, with multiple support points or with a platform bridge so as to prevent bar-to-bar abrasion from sags in the bar bundle.

Bars or bundles shall not be dropped or dragged.

540.336 Repair of Damaged Coating. All visible damage and cracks in the coating shall be repaired prior to shipping. The total bar surface area covered by patching by the coating applicator shall not exceed one percent (1%) in any one (1) foot section.

Sheared ends and other cuts and exposed areas shall be patched promptly before detrimental oxidation occurs. Areas to be repaired shall be clean and free from surface contaminants.

All visible damage and cracks in the coating due to shipping and field handling shall be repaired by patching before concrete is placed. The total bar surface area covered by patching material shall not exceed two percent (2%) in any one (1) foot section.

540.34 Splicing. Splicing of bars other than at the locations specified in the contract, will not be permitted unless otherwise approved by the Project Manager.

Bars in lapped splices shall be placed and securely tied in a manner that will maintain at least the minimum reinforcing bar cover required.

Spiral reinforcement may be spliced by lapping or by butt welding. If lap splicing is used laps shall be at least forty eight (48) bar or wire diameters but not less than twelve (12) inches. The welding of splices shall conform with the requirements herein provided.

Welded wire fabric and bar mat reinforcement shall be lapped as shown in the contract. If not shown in the contract, the length of overlap measured between the outermost cross wires of each sheet shall be at least one (1) spacing of cross wires plus two (2) inches.

540.35 Field Cutting. If it becomes necessary to cut bars to length in the field, bars shall be sheared or sawed. Flame cutting will not be permitted. The ends of the epoxy coated bars cut in the field shall be patched with epoxy patching material.

540.36 Reinforcing Bar Placement. Reinforcing bars shall be placed as shown in the contract and shall be securely tied in position with wire of not smaller than 16 gage (0.0625 inch diameter). Reinforcing shall be placed, supported, and tied carefully, and concrete shall be placed and vibrated with care, to avoid damage to the epoxy coating.

All intersections shall be tied except where the reinforcing bar spacing is less than one (1) foot in either direction. Where the spacing is less than one (1) foot in either direction, alternate intersections shall be tied.

Metal spacers, chairs, hangers, and other approved devices of adequate strength to prevent crushing under full load shall be used to hold the reinforcing bars in position.

The use of concrete blocks to support reinforcing bars will not be permitted, except that dense, rectangular concrete blocks may be used to support the bottom mat of reinforcement in slabs which are cast on earth. Such concrete blocks shall

1. Have compressive strength and density equal to or greater than the concrete to be placed;

2. Occupy a small area;

3. Contain embedded tie wires to provide for the attachment of reinforcement to the block

Wooden spacers or support shall not be used to hold reinforcing in position.

Reinforcing bar mats in bridge deck and concrete box culvert slabs shall be securely tied down to beams and forms to prevent upward movement of the bar mats during concrete placement. Maximum spacing between ties shall be ten (10) feet.

540.361 Reinforcing Bar Placement Tolerances. Variations in spacing between adjacent bars shall not to exceed 1/2 inch or one twenty-fourth (1/24) of the spacing dimension shown in the contract, whichever is greater.

With the exception of slabs cast on earth, the clear coverage of reinforcement shall not vary more than 1/4 inch or one-eighth (1/8) of the dimension shown in the contract, whichever is greater.

The clear coverage of the reinforcement in slabs cast on earth shall not vary more than minus 1/2 inch from the position shown in the contract.

540.362 Cleaning of Reinforcing Bars. Before concrete is placed, the reinforcing bars shall be cleaned of dirt, mortar, oil, loose rust, loose mill scale and other materials that would reduce or destroy the bond.

540.37 Welding of Reinforcing Steel. Reinforcing steel shall be welded only when shown in the contract or authorized in writing by the Project Manager. Welding shall conform with the requirements of AWS Specification D1.4—Reinforcing Steel Welding Code.

540.38 Concrete Cover Requirements. The concrete cover shall be as shown in the contract. Concrete cover shall be defined as the distance from the surface of concrete to the edge of the bar nearest to that surface. If cover dimensions are not shown in the contract, the concrete cover requirements of Table 540-B shall apply.

TABLE 540–B
CONCRETE COVER REQUIREMENTS

Location	Minimum Cover
Concrete cast against & permanently exposed to earth:	3 inches
Concrete exposed to earth or weather:	
Principal reinforcement	2 inches
Stirrups, ties, and spirals	1½ inches
Concrete bridge slabs:	
Top reinforcement	2 inches
Bottom reinforcement	1 inch
Concrete not exposed to weather or in contact with ground:	
Principal reinforcement	1½ inches
Stirrups, ties, and spirals	1 inch.
Bar bundles	*2 inches

*Or equal to the diameter of a single bar of equivalent area, whichever is greater.

540.39 Cleaning & Final Inspection. Before concrete is placed, the reinforcing bars shall be cleaned of dirt, mortar, oil, loose rust, loose mill scale and other materials that would reduce or destroy the bond.

No concrete shall be placed until the Project Manager has inspected the reinforcing steel in place and has authorized the Contractor to place the concrete.

Acceptance of the reinforcing steel shall not relieve the Contractor of responsibility for coverage and position control of the steel.

540.4 METHOD OF MEASUREMENT.

540.41 Reinforcing bars will be measured by the pound.

Epoxy coated reinforcing bars will be measured by the pound.

Welded wire fabric will be measured by the pound.

540.42 Measurement of will be based on the computed weight of the bars or welded wire fabric.

The computed weight of reinforcing bars will be based on the nominal unit weight of the bar sizes shown in AASHTO M 31.

The computed weight of epoxy coated reinforcing bars will be based on the nominal weight before application of the epoxy coating.

The computed weight of welded wire fabric will be based on the nominal unit weights per square foot contained in the CRSI Manual of Standard Practice.

When splices are made for the convenience of the Contractor, and are approved by the Project Manager at locations not shown in the contract, the extra steel required for laps will not be included in computing the weight of the bars.

540.5 BASIS OF PAYMENT.

540.51 Reinforcing bars will be paid for at the contract unit price per pound

Epoxy coated reinforcing bars will be paid for at the contract unit price per pound

Welded wire fabric will be paid for at the contract unit price per pound.

Payment will be made under:

Pay Item	Pay Unit
Reinforcing Bars Grade	Pound
Epoxy Coated Pound	
Welded wire Fabric	Pound

540.52 Work Included in Payment. The following work and items will be considered as included in the payment for the main items and will not be measured or paid for separately:

Clips, supports, wire, and other material used for fastening reinforcement.

Samples and submittals.

SECTION 545—PROTECTIVE COATING OF MISCELLANEOUS STRUCTURAL STEEL

545.1 DESCRIPTION.

545.11 This work shall consist of furnishing coating materials, surface preparation, and applying the coatings materials, in accordance with the specifications and the contract requirements.

This specification describes coating systems for use in coating of new steel bridge railing and miscellaneous structural steel items such as drop inlet grates and cattle guards, and field coating of new steel piling and other miscellaneous structural steel.

The coating systems consist of a polyurethane or an epoxy primer and a polyurethane topcoat.

The Contractor shall field repair all coatings damaged in shipping, handling, erecting, or from construction operations.

545.12 Coating Options. The primer shall be shop applied and the topcoat may be shop applied or field applied.

545.13 Terminology and Standards. Terminology used herein is in accordance with the definitions used in Volume 2, Systems and Specifications of the Steel Structures Painting Manual. Standards specified in the Steel Structures Painting Council Specifications (SSPC-SP) will be referenced by the SSPC-SP designation.

545.2 MATERIALS.

545.21 Coating System. Both coats of a selected system shall be supplied by a single manufacturer. The Contractor shall select a complete system.

545.211 Color. The color of the topcoat shall be aluminum or light gray, unless otherwise specified in the contract. If another color is specified in the contract, it shall be the Contractor's responsibility to select an approved system which is also available in the specified color.

545.22 Submittals, Certification, & Sampling. All applicable requirements of Subsection 544.22 Submittals & Certification, Subsection 544.221 Product Data Sheets, and Subsection 544.222 Sampling, shall apply.

545.23 Zinc Coatings. Position dowels and anchor bolts for bridge railing and bearings shall be mechanically galvanized in conformance with AASHTO M-298, Class 50, or hot-dip galvanized in conformance with AASHTO M-232. All portions of bearings not welded to the beam or girder and other structural members and parts required to be zinc coated shall be galvanized in accordance with AASHTO M-111. Fabricated bearing components shall be blast cleaned to remove all mill scale prior to galvanizing.

545.3 CONSTRUCTION REQUIREMENTS.

545.31 Surface Preparation. The Contractor shall remove all visible deposits of oil, grease or other contaminants from the surfaces to be coated by any of the methods specified in SSPC-SP 1 or by other methods approved by the Project Manager.

The Contractor shall then blast clean all surfaces to be coated in accordance with SSPC-SP 6, commercial blast cleaning.

All cleaning residue shall be removed from steel surfaces with a good commercial grade vacuum cleaner, or by double blowing. If the double blowing method is used the top surfaces of structural steel shall be vacuumed after the double blowing operations are completed.

Interiors of rail tubes shall also be blown free of blasting debris.

The steel shall then be kept dust free and primed within eight (8) hours after blast cleaning, unless otherwise authorized by the Project Manager.
Inspector.

If cleaned surfaces rust or are contaminated with foreign materials before coating is accomplished, they shall be recleaned by the Contractor, at no additional cost to the

Areas where field welding are required shall be masked prior to coating.

After the steel has been primed, it shall be cleaned again before applying the topcoat.

545.32 Mixing the Coating. The coating shall be mixed with a high shear mixer, such as a Jiffy Mixer, in accordance with the coating manufacturer's directions, to a smooth and lump-free consistency.

Mixing shall be done, as far as possible, in the original containers and shall be continued until all of the metallic powder or pigment is in suspension. Mixed primers shall be kept under continuous agitation up to and during the time of application.

545.33 Thinning Coatings. Thinning will not be allowed unless approved by the Inspector or Project Manager. If it is necessary to thin the coatings for proper application in adverse weather conditions, to coat intricate surfaces, or to obtain better coverage of the coatings, the thinning shall be done in accordance with the manufacturer's recommendations and using thinners supplied by the coating manufacturer.

545.34 Weather & Temperature Limitations. The coatings shall be applied only when the ambient air temperature and surface temperature of the steel are both above fifty degrees (50°) F and when the ambient air temperature and the temperature of the steel are at least five degrees (5°)F higher than the dew point.

The surface temperature of the steel and the ambient air temperature shall not be so hot as to cause blistering or porosity in the coatings.

Coatings shall not be applied when there is condensation or frost on the metal surfaces.

545.341 Relative Humidity. The coatings shall not be applied when the relative humidity is greater than ninety percent (90%).

545.35 Coating Applications. Application of coatings shall not be initiated until the surface preparation is inspected and approved by the Project Manager or the Project Inspector. The Inspector may waive such inspection.

All coating shall be done in a neat and workmanlike manner as described in SSPC-PA 1, producing a uniform, even coating which is firmly bonded to the underlying surface.

The Contractor shall pre-spray edges, welds, bends and other areas most likely to be under the minimum thickness requirements. Areas of primer or the total coating system which are deficient in thickness shall be repaired.

Coated areas of primer or topcoat exhibiting running, sagging or mud cracking shall be repaired according to the manufacturer's recommendations or as directed by the Project Manager.

The topcoat shall not be applied until the primer has fully cured.

The Contractor shall follow the manufacturer's recommendations for maximum time between coats. If more than thirty (30) days elapse between the application of the primer and the topcoat, the Contractor shall contact the manufacturer of that coating system, for recommendations for surface preparation prior to applying the topcoat.

Where requirements of the coating manufacturer differ from the requirements in this specification, the more stringent requirements shall apply.

All metal coated with impure, unsatisfactory, or unauthorized coating material, or coated in an unworkmanlike or objectionable manner shall be thoroughly cleaned and recoated or otherwise corrected as directed by the Project Manager.

The topcoat shall cover the prime coat thoroughly and uniformly without color variations, streaks, or blotches.

545.351 Required Coating of Components. Unless otherwise specified, the primer and topcoat shall be applied to all steel surfaces including the bottoms of rail post base plates, all surfaces of rail post anchor plates, and surfaces to be embedded in concrete, except for those surfaces to be in contact with elastomeric bearing pads or subject to sliding and rotational movements.

The full exposed lengths of new steel piling from the bottoms of the pier caps to two (2) feet below the finished grade or streambed elevations shall be coated.

(a) Coating of Sole Plates for Concrete Bridges. Sole plates for concrete bridges shall be delivered to the job site with one (1) coat of primer applied to all surfaces except for masked-off strips where the sole plates will be welded to the shoe plates of the prestressed beams and the surfaces to be in contact with elastomeric bearing pads.

Before installation, surfaces to be in contact with the pads shall be cleaned to SSPC-SP 6 requirements.

After installing the pads and welding the sole plates to the shoe plates, the Contractor shall touch up the primer and apply the topcoat to all exposed surfaces.

(b) **Coating of Galvanized Components.** Tie coats for galvanized components shall be applied in accordance with the recommendations of the coating manufacturer. The tie coats may be brushed.

Following the erection of the steel, galvanized hardware shall be topcoated.

545.352 Spray Equipment. The coatings shall be applied with the spray nozzles and at the pressures recommended by the manufacturer of the coating system.

545.353 Film Thickness Requirements. The required dry film thicknesses shall be as shown in table 545–B.

TABLE 545–B
REQUIRED FILM THICKNESSES

Coating	Dry Film Thickness Range, mils
Primer	2.0 to 4.0
Topcoat	3.0 to 6.0

Dry film thickness will be determined by the use of magnetic film thickness gages or electronic film thickness detectors.

545.36 Handling Steel. Newly coated structural steel shall not be handled or loaded until the coating(s) has thoroughly cured.

The fabricator and Contractor shall exercise care in handling coated structural steel during shipping, storage and erection.

The structural steel shall be stored on pallets at the job site, or by other means approved by the Project Manager, so it does not rest on the dirt and such that components do not rest or fall on each other.

Steel shall be insulated from binding chains by softeners approved by the Project Manager or the Project Inspector. Hooks and slings used for hoisting steel shall be padded. Parts shall be spaced during shipment in such a way that no rubbing occurs.

545.37 Provisions for Inspection. The Fabricator or Contractor shall notify the Project Manager at least three (3) working days in advance of any coating operation, to permit adequate time to plan inspection activities.

545.38 Field Repair. The Contractor shall field repair all coated areas of structural steel which are rusted or which show damage due to improper handling or other reasons. In preparation for repairs, all adhering dirt, grease, form oil and other undesirable material shall be removed by solvents or detergent, using methods approved by the Project Manager.

Large damaged, rusted or uncoated areas shall be blast cleaned to SSPC-SP 6 standards. Small areas with full-thickness damage shall be power tool cleaned using abrasive disks. On rusted or full-thickness damaged areas both coats of the system shall be applied.

Large areas shall be primed using spray equipment, brush or roller. Small areas shall be primed by brush. The topcoat may be sprayed or brushed.

Two (2) or more coats may be necessary to build up the required film thickness. On areas where only the topcoat is damaged only the topcoat need be applied.

The final finish shall be smooth, and uniform in appearance and color.

All requirements listed herein for inspection, mixing, thinning, temperature and humidity requirements, film thickness and applying the coatings shall apply to the repaired areas.

545.39 Protection of the Work & Public. During coating operations, all portions of structures not being coated shall be protected against blast cleaning operations, paint splatter, splashes, and smirches by protective covering or other methods approved by the Project Manager, however, the Contractor shall be responsible for all damage the coating operations cause to persons, vehicles or property.

545.4 METHOD OF MEASUREMENT & BASIS OF PAYMENT.

545.41 Unless otherwise provided, the furnishing, preparation and application of the coating system will be considered as included in the payment for the structural steel and no separate measurement or direct payment will be made therefor.

SECTION 602—SLOPE & EROSION PROTECTION STRUCTURES

602.1 DESCRIPTION.

602.11 This work shall consist of furnishing and placing riprap, gabions, sacked concrete revetment, concrete block revetment and other systems specified in the contract on the slopes of embankments and the sides and bottoms of channels, drain outlets, ditches and other locations shown in the contract. The work shall be performed in compliance with and to the lines, grades, dimensions and at the locations, shown in the contract.

The type(s) of slope protection structures to be furnished and placed shall be as specified in the contract.

602.2 MATERIALS

602.21 Classifications. Riprap will be classified as shown in Table 602-A. Riprap of the class specified and gabions shall meet the requirements shown.

At least eighty percent (80%) of the stones used shall meet the size requirements specified.

Stones less than the minimum dimension shown may be used only to fill the voids between stones. For riprap Class A and gabions stones smaller than the least dimension of the mesh openings shall not be used.

TABLE 602-A
RIPRAP CLASSIFICATIONS & GABION REQUIREMENTS

Class	Description	Stone Cubic Min.	Volume, Feet Max.	*Minimum Dimension, Inches
A	Wire Enclosed Riprap	1/6	2/3	4
B	Non-Enclosed Riprap	1	2	6
C	Non-Enclosed Riprap	2	4	9
D	Derrick Stone	14	27	12
E	Grouted Riprap	1/3	1	3
F	Grouted Riprap	1	2	6
G	Rock Plating	—	—	**4 to 8
n/a	Gabions	—	—	**4 to 8

*Minimum size in the least dimension.

**Seventy to eighty percent (70%–80%) of the stone shall be at least four (4) inches but not more than eight (8) inches in least dimension. The remainder of the stone shall be no larger than four (4) inches in any dimension.

602.22 Riprap.

602.221 Stone for Riprap. Stone to be used for riprap, except for riprap Class G, shall be rocks or rough quarry stone with a percent wear of not more than sixty (60) as determined by AASHTO T 96 and a soundness loss of not more than twenty one (21) as determined by AASHTO T 104 using a magnesium sulfate solution with a test duration of five (5) cycles.

602.222 Wire Mesh. The wire mesh shall be fabricated so as to be non-raveling and shall be furnished in such lengths and widths as to reduce the number of splices to a minimum. Wire mesh shall conform to the details shown in the contract. The composite wire mesh shall meet the testing requirements specified in Subsection 602.35 Wire Mesh Testing & Certification.

(a) **Wire.** Wire used in the wire mesh shall conform to the requirements of ASTM A 641 for soft hardness, and shall have a Class 3 zinc coating. The zinc coating shall be determined in accordance with ASTM A90.

Wire composing the mesh shall be 11¼ gage (0.118 inches in dia.) or larger.

(b) **Mesh Openings.** Openings of the mesh shall be uniform in size measuring not more than 4¾ inches in the largest dimension but must have at least one dimension of 3¼ or less.

(c) **Selvedge End Connectors.** Connectors (fasteners) for selvedge ends may be ties, clips, hog rings, or lacing wire. Only clips listed as approved on the Department's "Approved Product Listing" may be used.

Ties, clips, and hog rings shall be nine (9) gage (approx. 0.148 inches dia.) or larger. Hard drawn, twelve (12) gage (approx. 0.106 inches dia.) or larger, wire clips, having a method of closure such that the clips remain closed after installation, may be used in lieu of soft nine (9) gage wire. Hard drawn wire shall conform to the requirements of ASTM A 764 for galvanized MB, Type III.

Lacing wire shall be 13½ gage (approx. 0.092 inches dia.) or larger.

602.223 Stakes. Stakes shall be steel railroad rails, standard weight galvanized steel pipe, or steel angles.

Steel railroad rails shall have a unit weight of at least thirty (30) lbs. per yard.

Standard weight galvanized steel pipe shall be at least four (4) inches O.D.

Steel angles shall be at least four (4) by four (4) by ⅜ inches in dimension.

602.224 Grout. Portland cement, aggregate and water for grout shall conform to the the requirements of Section 510—Portland Cement Concrete.

602.23 Sacked Concrete Revetment. The sacked concrete revetment manufacturer must be listed as an approved vendor on the NMDOT's Approved Products Listing."

Bags of sacked concrete shall weigh between sixty (60) to eighty (80) pounds each, dry weight and shall contain between—to ⅔ cubic feet of concrete material.

Each bag shall contain a concrete mix of one (1) part cement to three (3) parts sand or a mix design shown in the contract or a mix design having first been approved by the Project Manager.

The concrete mix shall be capable of attaining a minimum compressive strength of 3,500 psi after twenty eight (28) days unless otherwise specified in the contract.

The sacked concrete shall be kept in dry storage at all times until application.

SECTION 623—DROP INLETS

623.1 DESCRIPTION.

623.11 This work shall consist of furnishing and installing drop inlets and junction boxes and adjusting existing drop inlets in compliance with the specifications and to the lines, grades and locations shown in the contract

623.2 MATERIALS.

623.21 Concrete shall be Class A and shall conform to the requirements of Section 510—Portland Cement Concrete.

Reinforcing steel shall conform to the requirements of Section 540—Steel Reinforcement.

Structural steel shall conform to the requirements of Section 541—Steel Structures.

Coatings for structural steel shall conform to the requirements of Section 545—Protective Coating of Miscellaneous Structural Steel.

Preformed expansion joint filler shall conform to the requirements of AASHTO M 213.

623.3 CONSTRUCTION REQUIREMENTS.

623.31 Drop inlets shall be constructed in accordance with the applicable provisions of Section 511—Concrete Structures, Section 540—Steel Reinforcement and Section 541—Steel Structures.

The drop inlets and junction boxes may be precast units or cast in place. If precast units are supplied they must be of a design and type preapproved by the Bridge Design Section and must be listed on the NMDOT "Approved Products Listing."

The Contractor shall raise the existing drop inlets by removing the top six (6) inches of the existing structure and reconstructing as shown in the contract. Adjustments will be paid for under the appropriate concrete and steel items.

623.32 Foundation Requirements. Drop inlets and junction boxes shall be placed on foundations compacted to at least 100 percent of maximum density, in accordance with Section 207—Subgrade Preparation.

Where unstable material is encountered in foundations, the unstable material shall be removed and replaced with structurally adequate material as approved by the Project Manager.

623.33 Backfilling. Backfilling shall be performed in accordance with Section 206—Excavation and Backfill for Culverts and Minor Structures.

623.34 Coating of Structural Steel. Structural steel for drop inlets shall be coated in accordance with the requirements of Section 545—Protective Coating of Miscellaneous Structural Steel.

623.4 METHOD OF MEASUREMENT.

623.41 Drop inlets will be measured by the unit per each

Junction boxes will be measured by the unit per each.

623.5 BASIS OF PAYMENT.

623.51 Drop inlets will be paid for at the contract unit price per each

Junction boxes will be paid for at the contract unit price per each

Payment will be made under:

Pay Item	Pay Unit
Median Drop Inlet, Type I, _____' to _____'	Each
Median Drop Inlet, Type _____	Each
Modified Median Drop Inlet, Type _____	Each
Curb Drop Inlet Type _____- _____, to _____'	Each
Curb Drop Inlet Type _____- _____, Over _____'	Each
Drop Inlet Type _____, _____ to _____'	Each
Drop Inlet Type _____, Over _____'	Each
Transverse Drop Inlet Type _____, _____' to _____'	Each
Transverse Drop Inlet Type _____, Over _____'	Each
Junction Box	Each

623.52 Work Included in Payment. The following work and items will be considered as included in the payment for the main items and will not be measured or paid for separately:

Subgrade preparation; Replacement of unsuitable foundation material; Excavation and backfilling for drop inlets; and, Coating of structural steel; reinforcing steel; and structural steel.

(a) **Packaging.** Sacks used for concrete riprap shall be made of jute, cotton, or scrim reinforced paper and shall be completely biodegradable and capable of holding the sand-cement mix without significant leakage

The sack material shall be permeable and shall permit passage of sufficient water to ensure complete hydration of the concrete mix.

Paper sacks shall be made of non-asphaltic, three (3) layer laminated paper reinforced with polyester fiber scrim. Paper sack perforations shall be uniform and offset in the three (3) layer bag to prevent the dry cement from escaping

Only one (1) type and size of sack shall be used throughout the project unless otherwise shown in the contract.

(b) **Portland Cement.** Portland cement shall conform to the requirements of Section 510—Portland Cement Concrete.

(c) **Aggregate.** Aggregate shall conform to the requirements of Section 510—Portland Cement Concrete for fine aggregate.

(d) **Steel Anchorage.** Steel staples shall conform to the requirements of Section 540—Steel Reinforcement and shall be epoxy coated or shall be galvanized in accordance with ASTM A 123.

602.24 Concrete Block Revetment. Concrete block revetment products must be listed as approved in the NMDOT's "Approved Products Listing" before incorporation into the work.

Concrete block revetment shall be of the type and size shown in the contract.

Concrete block units shall have a minimum compressive strength of 3,000 psi, unless otherwise shown in the contract, and shall be compatible with drainage geotextile(s) (filter fabrics) used in conjunction with this work.

602.25 Gabions.

602.251 Stone for Gabions. Rock used in constructing gabions shall meet the quality requirements in accordance with Subsection 602.221 Stone for Riprap and the requirements of Subsection 602.21 Classifications.

602.252 Wire Mesh For Gabions. Wire mesh and connectors for gabions shall meet the requirements of Subsection 602.222 Wire Mesh.

602.26 Drainage Geotextiles. Drainage geotextile(s) (filter fabric) shall conform to the requirements of Section 604—Soils & Drainage Geotextiles., and the requirements shown in the contract.

602.3 CONSTRUCTION REQUIREMENTS.

602.31 General Placement Requirements. Slope and erosion protection structures shall be constructed in accordance with the details shown in the contract or established by the Project Manager.

Riprap stones shall be placed to form a continuous blanket of the minimum thickness shown in the contract. Stones shall be placed with their long axis parallel to the toe of the slope and such that they have stable bearing upon the underlying soil or stones.

The joints between the larger stones shall be as close as practicable and shall be chinked with smaller stones except when Class E or F (grouted) riprap is called for.

The finished surface of the riprap shall not vary more than three (3) inches from the designated slope, except that derrick stone riprap shall not vary more than eight (8) inches from the designated plane.

Unless otherwise specified, the foundation course shall be placed in a trench excavated to a depth of two (2) feet below the toe of the slope of the embankment or side of channel.

A layer of drainage geotextile (filter fabric) shall be placed at the interface between all slope and erosion protection structures and the supporting soil or backfill material or placed as shown in the contract. Slope and erosion protection structures shall be placed in a manner which will not tear or otherwise damage the geotextile.

602.311 Grouted Riprap Placement. Voids in grouted riprap shall be completely filled with grout for the full thickness of the riprap. After the grout is placed, the surface of the riprap shall be swept with a stiff broom.

Grout shall be protected from freezing for at least four (4) days after placement.

Grouted riprap placed in hot, dry weather shall be cured in accordance with the requirements of Subsection 511.39 Curing.

(a) Proportioning & Mixing Grout. Grout used in riprap shall consist of one (1) part portland cement and three (3) parts fine aggregate by volume. The cement and fine aggregate shall be mixed with water to a thick workable consistency.

602.312 Class A Riprap Placement. The stones in Class A (wire enclosed) riprap shall be enclosed on all sides with wire mesh. The wire mesh shall be drawn tightly against the stone on all sides. Edges of wire mesh may be connected using approved fasteners or lacing wire, but shall be double loop woven to adjacent edges at least once with lacing wire to ensure that strength and flexibility at the point of connection is equal to or greater than that of the mesh.

Lacing shall be continuous as far as is practicable and shall pass through each mesh opening. Where splicing is necessary, an overlap of lacing of at least one (1) foot shall be provided.

Galvanized wire ties to connect the top and bottom layers of mesh shall be spaced approximately two (2) feet on centers and shall be anchored to the bottom layer of wire fabric, extended through the rock layer, and tied securely to the top layer of wire fabric. When indicated in the contract, wire enclosed riprap shall be anchored to the slopes by steel stakes driven through the riprap into the embankment. Stakes shall be spaced as shown in the contract.

602.32 Sacked Concrete Revetment Placement. Placement of sacked concrete revetment shall conform to the details and requirements shown in the contract or as directed by the Project Manager. Sacked concrete revetment shall be placed within a tolerance of 0.2 feet of the established grade and slope.

Unless otherwise specified, the foundation course shall be placed in a trench excavated to a depth of two (2) feet below the toe of the slope of the embankment or side of channel. The remaining courses shall be placed as shown in the contract and shall be

placed in a manner such that sack ends and steel staple anchors in succeeding courses are staggered

Each row of sacks shall be tamped sufficiently to round out the bags, eliminate wrinkles, minimize voids and prepare an even surface for the next row

The Contractor shall place and compact the backfill behind each row of sacked concrete revetment before placing the next row The method of compaction shall be as approved by the Project Manager. Backfill adjacent to the bags shall be free of large stones and jagged objects.

Sacked concrete revetment shall be anchored using steel staples Anchoring shall be done in such a manner so as not to damage the bags excessively All bags damaged to the point that the integrity of the bag is compromised, will be rejected and shall be replaced at no additional cost.

After placement of sacked concrete revetment, the Contractor shall wet it thoroughly and keep it moist for at least three (3) days unless otherwise directed by the Project Manager.

602.33 Concrete Block Revetment Placement. Concrete block revetment systems shall be constructed in strict accordance with the manufacturer's recommendations and the details shown in the contract.

Slopes shall be prepared by removing all obstructions and by filling voids with approved material or by contouring slopes so that sudden or sharp variations in contour are eliminated.

602.34 Gabions. Gabions shall be supplied in the dimensions shown in the contract. Gabion dimensions are subject to a tolerance limit of plus or minus five percent ($\pm 5\%$) of manufacturer's stated sizes.

602.341 Assembly of Gabion Baskets. Gabions shall be fabricated so that the sides, ends, lids and diaphragms can be assembled at the construction site into rectangular baskets of the specified sizes. Gabions shall be of single unit construction.

Where the length of the gabion exceeds one and one half ($1\frac{1}{2}$) times the horizontal width, the gabion shall be equally divided by diaphragms composed of the same mesh as the body of the gabions, into cells whose length does not exceed the horizontal width. The gabion shall be furnished with the necessary diaphragms secured in proper position on the base section so that no additional tying at this juncture will be necessary.

Perimeter edges shall be securely selvaged or bound so that the joints formed by tying the selvages have strength equal to or greater than that of the body of the mesh.

Perimeter edges of the gabion baskets and diaphrams shall be assembled using approved fasteners or lacing wire. Fasteners, other than lacing wire, shall be placed in each mesh opening. Lacing shall be done by double looping tightly through every other mesh opening.

In all cases gabions shall be assembled by either:

1. Double looped lacing twice; or,
2. Connected with approved fasteners and then double looped lacing once

602.342 Foundation Preparation. The top six (6) inches of the gabion foundation shall be leveled and compacted to at least ninety five percent (95%) of maximum density. Density requirements will be determined by AASHTO T 99 and field densities will be determined by AASHTO T 205.

602.343 Placement of Gabion Baskets. Assembled, empty gabion baskets shall be set into position as shown in the contract or directed by the Project Manager. To ensure proper alignment gabion stretching shall be effected in a manner approved by the Project Manager. Each unit shall be securely wired to adjacent units along the top and vertical edges prior to placing the stone.

602.344 Placement of Gabion Stone. The aggregate shall be placed to eliminate as many open pockets as possible in equal lifts of nine (9) inches to twelve (12) inches depending on the desired finished gabion height. In order to minimize local deformations, gabions shall be filled in stages and shall not be filled to a height exceeding one (1) foot more than an adjoining gabion. Stone at exposed surfaces shall be hand placed to provide an aesthetic appearance.

Cross connecting wires shall be provided on gabions whose cells are eighteen (18) inches in height or greater. These cross connecting wires shall be inserted directly above each lift of stone in a manner shown in the contract or as directed by the Project Manager. Two (2) connecting wires in each direction for each lift, shall be equally spaced horizontally and tightly tied through two (2) mesh openings at opposite faces of each gabion cell.

Gabions shall be filled in a manner which will result in minimum of voids or bulges and which will provide the proper alignment and will give the gabion a neat, square appearance.

After filling the gabion lid shall be bent over and shall be tightly bound to the perimeters and diaphragms in accordance with Subsection 602.341 Assembly of Gabion Baskets.

Gabions having poor alignment or construction will be rejected and shall be reconstructed at no additional cost to the Department.

602.345 Gabion Marking. Each gabion shall be clearly marked by color code or some other readily identifiable means to indicate size.

602.35 Wire Mesh Testing & Certification. A section of wire mesh, six (6) feet by three (3) feet minimum, shall have the ends securely clamped for three (3) feet along the width of the sample. When the width of the section under test exceeds three (3) feet, the clamps shall be placed at the center of the width and the excess width shall be allowed to fall free on each side of the clamped section.

602.351 Elongation Test. The clamped sample shall be subjected to tension sufficient to cause ten percent (10%) elongation of the length of the sample.

To be acceptable, after elongation, the diameter of individual wire strands shall not be reduced to values less than those for similar wire one (1) gage smaller in diameter. Additionally, the tested mesh sample shall not exhibit breakage of any individual wire strand nor shall the integrity of the sample have been impaired.

602.352 Rupture Test. After elongation and while clamped and otherwise unsupported, the section shall be subjected to a 6000 pound load applied in the approximate center of the sample section between the clamps and in a direction perpendicular to the direction of the tension force. The ram head used in the test shall be circular, not more than 13 5 inches in diameter and shall have its edges beveled or rounded to prevent cutting of the wire strands

To be acceptable, the sample shall withstand the applied load without rupture of any strand.

602.353 Non-Raveling Test. Wire mesh shall be tested for non-raveling properties by having a single wire strand of mesh cut and then subjecting the section of mesh to the elongation test as described herein.

To be acceptable, the mesh shall be able to resist pulling apart at any of the twists or connections forming the mesh or other unraveling under these conditions.

602.354 Certification. The Contractor shall furnish certified test reports made by an independent testing laboratory indicating that a sample of the same manufacture as the product to be supplied, equals or exceeds these specifications.

602.4 METHOD OF MEASUREMENT

602.41 Riprap, except Class G, will be measured by the cubic yard.

Riprap Class G will be measured by the square yard.

Sacked concrete revetment will be measured by the cubic yard.

Concrete block revetment will be measured by the square yard.

Gabions will be measured by the cubic yard.

602.42 Measurement of riprap will be based on the thickness shown in the contract and the area measured on the surface of the riprap.

Measurement of concrete block revetment will be based on the area measured on the surface of the revetment.

Measurement of gabions will be based on basket dimensions shown in the contract.

602.5 BASIS OF PAYMENT.

602.51 Riprap, except Class G, will be paid for at the contract unit price per cubic yard.

Riprap Class G will be paid for at the contract unit price per square yard.

Sacked concrete revetment will be paid for at the contract unit price per cubic yard.

Concrete block revetment will be paid for at the contract unit price per square yard.

Gabions will be paid for at the contract unit price per cubic yard.

Payment will be made under:

Pay Item	Pay Unit
Riprap Class _____	Cubic Yard
Riprap Class G	Square Yard
Sacked Concrete Revetment	Cubic Yard
Concrete Block Revetment	Square Yard

SLOPE & EROSION PROTECTION STRUCTURES

Gabions ..... Cubic Yard

602.52 Work Included in Payment. The following work and items will be considered as included in the payment for the main item(s) and will not be measured or paid for separately:

Excavation, backfilling and disposal of material required for placement of slope and erosion protection structures.

Stakes and steel staples required. Drainage geotextile(s)