ENVIRONMENTAL RESTORATION PROJECT

A Department of Energy
Environmental Cleanup Program

LA-UR-02-4013
July 2002
ER2002-0280

Addendum II to the RFI Work Plan and Sampling and Analysis Plan for Potential Release Sites 53-002(a) and 53-002(b) and Associated Piping and Drainages at TA-53

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List of Acronyms and Abbreviations

AP	administrative procedure
AH	auger hole
BH	borehole
CAA	Clean Air Act
COPC	chemical of potential concern
CS	confirmatory sample
CWA	Clean Water Act
DOE	US Department of Energy
DQO	data quality objective
EPA	US Environmental Protection Agency
EQL	estimated quantitation limit
ER	environmental restoration
ERDB	ER Project database
FEHM	finite element heat and mass transfer
FIMAD	Facility for Information Management, Analysis, and Display
HSWA	Hazardous and Solid Waste Amendments of 1984
IA	interim action
IWP	Installation Work Plan
LANL	Los Alamos National Laboratory
LIR	Laboratory [LANL] Implementation Requirement
NFA	no further action
NMED	New Mexico Environment Department
NOD	notice of deficiency
PCB	polychlorinated biphenyl
PID	photoionization detector
PRS	potential release site
QAPP	Quality Assurance Project Plan
Qbt 2	unit 2 of the Tshirege Member of the Bandelier Tuff
QC	quality control

QP	quality procedure
RFI	RCRA facility investigation
RLWS	radioactive liquid waste system
RSI	request for supplemental information
SAP	sampling and analysis plan
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
TA	technical area
TAL	target analyte list
TSCA	Toxic Substances Control Act
TSD	treatment, storage, and disposal
VOC	volatile organic compound

1.0 INTRODUCTION

This addendum (addendum II) describes the sampling and analysis activities necessary for determining the extent of contamination remaining at potential release site (PRS) 53-002(a)-99, the surface impoundments at technical area 53 (TA-53). [See Figures 1.0-1 and 1.0-2 for the location of TA-53 within Los Alamos National Laboratory (LANL) and the location of the surface impoundments within TA-53.]

PRS 53-002(a)-99 consists of PRS 53-002(a) (two northern surface impoundments) and PRS 53-002(b) (one southern impoundment). It is located near the southeastern boundary of TA-53 (Figure 1.0-3). The surface impoundments were part of the TA-53 radioactive liquid waste system (RLWS) and were used for the holding and decay of radioactively contaminated wastewater from 1970 to 1998.

The original "RFI [RCRA Facility Investigation] Work Plan and SAP [Sampling and Analysis Plan] for Potential Release Sites 53-002(a) and 53-002(b) and Associated Piping and Drainages at TA-53" (from this point forward referred to as "the work plan") (LANL 1998, 58841.2) was designed to determine the nature and extent of contamination to a predetermined depth of 15 ft below the surface impoundments (derived from predicted depths accessible by hand augering equipment). It was not meant to completely define the extent of contamination at the site. This addendum to the work plan provides the sampling plan for collecting and analyzing soil and tuff samples in order to determine the extent of contamination at the site. Once samples have been collected and analyzed, the data will be used to determine if contamination at the site has been reduced to levels that are protective of human health and the environment.

A no further action (NFA) decision is anticipated for this site because the interim actions (IAs) performed in 2001 and 2002 removed contaminated media within the impoundments that presented a potential health risk based on both industrial and residential scenario screening assessments (see risk target levels in section 1.1).

This addendum is organized as follows:

- Section 1.1 presents PRS descriptions and history, section 1.2 describes previous field investigations, and section 1.3 contains the regulatory framework for the investigation.
- Section 2.1 and section 2.2 describe the scope and objectives.
- Section 3.0 presents the investigative approach and data quality objectives (DQOs), the previous data collected, and the conceptual model for the TA-53 surface impoundments based on the current understanding of the existing data and data gaps.
- Section 4.0 reviews the proposed sampling activities.
- Section 5.0 reviews the sampling and analysis procedures to be used when collecting the required data.
- Section 6.0 reviews project management.
- Section 7.0 contains the references.

For the sake of completeness and clarity, note that the first addendum to the work plan contained the proposed sampling plan for the underground storage tanks and waste lines, PRSs 53-006(a,b,c,d,e), that were connected to the RLWS which flowed to the three surface impoundments (LANL 1998, 59997.2).

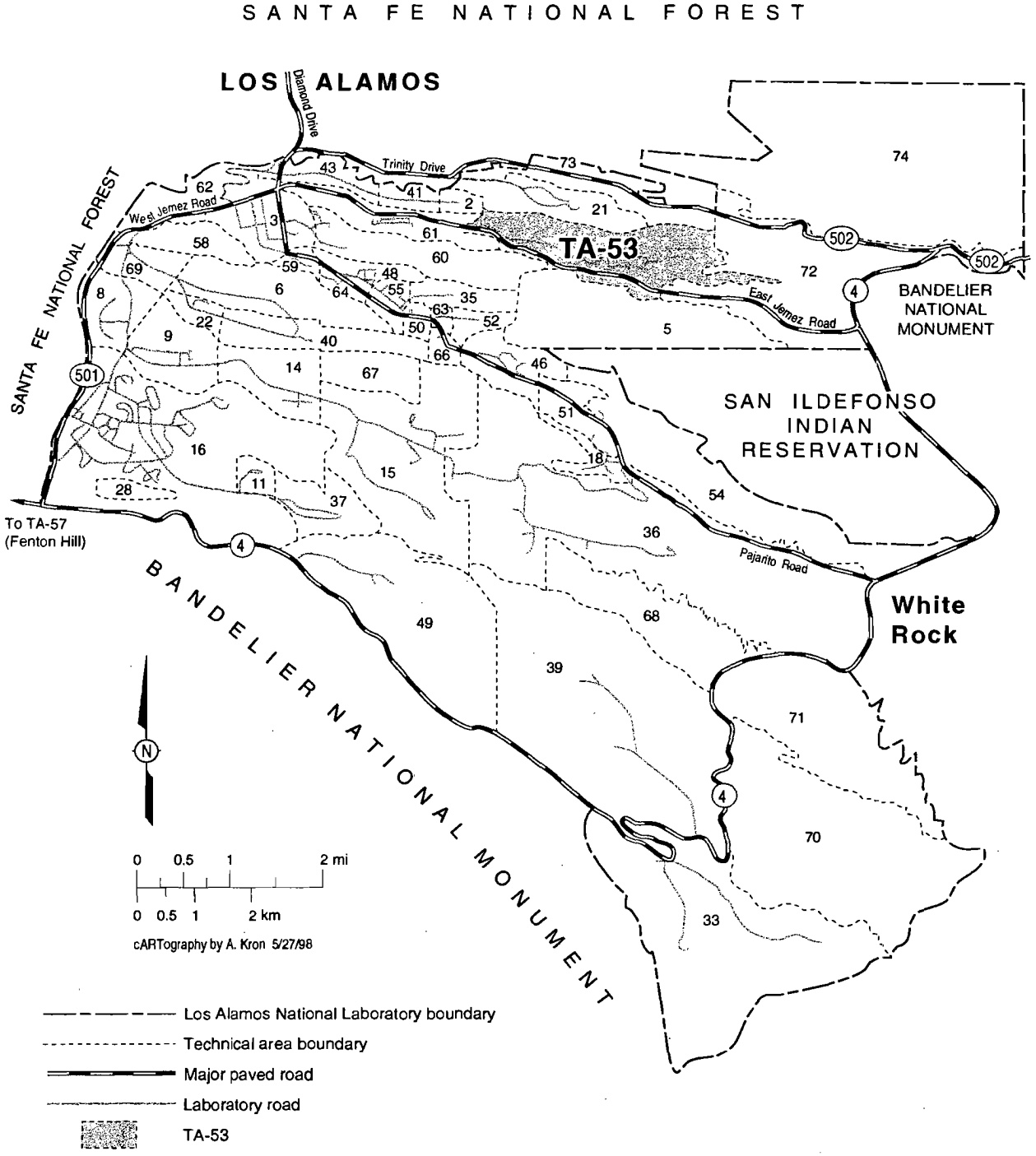


Figure 1.0-1. Los Alamos National Laboratory technical areas

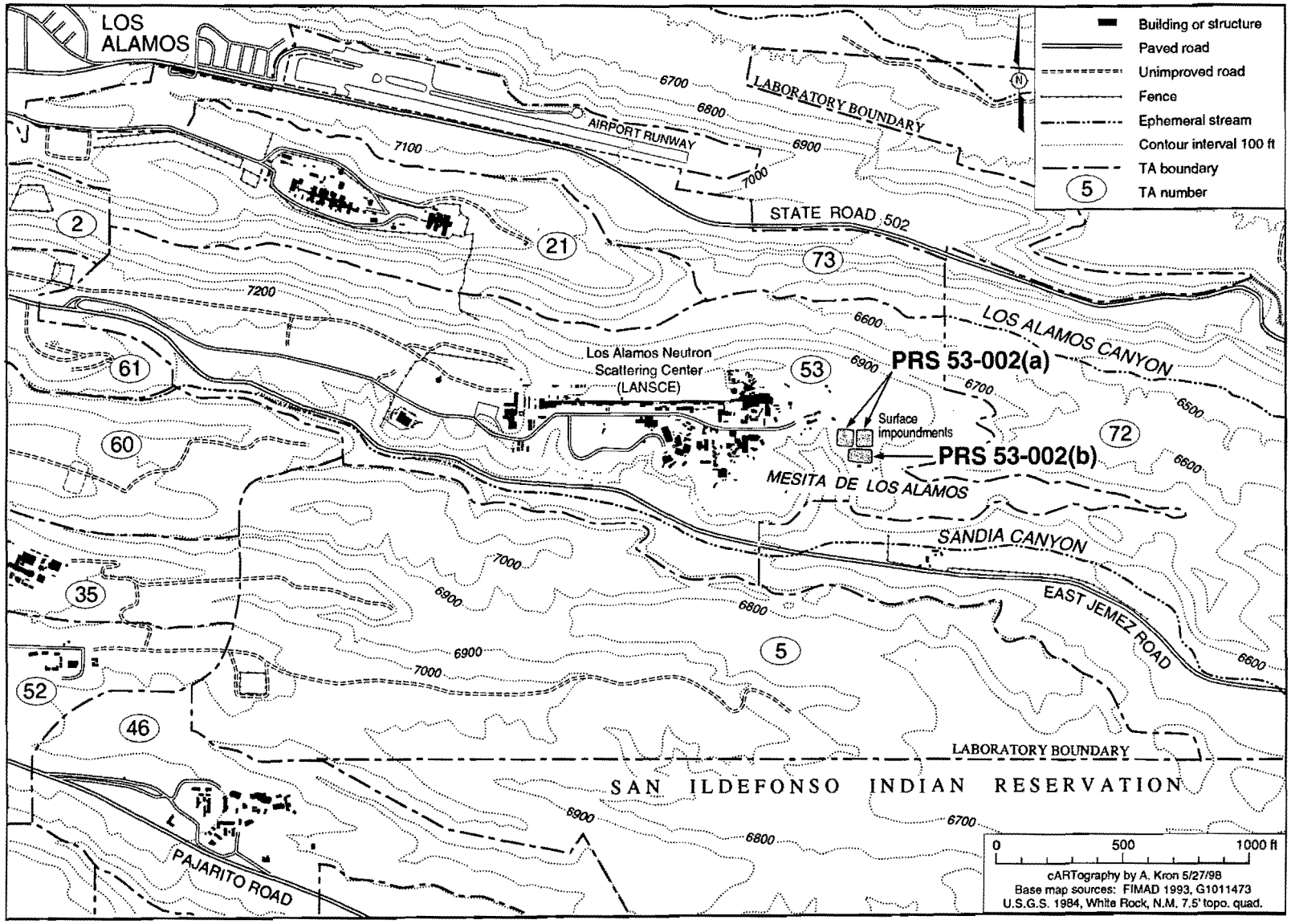


Figure 1.0-2. Topographic map showing surface impoundments at TA-53

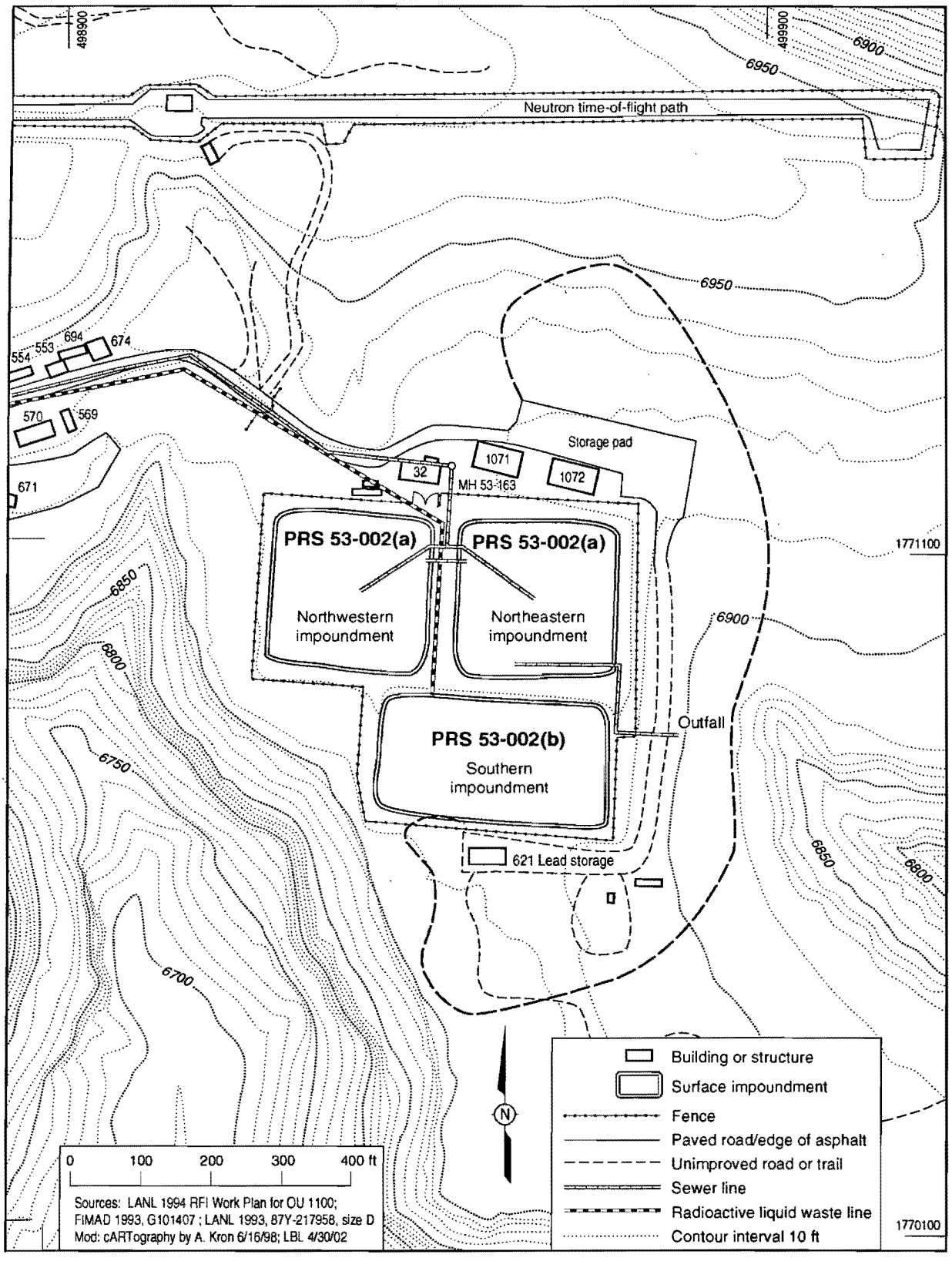


Figure 1.0-3. Current configuration of the TA-53 surface impoundments

1.1 PRS Descriptions and History

Consolidated PRS 53-002-99 consists of PRSs 53-002(a) and 53-002(b). PRS 53-002(a) itself consists of two northern surface impoundments designed to hold a combined total of 3.2 million gal. of sanitary and radioactive liquid wastewater from various TA-53 facilities. The northern surface impoundments were used from 1970 to 1992 as holding ponds for biodegradation, evaporation, and natural radionuclide decay. Radioactive wastewater was diverted from the northern surface impoundments to the new southern surface impoundment when it came online in 1985.

The northern impoundments were constructed by excavating into the tuff, adding a clay liner on top of the tuff, and spraying gunite (concrete) onto the crushed tuff berm. Effluent was released from the northern surface impoundments to a tributary of Los Alamos Canyon from 1978 to 1993 via an outfall to the east of the lagoons (see Figure 1.0-3).

The southern surface impoundment received excess sanitary wastewater from the northern impoundments through 1989 and radiological wastewater through 1998. It was designed to hold 2.5 million gal. and was constructed by excavating into tuff, overlaying the area with crushed tuff and sand, and then overlaying that with a Hypalon (rubber polymer) liner. Although the southern surface impoundment was constructed with an effluent discharge pipe to Los Alamos Canyon, the discharge pipe was plugged and no effluent was ever discharged.

In two separate field campaigns (one in 1994/1995 and one in 1999/2000), the ER Project collected samples from within and around the northern surface impoundments to characterize the nature and extent of contamination. The southern surface impoundment was also sampled in 1999/2000. Assessment of the data from samples collected within the dried sludge from the northern and southern impoundments and the clay liner of the northern impoundments determined that the concentrations of radionuclides surpassed the human health target levels of 15 mrem/yr dose, set by the US Department of Energy (DOE), and that carcinogenic chemicals surpassed the 10^{-5} cancer risk level, set by the New Mexico Environment Department (NMED) (LANL 2001, 71352). Therefore, the Laboratory proposed IAs to reduce the potential contaminant risk/dose to acceptable levels.

The IAs consisted of removing sludge from the three impoundments and removing the clay liner from the northern impoundments. Sludge was removed from the southern impoundment in 2000. The sludge and clay liner were removed from the northern two impoundments in May/June 2002. The data presented in this second addendum do not include any sample data from the removed material. The data included for assessment come only from tuff around and below the impoundments, or from soil and tuff from the outfall area.

1.2 Previous Field Investigations

1.2.1 1994/1995 Sampling Campaign

In 1994/1995, the ER Project conducted sampling at the northern surface impoundments to (1) assess the nature of the contamination, and (2) determine if contaminants were migrating into the subsurface. Samples of the sludge, the bentonite clay liner, the tuff below the bentonite liner, and the tuff below the gunite liner around the periphery were collected from the northern surface impoundments. Detections of chemicals located within the tuff (only) below the excavated liner are also presented in this second addendum to support the data gap summary (Appendix B).

Sample locations for the 1994/1995 sampling of tuff below the liner are shown in Figure 2.2-1. The list of samples taken during the 1994/1995 sampling campaign was presented in the work plan (LANL 1998, 58841.2).

The 1994/1995 samples—those taken for contaminants located within the tuff below the excavated liner—were used in the current data assessment to bound extent of contamination (see Appendix A). Appendix B presents the detected concentrations for those samples.

The 1994/1995 data for the northern impoundments indicated that the extent of contamination for most COPCs (with the exception of tritium) could be determined within a 12-ft depth. According to the NMED's notice of deficiency (NOD) (LANL 1999, 65120) regarding the work plan, a 15-ft depth within all surface impoundments was required as the maximum for the investigation due to the limited capabilities of the proposed sampling methods (i.e., hand and/or power augering). The historic drainage pathways associated with PRS 53-002(a) were also sampled to determine the lateral extent of contaminant migration.

Assessment of the 1994/1995 data indicated that the extent of contamination was not yet defined. Also, some of the data collected in 1994/1995 were of questionable quality, especially the polychlorinated biphenyl (PCB) data collected from the northern surface impoundments. It was also unknown what percentage of chromium VI made up the total chromium concentrations based on the 1994/1995 data. In addition, no sampling plan had been written or implemented for the southern surface impoundment.

1.2.2 1999/2000 Sampling Campaign

In 1998, the work plan (LANL 1998, 58841.2) was prepared for all three surface impoundments to collect samples needed to define extent-of-contamination to a 15-ft depth within all surface impoundments and up to a 29-ft depth around the perimeter of the surface impoundments. This work plan was implemented in 1999/2000. Samples were collected at depth beneath the liners to assess the movement of contaminants through the vertical profile and to determine extent of contamination for most contaminants.

Sample locations for the 1999/2000 sampling campaign are also shown in Figure 2.2-1. The list of samples taken during the 1999/2000 sampling campaign is presented in Appendix A. Appendix A does not include any samples from the removed material. Appendix B presents the detected concentrations for those samples.

1.3 Regulatory History

Before 1997, PRSs 53-002(a) and (b) were considered treatment, storage, and disposal (TSD) units regulated under RCRA. An interim status closure plan was submitted on February 12, 1993. On July 21, 1997, in response to a request from LANL, the Hazardous and Radioactive Materials Bureau (HRMB) of NMED approved a change in status for the TA-53 surface impoundments and added these units as PRSs 53-002(a) and 53-002(b) to Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 01585). RCRA activities at these PRSs after 1997 have been conducted in accordance with the Hazardous and Solid Waste Amendments of 1984 (HSWA)

Although radionuclides are not regulated under RCRA, they are regulated under DOE Order 5400.5, "Radiation Protection of the Public and the Environment" (proposed rule 58 FR 16268). Because it is more efficient and cost-effective to investigate all types of potential contamination during a single site characterization, this addendum addresses radiochemical concerns for PRS 53-002(a)-99.

Guidance for the ER Project's overall approach to site investigation, as well as the general history of the Laboratory, is available in the ER Project's draft "Installation Work Plan [IWP] for Environmental Restoration Project" (LANL 2000, 66802). The draft IWP contains the ER Project's Quality Assurance Project Plan (QAPP), which describes the requirements for personnel training; sample handling and custody; and data management review, validation, and verification. When appropriate, this addendum will reference the quality procedures (QPs) and standard operating procedures (SOPs) included in the QAPP. The documents referenced in this second addendum are available from the ER Project Reference Library and the Laboratory's public reading room.

2.0 OBJECTIVES AND SCOPE (HISTORIC AND CURRENT)

2.1 Objectives

2.1.1 1998 Work Plan Objective

The 1998 work plan (LANL 1998, 58841.2) investigation focused on determining if the surface impoundment liners (both the clay and Hypalon liners) prevented contaminants from migrating to subsurface media. The migration of contaminants was determined by sampling beneath and around the impoundments to the underlying material (sand and tuff) at various depths below both liners and around the perimeter of the surface impoundments.

The work plan was designed to answer the following questions:

- What is the nature, extent, and concentration of contaminants in the media (sludge, clay liner, sand layer, and underlying tuff [to a 15-ft depth]) associated with the three TA-53 surface impoundments and in the sediment of the drainage pathways leading from PRS 53-002(a)?
- What is the extent of historical transport or potential for future mobility, and what is the potential for down-canyon or vertical transport of contaminants into the vadose zone or the sediment in the side canyons of Los Alamos Canyon and Sandia Canyon?
- Do concentrations of potentially persistent bioaccumulators or other contaminants pose a potential unacceptable risk to ecological or human receptors?
- Do the sampling results of the investigation indicate that [best management practices] BMPs, either temporary or permanent, or interim measures may be needed to mitigate contaminant transport or reduce unacceptable risks? (LANL 1998, 58841.2, pp. 1-6 and 1-8)

In addition, the work plan stated, "The data collected from implementing this [work plan] and the data collected during the 1994/1995 sampling campaign will be used two ways: to determine the extent (to a 12 ft depth) of contamination and to conduct both baseline human health risk and ecological screening assessments. Baseline human health and/or ecological risk assessment(s) may be conducted with these data for these PRSs and their area of influence. If the extent is defined and the data indicate that human health and ecological risks are negligible, and groundwater/surface water contamination do not constitute a risk, no further action (NFA) will be proposed for this site" (LANL 1998, 58841.2, p. 1-8). (Note that *12 ft* was changed to *15 ft* by a subsequent NOD and NOD response.)

2.1.2 Addendum II Objective

The objective of this addendum is to confirm that the residual levels of contamination at the site do not pose unacceptable risk to human health and the environment by presenting a SAP designed to

- define extent of tritium present at the site within and around the impoundments by verifying the tritium model described in this document;
- define extent of other contaminants within and around the impoundments; and
- define verification sampling for the IAs, following removal of the sludge and liners.

The area of the site is approximately 7 acres; therefore, the design of a SAP demands consideration of the spatial scale. Although the extent of contamination may not be defined at every data point within and around the impoundments, by considering the data set as a whole, it is the objective of this plan to define extent of contamination with a few strategically placed boreholes for sample collection.

2.2 Scope

The best way to outline the scope of this addendum is to describe the original scope and to continue where it left off. The following paragraphs present an overview of what the 1998 work plan scope of work accomplished and what is still needed to complete the RFI for this site. Figure 2.2-1 displays the 1994/1995 and 1999/2000 sampling locations.

2.2.1 Overview of Previous and Currently Proposed Sample Collection and Analyses for PRS 53-002(a), Northern Surface Impoundments

In 1999/2000, the sludge, bentonite clay liner, and underlying tuff of the northern surface impoundments that comprise PRS 53-002(a) were sampled. Samples of all media types were collected from locations within the northwestern and northeastern surface impoundments as in the 1994/1995 ER Project sampling campaign. Samples were collected for PCB analyses from the sludge, clay liner, and at one depth interval into the tuff (underlying the clay liner). In addition, the tuff of both northern surface impoundments was sampled at two depth intervals and analyzed for semivolatile organic compounds (SVOCs), PCBs, target analyte list (TAL) metals, and for gamma-emitting isotopes, tritium, isotopic plutonium, and strontium-90. Ten percent of the samples were analyzed for chromium VI.

The resulting sludge and clay liner data indicated a potential human health risk for site workers exposed to contaminants (LANL 2001, 71352). In 2002, an IA was performed to remove the sludge and clay liner.

Ten confirmatory surface samples are proposed in this second addendum. Samples will be collected and analyzed from newly exposed tuff to complete the IA. In addition, to fill data gaps, samples are to be collected from depths of 30- and 50-ft at two locations (one in each impoundment) and analyzed for cobalt-60, strontium-90, and phthalates. (See section 4.0 for proposed sample collection details and figures.)

Figure 2.2-1. Sample locations for the 1994/1995 and 1999/2000 sampling campaigns

2.2.2 Overview of Previous and Currently Proposed Sample Collection and Analyses for PRS 53-002(b), Southern Surface Impoundment

In 1999/2000, the southern impoundment was sampled in a two-step process:

1. Sludge within the impoundment was collected to characterize the media. Sludge samples were collected and submitted for volatile organic compounds (VOCs), SVOCs, PCBs, reactive cyanide and sulfide, and TAL metals analyses. Radionuclide analyses were performed to detect tritium, isotopic uranium, isotopic plutonium, strontium-90, and gamma-emitting isotopes. Additionally, 10% of samples were analyzed for chromium VI, organochlorine pesticides, and chlorinated herbicides.

2. Once the sludge was removed, the sand layer (underneath the Hypalon liner) and three depth intervals of underlying tuff were sampled. Samples were also collected from within the berm surrounding the southern surface impoundment. Except for reactive cyanide and sulfide, the sand, tuff, and berm samples were analyzed for the same constituents as the water and sludge.

The resulting sludge data indicated a potential human health risk for site workers exposed to contaminants. In 2000, an IA was performed within the southern impoundment to remove the sludge and Hypalon liner.

During the 2002 IA, additional material was removed from the southern impoundment. Three confirmatory surface samples are proposed in this second addendum to verify the IA remediation. They are to be collected and analyzed from newly exposed tuff to complete the IA. (See section 4.0 for proposed sample collection details and figures.)

2.2.3 Overview of Previous and Currently Proposed Sample Collection and Analyses for Lateral Extent Around the Three Surface Impoundments

In 1999/2000, the soil/tuff surrounding the outer perimeter of the three surface impoundments was sampled to determine the lateral extent of contamination. Samples were collected from locations at three depth intervals. All soil/tuff samples were submitted for VOCs, SVOCs, PCBs, and TAL metals analyses. Radionuclide analyses was performed to detect tritium, isotopic uranium, isotopic plutonium, strontium-90, and gamma-emitting isotopes. Additionally, 10% of these samples were analyzed for chromium VI, organochlorine pesticides, and chlorinated herbicides.

The resulting data indicated data gaps for cobalt-60, strontium-90, phthalates, PCBs, and tritium contamination beyond a 15-ft depth. The proposed borehole locations and data collection described below will also be used to bound contamination southwest of the northern surface impoundments, in the Sandia Canyon tributary area, and in the influent line and discharge areas described in section 4.2.

Seven boreholes and two auger holes will be placed within and around the perimeter of the three surface impoundments to bound extent of contamination where needed. The auger holes will be bored to a depth of 6 ft to bound strontium-90 and phthalates not bounded in 1999/2000. The boreholes will be drilled to depths ranging from 50 to 300 ft to bound contaminants. Based on the tritium model discussed in section 3.4 of this second addendum, three of the seven boreholes will be placed at locations around the impoundments and drilled to depths of 200 ft to bound tritium contamination. In addition, one borehole will be placed between the three impoundments and drilled to a depth of 300 ft to bound tritium contamination. (See section 4.0 for proposed sample collection details and figures.)

2.2.4 Overview of Previous and Currently Proposed Sample Collection and Analyses for Influent Pipes and Discharge Lines

Soil samples were collected in 1999/2000 from underneath, and adjacent to, the influent pipes and discharge lines into the lagoons. Samples were collected in the sand bedding layer adjacent to and beneath the pipe. All pipe bedding material and tuff samples were submitted for VOCs (for samples below 6 in.), SVOCs, PCBs, and TAL metals analyses. Radionuclide analyses were performed to detect tritium, isotopic uranium, isotopic plutonium, strontium-90, and gamma-emitting isotopes. Additionally, 10% of the samples were analyzed for chromium VI, organochlorine pesticides, and chlorinated herbicides.

Two (BH1 and BH2) of the seven boreholes described in section 4.0 will capture data needed to bound radiochemical contaminants and phthalates not bounded in 1999/2000. BH1 and BH2 will be drilled to 50-ft depths. (See section 4.0 for proposed sample collection details and figures.)

2.2.5 Overview of Previous Sample Collection and Analyses for PRS 53-002(a), Decommissioned Outfall Area

Samples from the outfall area were collected at the surface, the soil/tuff interface, and the first interval (0–6 in.) below the soil/tuff interface. All samples were submitted for VOCs (for samples below 6 in.), SVOCs, PCBs, and TAL metals analyses. Radionuclide analyses were performed to detect tritium, isotopic uranium, isotopic plutonium, strontium-90, and gamma-emitting isotopes. Additionally, 10% of the samples were analyzed for chromium VI, organochlorine pesticides, and chlorinated herbicides.

BH3 will define extent for the upper portion of the outfall area. Any additional sampling data from, or cleanup activities completed in, the outfall area will be reported in the future TA-53 RFI report.

3.0 INVESTIGATIVE APPROACH

3.1 DQOs

The DQOs for this second addendum are the same as those first presented in the work plan (LANL 1998, 58841.2). The primary DQO is to obtain data sufficient to support a final risk-management decision about the site. To this end, data must either (1) demonstrate that residual contamination at the site does not, and will not, pose a potential unacceptable risk to human health or the environment without further action; or (2) determine what final action must be taken to meet this objective.

The qualitative evaluation of the existing data set indicates that additional data are needed for determining the vertical and lateral extents of contamination beneath the site. This information is needed for conducting an assessment of the potential for risk from contaminants in the future. Since tritium is the most mobile of the contaminants of concern, it will be used as a "tracer" to bound the vertical and lateral extents of subsurface contamination. A groundwater transport model was used to estimate the maximum possible migration of tritium at the site. The results were used to site supplemental sampling boreholes in regions of the subsurface that are *not* expected (based on the model) to be contaminated, thereby bounding the extent of subsurface contaminant transport.

The initial step of the DQO process was to compile existing information about the northern and southern surface impoundments. After assembling and evaluating the existing data, a conceptual site model was developed to demonstrate potential release and transport mechanisms, address contaminant concentrations, identify viable exposure pathways, and define the boundaries of the PRS. The conceptual site model describes the media receiving contaminants, the fate and transport of releases to

environmental media, and the exposure pathways to be used in the human health risk assessment. To further confirm the conceptual model, tritium has been chosen as an indicator contaminant for assessing the subsurface transport under the surface impoundments.

3.2 Nature and Extent of Contamination

The nature (types) of contamination were defined in the work plan (LANL 1998, 58841.2) and confirmed in the data assessments; therefore, no data gaps remain regarding the nature of contamination.

As for extent of contamination, a preliminary evaluation of the data was conducted with the 1994/1995 and 1999/2000 data to determine if any data gaps were present. Sampling results that reported radionuclides, inorganic chemicals above background, and detected organic chemicals were plotted on maps and color-coded for depth ranges. For each analyte, a visual qualitative assessment was conducted to determine if the vertical and lateral extent of contamination had been defined. Analytes that had several sample locations with detected concentrations that did not display a decreasing trend in concentration either vertically and/or laterally were identified. Those analytes were then plotted for spatial analysis. Extent of tritium, cobalt-60, cesium-134, strontium-90, phthalate, and PCB contamination has not been adequately defined below the impoundments or the berm surrounding the impoundments. The frequency-of-detects tables from the combined 1994/1995 and 1999/2000 existing data for media other than sludge or clay liner are presented in this section.

Figures 3.2-1 through 3.2-17 present the current understanding of extent for those contaminants listed above. The figures show what contaminants remain at depth. The illustrations for cobalt-60 (see Figures 3.2-1 through 3.2-5), strontium-90 (see Figures 3.2-6 through 3.2-10) and tritium (see Figures 3.2-11 through 3.2-15) are broken up by sampling depths: 0 ft (surface sample), > 0–1 ft, >1–9 ft, 10–20 ft, and greater than 20 ft. Each depth is represented by a unique symbol. The detected or non-detected concentration for every sample location is presented parenthetically in pCi/g for radionuclides. Non-detects are denoted by a *U* after the concentration. Detects are shown in red; non-detects are shown in green. As with cobalt-60, the extent has not been adequately defined for cesium-134. Also, because the detected values of cesium-134 are collocated with those of cobalt-60, no cesium-134 figures are presented here. Extent figures for cesium-134 would look similar to the cobalt-60 figures, and the analytical method for both cesium-134 and cobalt-60 are the same. There were fewer overall detects for the non-radionuclide analytes, so only the detected concentrations are displayed in the figure for aroclor-1254 (see Figure 3.2-16) and the phthalates (see Figure 3.2-17). Each sampling depth is shown in brackets following the concentration. The two phthalates are distinguished by different symbols: bis(2-ethylhexyl)phthalate is denoted with a red flag; di-n-butylphthalate is denoted with a red circle. The concentration units are ppm.

3.3 Data Gaps

Using frequency-of-detects tables, in conjunction with spatial analysis of the data in ArcView 3D, data gaps within the tuff were noted for determining vertical and lateral extent below and around the impoundments. In general, to define extent means to observe a decreasing trend in contamination (in this case, from sludge to liner, from liner to subsurface tuff, and from tuff directly below the liner to tuff at a 15-ft depth). However, the sludge and liner have been removed as part of an IA, so the data currently being considered comes only from tuff. In some cases, only one depth of tuff at a particular location has data.

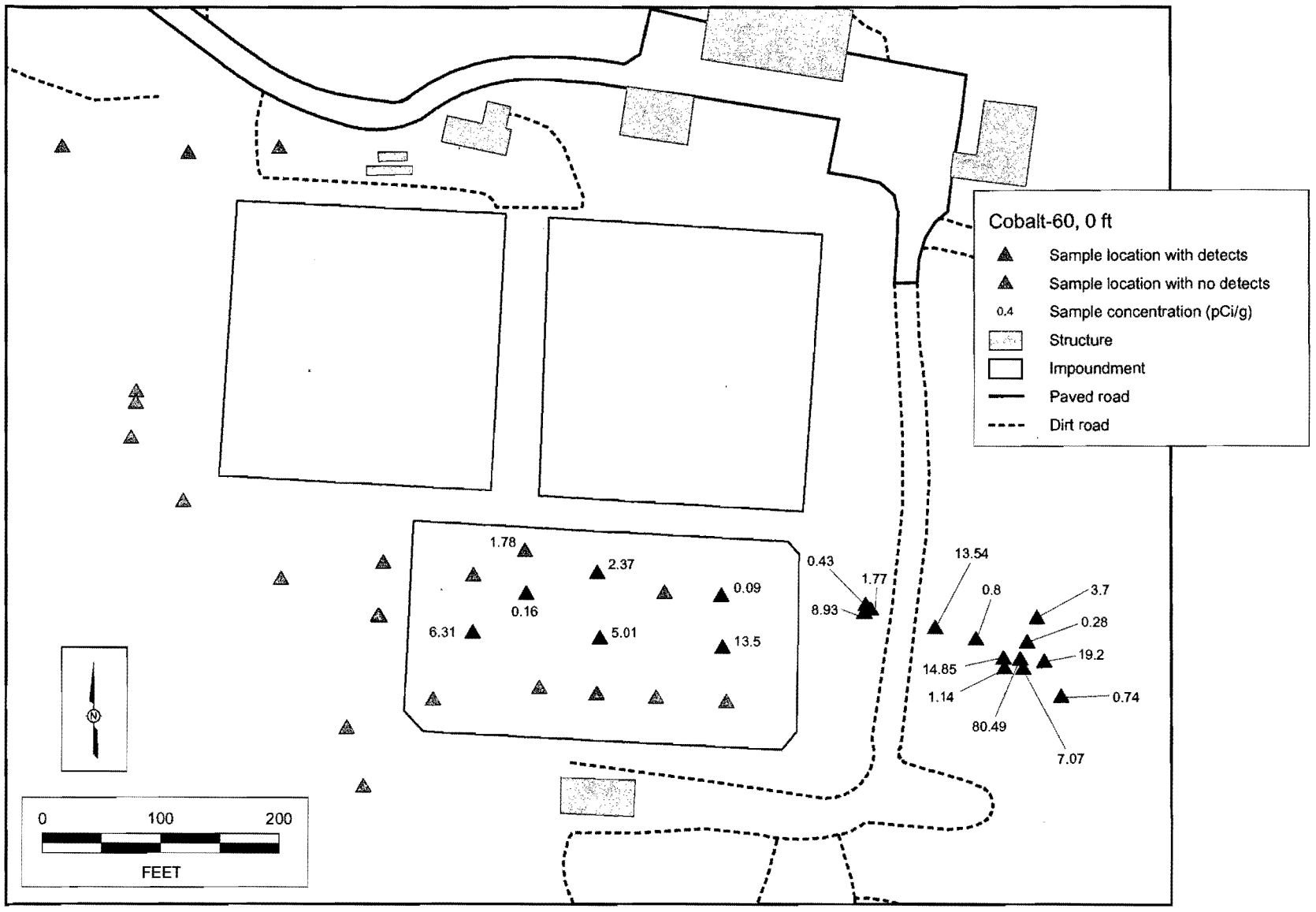
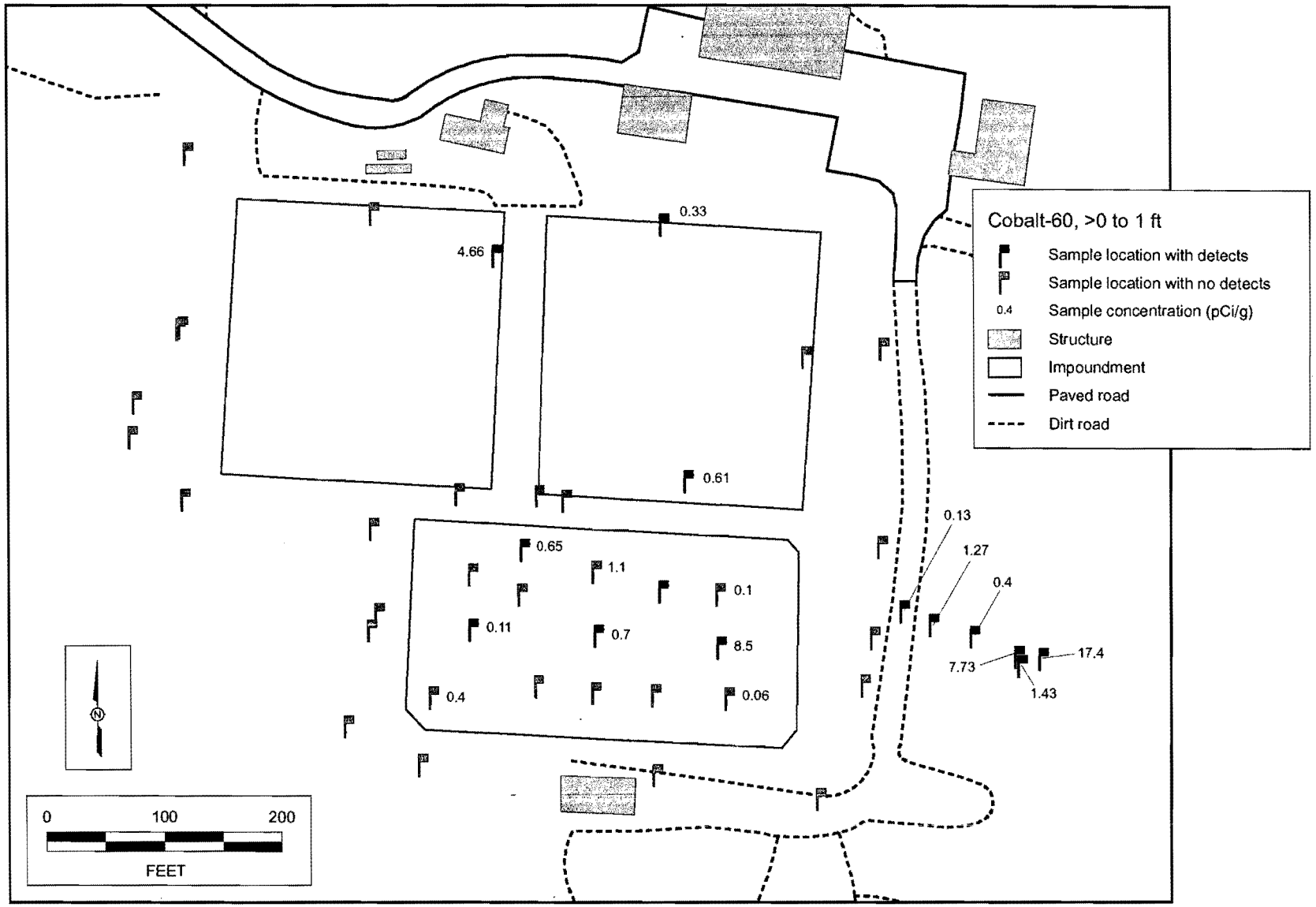
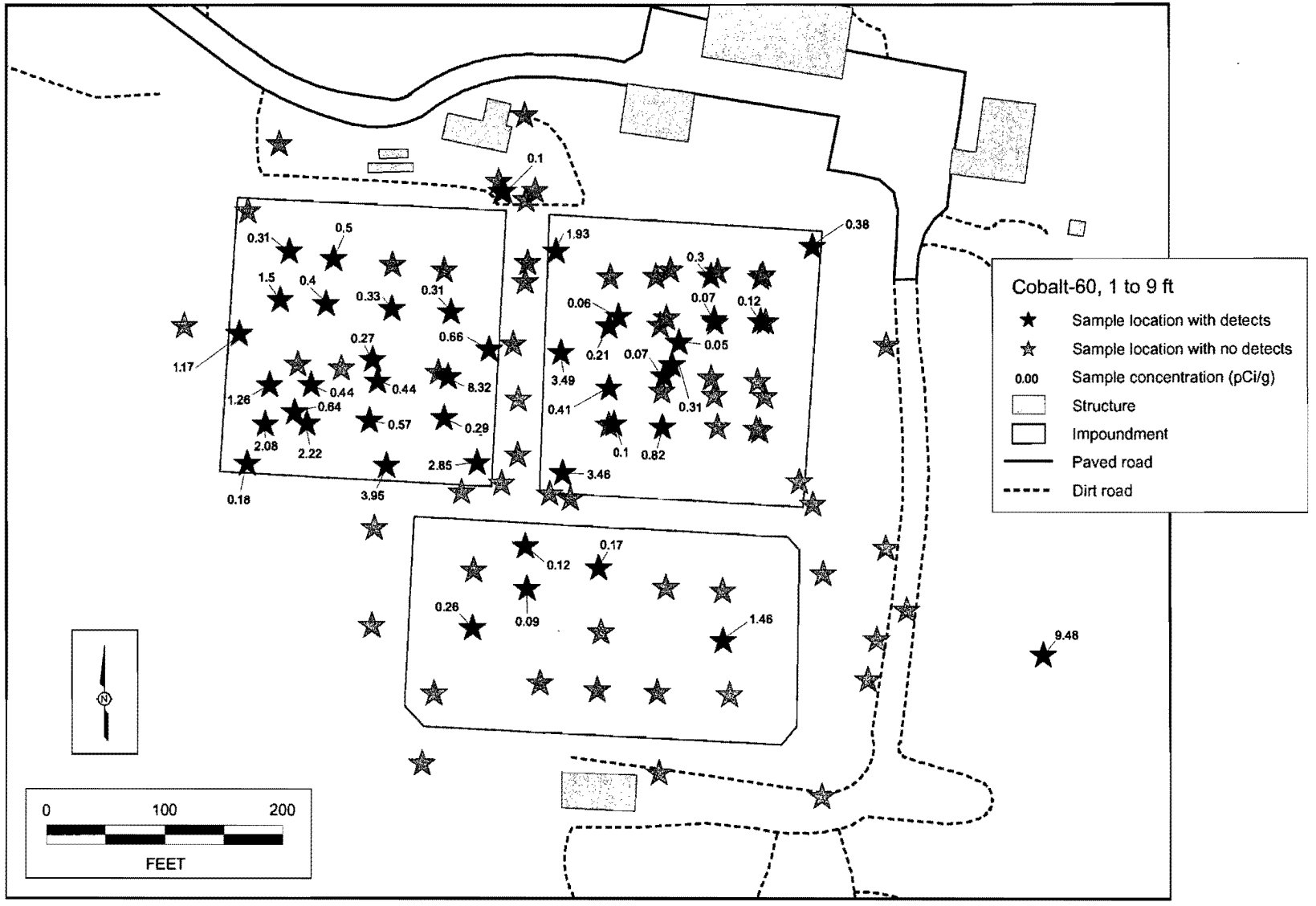


Figure 3.2-1. Cobalt-60 at 0-ft



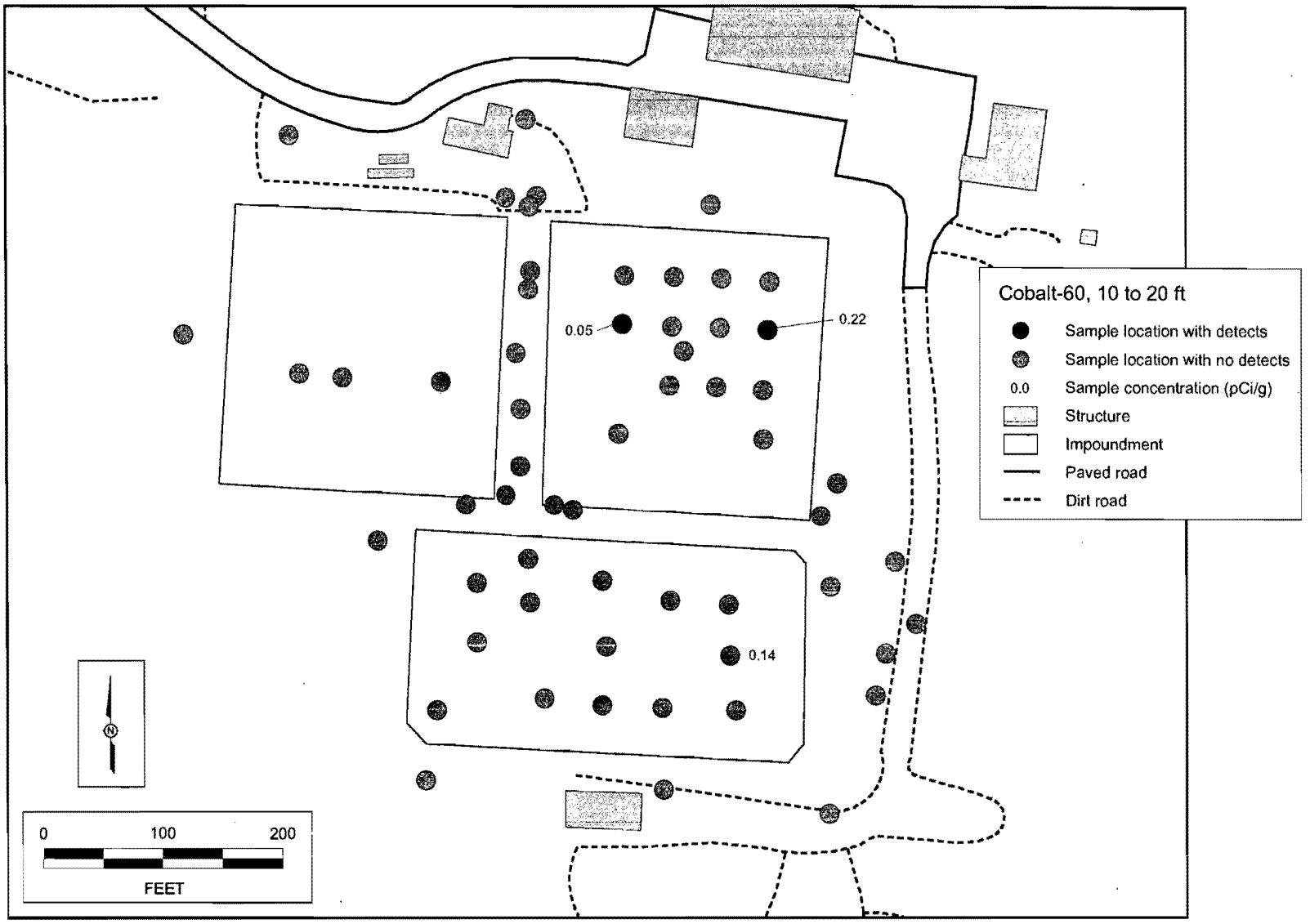
Source: FIMAD_VCA 53-002(a,b) Add II_Co-60, >0 to 1 ft _071502_lcf

Figure 3.2-2. Cobalt-60 at greater-than-0- to 1-ft depths



Source: FIMAD_VCA 53-002(a,b) Add II_Co-60, 1 to 9 ft _070902_lcf

Figure 3.2-3. Cobalt-60 at 1- to 9-ft depths



Source: FIMAD_VCA 53-002(a,b) Add II_Co-60, 10 to 20 ft _070902_lcf

Figure 3.2-4. Cobalt-60 at 10- to 20-ft depths

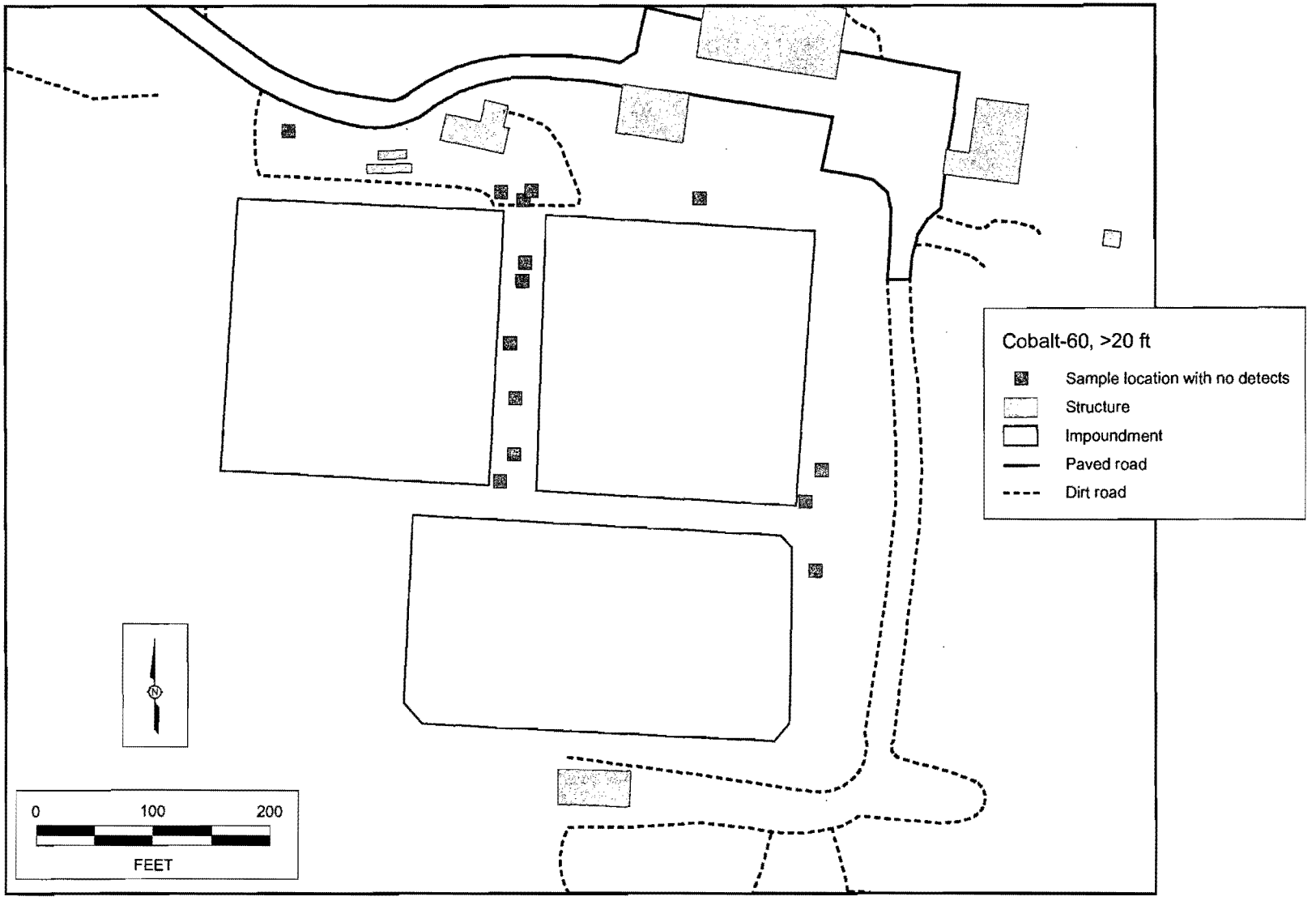
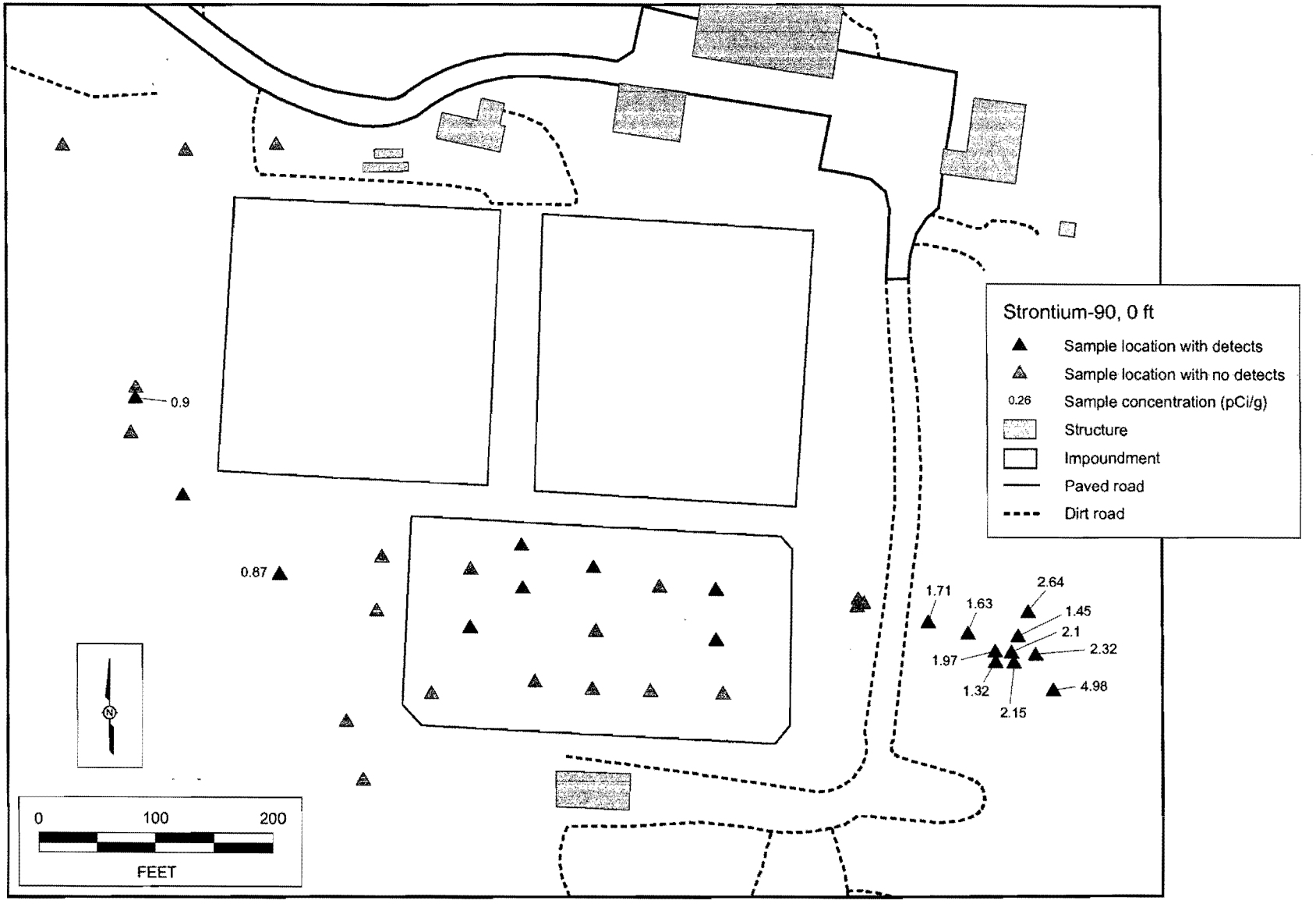


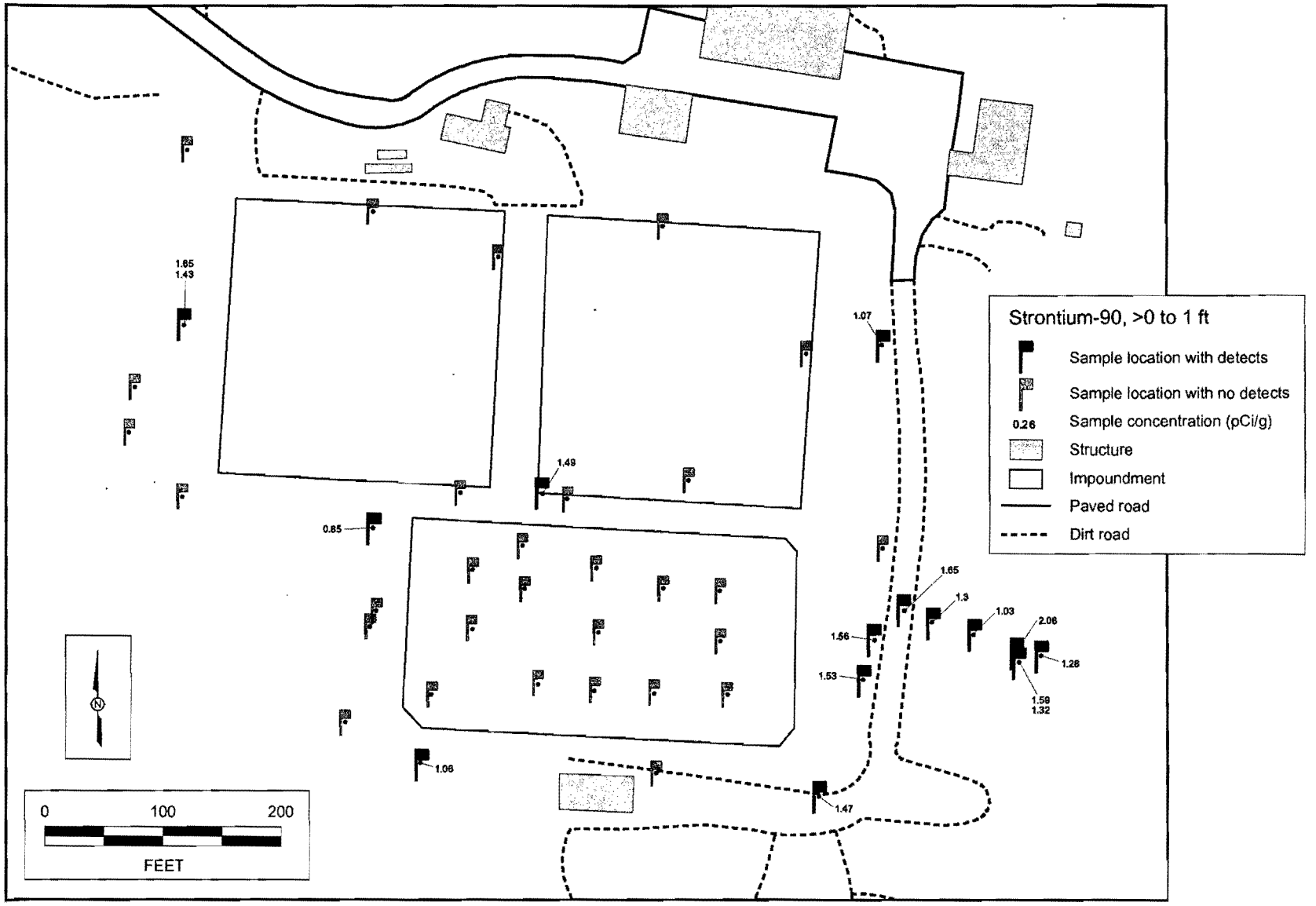
Figure 3.2-5. Cobalt-60 at depths greater than 20 ft

Source: FIMAD_VCA 53-002(a,b) Add II_Co-60, >20 ft _071102_lcf



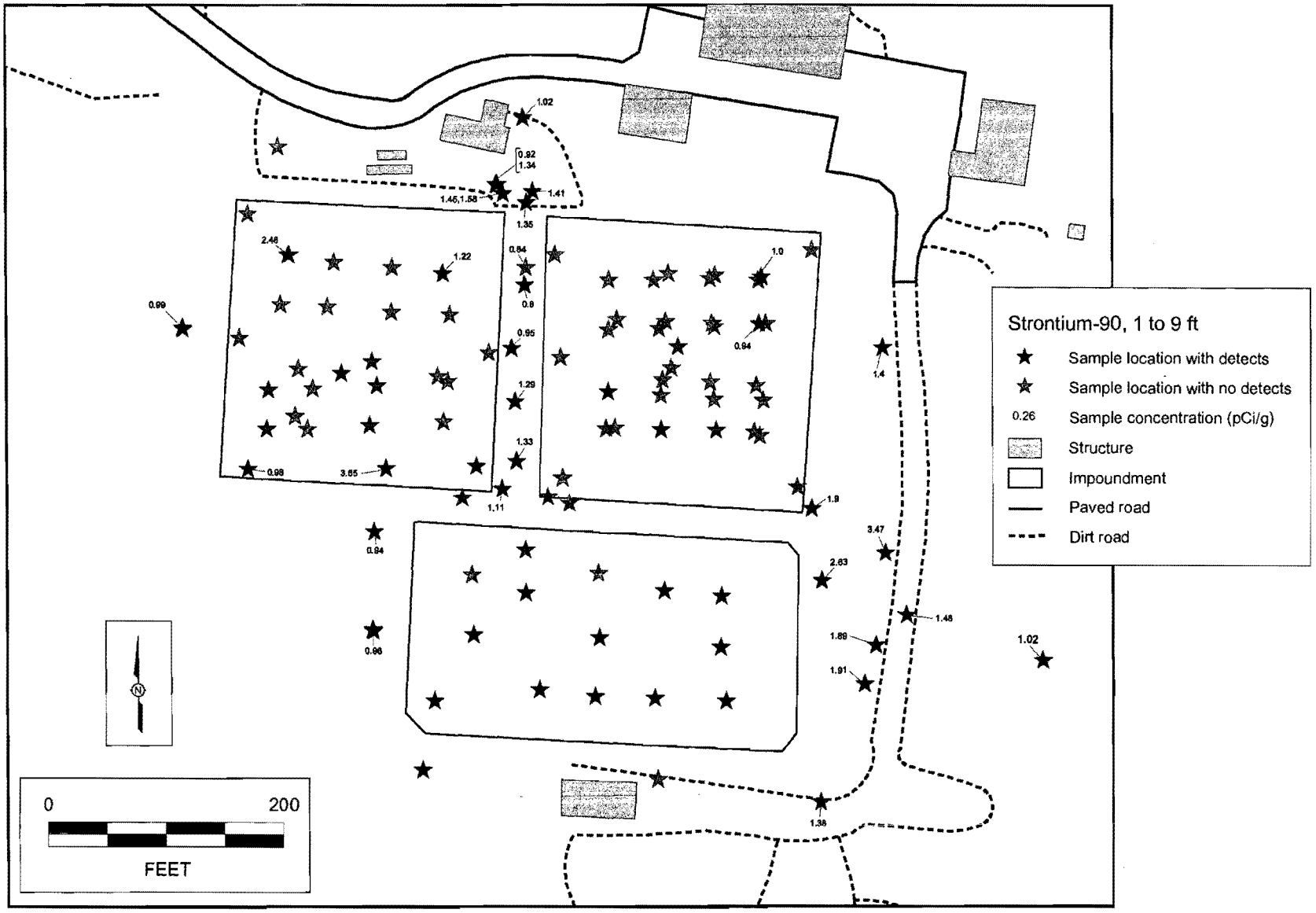
Source: FIMAD_VCA 53-002(a,b) Add II_Sr-90, 0 ft _070902_lcf

Figure 3.2-6. Strontium-90 at 0 ft



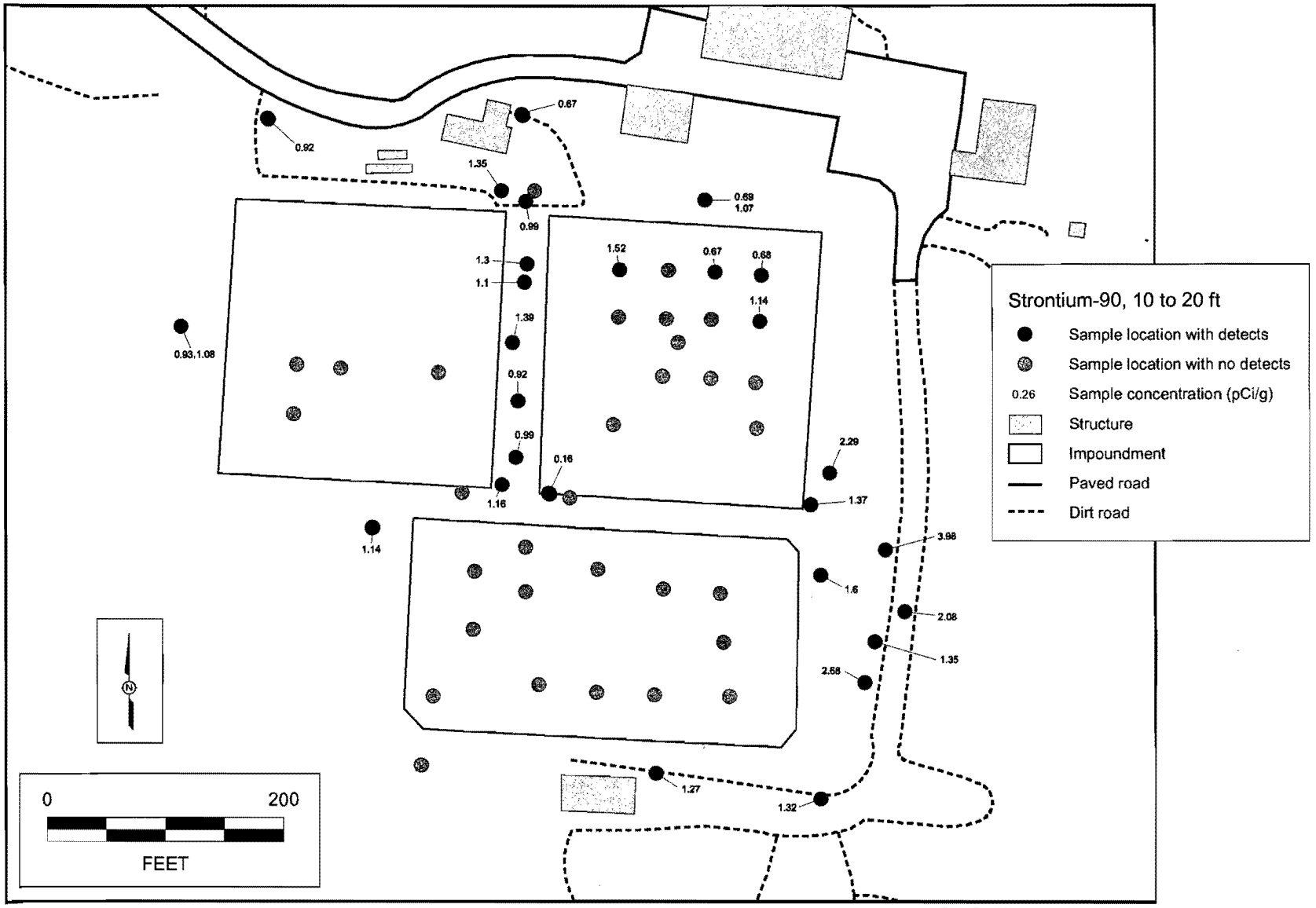
Source: FIMAD_VCA 53-002(a,b) Add II_Sr-90, >0 to 1 ft _071102_lcf

Figure 3.2-7. Strontium-90 at greater-than-0- to 1-ft depths



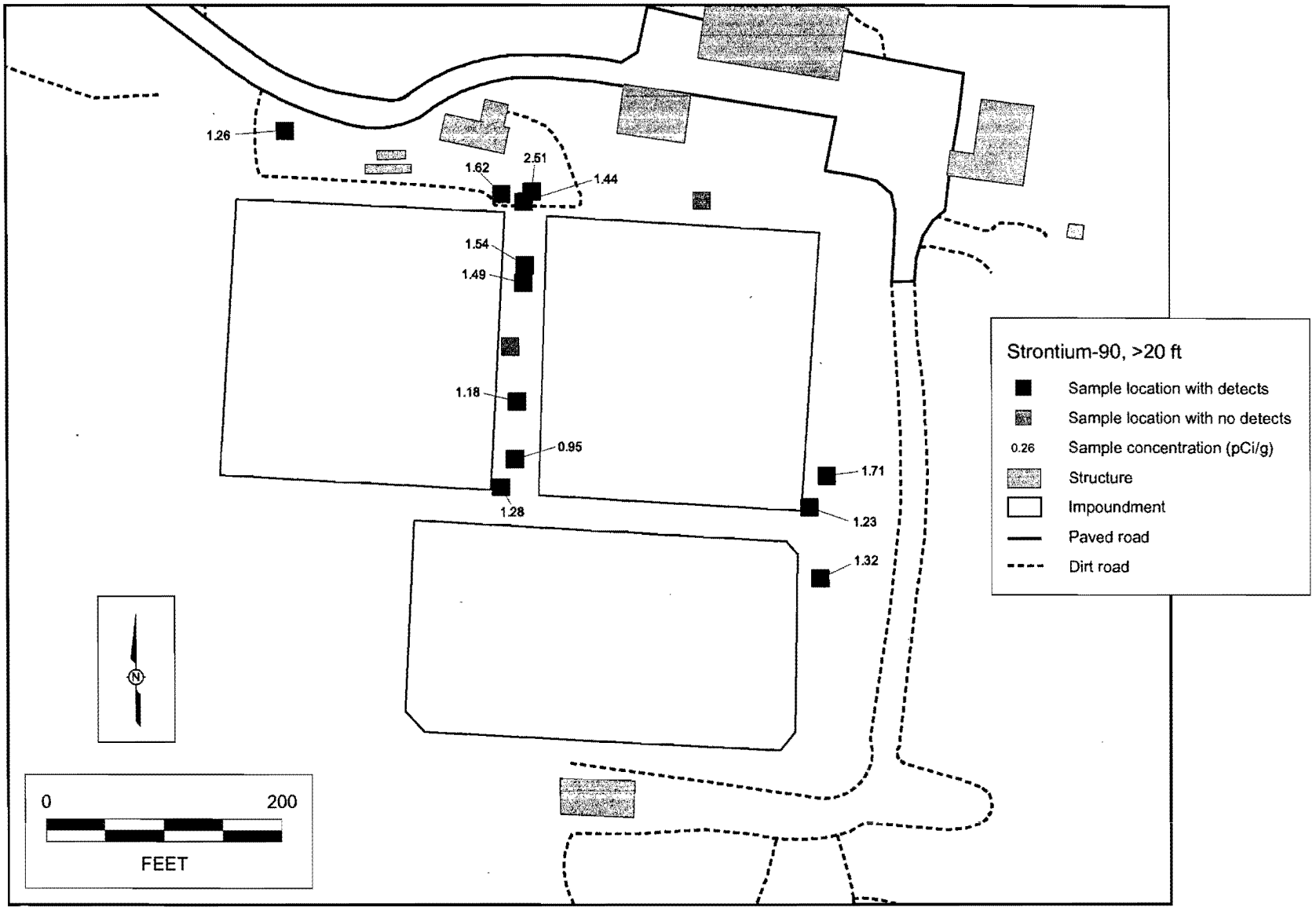
Source: FIMAD_VCA 53-002(a,b) Add II_Sr-90, 1 to 9 ft _071102_lcf

Figure 3.2-8. Strontium-90 at 1- to 9-ft depths



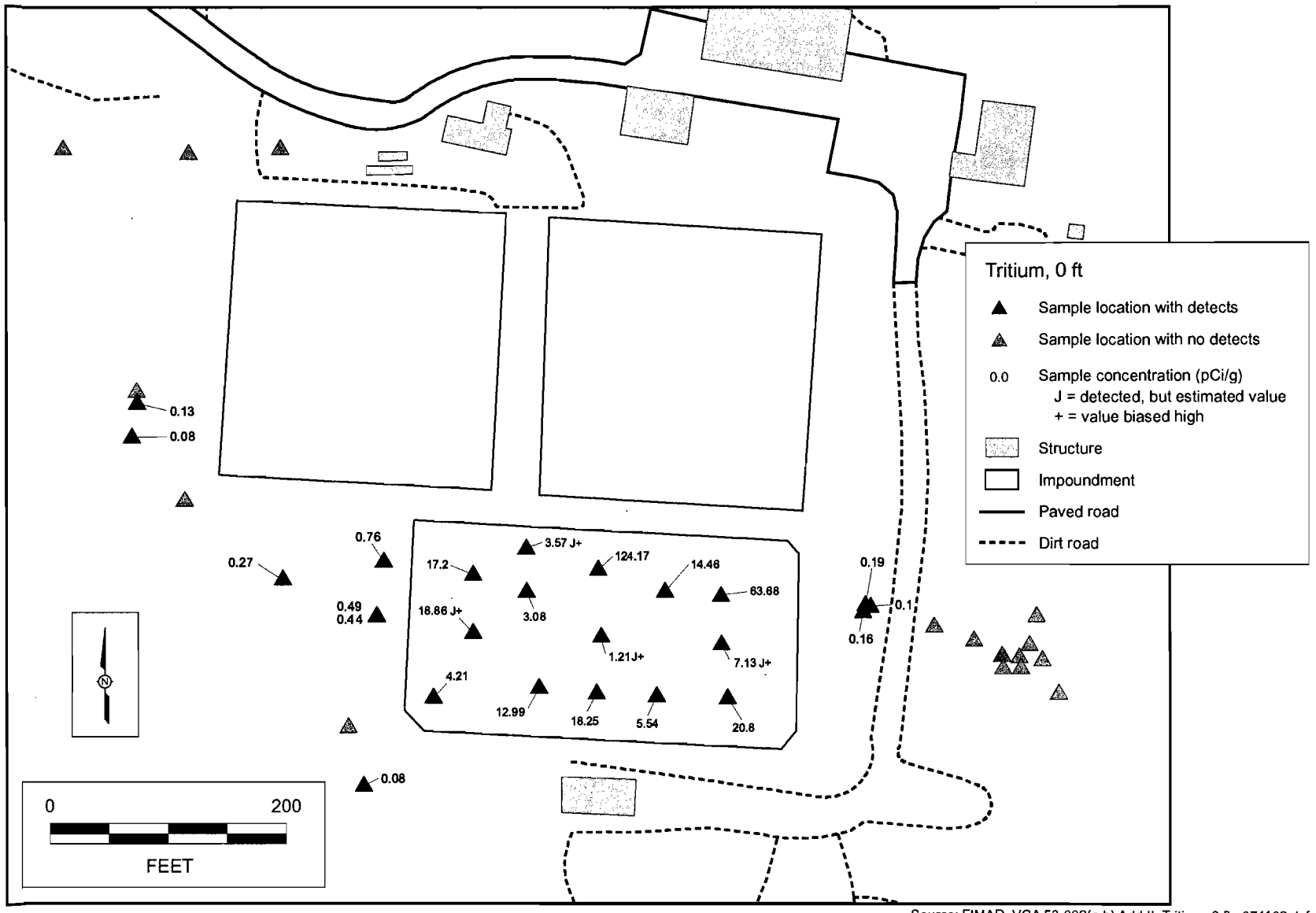
Source: FIMAD_VCA 53-002(a,b) Add II_Sr-90, 10–20 ft _071102_lcf

Figure 3.2-9. Strontium-90 at 10- to 20-ft depths



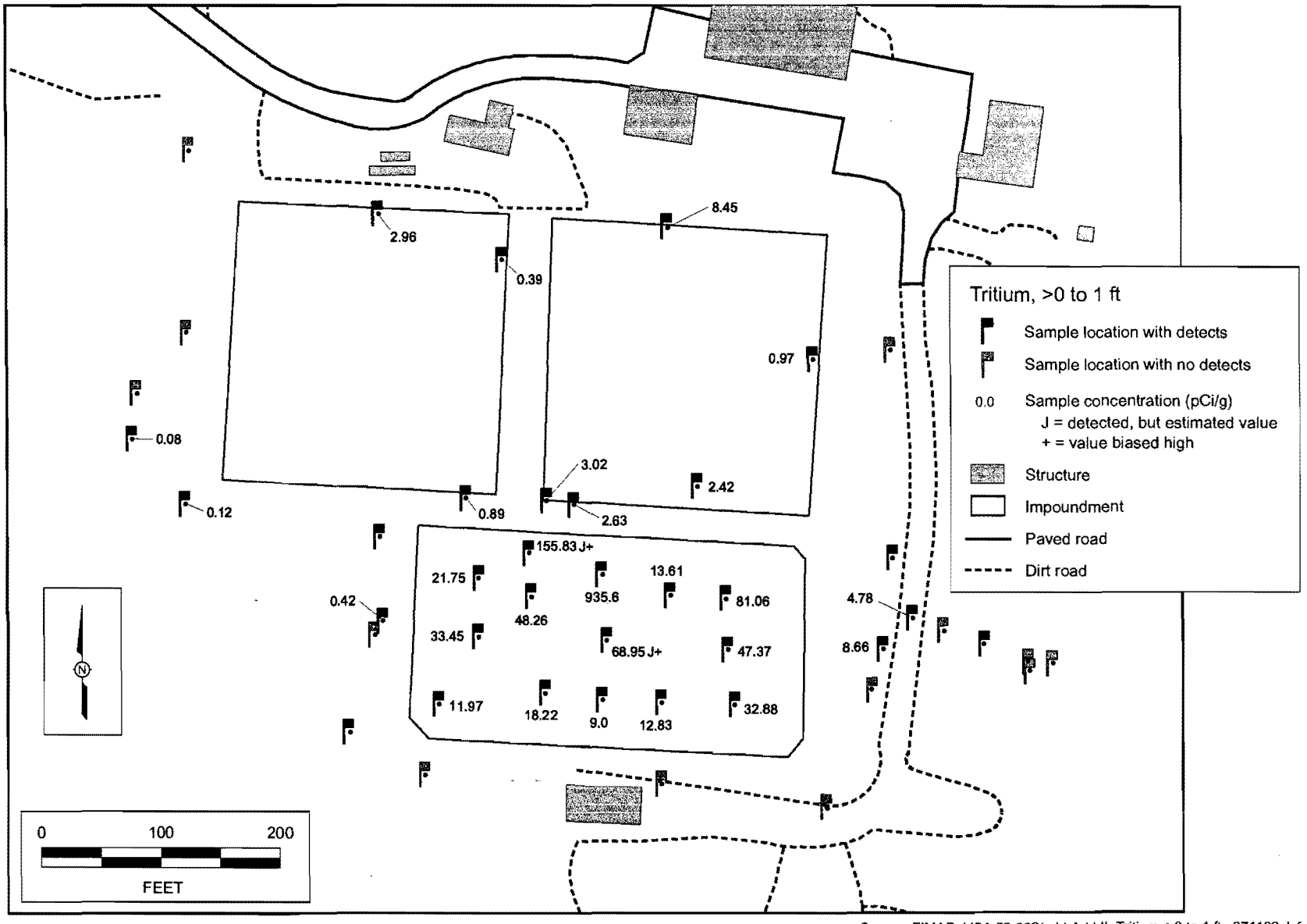
Source: FIMAD_VCA 53-002(a,b) Add II_Sr-90, >20 ft _071102_lcf

Figure 3.2-10. Strontium-90 at depths greater than 20 ft



Source: FIMAD_VCA 53-002(a,b) Add II_Tritium, 0 ft _071102_lcf

Figure 3.2-11. Tritium at 0 ft



Source: FIMAD_VCA 53-002(a,b) Add II_Tritium, >0 to 1 ft _071102_lcf

Figure 3.2-12. Tritium at greater-than-0- to 1-ft depths

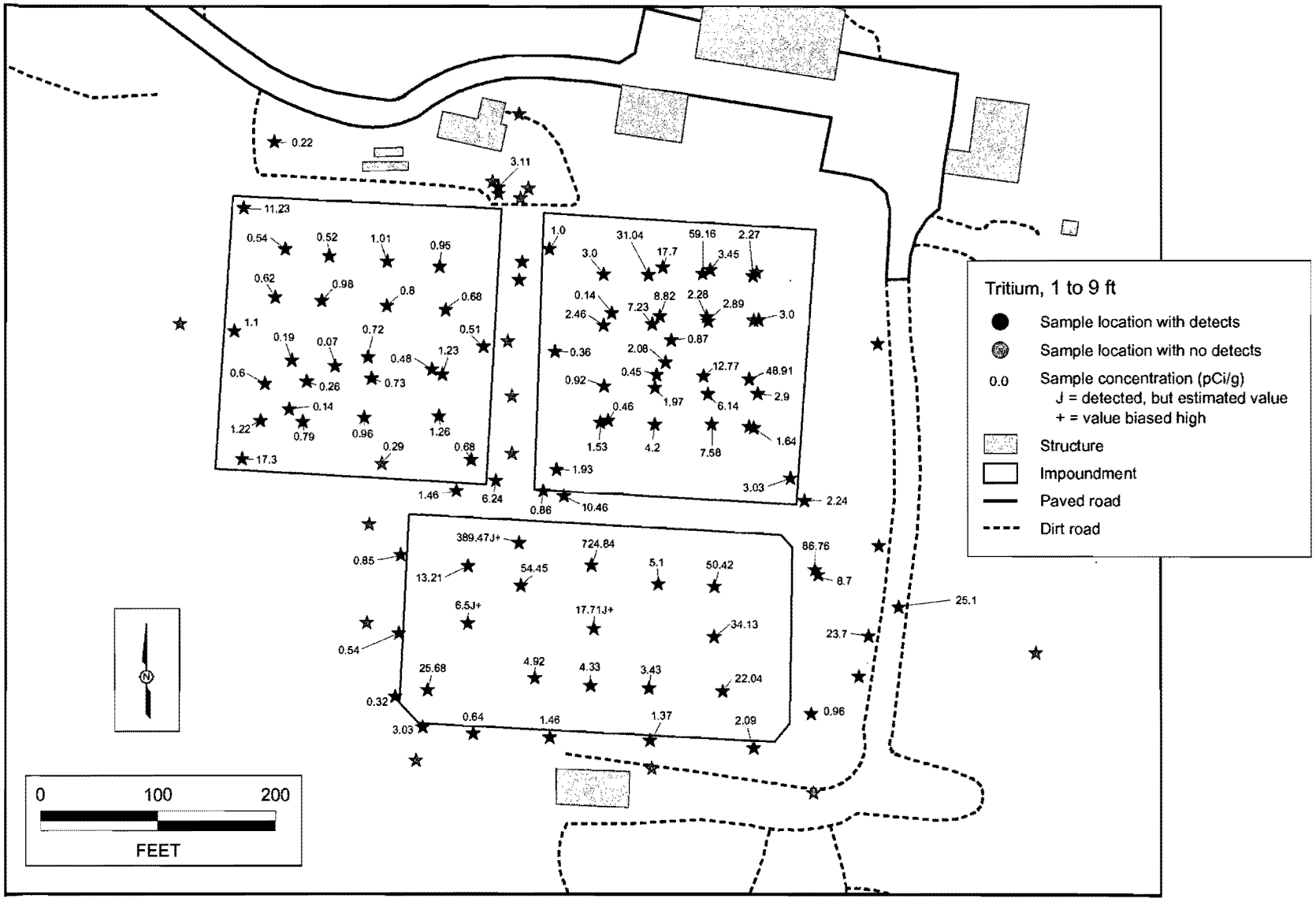
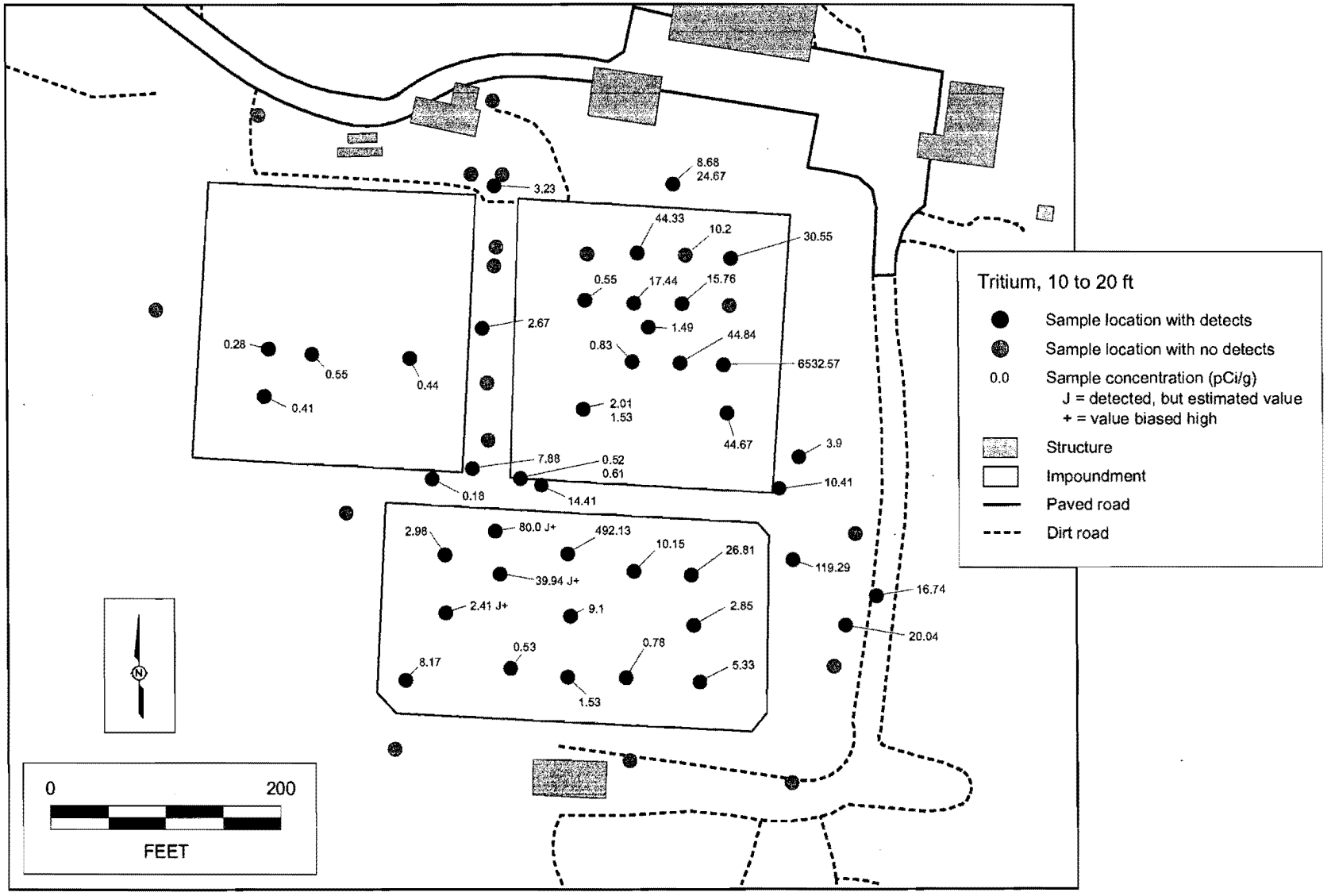
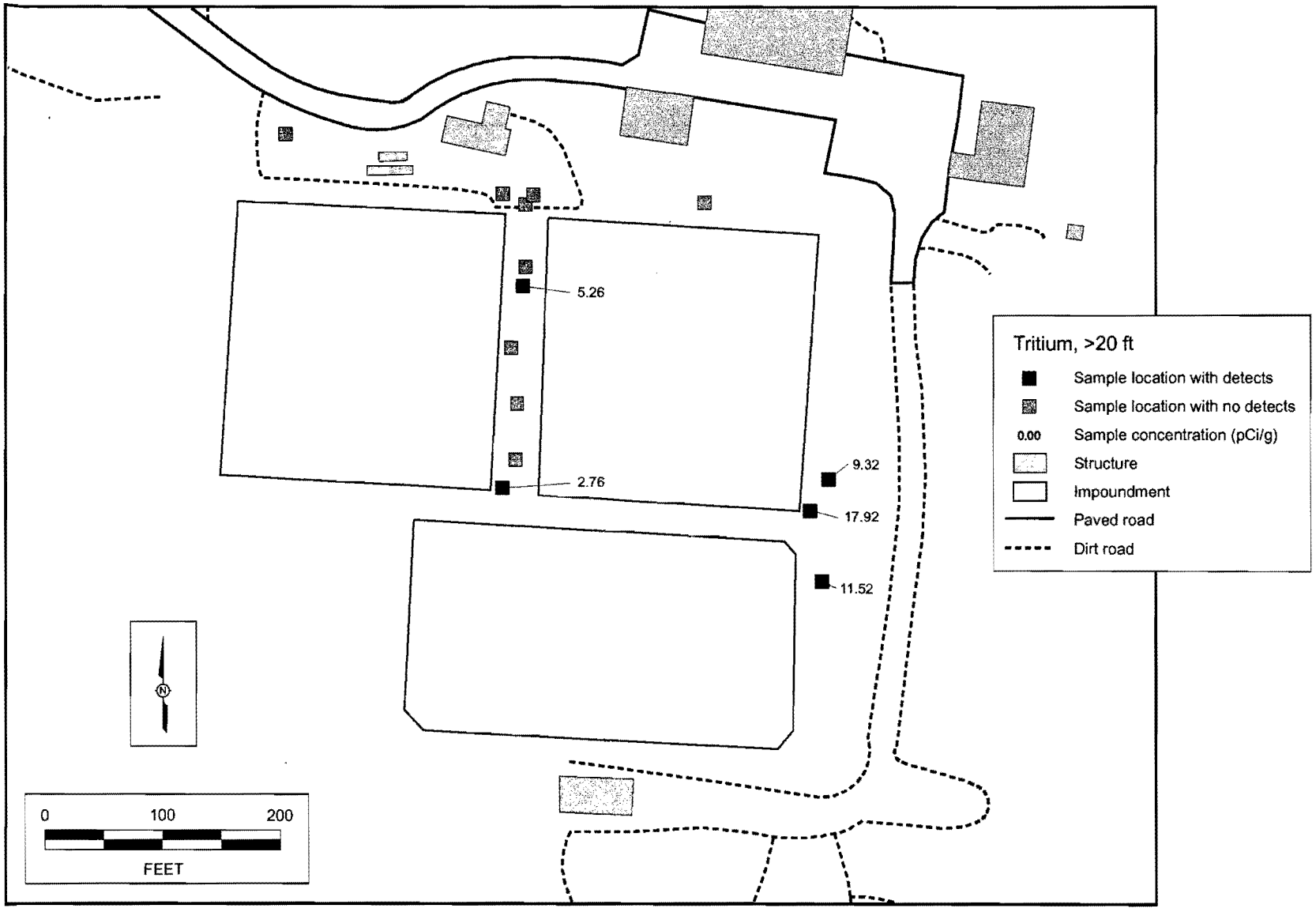


Figure 3.2-13. Tritium at 1- to 9-ft depths



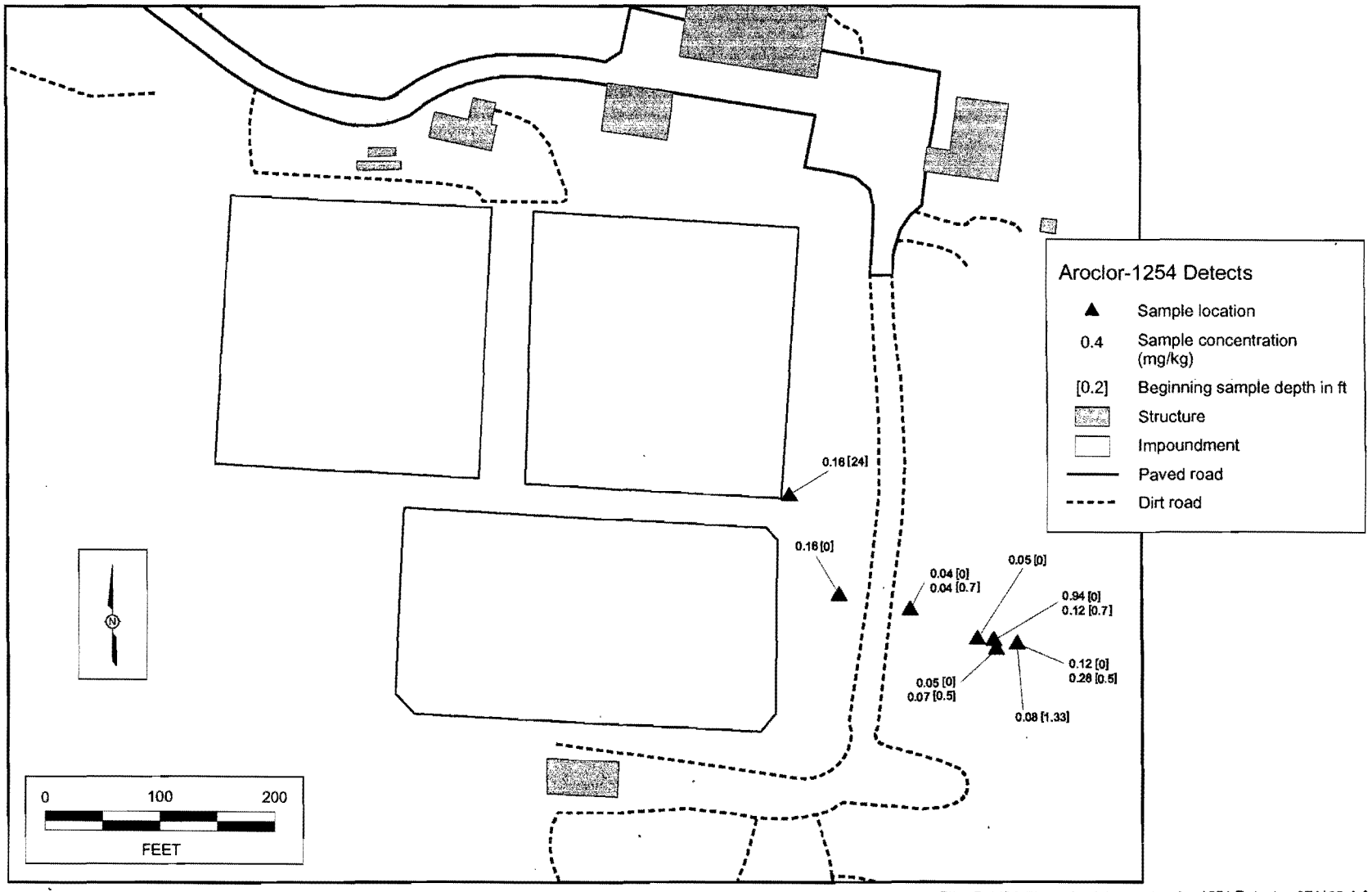
Source: FIMAD_VCA 53-002(a,b) Add II_Tritium, 10 to 20 ft _071102_lcf

Figure 3.2-14. Tritium at 10- to 20-ft depths



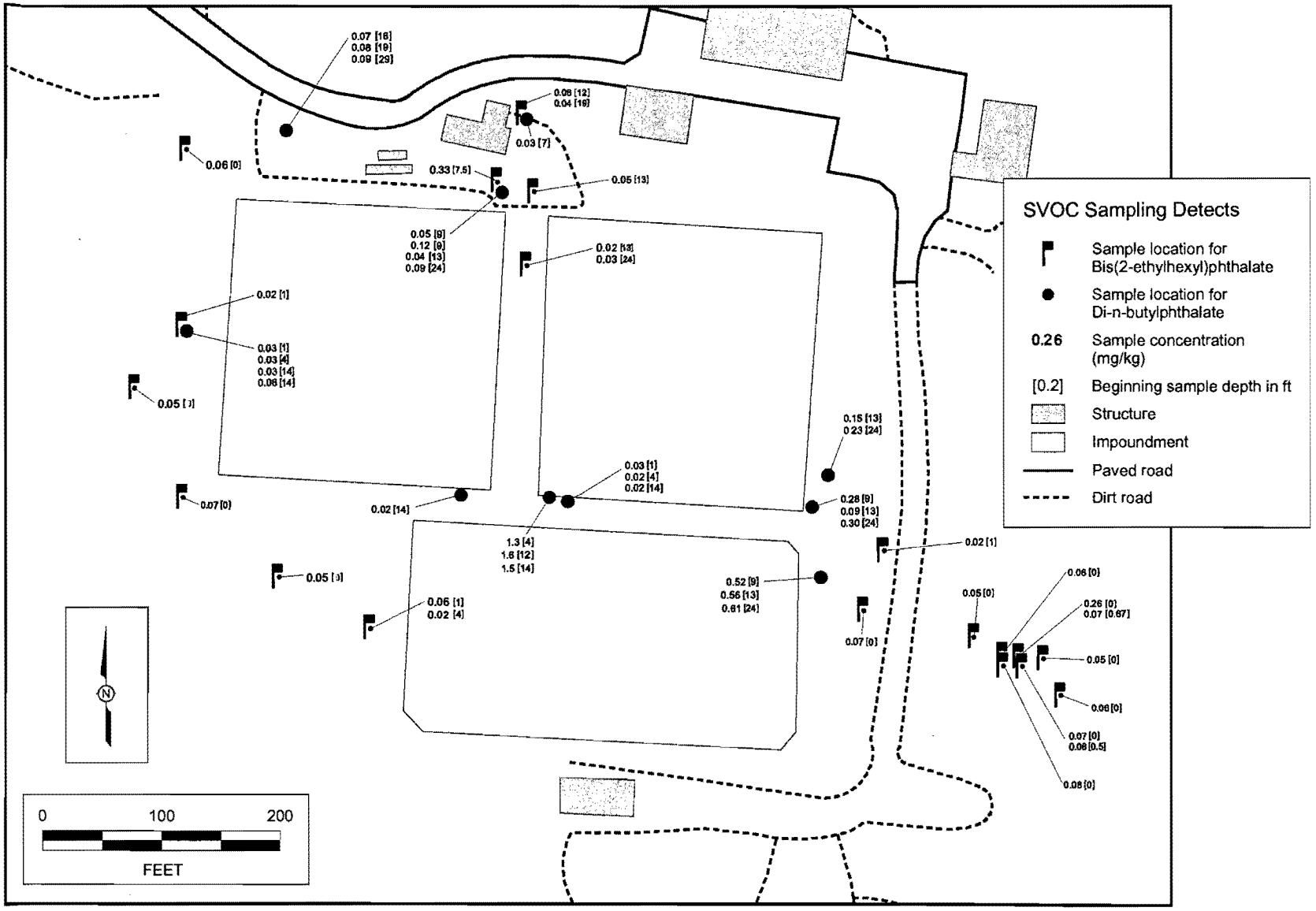
Source: FIMAD_VCA 53-002(a,b) Add II_Tritium, >20 ft _071102_lcf

Figure 3.2-15 Tritium at depths greater than 20 ft



Source: FIMAD_VCA 53-002(a,b) Add II_Aroclor-1254 Detects _071102_lcf

Figure 3.2-16. Aroclor-1254 detects



Source: FIMAD_VCA 53-002(a,b) Add II_SVOCs _071502_lcf

Figure 3.2-17. SVOC sampling detects

Strontium-90, tritium, uranium-234, and uranium-238 were detected at several locations adjacent to the radioactive liquid waste (RLW) pipeline between the northern impoundments to 24 ft, with no decrease in concentrations.

In the northern surface impoundments radioactive effluent outfall area, cesium-134, cobalt-60, strontium-90, uranium-234, and uranium-238 were detected. Sampling in the outfall area was limited to the top 2.5-ft depth, as soil cover is spare. There is a clear distribution of contaminants from the source, as they follow the flow of the outfall. However, the concentrations do not decrease with distance or depth from the outfall pipe; in some cases, the highest concentrations were located nearer the mesa edge of the outfall path.

Cobalt-60, strontium-90, and tritium have been detected under the northern surface impoundments within the tuff; these radionuclides were also detected to the north and west of the impoundments, even at depth.

As shown in Table 3.3-1, of the samples collected from tuff described as unit 2 of the Tshirege Member of the Bandelier Tuff (Qbt 2), cesium-134, cobalt-60, strontium-90, and tritium had the most detects. Figures 3.2-1 through 3.2-15 show the distribution of strontium-90, tritium, and cobalt-60 surrounding the impoundments.

Table 3.3-1
Frequency of Detects for Radionuclides

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (pCi/g)	Background/ Fallout Value (pCi/g)	Frequency of Detects Above Background/Fallout Value (pCi/g)
Americium-241	Soil	55	6	[-0.42] to 4.99	0.013	6/55
	Qbt 2	220	16	[-0.31] to 5.21	NA[a]	16/220
	Qbt 3	10	0	[-0.1 to 0.09]	NA	0/10
Cesium-134	Soil	55	14	[-0.056] to 53.92	NA	14/55
	Qbt 2	220	31	[-0.054] to 8.07	NA	31/220
	Qbt 3	10	0	[-0.035 to 0.042]	NA	0/10
Cesium-137	Soil	55	10	[-0.158] to 0.89	1.65	1/55
	Qbt 2	220	3	[-0.097] to 0.44	NA	3/220
	Qbt 3	10	1	[-0.05] to 0.38	NA	1/10
Cobalt-60	Soil	55	22	[-0.08] to 80.49	NA	22/55
	Qbt 2	219	62	[-0.06] to 9.48	NA	62/219
	Qbt 3	10	0	[-0.03 to 0.05]	NA	0/10
Europium-152	Soil	55	0	[-0.432 to 0.88]	NA	0/55
	Qbt 2	220	1	[-0.158] to 0.79	NA	1/220
	Qbt 3	10	0	[-0.08 to 0.08]	NA	0/10
Plutonium-238	Soil	55	2	[-0.04 to 0.33]	0.023	2/55
	Qbt 2	218	6	[-0.0131] to 0.37	NA	6/218
	Qbt 3	10	0	[-0.008 to 0.023]	NA	0/10
Plutonium-239	Soil	55	5	[-0.04] to 0.479	0.054	2/55
	Qbt 2	218	5	[-0.03 to 0.23]	NA	5/218
	Qbt 3	10	0	[-0.0006 to 0.025]	NA	0/10

Table 3.3-1 (continued)

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (pCi/g)	Background/ Fallout Value (pCi/g)	Frequency of Detects Above Background/Fallout Value (pCi/g)
Ruthenium-106	Soil	55	0	[-1.05 to 0.63]	NA	0/55
	Qbt 2	219	0	[-0.51 to 1.18]	NA	0/219
	Qbt 3	10	0	[-0.26 to 0.49]	NA	0/10
Sodium-22	Soil	55	12	[-0.16] to 99.4	NA	12/55
	Qbt 2	219	31	[-0.07] to 9.96	NA	31/219
	Qbt 3	10	0	[-0.03 to 0.05]	NA	0/10
Strontium-90	Soil	55	21	[-0.11] to 4.98	1.31	19/55
	Qbt 2	219	78	[-1.12] to 3.98	NA	78/219
Tritium	Soil	55	27	[-1.43] to 124.1667	NA	27/55
	Qbt 2	220	156	[-1.65] to 6532.57	NA	156/220
	Qbt 3	10	10	0.323 to 8.7	NA	10/10
Uranium-234	Soil	55	47	0.676 to 2.29	2.59	0/55
	Qbt 2	220	210	0.58 to 2.81	1.98	17/220
	Qbt 3	10	10	0.7 to 0.83	1.98	0/10
Uranium-235	Soil	55	20	0.0254 to [0.27]	0.2	0/55
	Qbt 2	220	47	[-0.02] to 0.31	0.09	8/220
	Qbt 3	10	10	0.053 to 0.086	0.09	0/10
Uranium-238	Soil	55	47	0.656 to 2.53	2.29	1/55
	Qbt 2	216	207	0.665 to 2.82	1.93	16/216
	Qbt 3	10	10	0.68 to 0.92	1.93	0/10

[a] NA = There is no background or fallout value for this radionuclide.

As noted above, there are several uranium-234 and uranium-238 detects adjacent to the RLW pipeline and in the outfall area, even at depth. However, looking at the frequency-of-detects tables, only in a small number of samples of the uranium are concentrations above background concentrations, and those that are above background exceed background only slightly (less than 1 pCi/g). Therefore, the extents of uranium-234 and uranium-238 have been bounded satisfactorily.

Data gaps also exist for organic chemicals surrounding and within the impoundments. There were several detections of Aroclor-1254 in the outfall area, with no decreasing trend in concentration laterally from the source. Bis(2-ethylhexyl)phthalate is ubiquitous at low concentrations (less than 1 ppm) on the western (surface only) and northern sides of the impoundments as well as in the outfall area. The sample analyses show decreasing concentrations of bis(2-ethylhexyl)phthalate at depth from the source; however, the concentrations do not decrease laterally from the source on the western side of the impoundments. Di-n-butylpthalate was detected in several sporadic locations around the northern impoundments, with no detections in the outfall area. Both of these analytes have at least one detect at 24-ft depth, with no vertical decreasing concentration. Because not all detected phthalates can be attributed to laboratory contamination, SVOC samples will be collected. The majority of detected values for acetone were found in tuff under the impoundments. Some detects were not bound at depth; therefore, samples will be collected for VOC analysis from within the impoundments. Table 3.3-2 presents the frequency of detects for organic chemicals.

Table 3.3-2
Frequency of Detects for Organic Chemicals

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)	Frequency of Detects
Acenaphthene	Soil	51	2	[0.0429 to 0.4]	2/51
Acetone	Soil	38	9	[0.0031 to 0.041]	9/38
	Qbt 2	217	65	0.00222 to 0.107	65/217
Aroclor-1254	Soil	47	8	[0.0114] to 0.94	8/47
	Qbt 2	244	7	[0.00403 to 0.406]	7/244
Aroclor-1260	Qbt 2	244	1	[0.00363 to 0.406]	1/244
Benzene	Soil	38	1	0.0003 to [0.0096]	1/38
	Qbt 2	217	1	0.00027 to [0.01]	1/217
Benzo(g,h,i)perylene	Qbt 3	10	1	0.018 to [0.41]	1/10
Benzoic acid	Soil	51	1	[0.0201 to 4]	1/51
Benzyl alcohol	Qbt 2	220	1	0.025 to [1.6]	1/220
BHC[alpha-]	Qbt 2	131	3	0.000754 to [0.0812]	3/131
BHC[gamma-]	Qbt 2	131	6	0.000593 to [0.0812]	6/131
Bis(2-ethylhexyl)phthalate	Soil	51	17	0.019 to [0.4]	17/51
	Qbt 2	220	29	0.018 to 0.47	29/220
Butanone[2-]	Qbt 2	217	9	0.0014 to [0.04]	9/217
Butylbenzene[sec-]	Qbt 2	167	1	[0.000278 to 0.01]	1/167
Butylbenzylphthalate	Qbt 2	220	3	0.018 to [0.45]	3/220
Chloroethane	Soil	38	2	0.00052 to [0.019]	2/38
	Qbt 2	217	2	[0.00136 to 0.02]	2/217
DDD[4,4'-]	Qbt 2	131	1	[0.0018 to 0.325]	1/131
DDE[4,4'-]	Soil	18	1	0.00032 to [0.0039]	1/18
DDT[4,4'-]	Qbt 2	131	2	0.00034 to [0.325]	2/131
Dichlorobenzene[1,4-]	Soil	89	1	[0.000251 to 0.4]	1/89
	Qbt 2	437	1	[0.000259 to 0.45]	1/437
Dichlorodifluoromethane	Qbt 2	217	3	[0.000728 to 0.02]	3/217
Dieldrin	Qbt 2	131	3	0.000898 to [0.162]	3/131
Diethylphthalate	Qbt 2	220	3	[0.0497 to 0.45]	3/220
Di-n-butylphthalate	Soil	51	1	0.025 to [0.4]	1/51
	Qbt 2	220	27	0.018 to 1.6	27/220
Endrin	Qbt 2	131	2	0.000835 to [0.162]	2/131
Fluoranthene	Soil	51	1	[0.0291 to 0.4]	1/51
Heptachlor	Qbt 2	131	5	0.000935 to [0.162]	5/131
Isopropyltoluene[4-]	Soil	38	2	[0.000226 to 0.0096]	2/38
	Qbt 2	167	7	[0.000234 to 0.01]	7/167
Methyl-2-pentanone[4-]	Qbt 2	217	3	0.00099 to [0.04]	3/217

Table 3.3-2 (continued)

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)	Frequency of Detects
Methylene chloride	Soil	38	1	[0.000566 to 0.01]	1/38
	Qbt 2	217	7	[0.000584 to 0.048]	7/217
	Qbt 3	10	3	[0.007 to 0.013]	3/10
Methylphenol[3-]	Qbt 2	108	1	[0.0459 to 0.4]	1/108
Methylphenol[4-]	Qbt 2	170	2	0.024 to [0.45]	2/170
Phenol	Qbt 2	220	1	0.029 to [0.45]	1/220
Pyrene	Soil	51	1	[0.0313 to 0.4]	1/51
Tetrachloroethene	Qbt 2	217	1	[0.000419 to 0.01]	1/217
Toluene	Soil	38	6	[0.00036 to 0.0096]	6/38
	Qbt 2	217	12	[0.000478 to 0.01]	12/217
Trichloro-1,2,2-trifluoroethane[1,1,2-]	Qbt 2	167	1	[0.000952] to 0.017	1/167
Trichloroethene	Soil	38	5	[0.000579 to 7.900001E-03]	5/38
	Qbt 2	217	8	0.00048 to [0.01]	8/217
Trichlorofluoromethane	Soil	38	3	0.00057 to [0.0096]	3/38
	Qbt 2	217	3	[0.001] to 0.035	3/217
	Qbt 3	10	3	[0.002 to 0.005]	3/10
Trimethylbenzene[1,2,4-]	Qbt 2	167	2	[0.000211 to 0.01]	2/167

The majority of detects are below background values (LANL 1998, 59730) for inorganic data. However, the extents for certain inorganic chemicals have not been defined. Selenium is present at low concentrations, with no decrease in trend in vertical concentrations within the southern impoundment. Chromium and nickel have several collocated detects at depth (14 ft) with no decrease in vertical concentration within the northern impoundments. The frequencies of detects for inorganic chemicals are presented in Table 3.3-3.

Table 3.3-3
Frequency of Detects for Inorganic Chemicals

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)	Background Value (mg/kg)	Frequency of Detects Above Background Value
Aluminum	Soil	55	55	1300 to 11500	29200	0/55
	Qbt 2	220	220	4.6 to 17800	7340	12/220
	Qbt 3	10	10	3400 to 16000	7340	5/10
Antimony	Soil	40	15	0.05 to [3.2]	0.83	0/40
	Qbt 2	174	55	[0.02 to 1]	0.5	0/174
	Qbt 3	10	0	[0.06 to 0.56]	0.5	0/10
Arsenic	Soil	55	55	0.59 to 4.6	8.17	0/55
	Qbt 2	220	211	0.227 to 4.3	2.79	11/220
	Qbt 3	10	10	1.9 to 3.7	2.79	5/10

Table 3.3-3 (continued)

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)	Background Value (mg/kg)	Frequency of Detects Above Background Value
Barium	Soil	55	55	19.6 to 170	295	0/55
	Qbt 2	220	220	1.5 to 260	46	24/220
	Qbt 3	10	10	25 to 100	46	7/10
Beryllium	Soil	55	54	0.15 to 2.7	1.83	1/55
	Qbt 2	220	209	0.0701 to 1.8	1.21	3/220
	Qbt 3	10	10	0.35 to 1.3	1.21	1/10
Cadmium	Soil	55	25	0.039 to [0.44]	0.4	0/55
	Qbt 2	220	103	0.0108 to 510	1.63	1/220
	Qbt 3	10	1	0.05 to [0.11]	1.63	0/10
Calcium	Soil	55	55	654 to 34000	6120	9/55
	Qbt 2	220	220	173 to 41000	2200	43/220
	Qbt 3	10	10	1600 to 5200	2200	7/10
Chromium	Soil	55	55	1.3 to 13	19.3	0/55
	Qbt 2	223	223	0.23 to 36.4	7.14	34/223
	Qbt 3	10	10	2.8 to 10	7.14	5/10
Chromium, hexavalent ion	Soil	7	0	[0.041 to 43]	NAa	0/7
	Qbt 2	27	4	[0.041 to 20]	NA	4/27
Cobalt	Soil	55	55	0.68 to 4.2	8.64	0/55
	Qbt 2	220	220	0.031 to 4.6	3.14	3/220
	Qbt 3	10	10	0.4 to 2.2	3.14	0/10
Copper	Soil	55	55	1.4 to 26	14.7	3/55
	Qbt 2	220	212	[0.08] to 18	4.66	10/220
	Qbt 3	10	10	1.7 to 5	4.66	2/10
Iron	Soil	55	55	1800 to 11300	21500	0/55
	Qbt 2	220	220	295 to 11600	14500	0/220
	Qbt 3	10	10	4500 to 12000	14500	0/10
Lead	Soil	55	55	2.8 to 17.7	22.3	0/55
	Qbt 2	220	220	1.27 to 41	11.2	12/220
	Qbt 3	10	10	7.5 to 21	11.2	2/10
Magnesium	Soil	55	55	319 to 2800	4610	0/55
	Qbt 2	220	213	17.4 to 3870	1690	7/220
	Qbt 3	10	10	620 to 2300	1690	5/10
Manganese	Soil	55	55	83.4 to 430	671	0/55
	Qbt 2	220	220	32 to 460	482	0/220
	Qbt 3	10	10	130 to 260	482	0/10

Table 3.3-3 (continued)

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)	Background Value (mg/kg)	Frequency of Detects Above Background Value
Mercury	Soil	55	21	0.01 to [0.11]	0.1	0/55
	Qbt 2	220	74	0.00265 to 0.302	0.1	1/220
	Qbt 3	10	5	0.01 to [0.11]	0.1	0/10
Nickel	Soil	55	54	1.6 to 11	15.4	0/55
	Qbt 2	220	187	0.47 to 18.6	6.58	18/220
	Qbt 3	10	10	2.3 to 7.7	6.58	3/10
Potassium	Soil	55	55	322 to 2400	3460	0/55
	Qbt 2	220	201	73.6 to 2500	3500	0/220
	Qbt 3	10	10	430 to 1700	3500	0/10
Selenium	Soil	49	22	[0.08 to 2.1]	1.52	0/49
	Qbt 2	205	63	[0.07 to 1.2]	0.3	46/205
	Qbt 3	10	0	[0.07 to 1.1]	0.3	0/10
Silver	Soil	55	24	[0.1] to 2.1	1	6/55
	Qbt 2	220	29	[0.1] to 1.1	1	1/220
	Qbt 3	10	0	[0.52 to 0.56]	1	0/10
Sodium	Soil	55	54	[0.51] to 250	915	0/55
	Qbt 2	220	220	25.6 to 1200	2770	0/220
	Qbt 3	10	10	110 to 180	2770	0/10
Thallium	Soil	55	28	0.03 to 0.67	0.73	0/55
	Qbt 2	220	74	[0.02 to 1]	1.1	0/220
	Qbt 3	10	9	0.09 to 0.24	1.1	0/10
Vanadium	Soil	55	55	3 to 21.3	39.6	0/55
	Qbt 2	220	220	0.48 to 17	17	0/220
	Qbt 3	10	10	4.9 to 16	17	0/10
Zinc	Soil	55	55	9.9 to 130	48.8	9/55
	Qbt 2	220	220	6.47 to 84	63.5	3/220
	Qbt 3	10	10	17 to 34	63.5	0/10

* NA = There is no background value for this chemical.

3.4 Conceptual Model of Tritium Transport

The conceptual model of tritium release from the previously active (wet) TA-53 surface impoundments and transport through the dry host rock assumes that the majority of tritium was released in the form of liquid over a specific period of time. Tritium is radioactive hydrogen (half-life = 12.4 years) and thus forms "heavy" water, which behaves nearly identically to normal water with respect to transport in the environment. Because it is intimately bound to water, tritium is migrating as liquid and as water vapor in pore space (Knight 1996, 70152).

Liquid effluent, mainly water, has infiltrated the dry rock beneath the surface impoundments and is moving under the forces of gravity and capillary action. Gravity pulls water down while capillary action pulls water from areas of high saturation to areas of low saturation. During the period of active infiltration from the surface, high saturation allows liquid to move more quickly to depth until it reaches equilibrium. After the source is removed, capillary forces will continue to spread the subsurface effluent into regions of lower saturation. At equilibrium, when liquid flow is reduced, vapor transport becomes the dominant process. In this setting (TA-53), the tritium plume will continue to grow slowly until radioactive decay and diffusion causes concentrations to fall to background values.

Within the porous media, equilibrium between water and water vapor is assumed (a well-mixed model) because diffusional transport is slow relative to the rate of tritium exchange between pore water and pore gas (Smiles et al. 1995, 70153). Any tritium in the vapor phase would become incorporated into the residual liquid pore water before diffusing through the air-filled pore space (Smiles et al. 1995, 70153). Migration of tritium due to water vapor transport is important in regions with low moisture content. Vapor transport becomes the dominant transport mechanism as the liquid effluent is spread out by capillary action after the source is removed. Finally, the short half-life of tritium causes a large reduction in the inventory.

3.4.1 Simulation Model of Tritium Transport

To support decisions regarding the placement of boreholes, a site-specific tritium transport model was developed for determining the maximum horizontal and lateral extent of tritium released beneath the TA-53 surface impoundments. The model used the porous-flow simulator FEHM (finite element heat and mass transfer), which was developed by the DOE and Nuclear Regulatory Commission to demonstrate compliance with EPA regulations at the Yucca Mountain high-level waste repository (Zyvoloski et al. 1997, 70147). The conceptual model of dual-phase tritium transport described above was simulated by means of enhanced liquid phase diffusion coefficient (Smiles et al. 1995, 70153). The simulation is run for a period of 100 years. The first 25 years (1970–1995) represent the active "wet" leaking phase at the site with enhanced infiltration. The last 75 years represent the period after the effluent source has been removed.

Site-specific data and general Pajarito Plateau hydrologic data (Birdsell et al. 1999, 69792) were used to develop a numerical grid that simulated the land surface to the water table and encompassed a lateral area centered on the impoundments (Figure 3.4-1). The grid was generated using GeoMesh grid generation software (Gable et al. 1995, 70148) and incorporates information from the LANL site-wide geologic model (Carey et al. 1999, 66782).

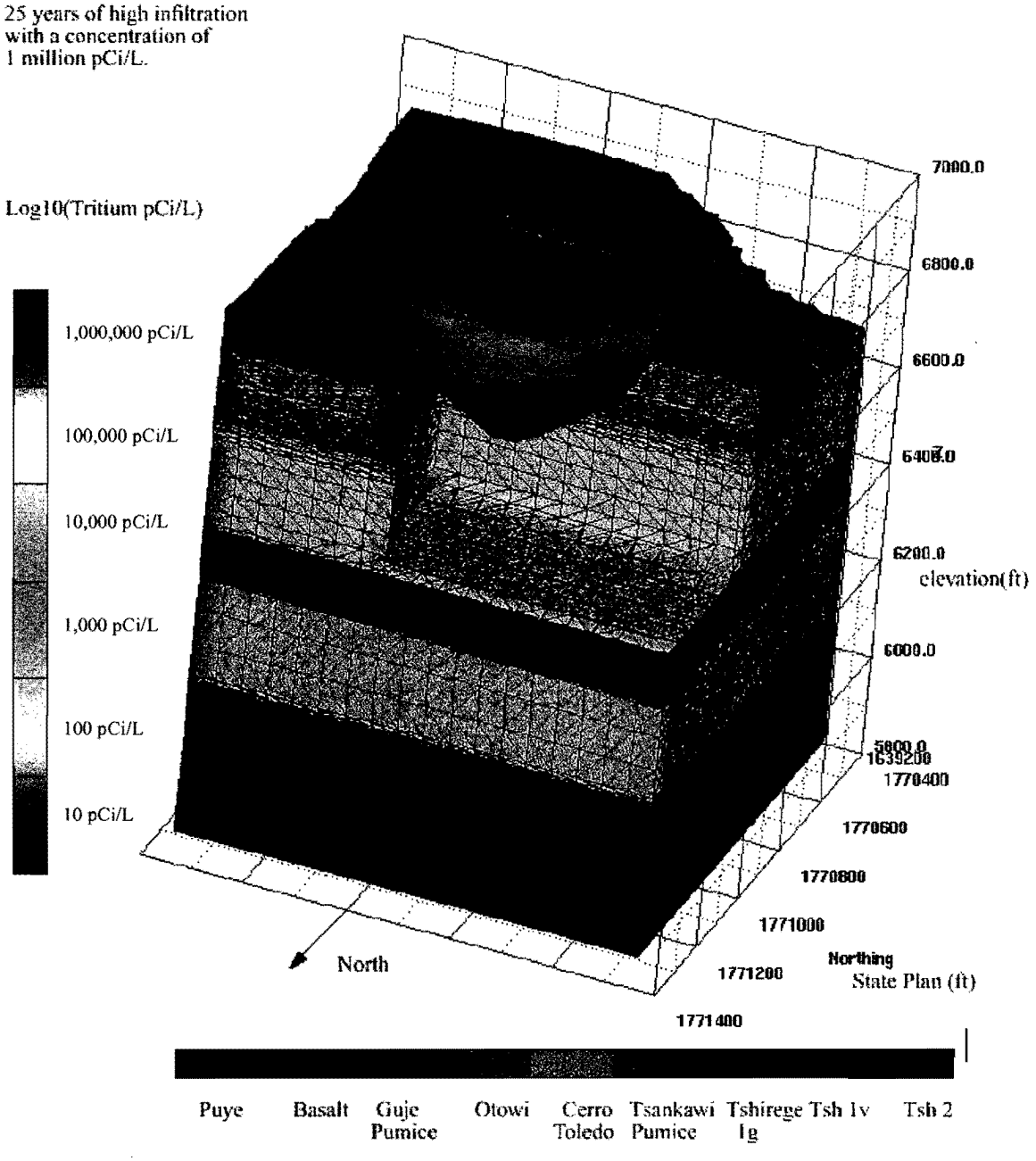


Figure 3.4-1. Numerical grid for tritium simulations showing topography, impoundment placement, geology, and the 1000 pCi/L tritium contour from a high infiltration simulation (2 m/yr for 25 years)

Assumptions and parameters developed for previous analyses of tritium transport in dry mesas were applied to generate a "worst case" conservative area of tritium contamination (Vold 1996, 70155; Vold and Eklund 1996, 70156). The simulated rate of liquid moving through the subsurface in the absence of a source, which applies for the simulated 75 years after the surface impoundments held liquid, was 1 mm/yr below the root zone, consistent with other similar analyses (Birdsell et al. 1999, 69792). Simulated tritium transport incorporates the physical processes of liquid diffusion, advection, dispersion, and radioactive decay in a variably saturated porous medium. Vapor phase transport is included via an enhanced liquid phase diffusion coefficient (Smiles et al. 1995, 70153).

Site data on tritium and water discharge from the northern impoundments (working volume of each northern impoundment is 1.6 million gal.) are available for the years 1978 to 1989 (TA-53 RFI, Appendix D, LANL 1998, 58841.2). For the 15 years effluent was discharged to the outfall, the total volume discharge was 60 million gal., containing approximately 187 Ci of tritium. For the model's input parameters, the total tritium and total water discharged from TA-53 surface impoundments were extrapolated conservatively to a 25-year range (1970–1995) using these data. Thus, the model is loaded with approximately 266 Ci of tritium from the TA-53 surface impoundments in a volume of approximately 85 million gal.

To provide a certain maximum extent of tritium transport, the model simulates extreme conditions which are highly unlikely to have existed at the site and which will overestimate the extent of tritium migration. The conservative input parameters are (1) infiltration rate and area, (2) volume of infiltration, (3) concentration of tritium in the effluent, and (4) the diffusion coefficient for tritium.

1. The enhanced infiltration rate used to simulate the active wet period of operation was 2 m/yr over an area of 10,000 ft^2 (roughly equivalent in size to the northeast quadrant of the southern surface impoundment, where the old unlined outfall channel was located), which equals a volume of 490,722 gal./yr. This infiltration rate is nearly 10 times higher than in-situ estimates (23 cm/yr) based on measured saturation in borehole 53-6 (Rogers 1998, 59169).

2. The total volume of the simulated infiltration, 12.2 million gal (490,722 gal. × 25 yr), is nearly 8 times the volume of an individual northern impoundment and 14% of the total estimated discharge (85 million gal.) at the site.

3. The simulated source concentration of 1 million pCi/L was chosen to represent the average concentration in the effluent: average activity = 288 Ci/(85 million gal. × 3.8 [conversion from gal to liter]) = 892,000 pCi/L, which was rounded up to 1 million pCi/L. The total injected tritium activity is 48.5 Ci and represents 18% of the total estimated tritium discharged from the impoundments.

4. The assumed vapor diffusion coefficient for tritium (1×10^{-3} m^2/s) is taken from Vold (Vold 1996, 70155) and is nearly 3 orders of magnitude greater than measured diffusion rates in core samples of the Bandelier Tuff that were shown to be appropriate for a large-scale vapor plume at TA-54 (Stauffer et al., 2000, 69794).

3.4.2 Simulation Model Results

Figure 3.4-2 shows a map view of the site with cross-section A-A'. The injection nodes (simulated point sources) are shown as pink spots and were placed near the center of the modeled area near the location of the unlined drainage ditch that carried effluent away from the northern impoundments (LANL 1998, 58841.2). By concentrating the injection in a relatively small area, the simulation produces a deeper zone of infiltration than applying an equivalent amount of water spread to any larger area.

Figure 3.4-3, a vertical slice through the model along cross section A-A', shows that, during the first 25 years of the simulation, the leading edge of the tritium contamination migrates to a depth of approximately 370 ft (a 6550-ft elevation), with concentrations of nearly 100,000 pCi/L at the 220-ft depth (a 6700-ft elevation). Figure 3.4-4 shows that, after 75 more years, the contamination has continued to migrate to a depth of 520 ft (a 6400-ft elevation); however, with the source removed, the processes of diffusion, dilution, and radioactive decay have reduced maximum concentrations to 4000 pCi/L. Thus, simulated values for the year 2070 are very low (as a reference point, well below the EPA guideline for tritium in drinking water of 20,000 pCi/L). The uncertain variables (infiltration rate, area, total volume, concentration, and diffusion coefficient) used in this simulation are conservative in nature and represent a worst-case scenario.

The boreholes proposed in section 4.2 are therefore expected to encompass, both laterally and vertically, the bulk of the current tritium contamination, which is expected to be similar to the predicted concentrations in Figure 3.4-3. New data from the proposed boreholes will help verify the current conceptual model and will allow the more definitive assignment of values to poorly constrained model input parameters.

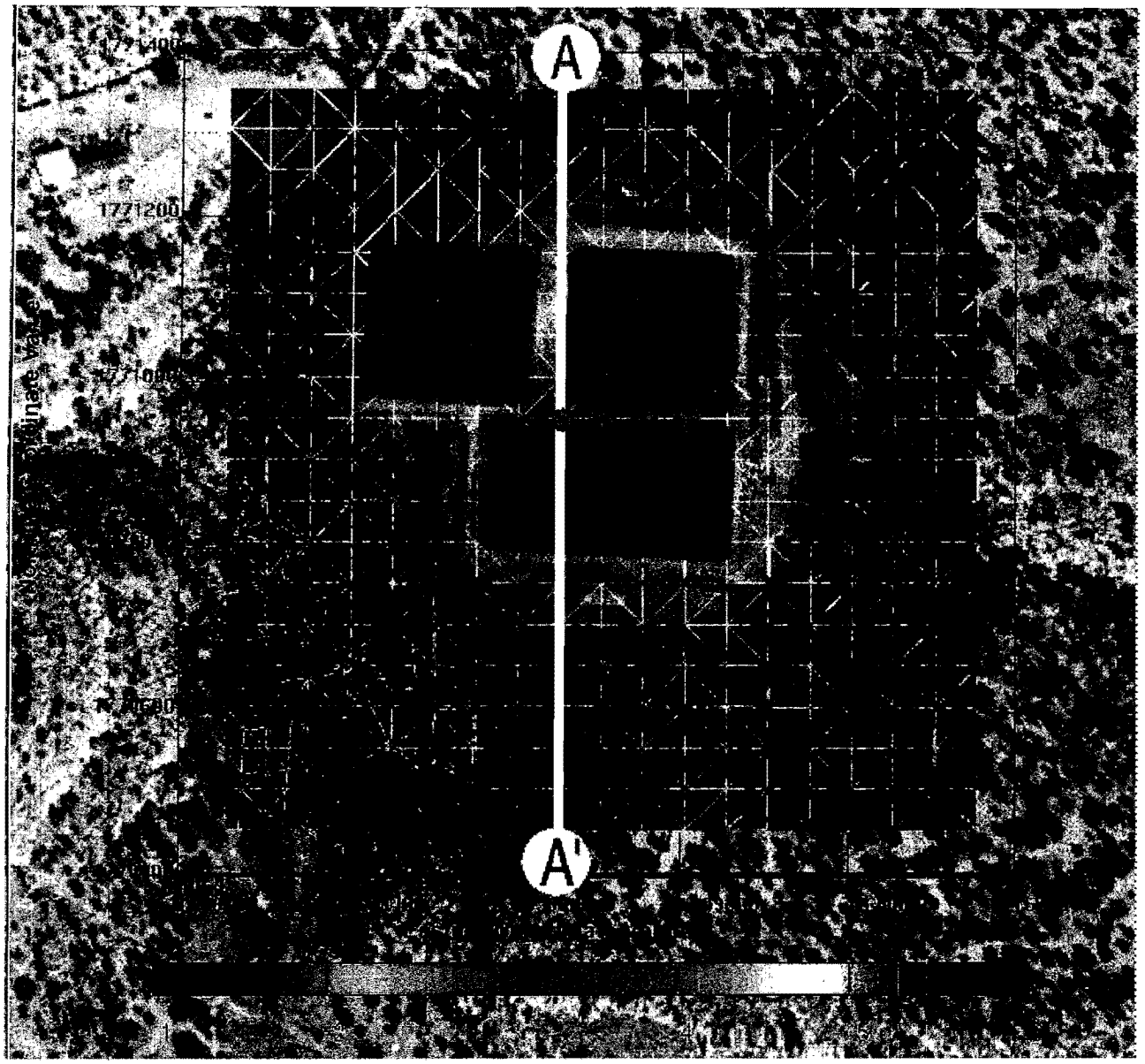


Figure 3.4-2. Horizontal slice of tritium concentration after 25 years of high infiltration (2 m/yr) from the 4 nodes shown in bright pink

(Cross-section A-A' marks the location of the vertical figures that follow); total mass input for this simulation is 12.23 million gal. of water containing 48.5 Ci of tritium.)

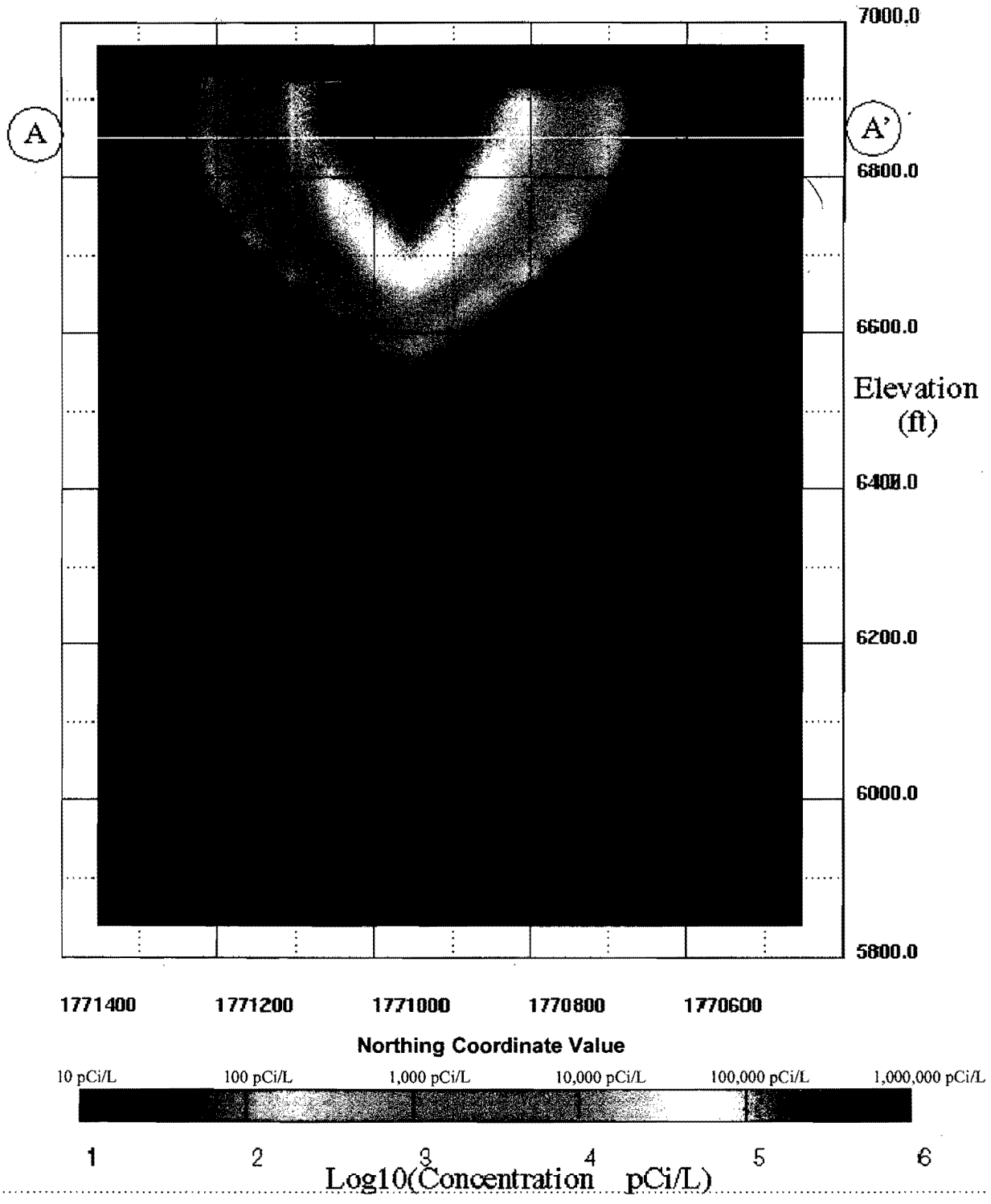


Figure 3.4-3. Predicted tritium concentrations [log10(pCi/L)] for 1995 on cross section A-A'

(After 25 years of high infiltration (2 m/yr); total mass input for this simulation is 12.2 million gal. of water containing 48.5 Ci of tritium; the water table is located very near the bottom of the modeled area.)

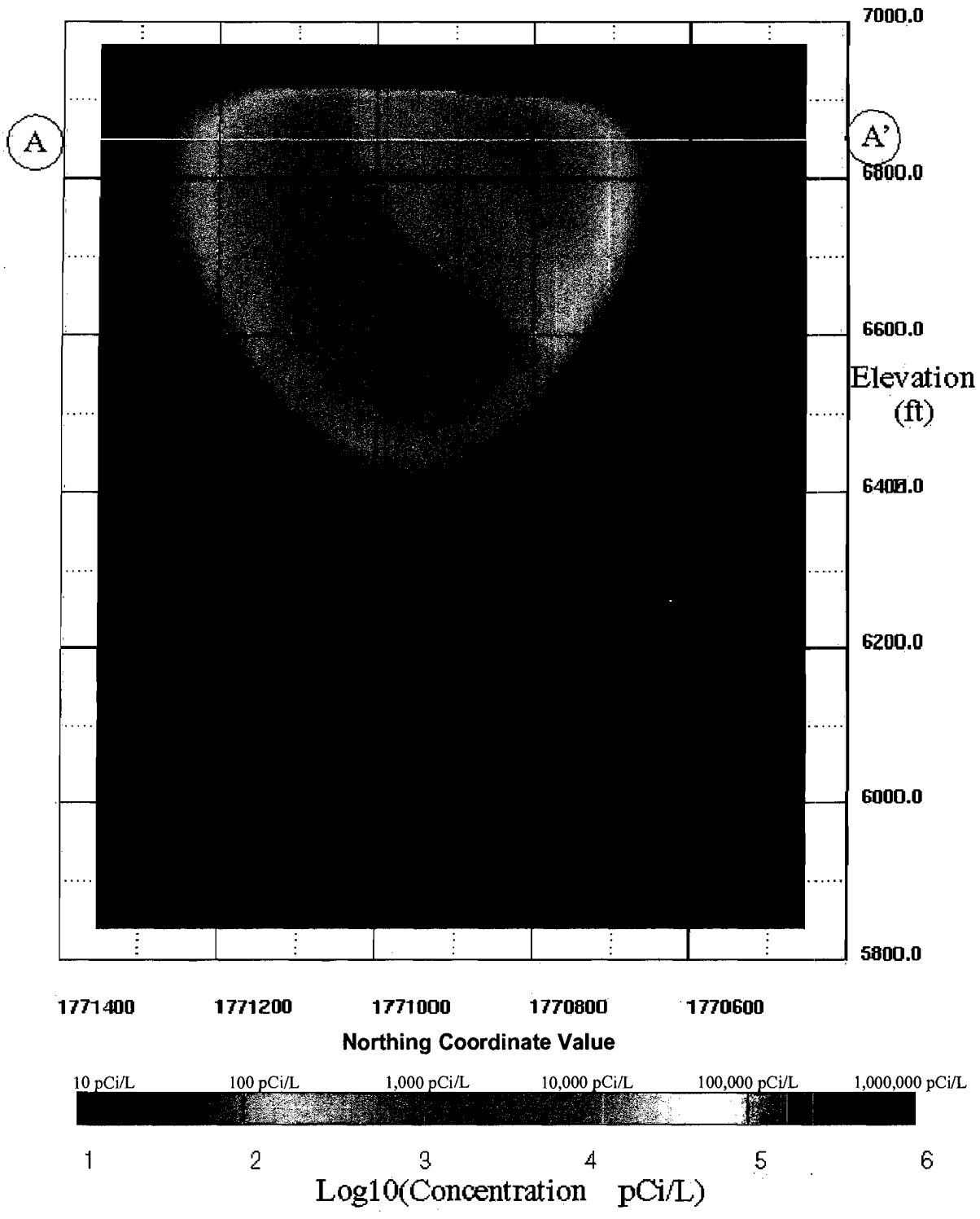


Figure 3.4-4. Predicted tritium concentrations for 2070 on cross section A-A'

(After 75 years of background infiltration, starting from the high infiltration case presented in Figure 3.2-2, maximum concentrations predicted are below 4000 pCi/L [log10(4000) = 3.6]; the total amount of tritium contamination has decayed to 0.32 Ci.)

4.0 PROPOSED SAMPLING ACTIVITIES

This section presents the proposed sampling required to address data gaps and confirm the conceptual transport model based on the spatial scale of the investigation. Also discussed are the proposed confirmatory samples for the IA activities.

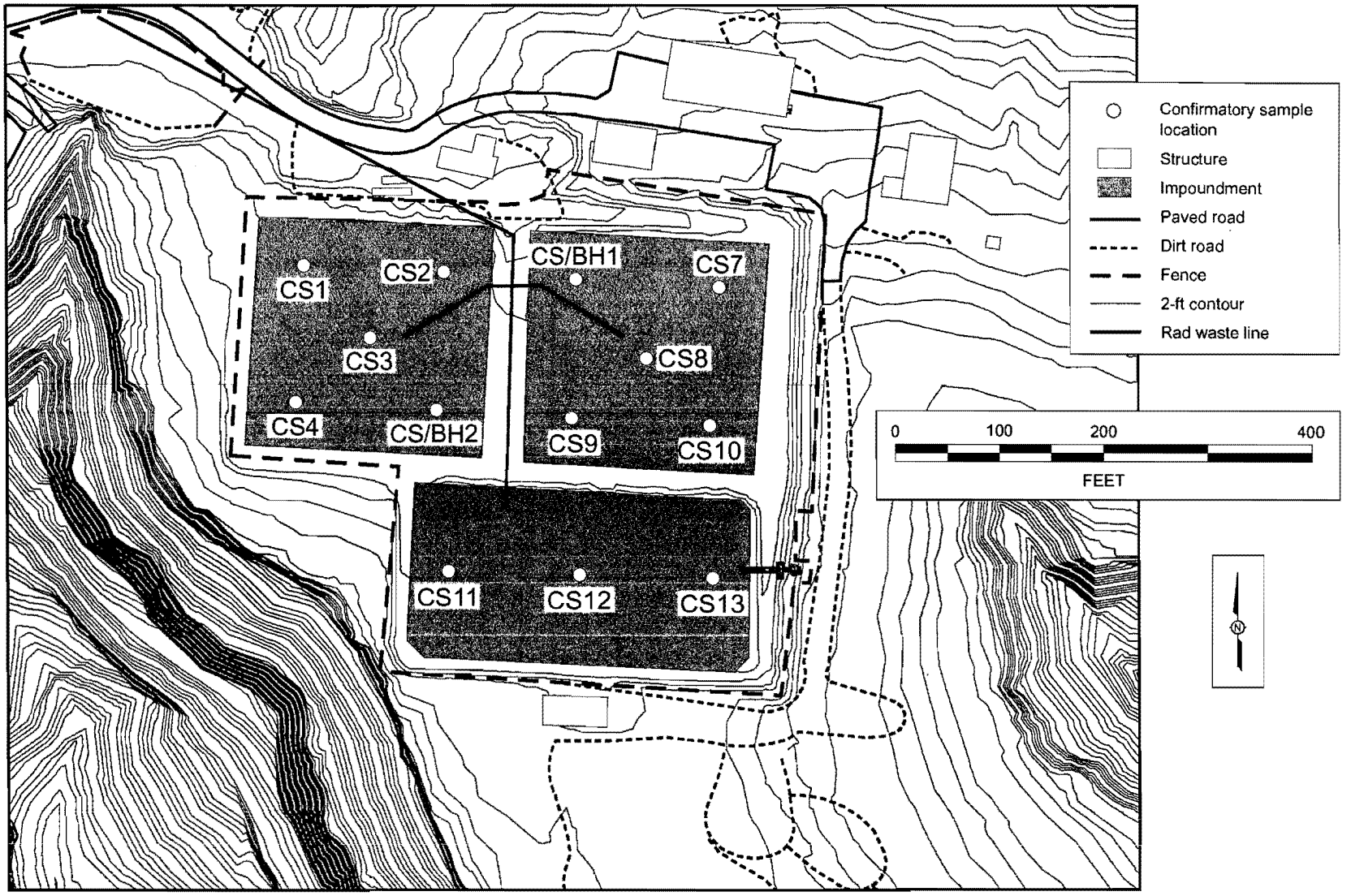
4.1 Confirmatory IA Samples Within the Surface Impoundments

Thirteen sample locations have been selected for the collection of shallow (0 to 6 in.) confirmatory samples from the recent IA that removed the sludge and liners from all three surface impoundments. The northern surface impoundments will yield a total of 10 confirmatory samples: 5 from each impoundment. Three confirmatory samples will be collected from the southern surface impoundment. Proposed sample locations are displayed in Figure 4.1-1. Table 4.1-1 presents the planned sample analyses.

Table 4.1-1
Confirmatory Sample Analyses for TA-53 Surface Impoundments IA

			Analyses
Sample Location	**Sample Number**	**Sample Depth (in.)**	**Gamma Spectroscopy**
Northeast surface impoundment	1	0–6	1
	2	0–6	1
	3	0–6	1
	4	0–6	1
	BH1*	0–6	1
Northwest surface impoundment	BH21*	0–6	1
	7	0–6	1
	8	0–6	1
	9	0–6	1
	10	0–6	1
Southern surface impoundment	11	0–6	1
	12	0–6	1
	13	0–6	1
Total Number of Samples			13

* Confirmatory samples and extent samples, see section 4.2.1.



Source: FIMAD_VCA 53-002(a,b) Add II, Prop conf smpls_070902_lcf

Figure 4.1-1. Proposed confirmatory sample (CS) locations within the impoundments

4.2 Borehole Samples from Within and Around the Surface Impoundments

4.2.1 Borehole Samples from Within the Northern Surface Impoundments

To complete the characterization process for the TA-53 surface impoundments, two boreholes (BH1 and BH2) are proposed, based on data gap determinations (see Figure 4.2-2). To help select appropriate sample locations for bounding extent of contamination in the tuff below the surface impoundments, concentrations of the COPCs were plotted (see Figures 3.2-1 through 3.2-17). This provided dimensional plots of the contaminant concentrations. The three primary COPCs (the risk drivers identified in the sludge/liner removal IA) were cesium-134, cobalt-60, and tritium. There are eleven locations with cobalt-60 concentrations higher than the SAL (1.2 pCi/g) (see figures in section 3.2) and one location with a tritium concentration higher than the tritium SAL (880 pCi/g). There are no concentrations of cesium-134 greater than SAL (2.3 pCi/g); however, the highest concentrations of cesium-134 are collocated with the highest concentrations of cobalt-60.

According to the data, the southeast corner of the northwest surface impoundment, and the northwest corner of the northeast surface impoundment, are appropriate locations in which to place boreholes (BH1 and BH2, respectively) for defining extent of cobalt-60, strontium-90, tritium, phthalates, and acetone. BH1, in conjunction with boreholes BH4 and BH5, will provide sufficient data to bound the contaminants with extent questions (greater than 25 ft) in the areas adjacent to the RLW pipeline and to the north of the lagoons. Two samples will be collected from each borehole, one at 30 ft and one at 50 ft, and analyzed for gamma-emitting radionuclides, SVOCs, VOCs, strontium-90, and tritium. In addition, two of the ten northern surface impoundment IA confirmatory samples are collocated with these two boreholes; therefore, a 0- to 6-in. interval will also be sampled for gamma-emitting isotopes (section 4.1).

4.2.2 Borehole Samples from Outside the Northern Surface Impoundments

To define extent for the phthalates and strontium-90 to the west of the lagoons, two hand auger holes (AH1 and AH2) will be drilled to 6 ft (see Figure 4.2-2) to collect samples for SVOC and strontium-90 analyses. Because of the topography, borehole placement in this area would not provide useful information about the lateral extent of SVOCs. The vertical extent for SVOCs has already been defined. The use of auger holes will allow samples to be taken closer to the mesa top edge. The two auger samples will be analyzed for SVOCs and strontium-90.

One borehole (BH3) will be drilled to a 50-ft depth to define vertical extent of contamination east of the impoundments, from the old outfall channel leading to Los Alamos Canyon. Two samples will be collected: one at 30 ft and one at 50 ft. Borehole samples for BH3 will be analyzed for gamma-emitting radionuclides, SVOCs, strontium-90, tritium, and PCBs.

Four boreholes (BH4–BH7) will be drilled to help define extent of contamination for the contaminants listed above, and for tritium. Three samples will be collected from each of the four boreholes at the 30-, 50-, and 100-ft depths for gamma-emitting radionuclides, strontium-90, and tritium. SVOC samples will also be collected from the 30- and 50-ft depths. VOC samples will be collected at one borehole (BH-7) at the 30- and 50-ft depths.

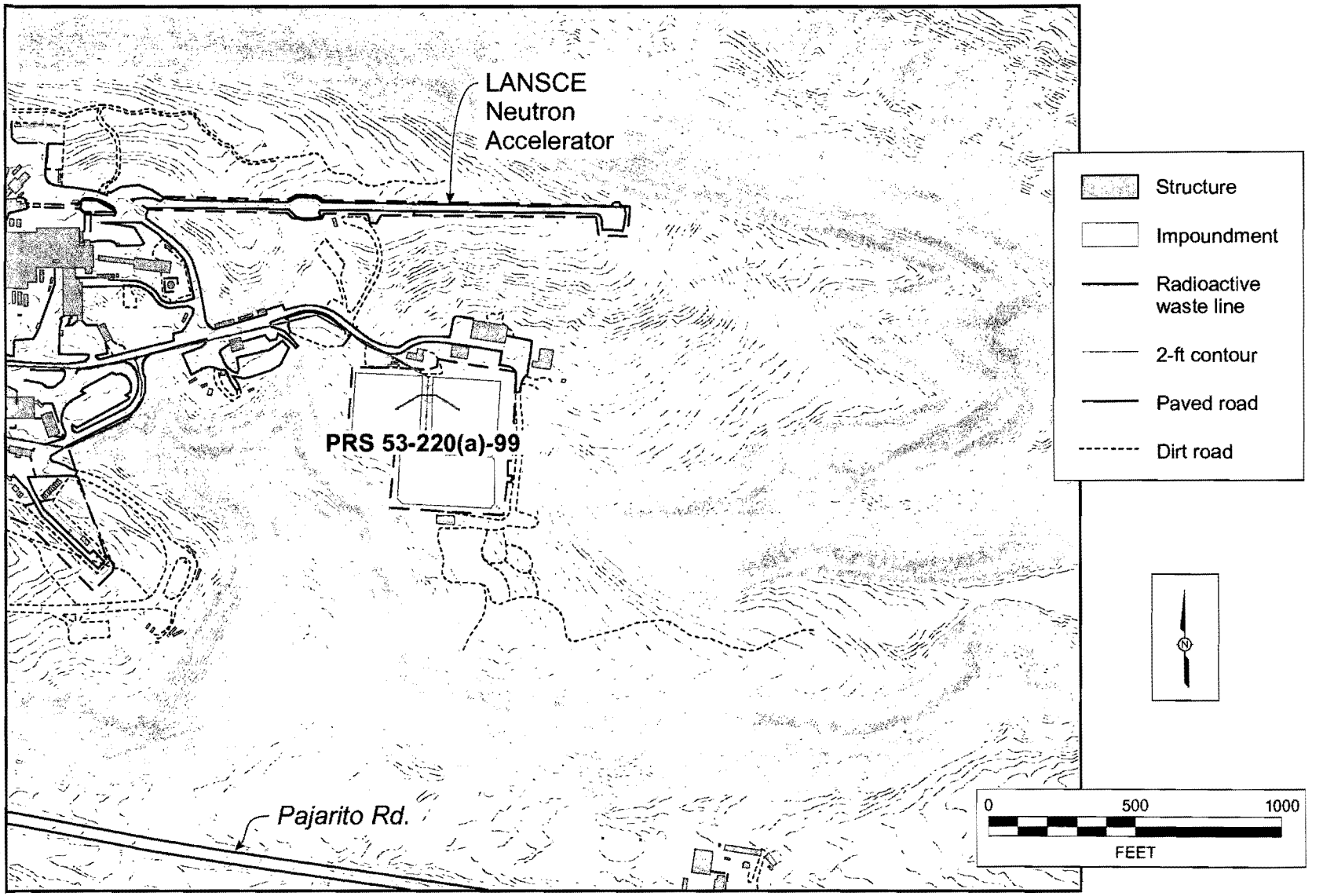
4.2.3 Borehole Samples to Confirm Tritium Transport Model

Boreholes BH4, BH5, and BH6 will continue to be drilled to 200 ft, and one borehole (BH7) will be drilled to 300 ft to confirm the tritium model presented in section 3.4. Samples for tritium analysis will be collected every 10 ft for a total of 20 samples in boreholes BH4–BH6, and a total of 30 samples in BH7. Sampling will be biased, however, by taking a sample at each geologic unit interface and geologic fracture encountered while drilling. No geologic interfaces are predicted within the first 50 ft of drilling. Based on observations from previous boreholes drilled around the impoundments, subsurface saturation is not expected (LANL 1998, 58841.2).

The geologic units below the surface impoundments are, for practical purposes, flat in this area. The geologic slope is not expected to have an effect on the downward migration of tritium in moisture from the TA-53 surface impoundments. The downward migration of moisture (and therefore tritium) is expected to be dominated by the vertical component. For this reason, the proposed boreholes for characterizing the extent of tritium in the vadose zone have been configured by placing one borehole (BH7) near the center of the three lagoons, where the furthest vertical extent is expected (see Figures 3.4-1 through 3.4-3). The steep side canyon walls to the south, west, and east of the surface impoundments are expected to have a drying effect on the mesa top. The land mass of mesa to the south of the surface impoundments is smaller or more limited (see Figure 4.2-1); therefore, only one borehole (BH6) is proposed for the area south of the lagoons. The land mass of mesa top to the north is more extensive than to the south; therefore, two boreholes are proposed for the area north of the impoundments to bound extent of tritium potentially moving laterally from the impoundments.

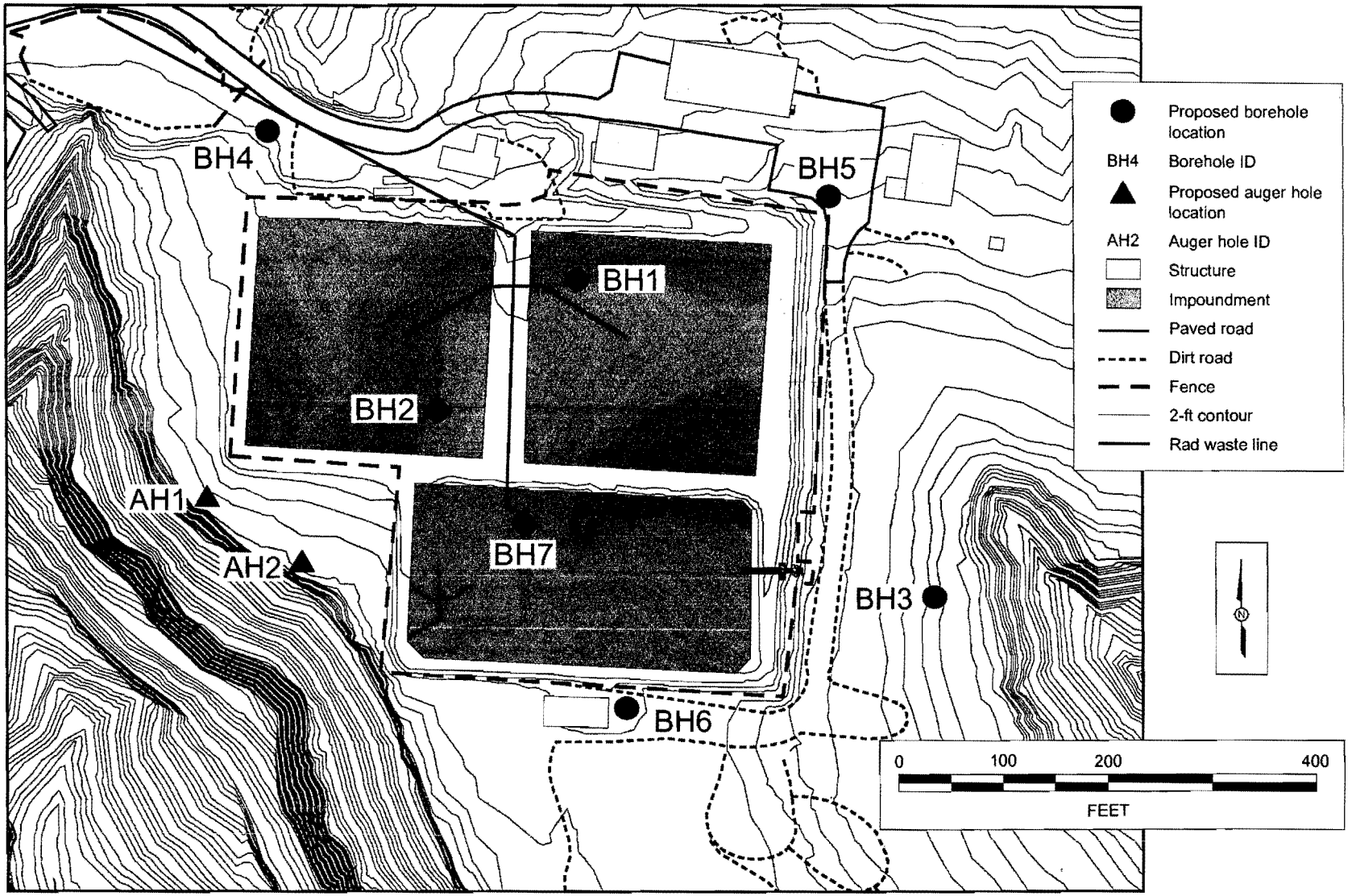
Boreholes BH4–BH-7 are expected to encounter interfaces for geologic units Qbt 2 (Quaternary Bandelier, Tshirege Member, unit 2), Qbt 1v (Quaternary Bandelier, Tshirege Member, unit 1v), Qbt 1g (Quaternary Bandelier, Tshirege Member, unit 1g), Qbtt (Quaternary Bandelier, Tshirege Member, Tsankawi Pumice), Qct (Quaternary Cerro Toledo), and Qbof (Quaternary Bandelier, Otowi Member). The predicted depths of the geologic units are shown in the site model (Figure 3.4-1). The proposed auger hole and borehole locations are displayed in Figure 4.2-2. Table 4.2-1 presents the samples that are proposed for collection.

Samples will be collected according to ER Project SOPs for SVOCs, PCBs, gamma spectroscopy, and strontium-90. Data quality will be assured by adherence to the ER Project QAPP, part of the draft IWP (LANL 2000, 66802).



Source: FIMAD_VCA 53-002(a,b) Add II_Site map _071102_lcf

Figure 4.2-1. Site map for TA-53 east



Source: FIMAD_VCA 53-002(a,b) Add II, Prop BHs_062402_lcf

Figure 4.2-2. Proposed auger and borehole sample locations

Table 4.2-1
Proposed Auger and Boreholes and Sample Analyses for TA-53 Surface Impoundments

Auger/Borehole Number	Depth (ft)	Number and Type of Sample Analyses						
		Tritium	Gamma Spectroscopy	Strontium-90	SVOCs	PCBs	VOCs	TAL Metals
AH1	0.5	0	0	1	1	0	0	0
	6	0	0	1	1	0	0	0
Total for AH1		**0**	**0**	**2**	**2**	**0**	**0**	**0**
AH2	0.5	0	0	1	1	0	0	0
	6	0	0	1	1	0	0	0
Total for AH2		**0**	**0**	**2**	**2**	**0**	**0**	**0**
BH1*	0.5	0	1	0	0	0	0	0
	30	1	1	1	1	0	1	1
	50	1	1	1	1	0	1	1
Total for BH1		**2**	**3**	**2**	**2**	**0**	**2**	**2**
BH2*	0.5	0	1	0	0	0	0	0
	30	1	1	1	1	0	1	1
	50	1	1	1	1	0	1	1
Total for BH2		**2**	**3**	**2**	**2**	**0**	**2**	**2**
BH3	30	1	1	1	1	1	0	1
	50	1	1	1	1	1	0	1
Total for BH3		**2**	**2**	**2**	**2**	**2**	**0**	**2**
BH4, BH5, BH6	10	3	0	0	0	0	0	0
	20	3	0	0	0	0	0	0
	30	3	3	3	3	0	0	0
	40	3	0	0	0	0	0	0
	50	3	3	3	3	0	0	0
	60	3	0	0	0	0	0	0
	70	3	0	0	0	0	0	0
	80	3	0	0	0	0	0	0
	90	3	0	0	0	0	0	0
	100	3	3	3	0	0	0	0
	110	3	0	0	0	0	0	0
	120	3	0	0	0	0	0	0
	130	3	0	0	0	0	0	0
	140	3	0	0	0	0	0	0
	150	3	0	0	0	0	0	0
	160	3	0	0	0	0	0	0
	170	3	0	0	0	0	0	0
	180	3	0	0	0	0	0	0
	190	3	0	0	0	0	0	0
	200	3	0	0	0	0	0	0
Total for BH4–BH6		**60**	**9**	**9**	**6**	**0**	**0**	**0**

Table 4.2-1 (continued)

Auger/Borehole Number	Depth (ft)	Number and Type of Sample Analyses						
		Tritium	Gamma Spectroscopy	Strontium-90	SVOCs	PCBs	VOCs	TAL Metals
BH7	10	1	0	0	0	0	0	0
	20	1	0	0	0	0	0	0
	30	1	1	1	1	0	1	1
	40	1	0	0	0	0	0	0
	50	1	1	1	1	0	1	1
	60	1	0	0	0	0	0	0
	70	1	0	0	0	0	0	0
	80	1	0	0	0	0	0	0
	90	1	0	0	0	0	0	0
	100	1	1	1	0	0	0	0
	110	1	0	0	0	0	0	0
	120	1	0	0	0	0	0	0
	130	1	0	0	0	0	0	0
	140	1	0	0	0	0	0	0
	150	1	0	0	0	0	0	0
	160	1	0	0	0	0	0	0
	170	1	0	0	0	0	0	0
	180	1	0	0	0	0	0	0
	190	1	0	0	0	0	0	0
	200	1	0	0	0	0	0	0
	210–300	10	0	0	0	0	0	0
Total for BH7		**30**	**3**	**3**	**2**	**0**	**2**	**2**
Grand Total Borehole Samples		**96**	**20**	**22**	**18**	**2**	**6**	**6**

* = Collocated with IA confirmatory samples (see Table 4.1-1).

5.0 DATA COLLECTION AND SAMPLING PROCEDURES

The following sections present the methodology to be used during the additional characterization activities needed to determine the extent of contamination at PRS 53-002(a)-99 at TA-53.

5.1 Geodetic Surveying

A licensed New Mexico surveyor will perform the geodetic surveying. Geodetic surveying will be used to accurately locate pertinent site features. Surveying will also precisely locate sampling locations. All locations will be recorded in New Mexico State plane coordinates, and location identification numbers will be assigned for submission to the Facility for Information Management, Analysis, and Display (FIMAD).

All sample locations will be surveyed in accordance with the applicable ER Project SOPs. Significant geomorphic boundaries or other features identified during the geomorphic survey will be included in the geodetic survey, as appropriate. The geodetic survey will be coordinated, conducted, and evaluated in accordance with ER-SOP-03.11, "Geodetic Surveys."

5.2 Sample Collection

Two primary sampling methods will be used, as appropriate. For relatively shallow soil samples, the spade-and-scoop method will be used. For deeper soil samples, a hand auger may be used if the soil is relatively free of large rocks and debris that make hand augering impractical. At locations where hand augering is ineffective or where tuff is encountered, powered hand-augering equipment may be used. The following ER Project SOPs will be followed during sampling: ER-SOP-6.09, "Spade-and-Scoop Method for the Collection of Soil Samples," and ER-SOP-6.10, "Hand Auger and Thin-Wall Tube Sampler."

For samples collected from boreholes, the primary collection method will be a drill rig. The following ER Project SOPs are pertinent to sampling: ER-SOP-6.24, "Sample Collection from Split-Spoon Samplers and Shelby Tube Samplers"; ER-SOP-6.26, "Core Barrel Sampling for Subsurface Earth Materials"; ER-SOP-4-01, "Drilling Methods and Drill Site Management"; and ER-SOP-4.04, "Contract Geophysical Logging."

Information to be recorded for collected samples includes, but is not limited to, a description of the sample material, a description of the sample's matrix (e.g., soil, rock, engineered material, fill, etc.), sample begin and end depths, formation name (if sampling tuff), and the results of field screening conducted on a given sample (e.g., photoionization detector [PID] or flame ionization detector readings).

Screening for ionizing radiation (for Department of Transportation and health and safety purposes) will be performed using a Ludlum Model 139 rate meter, or equivalent, with an air proportional (alpha) probe and an Eberline ESP-1 rate meter, or equivalent, and with a beta/gamma probe or as outlined in ER-SOP-10.10, "Radiation Scoping and Background Surveys," and ER-SOP-10.14, "Performing and Documenting Gross Gamma Radiation Scoping Surveys." The measured radioactivity levels will be recorded in the field log book and/or the sample collection logs, following ER-SOP-1.04, "Sample Control and Field Documentation." The SOPs that will be used for sample collection are listed in section 5.3.

5.3 Quality Assurance/Quality Control

The Laboratory's quality assurance program is described in the draft IWP (LANL 2000, 66802). Within the ER Project, the quality assurance program is administered by the Quality Program Project Leader and the Quality Integration and Improvement Team. To ensure that the quality goals for the ER Project are attained, the quality assurance program has prepared QPs and SOPs and designed programs to evaluate conformance to these procedures. The sampling and analysis to be conducted for this evaluation of TA-53 will follow the requirements outlined in the QAPP, which can be found in the draft IWP (LANL 2000, 66802).

Quality control (QC) is the set of activities conducted in the field and the laboratory to fulfill the requirements for quality. The numbers and types of QC samples will be added to the number of samples presented in the sampling tables in section 4.2. The SOP that specifies the number of QC samples to be collected is ER-SOP-1.05. Field duplicate samples will be collected at a frequency of 1 duplicate for every 20 samples collected. If fewer than 20 samples are collected at a subarea, 1 duplicate will be collected for the subarea. Field blanks may be collected when VOCs are sampled. The SOPs and QPs to be used include, but are not limited to,

- ER-SOP-1.01, General Instruction for Field Investigations
- ER-SOP-1.04, Sample Control and Field Documentation
- ER-SOP-1.05, Field Quality Control Samples

- ER-SOP-1.06, Management of ER Project Wastes
- ER-SOP-1.10, Waste Characterization
- ER-SOP-1.12, Field Site Closeout Checklist
- ER-SOP-10.14, Performing and Documenting Gross Gamma Radiation Scoping Surveys
- QP-2.1, Documenting Personnel Qualifications
- QP-2.2, Personnel Orientation and Training
- QP-3.2, Lessons Learned
- QP-3.5, Peer Review Process
- QP-4.4, Record Transmittal to the Records Processing Facility
- QP-5.3, Readiness Planning and Reviews
- QP-5.7, Notebook Documentation for Environmental Restoration Technical Activities

Data from the analytical laboratories will comply with the statement of work (SOW) for analytical laboratories (LANL 2000, 71233) and will include all the normal QA/QC parameters specified by the SOW. All data collected will be loaded into the ER Project database (ERDB).

5.4 Investigation-Derived Waste Management

Management of investigation-derived wastes will follow the guidelines and requirements of the Waste Characterization Strategy Form and all applicable regulations and DOE/LANL/ER Project implementing requirements including, but not limited to, RCRA/HSWA, 20NMAC4.1, 20NMAC9.1, the Clean Water Act (CWA), 20NMAC6.2, the Toxic Substances Control Act (TSCA), the Clean Air Act (CAA), the Laboratory Implementation Requirement (LIR) 404 series, ER-SOP-1.06, "Management of ER Project Wastes," and ER-SOP-1.10, "Waste Characterization."

5.5 Sample Designation Protocol

Each sample location will be marked, surveyed, and assigned a unique ER Project sample location identification number.

5.6 Sample Handling and Analysis

The following laboratory analytical methods, with the required detection limits, will be used for routine analytical services. Table 5.6-1, Table 5.6-2, Table 5.6-3, and Table 5.6-4 include the maximum required reporting limits or quantitation limits in accordance with the SOW for analytical laboratories (LANL 2000, 71233). In most cases, the reporting limits for the analytes are significantly lower than the detection or quantitation limits reported in these tables. The sample-specific detection or quantitation limits for each analyte are accessible from the ERDB. The detection limits for inorganic analytes will be below Laboratory background values.

Table 5.6-1
Target Analytes and Maximum Required Quantitation Limits for Radiochemical Analyses

Analyte	Soil/Solid Minimum Detectable Concentrations (pCi/g)	Analytical Technique[a]
Plutonium-238, -239	0.05	Alpha spectroscopy
Uranium-234, -235, -238	0.1	Alpha spectroscopy
Americium-241	0.05	Alpha spectroscopy
Gamma-emitting isotopes	—[b]	Gamma spectroscopy
Tritium	250 pCi/L	Liquid scintillation
Strontium-90	0.5	Air proportional beta analysis

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

[b] Estimated quantitation limits (EQLs) are not specified for cesium-134 or cobalt-60 (these and the other gamma-emitting isotopes commonly analyzed); they are determined on a case-specific basis.

Table 5.6-2
Target Analytes and Maximum Required Quantitation Limits for VOC Analyses

Target Analyte	Soil/Solids (µg/kg)	Target Analyte	Soil/Solids (µg/kg)
Chloromethane	10	1,3-dichloropropane	5
Vinyl chloride	10	Chlorodibromomethane	5
Bromomethane	10	4-methyl-2-pentanone	10
Chloroethane	10	Toluene	5
Acetone	10	2-hexanone	10
Dichlorodifluoromethane	10	1,2-dibromenthane	5
Iodomethane	5	Tetrachloroethene	5
Trichlorotrifluoroethane	5	Chlorobenzene	5
Trichlorotrifluoromethane	5	1,1,1,2-tetrachloroethane	5
Methyl chloride	5	Ethylbenzene	5
1,1-Dichloroethane	5	o,m,p-Xylene (mixed)	5
Carbon disulfide	5	Styrene	5
1,1-dichloroethane	5	Bromoform	5
1,2-dichloroethene (total)	10	1,1,2,2-tetrachloroethane	5
Bromochloromethane	5	1,2,3-trichloropropane	5
Chloroform	5	Isopropylbenzene	5

Table 5.6-2 (continued)

Target Analyte	Soil/Solids (µg/kg)
1,2-dichloroethane	5
1,1-dichloropropene	5
2-butanone	10
2,2-dichloropropane	5
1,1,1-trichloroethane	5
Carbon tetrachloride	5
Benzene	5
1,2-dichloropropane	5
Trichloroethene	5
Dibromomethane	5
Bromodichloromethane	5
t-1,3-dichloropropene	5
c-1,3-dichloroprepene	5
1,1,2-trichloroethane	5

Target Analyte	Soil/Solids (µg/kg)
Bromobenzene	5
n-Propylbenzene	5
2-chlorotolulene	5
4-chlorotolulene	5
1,3,5-trimethylbenzene	5
tert-butylbenzene	5
1,2,4-trimethylbenzene	5
Sec.-butylbenzene	5
1,3-dichlorobenzene	5
1,4-dichlorobenzene	5
p-Isopropyltoluene	5
1,2-dichlorobenzene	5
n-Butylbenzene	5
1,2-Dimbromo-3-chloropropane	10

Note: All analyses done by EPA contract laboratory program Method OLM2.0 or the equivalent EPA Method 8260. These methods are based on purge and trap sample extraction/concentration followed by gas chromatography/mass spectroscopy.

Table 5.6-3
Target Analytes and Maximum Required Detection Limits for SVOC Analyses

Target Analyte	Soil/Solids EQL[a] (µg/kg)
Acenaphthene	330
Acenaphthylene	330
Aniline	660
Anthracene	330
Azobenzene	660
Benz(a)anthracene	330
Benzoic acid	3300
Benzo(b)fluoranthrene	330
Benzo(k)fluoranthrene	330
Benzo(g,h,i)perylene	330
Benzo(a)pyrene	330
Benzyl alcohol	1300
Bis(2-chloroethoxy)methane	330
Bis(2-chloroethyl)ether	330
4-Bromophenyl phenylether	330
Butylbenzylphthalate	330
4-Chloroaniline	1300

Target Analyte	Soil/Solids EQL[a] (µg/kg)
4,6-Dinitro-2-methylphenol	1650
2,4-Dinitrotolulene	330
2,6-Dinitrotolulene	330
Di-n-octyl phthalate	330
Bis(2-ethylhexyl)phthalate	330
Fluoranthene	330
Fluorene	330
Hexachlorobenzene	330
Hexachlorobutadiene	330
Hexachlorocyclopentadiene	330
Hexachloroethane	330
Indeno(1,2,3-cd)pyrene	330
Isophorone	330
2-Methylnaphthalene	330
2-Methylphenol	330
4-Methylphenol	330
Naphthalene	330

Table 5.6-3 (continued)

Target Analyte	Soil/Solids EQL[a] (µg/kg)	Target Analyte	Soil/Solids EQL[a] (µg/kg)
4-Chloro-3-methylphenol	660	2-Nitroaniline	1650
2-Chloronaphthalene	330	3-Nitroaniline	1650
2-Chlorophenol	330	4-Nitroaniline	660
4-Chloropehnyl phenylether	330	Nitrobenzene	330
Chrysene	330	2-Nitrophenol	330
Dibenzo(a,h)anthracene	330	4-Nitrophenol	1650
Dibenzofuran	330	N-Nitrosodimethylamine	330
1,2-Dichlorobenzene	330	N-Nitrosodiphenylamine	330
1,3-Dichlorobenzene	330	N-Nitro-di-n-propylamine	330
1,4-Dichlorobenzene	330	2,2'-oxybis(1-Chloropropane)	330
3,3'-Dichlorobenzidine	660	Pentachlorophenol	1650
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 OLM2.0 or the equivalent EPA Method 8270. These methods are based on solvent extraction, concentration, and gas chromatography/mass spectroscopy detection and quantitation.

[a] EQLs for the 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 5.6-4
Target Analytes and Maximum Required Quantitation Limits for PCB Analyses

Analyte	Soil/Solids EQL[a] (µg/kg)
Aroclor-1016	33
Aroclor-1221	66
Aroclor-1232	33
Aroclor-1242	33
Aroclor-1248	33
Aroclor-1254	33
Aroclor-1260	33

Note: All analyses done by EPA Method 8080 or 8082 or by the equivalent contract laboratory program method. These methods employ gas chromatography for detection and quantitation.

[a] EQLs for the samples are based on no gel permeation chromatography 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.

All sampling will be conducted in accordance with ER Project procedures for sample control and documentation, and for sample handling, packaging, and shipping. All sample containers will be appropriately labeled and assigned unique Laboratory sample identification numbers with bar codes for tracking purposes. The samples will be documented on sample collection logs, placed in coolers with blue ice, and transported to the Sample Management Office (SMO) under chain-of-custody.

These five ER Project SOPs will be followed:

- ER-SOP-1.01, General Instructions for Field Investigations
- ER-SOP-1.02, Sample Containers and Preservation
- ER-SOP-1.03, Handling, Packaging, and Shipping of Samples
- ER-SOP-1.04, Sample Control and Field Documentation
- ER-SOP-1.08, Field Decontamination of Drilling and Sampling Equipment

5.7 Data Management

All original field documents will be transferred to the ER Project's Records Processing Facility in accordance with ER-QP-4.4, "Record Transmittal to the Records Processing Facility". Data generated by the analytical laboratories will be submitted to the SMO in accordance with the requirements of the ER Project analytical services SOW (LANL 2000, 71233). The reporting requirements included electronic and hard copy deliverables for routine analyses. The Data Analysis and Assessment Team within the Analysis and Assessment Focus Area is responsible for data verification, validation, and transfer into the ERDB.

6.0 PROJECT MANAGEMENT

6.1 Project Scheduling and Reporting Requirements

Implementation of this addendum will be directed by the Industrial Sites Team of the Remedial Actions Focus Area, which is part of the Laboratory's ER Project. No date has been determined for beginning the implementation of this second addendum, and no schedule for the work is provided here. The reporting requirements related to the implementation of this second addendum have not been determined.

6.2 Health and Safety Plan

A site-specific health and safety plan will be developed in accordance with the ER Project Site-Specific Health and Safety Plan (LANL 1995, 56448).

6.3 Investigation-Derived Waste Plan

If there is any investigation-derived waste, it will be handled in accordance with ER-SOP-1.06, "Management of ER Project Wastes."

6.4 Community Relations Plan

Community relations are governed by the Public Involvement Plan in Chapter 7 of the ER Project's draft IWP (LANL 2000, 66802).

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Appendix A

Samples Taken Tables

Table A-1
Samples Taken for Analysis at PRS 53-002(a)-99

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
0253-95-0103	53-01001	1.5–2.5	Qbt 2	—	76761	76624	—	—	76247	76387	76158	76128	76138	76119	76120	—
0253-95-0106	53-01002	1.5–2.5	Qbt 2	—	76817	76718	—	—	76721	76716	76696	76677	76643	76640	76642	—
0253-95-0110	53-01003	1.5–2.5	Qbt 2	—	76817	76718	—	—	76721	76716	76696	76677	76643	76640	76642	—
0253-95-0113	53-01004	1.5–2.5	Qbt 2	—	76817	76718	—	—	76721	76716	76696	76677	76643	76640	76642	—
0253-95-0116	53-01005	1.5–.42	Qbt 2	—	76817	76718	—	—	76721	76716	76696	76677	76643	76640	76642	—
0253-95-0119	53-01006	1.5–2.5	Qbt 2	—	76817	76718	—	—	76721	76716	76696	76677	76643	76640	76642	—
0253-95-0122	53-01007	1.5–2.5	Qbt 2	—	76824	76718	—	—	76721	76716	76696	76677	76643	76640	76642	—
0253-95-0126	53-01008	1.5–2.5	Qbt 2	—	76824	76815	—	—	76952	76772	76751	76807	76782	76795	76798	—
0253-95-0129	53-01009	1.5–2.5	Qbt 2	—	76824	76815	—	—	76952	76772	76751	76807	76782	76795	76798	—
0253-95-0132	53-01010	1.5–2.5	Qbt 2	—	76824	76815	—	—	76952	76772	76752	76807	76782	76795	76798	—
0253-95-0135	53-01011	1.5–2.5	Qbt 2	—	76824	76815	—	—	76952	76772	76752	76807	76782	76795	76798	—
0253-95-0138	53-01012	1.5–2.5	Qbt 2	—	76824	77884	—	—	76952	76772	76752	76807	76782	76795	76798	—
0253-95-0142	53-01013	1.5–2.5	Qbt 2	—	76824	76815	—	—	76952	76772	76752	76807	76782	76795	76798	—
0253-95-0145	53-01014	1.5–2.5	Qbt 2	—	76824	76815	—	—	76996	76772	76752	76807	76782	76795	76798	—
0253-95-0148	53-01015	1.5–2.5	Qbt 2	—	76824	76815	—	—	76996	76772	76836	76807	76782	76795	76798	—
0253-95-0151	53-01016	1.5–2.5	Qbt 2	—	76833	76815	—	—	76996	76772	76836	76807	76782	76795	76798	—
0253-95-0154	53-01017	1.5–2.5	Qbt 2	—	76833	76861	—	—	76996	76774	76836	76808	76783	76796	76799	—
0253-95-0177	53-01018	3.5–4.83	Qbt 2	—	76972	76932	—	—	77145	77234	76882	76850	76856	76797	76800	—
0253-95-0181	53-01019	2.17–3	Qbt 2	—	76972	76932	—	—	77145	77234	76882	76850	76856	76797	76800	—
0253-95-0184	53-01020	3.67–4.5	Qbt 2	—	76972	76932	—	—	77145	77234	76882	76850	76856	76797	76800	—
0253-95-0187	53-01021	1.58–2.5	Qbt 2	—	76972	76932	—	—	77145	77234	76882	76850	76856	76797	76800	—

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
0253-95-0190	53-01022	1.5–2.5	Qbt 2	—	77325	77434	—	—	77600	77234	77328	77138	77177	77254	77256	—
0253-95-0193	53-01023	2–3.33	Qbt 2	—	77572	77434	—	—	77600	77234	77328	77138	77177	77254	77256	—
0253-95-0196	53-01024	1.5–2.5	Qbt 2	—	77378	77434	—	—	77600	77234	77328	77138	77177	77254	77256	—
0253-95-0205	53-01025	1.5–2.5	Qbt 2	—	77378	77434	—	—	77600	77234	77328	77138	77177	77254	77256	—
0253-95-0208	53-01026	1.5–2.5	Qbt 2	—	77378	77434	—	—	77600	77567	77398	77138	77177	77254	77256	—
0253-95-0211	53-01027	1.5–2.5	Qbt 2	—	77642	77434	—	—	77796	77567	77398	77258	77237	77250	77249	—
0253-95-0214	53-01028	1.5–2.5	Qbt 2	—	77642	77672	—	—	77796	77567	77398	77258	77237	77250	77249	—
0253-95-0217	53-01029	1.5–2.5	Qbt 2	—	77642	77672	—	—	77796	77567	77398	77258	77237	77250	77249	—
0253-95-0220	53-01030	1.5–2.5	Qbt 2	—	78389	77672	—	—	77796	77567	77398	77258	77237	77250	77249	—
0253-95-0223	53-01031	1.5–2.5	Qbt 2	—	77642	77672	—	—	77796	77567	77458	77258	77237	77250	77249	—
0253-95-0227	53-01032	1.5–3	Qbt 2	—	77642	77672	—	—	77796	77567	77458	77258	77237	77250	77249	—
0253-95-0230	53-01033	1.5–2.5	Qbt 2	—	77717	77672	—	—	77796	77567	77458	77258	77237	77250	77249	—
0253-95-0233	53-01034	2–3	Qbt 2	—	77717	77672	—	—	77796	77567	77458	77258	77237	77250	77249	—
0253-95-0155	53-01288	1.5–2.5	Qbt 2	—	76933	76861	—	—	76996	76774	76836	76808	76783	76796	76799	—
0253-95-0156	53-01289	1–1.67	Qbt 2	—	76933	76861	—	—	76996	76774	76836	76808	76783	76796	76799	—
0253-95-0157	53-01290	0.67–1.5	Qbt 2	—	76933	76861	—	—	76996	76774	76836	76808	76783	76796	76799	—
0253-95-0158	53-01291	1.5–2.17	Qbt 2	—	76933	76861	—	—	76996	76774	76836	76808	76783	76796	76799	—
0253-95-0159	53-01292	1.5–2.5	Qbt 2	—	76933	76932	—	—	76996	76774	76751	76808	76783	76796	76799	—
0253-95-0160	53-01293	1.5–2.17	Qbt 2	—	76933	76861	—	—	76996	76774	76751	76808	76783	76796	76799	—
0253-95-0161	53-01294	1.5–2.5	Qbt 2	—	76933	76861	—	—	76996	76774	76751	76808	76783	76796	76799	—
0253-95-0162	53-01295	1.5–2.5	Qbt 2	—	76933	76861	—	—	76996	76774	76751	76808	76783	76797	76800	—
0253-95-0234	53-01316	2–3.67	Qbt 2	—	76933	76861	—	—	76996	76774	76751	76808	76785	76797	76800	—
0253-95-0236	53-01317	0.67–2	Qbt 2	—	76933	76861	—	—	77145	76774	76879	76808	76785	76797	76800	—

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
0253-95-0237	53-01318	1.17–2.5	Qbt 2	—	76933	76932	—	—	77145	76774	76879	76808	76785	76797	76800	—
0253-95-0238	53-01319	1.5–2.33	Qbt 2	—	76933	76932	—	—	77145	76774	77086	76808	76785	76797	76800	—
0253-95-0239	53-01320	1–2.33	Qbt 2	—	76972	76932	—	—	77145	76774	76879	76808	76785	76797	76800	—
0253-95-0241	53-01321	1.5–2.67	Qbt 2	—	76972	76932	—	—	77145	76774	76879	76808	76785	76797	76800	—
0253-95-0242	53-01322	1–2.67	Qbt 2	—	76972	76932	—	—	77145	76774	76882	76808	76785	76797	76800	—
0253-95-0243	53-01323	2.5–3.67	Qbt 2	—	76972	76932	—	—	77145	77234	76882	76808	76785	76797	76800	—
RE53-99-0015	53-01565	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0018	53-01566	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0021	53-01567	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0024	53-01568	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0246	53-01568	14–15	Qbt 2	—	—	—	—	—	—	—	5790R	—	—	—	—	—
RE53-99-0027	53-01569	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0030	53-01570	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0033	53-01571	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0036	53-01572	1–2	Qbt 2	—	—	—	5615R	5615R	—	—	—	—	—	—	—	—
RE53-99-0039	53-01573	1–2	Qbt 2	—	—	—	5620R	5620R	—	—	—	—	—	—	—	—
RE53-99-0040	53-01573	1–2	Qbt 2	—	—	—	5620R	5620R	—	—	—	—	—	—	—	—
RE53-99-0115	53-01573	4–5	Qbt 2	5634R	5634R	5633R	5633R	5633R	—	5633R	5633R	5635R	5635R	5635R	5635R	5635R
RE53-99-0116	53-01573	14–15	Qbt 2	5634R	5634R	5633R	5633R	5633R	—	5633R	5633R	5635R	5635R	5635R	5635R	5635R
RE53-99-0044	53-01574	1–2	Qbt 2	—	—	—	5620R	5620R	—	—	—	—	—	—	—	—
RE53-99-0059	53-01575	1–2	Qbt 2	5641R	—	—	5640R	5640R	—	—	—	—	—	—	—	—
RE53-99-0117	53-01575	4–5	Qbt 2	—	5641R	5640R	5640R	5640R	—	5640R	5640R	5642R	5642R	5642R	5642R	5642R
RE53-99-0118	53-01575	14–15	Qbt 2	—	5641R	5640R	5640R	5640R	—	5640R	5640R	5642R	5642R	5642R	5642R	5642R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0062	53-01576	1–2	Qbt 2	5685R	—	—	5684R	5684R	—	—	—	—	—	—	—	—
RE53-99-0119	53-01576	4–5	Qbt 2	—	5685R	5684R	5684R	5684R	—	5684R	5684R	5686R	5686R	5686R	5686R	5686R
RE53-99-0120	53-01576	14–15	Qbt 2	—	5685R	5684R	5684R	5684R	—	5684R	5684R	5686R	5686R	5686R	5686R	5686R
RE53-99-0065	53-01577	1–2	Qbt 2	—	—	—	5684R	5684R	—	—	—	—	—	—	—	—
RE53-99-0121	53-01577	4–5	Qbt 2	—	5685R	5684R	5684R	5684R	—	5684R	5684R	5686R	5686R	5686R	5686R	5686R
RE53-99-0122	53-01577	14–15	Qbt 2	5685R	5685R	5684R	5684R	5684R	—	5684R	5684R	5686R	5686R	5686R	5686R	5686R
RE53-99-0047	53-01579	1–2	Qbt 2	—	—	—	5621R	5621R	—	—	—	—	—	—	—	—
RE53-99-0050	53-01580	1–2	Qbt 2	—	—	—	5621R	5621R	—	—	—	—	—	—	—	—
RE53-99-0053	53-01581	1–2	Qbt 2	—	—	—	5621R	5621R	—	—	—	—	—	—	—	—
RE53-99-0080	53-01582	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0125	53-01582	4–5	Qbt 2	5696R	5696R	—	5695R	5695R	—	5695R	5695R	5697R	5697R	5697R	5697R	5697R
RE53-99-0126	53-01582	14–15	Qbt 2	5696R	5696R	—	5695R	5695R	—	5695R	5695R	5697R	5697R	5697R	5697R	5697R
RE53-99-0127	53-01582	14–15	Qbt 2	5696R	5696R	—	5695R	5695R	—	5695R	5695R	5697R	5697R	5697R	5697R	5697R
RE53-99-0077	53-01583	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0072	53-01584	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0073	53-01584	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0123	53-01584	4–5	Qbt 2	5696R	5696R	—	5695R	5695R	—	5695R	5695R	5697R	5697R	5697R	5697R	5697R
RE53-99-0124	53-01584	14–15	Qbt 2	5696R	5696R	—	5695R	5695R	—	5695R	5695R	5697R	5697R	5697R	5697R	5697R
RE53-99-0069	53-01585	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0264	53-01585	14–15	Qbt 2	—	5968R	—	5967R	—	—	5967R	5967R	5969R	5969R	5969R	5969R	5969R
RE53-99-0092	53-01586	1–2	Qbt 2	—	—	—	5702R	5702R	—	—	—	—	—	—	—	—
RE53-99-0132	53-01586	4–5	Qbt 2	5707R	5707R	—	5705R	5705R	—	5705R	-	5706R	5706R	5706R	5706R	5706R
RE53-99-0245	53-01586	4–5	Qbt 2	—	—	—	—	—	—	—	5790R	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0133	53-01586	14–15	Qbt 2	5707R	5707R	—	5705R	5705R	—	5705R	—	5706R	5706R	5706R	5706R	5706R
RE53-99-0089	53-01587	1–2	Qbt 2	—	—	—	5702R	5702R	—	—	—	—	—	—	—	—
RE53-99-0130	53-01587	4–5	Qbt 2	5703R	5703R	—	5702R	5702R	—	5702R	5709R	5704R	5704R	5704R	5704R	5704R
RE53-99-0131	53-01587	14–15	Qbt 2	5703R	5703R	—	5702R	5702R	—	5702R	5709R	5704R	5704R	5704R	5704R	5704R
RE53-99-0095	53-01588	1–2	Qbt 2	—	—	—	5716R	5716R	—	—	—	—	—	—	—	—
RE53-99-0134	53-01588	4–5	Qbt 2	—	5795R	—	5794R	5794R	—	5794R	5794R	5797R	5797R	5797R	5797R	5797R
RE53-99-0135	53-01588	14–15	Qbt 2	—	5795R	—	5794R	5794R	—	5794R	5794R	5797R	5797R	5797R	5797R	5797R
RE53-99-0086	53-01589	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0128	53-01589	4–5	Qbt 2	5703R	5703R	—	5702R	5702R	—	5702R	5709R	5704R	5704R	5704R	5704R	5704R
RE53-99-0129	53-01589	14–15	Qbt 2	5703R	5703R	—	5702R	5702R	—	5702R	5709R	5704R	5704R	5704R	5704R	5704R
RE53-99-0083	53-01590	1–2	Qbt 2	—	—	—	5698R	5698R	—	—	—	—	—	—	—	—
RE53-99-0107	53-01591	1–2	Qbt 2	5819R	—	—	5818R	5818R	—	—	—	—	—	—	—	—
RE53-99-0104	53-01592	1–2	Qbt 2	5796R	—	—	5794R	5794R	—	—	—	—	—	—	—	—
RE53-99-0140	53-01592	4–5	Qbt 2	5796R	5795R	—	5794R	5794R	—	5794R	5794R	5797R	5797R	5797R	5797R	5797R
RE53-99-0141	53-01592	14–15	Qbt 2	5796R	5795R	—	5794R	5794R	—	5794R	5794R	5797R	5797R	5797R	5797R	5797R
RE53-99-0101	53-01593	1–2	Qbt 2	—	—	—	5716R	5716R	—	—	—	—	—	—	—	—
RE53-99-0138	53-01593	4–5	Qbt 2	5796R	5795R	—	5794R	5794R	—	5794R	5794R	5797R	5797R	5797R	5797R	5797R
RE53-99-0139	53-01593	14–15	Qbt 2	5796R	5795R	—	5794R	5794R	—	5794R	5794R	5797R	5797R	5797R	5797R	5797R
RE53-99-0098	53-01594	1–2	Qbt 2	—	—	—	5705R	5705R	—	—	—	—	—	—	—	—
RE53-99-0136	53-01594	4–5	Qbt 2	—	5791R	—	—	—	5790R	5790R	5790R	5792R	5792R	5792R	5792R	5792R
RE53-99-0137	53-01594	14–15	Qbt 2	—	5791R	—	—	—	5790R	5790R	5790R	5792R	5792R	5792R	5792R	5792R
RE53-99-0189	53-01595	1–2	Qbt 2	—	—	—	5716R	5716R	—	—	—	—	—	—	—	—
RE53-99-0148	53-01595	4–5	Qbt 2	—	5827R	—	5826R	5826R	—	5826R	5826R	5828R	5828R	5828R	5828R	5828R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0149	53-01595	14–15	Qbt 2	—	5827R	—	5826R	5826R	—	5826R	5826R	5828R	5828R	5828R	5828R	5828R
RE53-99-0192	53-01596	1–2	Qbt 2	—	—	—	5716R	5716R	—	—	—	—	—	—	—	—
RE53-99-0146	53-01596	4–5	Qbt 2	—	5827R	—	5826R	5826R	—	5826R	5826R	5828R	5828R	5828R	5828R	5828R
RE53-99-0147	53-01596	14–15	Qbt 2	—	5827R	—	5826R	5826R	—	5826R	5826R	5828R	5828R	5828R	5828R	5828R
RE53-99-0113	53-01597	1–2	Qbt 2	—	—	—	5716R	5716R	—	—	—	—	—	—	—	—
RE53-99-0144	53-01597	4–5	Qbt 2	—	5819R	—	5818R	5818R	—	5818R	5818R	5820R	5820R	5820R	5820R	5820R
RE53-99-0145	53-01597	14–15	Qbt 2	—	5819R	—	5818R	5818R	—	5818R	5818R	5820R	5820R	5820R	5820R	5820R
RE53-99-0110	53-01598	1–2	Qbt 2	—	—	—	5716R	5716R	—	—	—	—	—	—	—	—
RE53-99-0142	53-01598	4–5	Qbt 2	—	5819R	—	5818R	5818R	—	5818R	5818R	5820R	5820R	5820R	5820R	5820R
RE53-99-0143	53-01598	14–15	Qbt 2	—	5819R	—	5818R	5818R	—	5818R	5818R	5820R	5820R	5820R	5820R	5820R
RE53-99-0056	53-01599	1–2	Qbt 2	—	—	—	5621R	5621R	—	—	—	—	—	—	—	—
RE53-99-0216	53-01624	0–0.5	Soil	—	5889R	—	5888R	—	—	5888R	—	5890R	5890R	5890R	5890R	5890R
RE53-99-0217	53-01624	0.5–1	Qbt 2	—	5889R	—	5888R	—	—	5888R	5888R	5890R	5890R	5890R	5890R	5890R
RE53-99-0218	53-01626	0–0.5	Soil	—	5889R	—	5888R	—	—	5888R	—	5890R	5890R	5890R	5890R	5890R
RE53-99-0219	53-01626	0.5–0.83	Soil	—	5889R	—	5888R	—	—	5888R	5888R	5890R	5890R	5890R	5890R	5890R
RE53-99-0220	53-01626	0.83–1.33	Qbt 2	—	5889R	—	5888R	—	—	5888R	5888R	5890R	5890R	5890R	5890R	5890R
RE53-99-0210	53-01631	0–0.5	Soil	5867R	5867R	—	5866R	—	—	5866R	5866R	5868R	5868R	5868R	5868R	5868R
RE53-99-0211	53-01631	0.67–1.67	Qbt 2	5867R	5867R	—	5866R	—	—	5866R	5866R	5868R	5868R	5868R	5868R	5868R
RE53-99-0212	53-01632	0–0.33	Soil	5867R	5867R	5866R	5866R	5866R	—	5866R	5866R	5868R	5868R	5868R	5868R	5868R
RE53-99-0213	53-01633	0–0.5	Soil	—	5867R	—	5866R	—	—	5866R	—	5868R	5868R	5868R	5868R	5868R
RE53-99-0214	53-01634	0–0.5	Soil	—	5867R	5866R	5866R	5866R	—	5866R	5866R	5868R	5868R	5868R	5868R	5868R
RE53-99-0215	53-01634	0.67–1.67	Qbt 2	—	5867R	5866R	5866R	5866R	—	5866R	5866R	5868R	5868R	5868R	5868R	5868R
RE53-99-0221	53-01635	0–0.5	Soil	—	5906R	—	5905R	—	—	5905R	—	5907R	5907R	5907R	5907R	5907R

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RE53-99-0222	53-01635	0.5–1.33	Soil	—	5906R	—	5905R	—	—	5905R	5905R	5907R	5907R	5907R	5907R	5907R
RE53-99-0223	53-01635	1.33–2.5	Qbt 2	—	5906R	—	5905R	—	—	5905R	5905R	5907R	5907R	5907R	5907R	5907R
RE53-99-0224	53-01636	0–0.33	Soil	—	5906R	—	5905R	—	—	5905R	—	5907R	5907R	5907R	5907R	5907R
RE53-99-0225	53-01637	0–0.5	Soil	—	5906R	—	5905R	—	—	5905R	—	5907R	5907R	5907R	5907R	5907R
RE53-99-0226	53-01638	0–0.25	Soil	—	5906R	—	5905R	—	—	5905R	—	5907R	5907R	5907R	5907R	5907R
RE53-99-0183	53-01639	0–0.33	Soil	5799R	5799R	5798R	5798R	5798R	—	5798R	5801R	5800R	5800R	5800R	5800R	5800R
RE53-99-0184	53-01640	0–0.33	Soil	—	5799R	—	5798R	5798R	—	5798R	5801R	5800R	5800R	5800R	5800R	5800R
RE53-99-0185	53-01641	0–0.33	Soil	—	5799R	—	5798R	5798R	—	5798R	5801R	5800R	5800R	5800R	5800R	5800R
RE53-99-0163	53-01642	0–0.5	Qbt 2	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0179	53-01642	4.5–5	Soil	—	5644R	—	—	—	—	—	5643R	5645R	5645R	5645R	5645R	5645R
RE53-99-0164	53-01643	0–0.25	Soil	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0165	53-01644	0–0.5	Soil	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0178	53-01644	0.67–1	Soil	—	5644R	—	—	—	—	—	5643R	5645R	5645R	5645R	5645R	5645R
RE53-99-0166	53-01645	0–0.5	Qbt 2	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0175	53-01645	1–1.33	Soil	—	5634R	5633R	5633R	5633R	—	5633R	5633R	5635R	5635R	5635R	5635R	5635R
RE53-99-0167	53-01646	0–0.5	Soil	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0177	53-01646	0.58–0.92	Soil	—	5644R	—	—	—	—	—	5643R	5645R	5645R	5645R	5645R	5645R
RE53-99-0168	53-01647	0–0.25	Soil	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0169	53-01648	0–0.5	Soil	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0176	53-01648	0.67–1	Soil	—	5644R	—	—	—	—	—	5643R	5645R	5645R	5645R	5645R	5645R
RE53-99-0170	53-01649	0–0.5	Soil	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0171	53-01650	0–0.42	Qbt 2	—	5623R	—	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0172	53-01651	0–0.5	Soil	5623R	5623R	5622R	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0173	53-01651	0–0.5	Soil	5623R	5623R	5622R	5622R	5622R	—	5622R	—	5624R	5624R	5624R	5624R	5624R
RE53-99-0174	53-01651	0.5–0.67	Soil	5634R	5634R	—	5633R	5633R	—	5633R	5633R	5635R	5635R	5635R	5635R	5635R
RE53-99-0180	53-01652	0–0.5	Soil	—	5662R	—	5661R	5661R	—	5661R	—	5663R	5663R	5663R	5663R	5663R
RE53-99-0181	53-01652	0.67–1	Qbt 2	5662R	5662R	5661R	5661R	5661R	—	5661R	5661R	5663R	5663R	5663R	5663R	5663R
RE53-99-0182	53-01653	0–0.5	Soil	5662R	5662R	5661R	5661R	5661R	—	5661R	—	5663R	5663R	5663R	5663R	5663R
RE53-99-0230	53-01654	7–8	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0231	53-01654	12–13	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0232	53-01654	19–20	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0233	53-01655	10–12.5	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0234	53-01655	14–15	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0235	53-01655	24–25	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0236	53-01656	9–10	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0237	53-01656	13–14	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0238	53-01656	24–25	Qbt 2	—	5990R	—	5989R	-	—	5989R	5989R	5991R	5991R	5991R	5991R	5991R
RE53-99-0239	53-01657	9–10	Qbt 2	—	5998R	—	5997R	-	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0240	53-01657	13–14	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0241	53-01657	24–25	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0242	53-01658	9–10	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0243	53-01658	13–14	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0244	53-01658	24–25	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0280	53-01659	9–10	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0281	53-01659	13–14	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0282	53-01659	24–25	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0286	53-01660	9–10	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0287	53-01660	13–14	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0288	53-01660	24–25	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0283	53-01661	9–10	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0284	53-01661	13–14	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0285	53-01661	24–25	Qbt 2	—	5998R	—	5997R	—	—	5997R	5997R	5999R	5999R	5999R	5999R	5999R
RE53-99-0289	53-01662	9–10	Qbt 2	—	6001R	—	6000R	—	—	6000R	6000R	6002R	6002R	6002R	6002R	6002R
RE53-99-0290	53-01662	13–14	Qbt 2	—	6001R	—	6000R	—	—	6000R	6000R	6002R	6002R	6002R	6002R	6002R
RE53-99-0291	53-01662	24–25	Qbt 2	—	6001R	—	6000R	—	—	6000R	6000R	6002R	6002R	6002R	6002R	6002R
RE53-99-0292	53-01663	9–10	Qbt 2	—	6001R	—	6000R	—	—	6000R	6000R	6002R	6002R	6002R	6002R	6002R
RE53-99-0293	53-01663	13–14	Qbt 2	—	6001R	—	6000R	—	—	6000R	6000R	6002R	6002R	6002R	6002R	6002R
RE53-99-0294	53-01663	24–25	Qbt 2	—	6001R	—	6000R	—	—	6000R	6000R	6002R	6002R	6002R	6002R	6002R
RE53-99-0247	53-01664	1–2	Soil	—	5950R	—	5949R	—	—	5949R	5949R	5951R	5951R	5951R	5951R	5951R
RE53-99-0248	53-01664	4–5	Qbt 2	—	5950R	—	5949R	—	—	5949R	5949R	5951R	5951R	5951R	5951R	5951R
RE53-99-0249	53-01664	14–15	Qbt 2	—	5950R	—	5949R	—	—	5949R	5949R	5951R	5951R	5951R	5951R	5951R
RE53-99-0250	53-01681	1–2	Soil	—	5950R	—	5949R	—	—	5949R	5949R	5951R	5951R	5951R	5951R	5951R
RE53-99-0251	53-01681	4–5	Qbt 2	—	5950R	—	5949R	—	—	5949R	5949R	5951R	5951R	5951R	5951R	5951R
RE53-99-0252	53-01681	14–15	Qbt 2	—	5950R	—	5949R	—	—	5949R	5949R	5951R	5951R	5951R	5951R	5951R
RE53-99-0253	53-01682	1–2	Soil	—	5964R	5963R	5963R	5963R	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0254	53-01682	4–5	Qbt 2	—	5964R	5963R	5963R	5963R	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0255	53-01682	14–15	Qbt 2	—	5964R	5963R	5963R	5963R	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0256	53-01683	1–2	Soil	—	5964R	—	5963R	—	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0257	53-01683	4–5	Qbt 2	—	5964R	—	5963R	—	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0258	53-01683	14–15	Qbt 2	—	5964R	—	5963R	—	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0259	53-01684	1–2	Soil	—	5964R	—	5963R	—	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0260	53-01684	4–5	Qbt 2	—	5964R	—	5963R	—	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0261	53-01684	14–15	Qbt 2	—	5964R	—	5963R	—	—	5963R	5963R	5965R	5965R	5965R	5965R	5965R
RE53-99-0262	53-01685	1–2	Soil	—	5968R	—	5967R	—	—	5967R	5967R	5969R	5969R	5969R	5969R	5969R
RE53-99-0263	53-01685	4–5	Qbt 2	—	5968R	—	5967R	—	—	5967R	5967R	5969R	5969R	5969R	5969R	5969R
RE53-99-0265	53-01686	1–2	Soil	—	5975R	—	5974R	—	—	5974R	5974R	5976R	5976R	5976R	5976R	5976R
RE53-99-0266	53-01686	4–5	Qbt 2	—	5975R	—	5974R	—	—	5974R	5974R	5976R	5976R	5976R	5976R	5976R
RE53-99-0267	53-01686	4–5	Qbt 2	—	5975R	—	5974R	—	—	5974R	5974R	5976R	5976R	5976R	5976R	5976R
RE53-99-0268	53-01687	1–2	Soil	—	5975R	—	5974R	—	—	5974R	5974R	5976R	5976R	5976R	5976R	5976R
RE53-99-0269	53-01687	4–5	Qbt 2	—	5975R	—	5974R	—	—	5974R	5974R	5976R	5976R	5976R	5976R	5976R
RE53-99-0270	53-01687	14–15	Qbt 2	—	5975R	—	5974R	—	—	5974R	5974R	5976R	5976R	5976R	5976R	5976R
RE53-99-0271	53-01688	1–2	Soil	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0274	53-01688	1–2	Soil	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0272	53-01688	4–5	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0275	53-01688	4–5	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0273	53-01688	14–15	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0276	53-01688	14–15	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0277	53-01689	16–17	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0278	53-01689	19–20	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0279	53-01689	29–30	Qbt 2	—	5983R	—	5982R	—	—	5982R	5982R	5984R	5984R	5984R	5984R	5984R
RE53-99-0227	53-01690	4.5–6	Qbt 2	—	5986R	—	5985R	5985R	—	5985R	5985R	5987R	5987R	5987R	5987R	5987R
RE53-99-0228	53-01690	6–7.5	Qbt 2	—	5986R	—	5985R	5985R	—	5985R	5985R	5987R	5987R	5987R	5987R	5987R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0229	53-01690	7.5–9	Qbt 2	—	5986R	—	5985R	5985R	—	5985R	5985R	5987R	5987R	5987R	5987R	5987R
RE53-99-0295	53-01691	9–10	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0298	53-01691	9–10	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0296	53-01691	13–14	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0297	53-01691	24–25	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0299	53-01692	13–14	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0300	53-01692	24–25	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0301	53-01693	9–10	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0302	53-01693	13–14	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0303	53-01693	24–25	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0304	53-01694	9–10	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0305	53-01694	13–14	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0306	53-01694	24–25	Qbt 2	—	6011R	—	6010R	—	—	6010R	6010R	6012R	6012R	6012R	6012R	6012R
RE53-99-0310	53-01695	1–2	Qbt 2	—	6014R	—	6013R	—	—	6013R	6013R	6015R	6015R	6015R	6015R	6015R
RE53-99-0311	53-01695	4–5	Qbt 2	—	6014R	—	6013R	—	—	6013R	6013R	6015R	6015R	6015R	6015R	6015R
RE53-99-0312	53-01695	14–15	Qbt 2	—	6014R	—	6013R	—	—	6013R	6013R	6015R	6015R	6015R	6015R	6015R
RE53-99-0314	53-01696	4–5	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0313	53-01696	12–24	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0315	53-01696	14–15	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0319	53-01697	1–2	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0320	53-01697	4–5	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0321	53-01697	14–15	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0316	53-01698	1–2	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-99-0317	53-01698	4–5	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0318	53-01698	14–15	Qbt 2	—	6023R	—	6022R	—	—	6022R	6022R	6024R	6024R	6024R	6024R	6024R
RE53-99-0307	53-01701	1–2	Qbt 2	—	6014R	—	6013R	—	—	6013R	6013R	6015R	6015R	6015R	6015R	6015R
RE53-99-0308	53-01701	4–5	Qbt 2	—	6014R	—	6013R	—	—	6013R	6013R	6015R	6015R	6015R	6015R	6015R
RE53-99-0309	53-01701	14–15	Qbt 2	—	6014R	—	6013R	—	—	6013R	6013R	6015R	6015R	6015R	6015R	6015R
RE53-99-0322	53-01702	1–2	Qbt 2	—	6056R	—	6055R	—	—	6055R	6055R	6057R	6057R	—	6057R	6057R
RE53-00-0004	53-01706	2–3	Qbt 3	—	6484R	—	6483R	—	—	6483R	6483R	6495R	6485R	6495R	6495R	—
RE53-00-0005	53-01707	3.5–4.5	Qbt 3	—	6484R	—	6483R	—	—	6483R	6483R	6495R	6485R	6495R	6495R	—
RE53-00-0006	53-01708	5–6	Qbt 3	—	6484R	—	6483R	—	—	6483R	6483R	6495R	6485R	6495R	6495R	—
RE53-00-0007	53-01709	8.01–9.01	Qbt 3	—	6504R	—	6503R	—	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0008	53-01710	6.51–7.51	Qbt 3	—	6504R	—	6503R	—	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0009	53-01711	5.5–6.51	Qbt 3	—	6504R	—	6503R	—	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0010	53-01712	4–5	Qbt 3	—	6504R	—	6503R	—	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0011	53-01713	4–5	Qbt 3	—	6504R	—	6503R	—	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0012	53-01714	3–4	Qbt 3	—	6504R	6503R	6503R	6503R	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0013	53-01715	4.5–5.5	Qbt 3	—	6504R	6503R	6503R	6503R	—	6503R	6503R	6511R	6505R	6511R	6511R	—
RE53-00-0093	53-01718	1–2	Qbt 2	7532R	7533R	7532R	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R
RE53-00-0094	53-01718	4–5	Qbt 2	7532R	7533R	—	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R
RE53-00-0095	53-01718	14–15	Qbt 2	7532R	7533R	—	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R
RE53-00-0046	53-01719	0–0.5	Soil	—	7533R	—	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R
RE53-00-0047	53-01719	1–2	Qbt 2	—	7533R	—	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R
RE53-00-0048	53-01719	4–5	Qbt 2	—	7533R	—	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R
RE53-00-0049	53-01719	14–15	Qbt 2	—	7533R	—	—	—	—	7532R	7532R	7534R	7534R	7534R	7534R	7534R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-00-0050	53-01720	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0051	53-01720	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0052	53-01720	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0053	53-01720	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0054	53-01721	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0055	53-01721	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0056	53-01721	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0057	53-01721	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0058	53-01722	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0059	53-01722	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0060	53-01722	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0061	53-01722	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0062	53-01723	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0063	53-01723	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0064	53-01723	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0065	53-01723	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0066	53-01724	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0067	53-01724	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0068	53-01724	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0069	53-01724	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0070	53-01725	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0071	53-01725	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0072	53-01725	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R

Sample ID	Location ID	Depth (ft)	Media	Hexavalent Chromium	Metals	Herbicides	PCBs	Pesticides	Pesticides/PCBs	SVOCs	VOCs	Gamma Spectroscopy	Tritium	Isotopic Plutonium	Isotopic Uranium	Strontium-90
RE53-00-0073	53-01725	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0074	53-01726	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0075	53-01726	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0076	53-01726	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0077	53-01726	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0078	53-01727	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0079	53-01727	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0080	53-01727	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0081	53-01727	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0082	53-01728	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0083	53-01728	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0084	53-01728	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0085	53-01728	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0086	53-01729	0–0.5	Soil	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0087	53-01729	1–2	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0088	53-01729	4–5	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R
RE53-00-0089	53-01729	14–15	Qbt 2	—	7600R	—	7599R	—	—	7599R	7599R	7601R	7601R	7601R	7601R	7601R

Notes: Numbers in analyte columns are sample request numbers. Dashes indicate that the sample was either not analyzed or that the result is a nondected value.

Appendix B

Samples with Detected Radionuclides and Inorganic Chemicals Above Background and Detected Organic Chemicals

Table B-1
Concentrations (pCi/g) of Detected Radionuclides at PRS 53-002(a)-99

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				**0.013**	**—**	**1.65**	**—**	**—**	**0.023**	**0.054**	**—**	**1.31**	**0.766**	**—**	**—**	**2.29**
Qbt 2,3,4 Background Value				**—**	**—**	**0.1**	**—**	**—**	**—**	**—**	**—**	**—**	**0.3**	**—**	**—**	**—**
0253-95-0103	53-01001	1.50–2.50	Qbt 2	—	—	—	0.307	—	0.164	0.117	—	2.48	0.5394995	—	—	—
0253-95-0106	53-01002	1.50–2.50	Qbt 2	—	—	—	0.499	—	—	—	—	—	0.5231594	—	—	—
0253-95-0110	53-01003	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	1.010505	—	—	—
0253-95-0113	53-01004	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	1.22	0.9529927	—	—	—
0253-95-0116	53-01005	1.50–2.42	Qbt 2	—	—	—	1.5	—	—	—	—	—	0.6210526	—	—	—
0253-95-0119	53-01006	1.50–2.50	Qbt 2	—	—	—	0.4	—	—	—	—	—	0.9836478	—	—	—
0253-95-0122	53-01007	1.50–2.50	Qbt 2	—	—	—	0.33	—	—	—	—	—	0.7982784	—	—	—
0253-95-0126	53-01008	1.50–2.50	Qbt 2	—	—	—	0.306	—	—	—	—	—	0.6794408	—	—	—
0253-95-0129	53-01009	1.50–2.50	Qbt 2	—	—	—	0.274	—	—	—	—	—	0.71963	—	—	—
0253-95-0132	53-01010	1.50–2.50	Qbt 2	—	—	—	1.26	—	—	—	—	—	0.5976503	—	—	—
0253-95-0135	53-01011	1.50–2.50	Qbt 2	—	—	—	0.435	—	—	—	—	—	0.2625773	—	—	—
0253-95-0138	53-01012	1.50–2.50	Qbt 2	—	—	—	0.435	—	—	—	—	—	0.7304891	—	—	—
0253-95-0142	53-01013	1.50–2.50	Qbt 2	—	1.99	—	8.32	—	—	—	—	—	1.233927	—	—	—
0253-95-0145	53-01014	1.50–2.50	Qbt 2	—	—	—	2.08	—	—	—	—	—	1.217908	—	—	—
0253-95-0148	53-01015	1.50–2.50	Qbt 2	—	0.411	—	2.22	—	—	—	—	—	0.7894737	—	—	—
0253-95-0151	53-01016	1.50–2.50	Qbt 2	—	—	—	0.571	—	—	—	—	—	0.957311	—	—	—
0253-95-0154	53-01017	1.50–2.50	Qbt 2	—	—	—	0.293	—	—	—	—	—	1.25626	—	—	—
0253-95-0177	53-01018	3.50–4.83	Qbt 2	—	—	—	—	—	—	—	—	—	2.95496	—	—	—
0253-95-0181	53-01019	2.17–3.00	Qbt 2	—	—	—	—	—	—	0.19	—	—	31.04335	—	—	—
0253-95-0184	53-01020	3.67–4.50	Qbt 2	—	—	—	0.297	—	—	—	1.65	—	59.15668	—	—	—
0253-95-0187	53-01021	1.58–2.50	Qbt 2	—	0.222	—	—	—	—	—	—	—	2.267644	—	—	—
0253-95-0190	53-01022	1.50–2.50	Qbt 2	—	0.156	—	0.21	—	—	—	—	—	2.457728	—	—	—
0253-95-0193	53-01023	2.00–3.33	Qbt 2	—	—	—	—	—	—	—	0.491	—	7.229845	—	—	—
0253-95-0196	53-01024	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	0.298	—	2.890205	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				0.013	—	1.65	—	—	0.023	0.054	—	1.31	0.766	—	—	2.29
Qbt 2,3,4 Background Value				—	—	0.1	—	—	—	—	—	—	0.3	—	—	—
0253-95-0205	53-01025	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	0.373	—	3.003841	—	—	—
0253-95-0208	53-01026	1.50–2.50	Qbt 2	—	—	—	0.309	—	—	—	0.325	—	2.078185	—	—	—
0253-95-0211	53-01027	1.50–2.50	Qbt 2	—	—	—	0.411	—	—	—	—	—	0.92409	—	—	—
0253-95-0214	53-01028	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	1.972716	—	—	—
0253-95-0217	53-01029	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	0.623	—	6.142857	—	—	—
0253-95-0220	53-01030	1.50–2.50	Qbt 2	—	0.321	—	—	—	—	—	—	—	2.897711	—	—	—
0253-95-0223	53-01031	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	1.526316	—	—	—
0253-95-0227	53-01032	1.50–3.00	Qbt 2	—	—	—	0.82	—	—	—	—	—	4.20174	—	—	—
0253-95-0230	53-01033	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	7.582952	—	—	—
0253-95-0233	53-01034	2.00–3.00	Qbt 2	—	—	—	—	—	—	—	0.691	—	1.643035	—	—	—
0253-95-0155	53-01288	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	11.22486	—	—	—
0253-95-0156	53-01289	1.00–1.67	Qbt 2	—	—	—	—	—	—	—	—	—	2.962872	—	—	—
0253-95-0157	53-01290	0.67–1.50	Qbt 2	—	0.745	—	4.66	—	—	—	—	—	0.393982	—	—	—
0253-95-0158	53-01291	1.50–2.17	Qbt 2	—	—	—	1.17	—	—	—	—	—	1.091901	—	—	—
0253-95-0159	53-01292	1.50–2.50	Qbt 2	—	—	—	0.657	—	—	—	—	—	0.507932	—	—	—
0253-95-0160	53-01293	1.50–2.17	Qbt 2	—	—	—	0.178	—	—	—	—	0.984	17.29997	—	—	—
0253-95-0161	53-01294	1.50–2.50	Qbt 2	—	1.66	—	3.95	—	—	—	—	3.65	0.289716	—	—	—
0253-95-0162	53-01295	1.50–2.50	Qbt 2	—	—	—	2.85	—	—	—	—	—	0.67536	—	—	—
0253-95-0234	53-01316	2.00–3.67	Qbt 2	—	2.29	—	1.93	—	—	—	—	—	0.995714	—	—	—
0253-95-0236	53-01317	0.67–2.00	Qbt 2	—	—	—	0.327	—	—	—	—	—	8.4529	—	—	—
0253-95-0237	53-01318	1.17–2.50	Qbt 2	—	—	—	0.376	—	—	—	—	—	3.511111	—	—	—
0253-95-0238	53-01319	1.50–2.33	Qbt 2	—	1.57	—	3.49	—	—	—	—	—	0.357644	—	—	—
0253-95-0239	53-01320	1.00–2.33	Qbt 2	—	—	—	—	—	—	—	—	—	0.965455	—	—	—
0253-95-0241	53-01321	1.50–2.67	Qbt 2	—	1.91	—	3.46	—	—	—	—	—	1.929575	—	—	—
0253-95-0242	53-01322	1.00–2.67	Qbt 2	—	—	—	0.606	—	—	—	—	—	2.421524	—	—	—
0253-95-0243	53-01323	2.50–3.67	Qbt 2	—	—	—	—	—	—	—	—	—	3.02809	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				**0.013**	**—**	**1.65**	**—**	**—**	**0.023**	**0.054**	**—**	**1.31**	**0.766**	**—**	**—**	**2.29**
Qbt 2,3,4 Background Value				**—**	**—**	**0.1**	**—**	**—**	**—**	**—**	**—**	**—**	**0.3**	**—**	**—**	**—**
RE53-99-0115	53-01573	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.481	—	—	—
RE53-99-0116	53-01573	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.443	—	—	—
RE53-99-0117	53-01575	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.069	—	—	—
RE53-99-0118	53-01575	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.551	—	—	—
RE53-99-0119	53-01576	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.186	—	—	—
RE53-99-0120	53-01576	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.276	—	—	—
RE53-99-0121	53-01577	4.00–5.00	Qbt 2	—	—	—	0.64	—	—	—	—	—	0.138	—	—	—
RE53-99-0122	53-01577	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.408	—	0.103	—
RE53-99-0125	53-01582	4.00–5.00	Qbt 2	—	—	—	0.104	—	0.165	—	—	—	0.4551	—	—	—
RE53-99-0126	53-01582	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	2.0091	—	—	—
RE53-99-0127	53-01582	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	1.5318	—	—	—
RE53-99-0123	53-01584	4.00–5.00	Qbt 2	—	—	—	0.0591	—	—	—	—	—	0.13875	—	—	—
RE53-99-0124	53-01584	14.00–15.00	Qbt 2	0.0837	—	—	0.0502	—	0.128	—	—	—	0.54723	—	—	—
RE53-99-0264	53-01585	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.52	—	—	—	—
RE53-99-0132	53-01586	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	0.0864	—	17.66667	—	—	—
RE53-99-0133	53-01586	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	44.33333	—	—	—
RE53-99-0130	53-01587	4.00–5.00	Qbt 2	—	0.0374	—	—	—	0.0476	—	—	—	8.822222	—	—	—
RE53-99-0131	53-01587	14.00–15.00	Qbt 2	—	—	—	—	—	0.258	—	—	—	17.44444	—	—	—
RE53-99-0134	53-01588	4.00–5.00	Qbt 2	0.162	—	—	0.0455	—	—	—	—	—	0.87468	—	—	—
RE53-99-0135	53-01588	14.00–15.00	Qbt 2	0.141	0.668	—	—	—	—	—	—	—	1.4874	—	—	—
RE53-99-0128	53-01589	4.00–5.00	Qbt 2	—	—	—	0.07	—	—	—	—	—	0.448889	—	—	—
RE53-99-0129	53-01589	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.832222	—	—	—
RE53-99-0140	53-01592	4.00–5.00	Qbt 2	0.119	0.564	—	—	—	—	—	—	—	12.765	—	—	—
RE53-99-0141	53-01592	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	44.844	—	—	—
RE53-99-0138	53-01593	4.00–5.00	Qbt 2	—	—	0.0416	0.0697	—	—	—	0.177	—	2.2755	—	—	—
RE53-99-0139	53-01593	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	15.762	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				0.013	—	1.65	—	—	0.023	0.054	—	1.31	0.766	—	—	2.29
Qbt 2,3,4 Background Value				—	—	0.1	—	—	—	—	—	—	0.3	—	—	—
RE53-99-0136	53-01594	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	0.151	—	3.45	—	—	—
RE53-99-0137	53-01594	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	0.67	10.2	—	—	—
RE53-99-0148	53-01595	4.00–5.00	Qbt 2	—	0.12	—	—	—	—	—	0.18	1	—	—	—	—
RE53-99-0149	53-01595	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	0.68	30.55	—	—	—
RE53-99-0146	53-01596	4.00–5.00	Qbt 2	—	—	—	0.12	—	—	—	0.2	0.94	—	—	—	—
RE53-99-0147	53-01596	14.00–15.00	Qbt 2	—	—	—	0.22	—	—	—	—	1.14	—	—	—	—
RE53-99-0144	53-01597	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	48.91	—	—	—
RE53-99-0145	53-01597	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	0.19	—	6532.57	—	—	—
RE53-99-0143	53-01598	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	44.67	—	—	—
RE53-99-0216	53-01624	0.00–0.50	Soil	—	0.4	—	0.8	—	—	—	—	1.63	—	—	—	—
RE53-99-0217	53-01624	0.50–1.00	Qbt 2	—	—	—	0.39	—	—	—	—	1.03	—	2.58	—	—
RE53-99-0218	53-01626	0.00–0.50	Soil	—	3.55	—	7.07	—	—	—	—	2.15	—	—	—	—
RE53-99-0219	53-01626	0.50–0.83	Soil	—	7.76	0.38	11.28	—	—	—	—	1.59	—	—	—	—
RE53-99-0220	53-01626	0.83–1.33	Qbt 2	—	1.19	—	1.43	—	—	—	—	1.32	—	2.81	—	2.79
RE53-99-0210	53-01631	0.00–0.50	Soil	—	42.66	—	13.54	—	—	—	—	1.71	—	—	—	—
RE53-99-0211	53-01631	0.67–1.67	Qbt 2	—	1.38	—	1.27	—	—	—	—	1.3	—	—	—	—
RE53-99-0212	53-01632	0.00–0.33	Soil	—	31.7	—	14.85	—	0.31	—	—	1.97	—	—	—	—
RE53-99-0213	53-01633	0.00–0.50	Soil	—	0.66	—	1.14	—	—	—	—	1.32	—	—	—	—
RE53-99-0214	53-01634	0.00–0.50	Soil	—	53.92	—	80.49	—	—	—	—	2.09	—	—	—	—
RE53-99-0215	53-01634	0.67–1.67	Qbt 2	—	7.42	—	7.73	—	—	—	—	2.08	—	—	—	—
RE53-99-0221	53-01635	0.00–0.50	Soil	—	16.76	—	19.2	—	—	—	0.19	2.32	—	—	—	—
RE53-99-0222	53-01635	0.50–1.33	Soil	—	15.35	—	17.38	—	—	—	—	1.28	—	—	—	—
RE53-99-0223	53-01635	1.33–2.50	Qbt 2	—	8.07	—	9.48	—	—	—	—	1.02	—	—	—	—
RE53-99-0224	53-01636	0.00–0.33	Soil	—	—	—	0.74	—	—	—	—	4.98	—	—	—	—
RE53-99-0225	53-01637	0.00–0.50	Soil	—	—	—	0.28	—	—	—	—	1.45	—	—	—	—
RE53-99-0226	53-01638	0.00–0.25	Soil	—	0.71	—	3.7	—	—	—	—	2.64	—	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				0.013	—	1.65	—	—	0.023	0.054	—	1.31	0.766	—	—	2.29
Qbt 2,3,4 Background Value				—	—	0.1	—	—	—	—	—	—	0.3	—	—	—
RE53-99-0183	53-01639	0.00–0.33	Soil	—	—	—	0.428	—	—	—	0.286	—	0.186	—	—	—
RE53-99-0184	53-01640	0.00–0.33	Soil	—	14.6	—	8.93	—	—	—	0.432	—	0.16428	—	—	—
RE53-99-0185	53-01641	0.00–0.33	Soil	0.191	1.5	—	1.77	—	—	—	0.422	—	0.104118	—	—	—
RE53-99-0179	53-01642	4.50–5.00	Soil	—	—	—	—	—	—	—	—	—	0.224	—	—	—
RE53-99-0166	53-01645	0.00–0.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	0.093	—
RE53-99-0175	53-01645	1.00–1.33	Soil	—	—	—	—	—	—	—	—	—	0.119	—	—	—
RE53-99-0168	53-01647	0.00–0.25	Soil	—	—	—	—	—	—	—	—	—	0.134	—	—	—
RE53-99-0169	53-01648	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	0.078	—	—	—
RE53-99-0176	53-01648	0.67–1.00	Soil	—	—	—	—	—	—	—	—	—	0.081	—	—	—
RE53-99-0170	53-01649	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	0.268	—	—	—
RE53-99-0171	53-01650	0.00–0.42	Qbt 2	—	—	0.44	—	—	—	0.036	—	—	0.715	—	0.091	—
RE53-99-0172	53-01651	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	0.485	—	—	—
RE53-99-0173	53-01651	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	0.437	—	—	—
RE53-99-0174	53-01651	0.50–0.67	Soil	—	—	—	—	—	—	—	—	—	0.419	—	—	—
RE53-99-0182	53-01653	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	0.08	—	—	—
RE53-99-0230	53-01654	7.00–8.00	Qbt 2	—	—	—	—	—	—	—	—	1.02	—	—	—	—
RE53-99-0232	53-01654	19.00–20.00	Qbt 2	—	—	—	—	—	—	—	—	0.67	—	—	—	—
RE53-99-0233	53-01655	10.00–12.50	Qbt 2	—	—	—	—	—	—	—	—	0.69	8.68	—	—	—
RE53-99-0234	53-01655	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.07	24.67	—	—	—
RE53-99-0236	53-01656	9.00–10.00	Qbt 2	—	—	—	—	—	0.37	—	—	1.41	—	—	—	—
RE53-99-0238	53-01656	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	2.51	—	—	—	—
RE53-99-0239	53-01657	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	1.35	—	—	—	2.18
RE53-99-0240	53-01657	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	0.99	3.23	—	—	1.96
RE53-99-0241	53-01657	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	1.44	—	—	—	—
RE53-99-0242	53-01658	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	0.84	—	—	—	—
RE53-99-0243	53-01658	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.3	—	2.08	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				**0.013**	**—**	**1.65**	**—**	**—**	**0.023**	**0.054**	**—**	**1.31**	**0.766**	**—**	**—**	**2.29**
Qbt 2,3,4 Background Value				**—**	**—**	**0.1**	**—**	**—**	**—**	**—**	**—**	**—**	**0.3**	**—**	**—**	**—**
RE53-99-0244	53-01658	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	1.54	—	2.56	—	2.34
RE53-99-0280	53-01659	9.00–10.00	Qbt 2	0.15	—	—	—	—	—	—	—	1.33	—	—	—	2.19
RE53-99-0281	53-01659	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	0.99	—	—	—	2.42
RE53-99-0282	53-01659	24.00–25.00	Qbt 2	—	0.09	—	—	—	—	—	—	0.95	—	2.54	—	2.21
RE53-99-0286	53-01660	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	0.8	—	—	—	—
RE53-99-0287	53-01660	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.1	—	—	—	—
RE53-99-0288	53-01660	24.00–25.00	Qbt 2	—	0.09	—	—	—	—	—	—	1.49	5.26	2.2	—	—
RE53-99-0283	53-01661	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	0.95	—	2.05	—	—
RE53-99-0284	53-01661	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.39	2.67	—	—	—
RE53-99-0285	53-01661	24.00–25.00	Qbt 2	—	0.09	—	—	—	—	—	—	—	—	—	—	2.02
RE53-99-0289	53-01662	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	1.29	—	—	—	—
RE53-99-0290	53-01662	13.00–14.00	Qbt 2	—	0.08	—	—	—	—	—	—	0.92	—	—	—	—
RE53-99-0291	53-01662	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	1.18	—	—	0.25	—
RE53-99-0292	53-01663	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	1.11	6.24	—	—	—
RE53-99-0293	53-01663	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.16	7.88	—	—	—
RE53-99-0294	53-01663	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	1.28	—	—	—	—
RE53-99-0247	53-01664	1.00–2.00	Soil	0.19	—	—	—	—	—	—	—	1.53	—	—	—	—
RE53-99-0248	53-01664	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	1.91	—	—	—	—
RE53-99-0249	53-01664	14.00–15.00	Qbt 2	—	0.12	0.13	—	—	—	—	—	2.68	—	2.06	—	2.08
RE53-99-0250	53-01681	1.00–2.00	Soil	—	—	—	—	—	—	—	—	1.47	—	—	—	—
RE53-99-0251	53-01681	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	1.38	—	—	—	—
RE53-99-0252	53-01681	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.32	—	—	—	—
RE53-99-0254	53-01682	4.00–5.00	Qbt 2	—	0.11	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0255	53-01682	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.27	—	2.11	—	1.95
RE53-99-0256	53-01683	1.00–2.00	Soil	—	—	—	—	—	—	—	—	1.06	—	—	—	—
RE53-99-0257	53-01683	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	2.07

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				0.013	—	1.65	—	—	0.023	0.054	—	1.31	0.766	—	—	2.29
Qbt 2,3,4 Background Value				—	—	0.1	—	—	—	—	—	—	0.3	—	—	—
RE53-99-0259	53-01684	1.00–2.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	2.53
RE53-99-0260	53-01684	4.00–5.00	Qbt 2	—	0.11	—	—	—	—	—	—	3.47	—	—	—	—
RE53-99-0261	53-01684	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	3.98	—	2.7	—	2.82
RE53-99-0262	53-01685	1.00–2.00	Soil	—	—	—	—	—	—	—	—	1.07	—	—	—	—
RE53-99-0263	53-01685	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	1.4	—	2.11	—	2.07
RE53-99-0266	53-01686	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	2.33	0.23	—
RE53-99-0267	53-01686	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	0.96	—	—	—	—
RE53-99-0268	53-01687	1.00–2.00	Soil	—	—	—	—	—	—	—	—	0.85	—	—	—	—
RE53-99-0269	53-01687	4.00–5.00	Qbt 2	—	—	—	—	—	—	0.19	—	0.94	—	—	—	—
RE53-99-0270	53-01687	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.14	—	—	0.31	—
RE53-99-0271	53-01688	1.00–2.00	Soil	—	—	—	—	—	—	—	—	1.65	—	—	—	—
RE53-99-0274	53-01688	1.00–2.00	Soil	—	0.1	—	—	—	—	—	—	1.43	—	—	—	—
RE53-99-0275	53-01688	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	0.99	—	—	—	—
RE53-99-0273	53-01688	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.08	—	—	—	—
RE53-99-0276	53-01688	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	0.93	—	—	—	—
RE53-99-0278	53-01689	19.00–20.00	Qbt 2	—	—	—	—	—	—	—	—	0.92	—	—	—	—
RE53-99-0279	53-01689	29.00–30.00	Qbt 2	—	—	—	—	—	—	—	—	1.26	—	—	—	—
RE53-99-0227	53-01690	4.50–6.00	Qbt 2	—	—	—	—	—	—	—	—	0.92	—	—	—	—
RE53-99-0228	53-01690	6.00–7.50	Qbt 2	—	—	—	—	0.79	—	—	—	—	—	—	—	—
RE53-99-0229	53-01690	7.50–9.00	Qbt 2	—	0.15	—	—	—	—	—	—	1.34	—	—	—	—
RE53-99-0295	53-01691	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	1.58	—	2.21	—	—
RE53-99-0298	53-01691	9.00–10.00	Qbt 2	—	—	—	0.1	—	—	—	—	1.45	3.11	—	—	—
RE53-99-0296	53-01691	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.35	—	2.7	—	1.96
RE53-99-0297	53-01691	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	1.62	—	2.07	—	2.45
RE53-99-0299	53-01692	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	2.29	3.9	—	—	—
RE53-99-0300	53-01692	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	1.71	9.32	2.35	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				0.013	—	1.65	—	—	0.023	0.054	—	1.31	0.766	—	—	2.29
Qbt 2,3,4 Background Value				—	—	0.1	—	—	—	—	—	—	0.3	—	—	—
RE53-99-0301	53-01693	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	1.9	2.24	—	—	—
RE53-99-0302	53-01693	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.37	10.41	—	—	—
RE53-99-0303	53-01693	24.00–25.00	Qbt 2	—	0.09	—	—	—	—	—	—	1.23	17.92	—	—	—
RE53-99-0304	53-01694	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	2.63	86.76	—	—	—
RE53-99-0305	53-01694	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	1.6	119.29	—	—	—
RE53-99-0306	53-01694	24.00–25.00	Qbt 2	0.19	—	—	—	—	—	—	—	1.32	11.52	2.37	—	1.99
RE53-99-0310	53-01695	1.00–2.00	Qbt 2	—	—	—	0.13	—	—	—	0.28	1.65	4.78	—	—	—
RE53-99-0311	53-01695	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	1.48	25.1	—	—	—
RE53-99-0312	53-01695	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	2.08	16.74	—	—	—
RE53-99-0314	53-01696	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.86	—	—	—
RE53-99-0313	53-01696	12.00–24.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.522	—	0.103	—
RE53-99-0315	53-01696	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.607	—	—	—
RE53-99-0319	53-01697	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.888	—	—	—
RE53-99-0320	53-01697	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	1.462	—	—	—
RE53-99-0321	53-01697	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.18	—	—	—
RE53-99-0316	53-01698	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	0.25	—	2.63	—	—	—
RE53-99-0317	53-01698	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	10.46	—	—	—
RE53-99-0318	53-01698	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	14.41	—	0.105	—
RE53-99-0307	53-01701	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	1.56	8.66	—	—	—
RE53-99-0308	53-01701	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	1.89	23.7	—	—	—
RE53-99-0309	53-01701	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	1.35	20.04	—	—	—
RE53-99-0322	53-01702	1.00–2.00	Qbt 2	0.22	—	—	—	—	—	—	—	1.49	3.02	—	—	—
RE53-00-0004	53-01706	2.00–3.00	Qbt 3	—	—	—	—	—	—	—	—	—	0.85	—	—	—
RE53-00-0005	53-01707	3.50–4.50	Qbt 3	—	—	—	—	—	—	—	—	—	0.541	—	—	—
RE53-00-0006	53-01708	5.00–6.00	Qbt 3	—	—	—	—	—	—	—	—	—	0.323	—	—	—
RE53-00-0007	53-01709	8.01–9.01	Qbt 3	—	—	—	—	—	—	—	—	—	0.96	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				**0.013**	**—**	**1.65**	**—**	**—**	**0.023**	**0.054**	**—**	**1.31**	**0.766**	**—**	**—**	**2.29**
Qbt 2,3,4 Background Value				**—**	**—**	**0.1**	**—**	**—**	**—**	**—**	**—**	**—**	**0.3**	**—**	**—**	**—**
RE53-00-0008	53-01710	6.51–7.51	Qbt 3	—	—	—	—	—	—	—	—	—	2.09	—	—	—
RE53-00-0009	53-01711	5.50–6.51	Qbt 3	—	—	—	—	—	—	—	—	—	3.03	—	—	—
RE53-00-0010	53-01712	4.00–5.00	Qbt 3	—	—	—	—	—	—	—	—	—	1.46	—	—	—
RE53-00-0011	53-01713	4.00–5.00	Qbt 3	—	—	—	—	—	—	—	—	—	1.37	—	—	—
RE53-00-0012	53-01714	3.00–4.00	Qbt 3	—	—	—	—	—	—	—	—	—	8.7	—	—	—
RE53-00-0013	53-01715	4.50–5.50	Qbt 3	—	—	0.38	—	—	—	—	—	—	0.64	—	—	—
RE53-00-0040	53-01716	0.00–0.50	Soil	1.09	—	—	6.31	—	—	—	50.1	—	16.85714(J+)	—	—	—
RE53-00-0041	53-01716	1.00–2.00	Qbt 2	—	—	—	0.106	—	—	—	0.312	—	33.44681(J+)	—	—	—
RE53-00-0042	53-01716	4.00–5.00	Qbt 2	—	—	—	0.254	—	—	—	1.53	—	6.5(J+)	—	—	—
RE53-00-0043	53-01716	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	2.406756(J+)	—	—	—
RE53-00-0044	53-01717	0.00–0.50	Soil	—	—	—	5.01	—	—	—	99.4	—	1.212121(J+)	—	—	—
RE53-00-0090	53-01717	1.00–2.00	Qbt 2	—	—	—	0.714	—	—	—	7.37	—	68.94736(J+)	—	—	—
RE53-00-0091	53-01717	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	1.12	—	17.70833(J+)	—	—	—
RE53-00-0092	53-01717	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	0.106	—	9.090909	—	—	—
RE53-00-0045	53-01718	0.00–0.50	Soil	4.99	—	—	13.5	—	—	0.479	55.4	—	7.125(J+)	—	—	—
RE53-00-0093	53-01718	1.00–2.00	Qbt 2	5.21	0.0931	—	8.49	—	—	—	8.49	—	47.36842	—	—	—
RE53-00-0094	53-01718	4.00–5.00	Qbt 2	1.05	—	—	1.46	—	—	—	1.69	—	34.125	—	—	—
RE53-00-0095	53-01718	14.00–15.00	Qbt 2	0.0945	—	—	0.137	—	—	—	0.126	—	2.845833	—	—	—
RE53-00-0046	53-01719	0.00–0.50	Soil	1.18	—	—	1.78	—	—	—	0.331	—	3.571429(J+)	—	—	—
RE53-00-0047	53-01719	1.00–2.00	Qbt 2	0.488	—	—	0.615	—	—	—	—	—	155.8333(J+)	—	—	—
RE53-00-0048	53-01719	4.00–5.00	Qbt 2	—	—	—	0.119	—	—	—	—	—	389.4737(J+)	—	—	—
RE53-00-0049	53-01719	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	80(J+)	—	—	—
RE53-00-0050	53-01720	0.00–0.50	Soil	—	—	—	0.159	—	—	—	0.301	—	3.075	—	—	—
RE53-00-0051	53-01720	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	1.95	—	48.26316	—	—	—
RE53-00-0052	53-01720	4.00–5.00	Qbt 2	—	—	—	0.0904	—	—	—	0.568	—	54.44681	—	—	—
RE53-00-0053	53-01720	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	0.211	—	39.94737	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				0.013	—	1.65	—	—	0.023	0.054	—	1.31	0.766	—	—	2.29
Qbt 2,3,4 Background Value				—	—	0.1	—	—	—	—	—	—	0.3	—	—	—
RE53-00-0054	53-01721	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	17.21053	—	—	—
RE53-00-0055	53-01721	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	21.75	—	—	—
RE53-00-0056	53-01721	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	13.20833	—	—	—
RE53-00-0057	53-01721	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	2.987629	—	—	—
RE53-00-0058	53-01722	0.00–0.50	Soil	0.829	—	—	2.37	—	0.0562	0.314	16.2	—	124.1667	—	—	—
RE53-00-0059	53-01722	1.00–2.00	Qbt 2	—	—	—	1.1	—	—	0.0546	9.96	—	935.6044	—	—	—
RE53-00-0060	53-01722	4.00–5.00	Qbt 2	—	—	—	0.174	—	—	—	2.85	—	724.8387	—	—	—
RE53-00-0061	53-01722	14.00–15.00	Qbt 2	0.0856	—	—	—	—	—	—	0.386	—	492.1277	—	—	—
RE53-00-0062	53-01723	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	14.45833	—	—	—
RE53-00-0063	53-01723	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	13.60825	—	—	—
RE53-00-0064	53-01723	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	5.103093	—	—	—
RE53-00-0065	53-01723	14.00–15.00	Qbt 2	0.0947	—	—	—	—	—	—	—	—	10.14894	—	—	—
RE53-00-0066	53-01724	0.00–0.50	Soil	—	—	—	0.0936	—	—	—	0.172	—	63.68421	—	—	—
RE53-00-0067	53-01724	1.00–2.00	Qbt 2	—	—	—	0.101	—	—	—	—	—	81.05263	—	—	—
RE53-00-0068	53-01724	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	50.41666	—	—	—
RE53-00-0069	53-01724	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	26.80851	—	—	—
RE53-00-0070	53-01725	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	4.206186	—	—	—
RE53-00-0071	53-01725	1.00–2.00	Qbt 2	0.163	—	—	0.339	—	—	—	0.0767	—	11.96907	—	—	—
RE53-00-0072	53-01725	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	25.68421	—	—	—
RE53-00-0073	53-01725	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	8.166666	—	—	—
RE53-00-0074	53-01726	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	12.98969	—	—	—
RE53-00-0075	53-01726	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	18.29166	—	—	—
RE53-00-0076	53-01726	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	4.916666	—	—	—
RE53-00-0077	53-01726	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.5319588	—	—	—
RE53-00-0078	53-01727	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	18.25	—	—	—
RE53-00-0079	53-01727	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	9	—	—	—

Sample ID	Location ID	Depth(ft)	Media	Americium-241	Cesium-134	Cesium-137	Cobalt-60	Europium-152	Plutonium-238	Plutonium-239	Sodium-22	Strontium-90	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil Background Value				**0.013**	**—**	**1.65**	**—**	**—**	**0.023**	**0.054**	**—**	**1.31**	**0.766**	**—**	**—**	**2.29**
Qbt 2,3,4 Background Value				**—**	**—**	**0.1**	**—**	**—**	**—**	**—**	**—**	**—**	**0.3**	**—**	**—**	**—**
RE53-00-0080	53-01727	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	4.333333	—	—	—
RE53-00-0081	53-01727	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	1.530928	—	—	—
RE53-00-0082	53-01728	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	5.541666	—	—	—
RE53-00-0083	53-01728	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	12.83333	—	—	—
RE53-00-0084	53-01728	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	3.43299	—	—	—
RE53-00-0085	53-01728	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.7824743	—	—	—
RE53-00-0086	53-01729	0.00–0.50	Soil	—	0.174	—	—	—	—	—	0.443	—	20.81443	—	—	—
RE53-00-0087	53-01729	1.00–2.00	Qbt 2	—	0.263	—	0.0557	—	—	—	0.0933	—	32.875	—	—	—
RE53-00-0088	53-01729	4.00–5.00	Qbt 2	0.126	0.0392	—	—	—	—	—	—	—	22.04166	—	—	—
RE53-00-0089	53-01729	14.00–15.00	Qbt 2	0.126	0.0392	—	—	—	—	—	—	—	5.333333	—	—	—

Notes: Numbers in analyte columns represent detected concentrations in pCi/g. Dashes indicate that the sample was either not analyzed or that the result is a nondected value. Letters in parentheses represent lab qualifiers: U and UJ represent nondetected values; J, J+, J- and null values represent detected values.

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Table B-2
Concentrations (mg/kg) of Detected Organic Chemicals at PRS 53-002(a)-99

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
0253-95-0103	53-01001	1.50-2.50	Qbt 2	—	—	—	0.018	—	—	—	—	0.001(J)	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0110	53-01003	1.50-2.50	Qbt 2	—	0.034	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0113	53-01004	1.50-2.50	Qbt 2	—	0.071	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0116	53-01005	1.50-2.42	Qbt 2	—	0.037	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0119	53-01006	1.50-2.50	Qbt 2	—	0.048	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0122	53-01007	1.50-2.50	Qbt 2	—	0.003(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0129	53-01009	1.50-2.50	Qbt 2	—	—	0.006	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0135	53-01011	1.50-2.50	Qbt 2	—	—	0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0136	53-01012	1.50-2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.004(J)	—	—	—	—	—	—	—	—	—	—	—
0253-95-0142	53-01013	1.50-2.50	Qbt 2	—	0.041	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.005(J)	—	—	—	—	—	—	—	—	—	—	—
0253-95-0145	53-01014	1.50-2.50	Qbt 2	—	0.009(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.004(J)	—	—	—	—	—	—	—	—	—	—	—
0253-95-0148	53-01015	1.50-2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.247(J)	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	0.001(J)	—	0.002	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
0253-95-0177	53-01018	3.50-4.83	Qbt 2	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0181	53-01019	2.17-3.00	Qbt 2	--	0.049	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0184	53-01020	3.67-4.50	Qbt 2	--	0.062	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0187	53-01021	1.58-2.50	Qbt 2	--	0.107	--	--	--	--	--	--	--	0.001(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0190	53-01022	1.50-2.50	Qbt 2	--	0.0256	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0193	53-01023	2.00-3.33	Qbt 2	--	0.003(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0196	53-01024	1.50-2.50	Qbt 2	--	0.024	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0205	53-01025	1.50-2.50	Qbt 2	--	0.007(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0208	53-01026	1.50-2.50	Qbt 2	--	0.002(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0211	53-01027	1.50-2.50	Qbt 2	--	0.003(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0214	53-01028	1.50-2.50	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0217	53-01029	1.50-2.50	Qbt 2	--	0.021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
0253-95-0220	53-01030	1.50-2.50	Qbt 2	--	0.008(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003(J)	--	0.002(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
0253-95-0227	53-01032	1.50-3.00	Qbt 2	—	0.006(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0230	53-01033	1.50-2.50	Qbt 2	—	0.006(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	0.002	—
0253-95-0233	53-01034	2.00-3.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0155	53-01288	1.50-2.50	Qbt 2	—	0.002(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0156	53-01289	1.00-1.67	Qbt 2	—	0.003(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0157	53-01290	0.67-1.50	Qbt 2	—	0.033	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0161	53-01294	1.50-2.50	Qbt 2	—	—	0.006	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0162	53-01295	1.50-2.50	Qbt 2	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0236	53-01317	0.67-2.00	Qbt 2	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0237	53-01318	1.17-2.50	Qbt 2	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0239	53-01320	1.00-2.33	Qbt 2	—	—	—	—	—	—	—	—	0.001(J)	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0242	53-01322	1.00-2.67	Qbt 2	—	0.014(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0115	53-01573	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0116	53-01573	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	—	—	0.004(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.700001E-04(J)	—	—
RE53-99-0117	53-01575	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.047(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0118	53-01575	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00071(J)	—	—	—	—
RE53-99-0119	53-01576	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00053(J)	—	0.001(J)	—	—
RE53-99-0120	53-01576	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—
RE53-99-0121	53-01577	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—
RE53-99-0122	53-01577	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	0.001(J)	—	—
RE53-99-0125	53-01582	4.00-5.00	Qbt 2	—	0.007(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0126	53-01582	14.00-15.00	Qbt 2	—	0.01(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0127	53-01582	14.00-15.00	Qbt 2	—	0.013(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0124	53-01584	14.00-15.00	Qbt 2	—	0.011(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.004(J)	—	—	—	—
RE53-99-0264	53-01585	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.067(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0132	53-01586	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0133	53-01586	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.036(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0134	53-01588	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.1(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0135	53-01568	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.096(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0129	53-01589	14.00-15.00	Qbt 2	—	—	—	—	0.0003(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0140	53-01592	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.1(J)	—	—	—	—	—	—	0.0003(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0141	53-01592	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0138	53-01593	4.00-5.00	Qbt 2	—	0.04(J)	—	—	—	—	—	—	—	—	0.1(J)	0.005(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	—	—	—	—	—	0.001(J)
RE53-99-0139	53-01593	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.15(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0136	53-01594	4.00-5.00	Qbt 2	—	0.022(J)	—	—	—	—	—	—	—	—	0.073(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.032(J)	—	—	—	—	—	—	—	—
RE53-99-0137	53-01594	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.054(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0148	53-01595	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.054(J)	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0149	53-01595	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.05(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0146	53-01596	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.059(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0147	53-01596	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.062(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0144	53-01597	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.097(J)	0.003(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0145	53-01597	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.081(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	0.37	—	—	—	—	—	—	—	—	—
RE53-99-0142	53-01598	4.00-5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.093(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	0.001(J)	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0143	53-01598	14.00-15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.095(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0216	53-01624	0.00-0.50	Soil	—	—	—	—	—	—	—	—	—	—	0.047(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0217	53-01624	0.50-1.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—
RE53-99-0218	53-01626	0.00-0.50	Soil	—	—	0.049	—	—	—	—	—	—	—	0.065(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0219	53-01626	0.50-0.83	Soil	—	—	0.069	—	—	—	—	—	—	—	0.076(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.005(J)	—	—	—	—	—	—	—	—	0.001(J)	—
RE53-99-0220	53-01626	0.83-1.33	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.004(J)	—	—	—	—	—	0.001(J)	—	—	—
RE53-99-0210	53-01631	0.00-0.50	Soil	—	—	0.039	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	—	—	0.001(J)	—	0.001(J)	—
RE53-99-0211	53-01631	0.67-1.67	Qbt 2	—	—	0.04	—	—	—	—	—	—	—	—	0.003(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	0.001(J)	—	—	—
RE53-99-0212	53-01632	0.00-0.33	Soil	—	—	0.045	—	—	—	—	—	—	—	0.058(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]
RE53-99-0213	53-01633	0.00-0.50	Soil	—	—	—	—	—	—	—	—	—	—	0.08(J)	—	—	—	—	—	—	—	—
RE53-99-0214	53-01634	0.00-0.50	Soil	0.28(J)	—	0.94	—	—	—	0.028(J)	—	—	—	0.26(J)	—	—	—	—	—	—	—	—
RE53-99-0215	53-01634	0.67-1.67	Qbt 2	—	—	0.12	—	—	—	—	—	—	—	0.074(J)	0.004(J)	—	—	—	—	—	—	—
RE53-99-0221	53-01635	0.00-0.50	Soil	—	—	0.12	—	—	—	—	—	—	—	0.047(J)	—	—	—	—	—	—	—	—
RE53-99-0222	53-01635	0.50-1.33	Soil	—	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0004(J)
RE53-99-0223	53-01635	1.33-2.50	Qbt 2	—	—	0.082	—	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	0.0003(J)
RE53-99-0224	53-01636	0.00-0.33	Soil	—	—	—	—	—	—	—	—	—	—	0.063(J)	—	—	—	—	—	—	—	—
RE53-99-0184	53-01640	0.00-0.33	Soil	—	—	0.16	—	—	—	—	—	—	—	0.074(J)	—	—	—	—	—	—	—	—
RE53-99-0185	53-01641	0.00-0.33	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-98-0164	53-01643	0.00-0.25	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0165	53-01644	0.00-0.50	Soil	—	—	—	—	—	—	—	—	—	—	0.058(J)	—	—	—	—	—	—	—	—
RE53-99-0178	53-01644	0.67-1.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0166	53-01645	0.00-0.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.069(J)	—	—	—	—	—	—	—	—

Sample ID	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0213	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0214	—	—	—	—	—	—	—	0.002(J)	—	—	—	—	—	—	—	0.001(J)	—	—	—	—
RE53-99-0215	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0221	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0222	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.003(J)	—
RE53-99-0223	—	—	—	—	—	—	—	0.001(J)	—	—	—	—	—	—	—	0.001(J)	—	—	0.035	—
RE53-99-0224	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0184	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0013(J)	—	—
RE53-99-0185	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.700001E-04(J)	—	—
RE53-98-0164	—	—	—	—	—	0.041(J)	—	—	—	—	—	—	—	0.038(J)	—	—	—	—	—	—
RE53-99-0165	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0178	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	0.001(J)	—	—
RE53-99-0166	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0175	53-01645	1.00-1.33	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0026(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—
RE53-99-0167	53-01646	0.00-0.50	Soil	—	—	—	—	—	—	—	—	—	—	0.046(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0176	53-01648	0.67-1.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—
RE53-99-0170	53-01649	0.00-0.50	Soil	—	—	—	—	—	—	—	—	—	—	0.048(J)	—	—	—	—	—	0.00032(J-)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0174	53-01651	0.50-0.67	Soil	—	—	—	—	0.0003(J)	—	—	—	—	—	—	—	—	—	0.00052(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—
RE53-99-0230	53-01654	7.00-8.00	Obt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.029(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0231	53-01654	12.00-13.00	Obt 2	—	—	—	—	—	—	—	—	—	—	0.061(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0232	53-01654	19.00-20.00	Obt 2	—	—	—	—	—	—	—	—	—	—	0.044(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0234	53-01655	14.00-15.00	Obt 2	—	0.016(J-)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.024(J)	—	—	—	—	—	—	—	—	—
RE53-99-0237	53-01656	13.00-14.00	Obt 2	—	—	—	—	—	—	—	—	—	—	0.048(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0243	53-01658	13.00-14.00	Obt 2	—	—	—	—	—	—	—	—	—	—	0.019(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0244	53-01658	24.00-25.00	Obt 2	—	—	—	—	—	—	—	—	—	—	0.033(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0247	53-01664	1.00-2.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.001(J)	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0249	53-01664	14.00-15.00	Obt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.001(J)	0.001(J)	--	--	--	--
RE53-99-0250	53-01681	1.00-2.00	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004(J)	--	--	--	--
RE53-99-0251	53-01681	4.00-5.00	Obt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005(J)	--	--	--	--	0.0007(J)	--	--	--	--
RE53-99-0253	53-01682	1.00-2.00	Soil	--	0.03(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0259	53-01684	1.00-2.00	Soil	--	--	--	--	--	--	--	--	--	--	0.021(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0260	53-01684	4.00-5.00	Obt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.001(J)	--	--	--	--
RE53-99-0265	53-01686	1.00-2.00	Soil	--	--	--	--	--	--	--	--	--	--	0.061(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0266	53-01686	4.00-5.00	Obt 2	--	--	--	--	--	--	--	--	--	--	0.018(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0271	53-01688	1.00-2.00	Soil	0.3(J)	--	--	--	--	--	--	--	--	--	0.019(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0274	53-01688	1.00-2.00	Soil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.025(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0275	53-01688	4.00-5.00	Obt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.034(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0273	53-01688	14.00-15.00	Obt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.026(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0276	53-01688	14.00-15.00	Obt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo[g,h,i]perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0277	53-01689	16.00-17.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.072(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0278	53-01689	19.00-20.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.084(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0279	53-01689	29.00-30.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.085(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0229	53-01690	7.50-9.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	0.33(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0295	53-01691	9.00-10.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.045(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0298	53-01691	9.00-10.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0296	53-01691	13.00-14.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.044(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0297	53-01691	24.00-25.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.068(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0299	53-01692	13.00-14.00	Qbt 2	—	0.027(J-)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0300	53-01692	24.00-25.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0301	53-01693	9.00-10.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0302	53-01693	13.00-14.00	Qbt 2	—	0.025(J-)	—	—	—	—	—	—	—	—	—	0.011(J-)	—	—	—	—	—	—	—	—	—	—	0.088(J-)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0303	53-01693	24.00-25.00	Qbt 2	—	0.028	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3(J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0304	53-01694	9.00-10.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.52	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0305	53-01694	13.00-14.00	Qbt 2	–	0.063	–	–	–	–	–	–	–	–	–	–	–	0.055(J)	–	–	–	–	–	–	–	–	0.56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0306	53-01694	24.00-25.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	0.018(J)	–	–	–	–	–	–	–	–	0.61	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0310	53-01695	1.00-2.00	Qbt 2	–	–	–	–	–	–	–	0.025(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.029(J)	–	–	–	–	–	–	–
RE53-99-0312	53-01695	14.00-15.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.006(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0314	53-01696	4.00-5.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.054(J)	1.3	–	–	–	–	–	–	–	–	–	–	–	–	0.001(J-)	–	–
RE53-99-0313	53-01696	12.00-24.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.06(J)	1.6	–	–	–	–	–	–	–	–	–	–	–	–	0.001(J-)	–	–
RE53-99-0315	53-01696	14.00-15.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.058(J)	1.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0319	53-01697	1.00-2.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.002(J)	–	–	–
RE53-99-0321	53-01697	14.00-15.00	Qbt 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.02(J)	–	–	–	–	–	–	–	–	–	–	–	–	0.008	–	–
RE53-99-0316	53-01698	1.00-2.00	Qbt 2	–	0.01(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.025(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0317	53-01698	4.00-5.00	Qbt 2	–	0.008(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.018(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE53-99-0318	53-01698	14.00-15.00	Qbt 2	–	0.008(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.021(J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-99-0307	53-01701	1.00-2.00	Qbt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.002(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-99-0308	53-01701	4.00-5.00	Qbt 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.002(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.001	--
RE53-99-0322	53-01702	1.00-2.00	Qbt 2	--	0.045(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.017(J)	--	--	--
RE53-00-0006	53-01708	5.00-6.00	Qbt 3	--	--	--	--	--	0.018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0040	53-01716	0.00-0.50	Soil	--	--	--	--	--	--	--	--	--	--	0.058(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0045	53-01718	0.00-0.50	Soil	--	--	--	--	--	--	--	--	--	--	0.2(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0094	53-01718	4.00-5.00	Qbt 2	--	--	--	--	--	--	--	--	--	--	0.098(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0047	53-01719	1.00-2.00	Qbt 2	--	--	--	--	--	--	--	--	--	--	--	--	0.006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0050	53-01720	0.00-0.50	Soil	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0051	53-01720	1.00-2.00	Qbt 2	--	0.008(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0004(J)
RE53-00-0052	53-01720	4.00-5.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0053	53-01720	14.00-15.00	Qbt 2	--	0.011(J-)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0054	53-01721	0.00-0.50	Soil	--	0.007(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-00-0055	53-01721	1.00-2.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0056	53-01721	4.00-5.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0057	53-01721	14.00-15.00	Qbt 2	--	0.007(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0059	53-01722	1.00-2.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0060	53-01722	4.00-5.00	Qbt 2	--	0.009(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0061	53-01722	14.00-15.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0062	53-01723	0.00-0.50	Soil	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0070	53-01725	0.00-0.50	Soil	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0071	53-01725	1.00-2.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0072	53-01725	4.00-5.00	Qbt 2	--	0.007(J)	--	--	--	--	--	--	--	--	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0073	53-01725	14.00-15.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0074	53-01726	0.00-0.50	Soil	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0075	53-01726	1.00-2.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-00-0076	53-01726	4.00-5.00	Qbt 2	--	0.007(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0077	53-01726	14.00-15.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0078	53-01727	0.00-0.50	Soil	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0079	53-01727	1.00-2.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0080	53-01727	4.00-5.00	Qbt 2	--	0.007(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0081	53-01727	14.00-15.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0082	53-01728	0.00-0.50	Soil	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0083	53-01728	1.00-2.00	Qbt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0084	53-01728	4.00-5.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0085	53-01728	14.00-15.00	Qbt 2	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0086	53-01729	0.00-0.50	Soil	--	0.005(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0087	53-01729	1.00-2.00	Qbt 2	--	0.008(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aroclor-1254	Aroclor-1260	Benzene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Alcohol	BHC[alpha-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate	Butanone[2-]	Butylbenzene[sec-]	Butylbenzylphthalate	Chloroethane	DDD[4,4'-]	DDE[4,4'-]	DDT[4,4'-]	Dichlorobenzene[1,4-]	Dichlorodifluoromethane	Dieldrin	Diethylphthalate	Di-n-butylphthalate	Endrin	Fluoranthene	Heptachlor	Isopropyltoluene[4-]	Methyl-2-pentanone[4-]	Methylene Chloride	Methylphenol[3-]	Methylphenol[4-]	Phenol	Pyrene	Tetrachloroethene	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
RE53-00-0088	53-01729	4.00-5.00	Obt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RE53-00-0089	53-01729	14.00-15.00	Obt 2	--	0.006(J)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes: Numbers in analyte columns represent detected concentrations in mg/kg. Dashes indicate that the sample was either not analyzed or a nondected value. Letters in parentheses represent lab qualifiers: U and UJ represent nondetected values; J, J+, J- and null values represent detected values.

Table B-3
Concentrations (mg/kg) of Inorganic Chemicals Above Background at PRS 53-002(a)-99

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
0253-95-0106	53-01002	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.476(U)	—	—
0253-95-0110	53-01003	1.50–2.50	Qbt 2	—	0.971(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0113	53-01004	1.50–2.50	Qbt 2	—	0.962(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.481(U)	—	—
0253-95-0116	53-01005	1.50–2.42	Qbt 2	—	0.99(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.495(U)	—	—
0253-95-0119	53-01006	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0122	53-01007	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.481(U)	—	—
0253-95-0126	53-01008	1.50–2.50	Qbt 2	—	0.971(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0129	53-01009	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.467(U)	—	—
0253-95-0132	53-01010	1.50–2.50	Qbt 2	—	0.971(U)	—	—	—	—	—	7.37	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0135	53-01011	1.50–2.50	Qbt 2	—	0.926(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.463(U)	—	—
0253-95-0138	53-01012	1.50–2.50	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49(U)	—	—
0253-95-0142	53-01013	1.50–2.50	Qbt 2	7980	1(U)	—	70.7	—	—	—	—	—	—	9.22	—	—	—	—	0.412	—	—
0253-95-0145	53-01014	1.50–2.50	Qbt 2	—	0.943(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.472(U)	—	—
0253-95-0148	53-01015	1.50–2.50	Qbt 2	—	0.971(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0151	53-01016	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0154	53-01017	1.50–2.50	Qbt 2	—	0.926(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.463(U)	—	—
0253-95-0177	53-01018	3.50–4.83	Qbt 2	—	0.99(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.495(U)	—	—
0253-95-0181	53-01019	2.17–3.00	Qbt 2	—	0.99(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.495(U)	—	—
0253-95-0184	53-01020	3.67–4.50	Qbt 2	—	0.99(U)	—	111	—	—	4320	—	—	—	5.39	—	—	—	—	0.495(U)	—	—
0253-95-0187	53-01021	1.58–2.50	Qbt 2	—	0.971(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0190	53-01022	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	3000	—	—	—	—	27.5	—	—	—	0.5(U)	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	**0.83**	—	—	**1.83**	**0.4**	**6120**	—	—	—	**14.7**	—	—	**0.1**	—	**1.52**	**1**	**48.8**
Qbt 2,3,4 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	—	**2200**	**7.14**	—	—	**4.66**	**11.2**	**1690**	**0.1**	**6.58**	**0.3**	—	—
0253-95-0193	53-01023	2.00–3.33	Qbt 2	—	—	—	59.8	—	—	29600	—	—	—	—	—	3110	—	—	0.481(U)	—	—
0253-95-0196	53-01024	1.50–2.50	Qbt 2	—	0.971(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.485(U)	—	—
0253-95-0205	53-01025	1.50–2.50	Qbt 2	—	0.99(U)	—	—	—	—	7750	—	—	—	—	—	—	—	—	0.495(U)	—	—
0253-95-0208	53-01026	1.50–2.50	Qbt 2	—	—	—	95.7	—	—	26000	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0211	53-01027	1.50–2.50	Qbt 2	—	0.99(U)	—	—	—	—	10500	—	—	—	—	—	—	—	—	0.495(U)	—	—
0253-95-0214	53-01028	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	3360	—	—	—	—	—	—	0.302	—	0.5(U)	—	—
0253-95-0217	53-01029	1.50–2.50	Qbt 2	—	—	—	55.8	—	—	5290	—	—	—	—	—	—	—	—	—	—	—
0253-95-0220	53-01030	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0223	53-01031	1.50–2.50	Qbt 2	—	0.952(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.476(U)	—	—
0253-95-0227	53-01032	1.50–3.00	Qbt 2	—	0.943(U)	—	—	—	—	12100	—	—	—	—	—	—	—	—	0.472(U)	—	—
0253-95-0230	53-01033	1.50–2.50	Qbt 2	—	0.971(U)	—	—	—	—	3940	—	—	—	—	—	—	—	—	—	—	—
0253-95-0233	53-01034	2.00–3.00	Qbt 2	—	1(U)	—	50.8	—	—	4070	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0155	53-01288	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0156	53-01289	1.00–1.67	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0157	53-01290	0.67–1.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0159	53-01292	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0160	53-01293	1.50–2.17	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0161	53-01294	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0162	53-01295	1.50–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0234	53-01316	2.00–3.67	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0253-95-0236	53-01317	0.67–2.00	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0237	53-01318	1.17–2.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0238	53-01319	1.50–2.33	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5(U)	—	—
0253-95-0241	53-01321	1.50–2.67	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	5.29	—	—	—	—	0.5(U)	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
0253-95-0242	53-01322	1.00–2.67	Qbt 2	—	—	—	—	—	—	3580	—	—	—	—	—	—	—	—	—	—	—
0253-95-0243	53-01323	2.50–3.67	Qbt 2	—	1(U)	—	—	—	—	2580	—	—	—	—	—	—	—	—	0.5(U)	—	—
RE53-99-0115	53-01573	4.00–5.00	Qbt 2	—	0.76(U)	—	—	—	—	—	18.5	2.1(U)	—	—	—	—	—	9.3	0.46(U)	—	—
RE53-99-0116	53-01573	14.00–15.00	Qbt 2	—	0.78(U)	—	—	—	—	—	—	2.2(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0059	53-01575	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	2.2(U)	—	—	—	—	—	—	—	—	—
RE53-99-0117	53-01575	4.00–5.00	Qbt 2	—	0.84(U)	—	—	—	—	2790	—	—	—	—	—	—	—	—	0.79(J)	—	—
RE53-99-0118	53-01575	14.00–15.00	Qbt 2	—	0.81(U)	—	—	—	—	17900	—	—	—	—	—	—	—	—	0.49(U)	—	—
RE53-99-0062	53-01576	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	2.2(U)	—	—	—	—	—	—	—	—	—
RE53-99-0119	53-01576	4.00–5.00	Qbt 2	—	0.76(U)	—	—	—	—	—	15.7	—	—	—	—	—	—	8.2(J)	0.47(U)	—	—
RE53-99-0120	53-01576	14.00–15.00	Qbt 2	—	0.77(U)	—	—	—	—	—	21.2	—	—	—	—	—	—	11.1	0.47(U)	—	—
RE53-99-0121	53-01577	4.00–5.00	Qbt 2	—	0.77(U)	—	—	—	—	—	7.7	—	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0122	53-01577	14.00–15.00	Qbt 2	—	0.79(U)	—	—	—	—	—	36.4	2.2(U)	—	—	—	—	—	18.6	0.48(U)	—	—
RE53-99-0125	53-01582	4.00–5.00	Qbt 2	—	0.78(U)	—	—	—	—	—	—	2.2(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0126	53-01582	14.00–15.00	Qbt 2	—	0.79(U)	—	—	—	—	—	7.9	2.2(U)	—	—	—	—	—	—	0.48(U)	—	—
RE53-99-0127	53-01582	14.00–15.00	Qbt 2	—	0.79(U)	—	—	—	—	—	7.9	2.2(U)	—	—	—	—	—	—	0.48(U)	—	—
RE53-99-0123	53-01584	4.00–5.00	Qbt 2	—	0.77(U)	—	—	—	—	—	—	2.1(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0124	53-01584	14.00–15.00	Qbt 2	—	0.79(U)	—	—	—	—	—	—	2.2(U)	—	—	—	—	—	—	0.48(U)	—	—
RE53-99-0132	53-01586	4.00–5.00	Qbt 2	—	0.81(U)	—	47.2	1.3	—	—	—	2.3(U)	—	—	—	—	—	—	0.5(U)	—	—
RE53-99-0133	53-01586	14.00–15.00	Qbt 2	—	0.77(U)	—	—	—	—	—	9.3	2.1(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0130	53-01587	4.00–5.00	Qbt 2	—	0.77(U)	—	—	—	—	—	—	2.1(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0131	53-01587	14.00–15.00	Qbt 2	—	0.76(U)	—	—	—	—	—	—	2.1(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0134	53-01588	4.00–5.00	Qbt 2	—	—	—	—	—	—	7300	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0135	53-01588	14.00–15.00	Qbt 2	—	0.53(U)	—	—	—	—	—	15	—	—	—	—	—	0.11(U)	7.3	—	—	—
RE53-99-0128	53-01589	4.00–5.00	Qbt 2	—	0.78(U)	—	—	—	—	2490	—	2.2(U)	—	—	—	—	—	—	0.48(U)	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
RE53-99-0129	53-01589	14.00–15.00	Qbt 2	—	0.77(U)	—	—	—	—	—	—	2.1(U)	—	—	—	—	—	—	0.47(U)	—	—
RE53-99-0107	53-01591	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	0.06	—	—	—	—	—	—	—	—	—
RE53-99-0104	53-01592	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	0.068(U)	—	—	—	—	—	—	—	—	—
RE53-99-0140	53-01592	4.00–5.00	Qbt 2	—	—	—	92	—	—	41000	—	0.043(U)	—	—	—	2000	0.11(U)	—	—	—	—
RE53-99-0141	53-01592	14.00–15.00	Qbt 2	—	0.52(U)	—	—	—	—	—	11	0.041(U)	—	—	—	—	—	—	—	—	—
RE53-99-0138	53-01593	4.00–5.00	Qbt 2	—	0.59(U)	—	58	—	—	4000	—	0.047(U)	—	—	—	—	0.12(U)	—	—	—	—
RE53-99-0139	53-01593	14.00–15.00	Qbt 2	—	0.53(U)	—	—	—	—	—	—	0.043(U)	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0136	53-01594	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.96(U)	—	—
RE53-99-0137	53-01594	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1(U)	—	—
RE53-99-0148	53-01595	4.00–5.00	Qbt 2	12000	—	3.6	94	—	—	3700	8.2	—	—	—	—	2000	—	6.9	0.5	—	—
RE53-99-0149	53-01595	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	24	—	—	—	—	—	—	13	—	—	—
RE53-99-0146	53-01596	4.00–5.00	Qbt 2	9200	—	3	58	—	—	2400	8.6	—	—	—	—	—	—	8.1	0.37(J)	—	—
RE53-99-0147	53-01596	14.00–15.00	Qbt 2	—	0.56(UJ)	—	—	—	—	—	17	—	—	—	—	—	—	9.6	—	—	—
RE53-99-0144	53-01597	4.00–5.00	Qbt 2	7500	0.84(U)	—	53	—	—	—	—	—	—	—	—	—	—	—	0.47(UJ)	—	—
RE53-99-0145	53-01597	14.00–15.00	Qbt 2	—	0.66(UJ)	—	—	—	—	—	23	—	—	—	—	—	0.11(U)	12	0.44(U)	—	—
RE53-99-0142	53-01598	4.00–5.00	Qbt 2	—	0.8(UJ)	—	57	—	—	3600	—	—	—	—	—	—	0.12(U)	—	0.47(U)	—	—
RE53-99-0143	53-01598	14.00–15.00	Qbt 2	—	0.68(U)	2.9	—	—	—	—	17	—	—	—	—	—	0.11(U)	9	0.43(UJ)	—	—
RE53-99-0217	53-01624	0.50–1.00	Qbt 2	—	—	—	—	—	—	—	22	—	—	—	—	—	—	15	—	—	—
RE53-99-0218	53-01626	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	—	16(J—)	—	—	—	—	—	—	81(J+)
RE53-99-0219	53-01626	0.50–0.83	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65(J+)
RE53-99-0220	53-01626	0.83–1.33	Qbt 2	—	—	—	—	—	—	—	19	—	—	—	—	—	0.11(U)	11	—	—	—
RE53-99-0210	53-01631	0.00–0.50	Soil	—	—	—	—	—	—	—	—	0.042(U)	—	—	—	—	—	—	—	—	92
RE53-99-0211	53-01631	0.67–1.67	Qbt 2	—	—	—	—	—	—	—	28	0.044(U)	—	—	—	—	—	15	0.44(UJ)	—	—
RE53-99-0212	53-01632	0.00–0.33	Soil	—	—	—	—	—	—	—	—	0.041(U)	—	—	—	—	—	—	—	—	74

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	**0.83**	—	—	**1.83**	**0.4**	**6120**	—	—	—	**14.7**	—	—	**0.1**	—	**1.52**	**1**	**48.8**
Qbt 2,3,4 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	—	**2200**	**7.14**	—	—	**4.66**	**11.2**	**1690**	**0.1**	**6.58**	**0.3**	—	—
RE53-99-0214	53-01634	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	—	26	—	—	—	—	—	2.1	130
RE53-99-0215	53-01634	0.67–1.67	Qbt 2	—	—	—	—	—	—	—	—	—	—	7.8	—	—	—	—	0.41(UJ)	—	—
RE53-99-0221	53-01635	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	—	16(J—)	—	—	—	—	—	—	86(J+)
RE53-99-0222	53-01635	0.50–1.33	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	78(J+)
RE53-99-0223	53-01635	1.33–2.50	Qbt 2	13000	—	—	—	—	—	—	9.1	—	—	7.7(J—)	—	—	—	—	—	—	—
RE53-99-0224	53-01636	0.00–0.33	Soil	—	—	—	—	—	—	9300	—	—	—	—	—	—	—	—	—	—	49(J+)
RE53-99-0183	53-01639	0.00–0.33	Soil	—	3.1(U)	—	—	—	0.43(U)	—	—	0.1(U)	—	—	—	—	—	—	—	—	—
RE53-99-0184	53-01640	0.00–0.33	Soil	—	3.1(U)	—	—	—	0.42(U)	—	—	—	—	—	—	—	—	—	—	—	63.4
RE53-99-0185	53-01641	0.00–0.33	Soil	—	3.2(U)	—	—	—	0.44(U)	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0163	53-01642	0.00–0.50	Qbt 2	—	1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48(U)	—	—
RE53-99-0166	53-01645	0.00–0.50	Qbt 2	—	0.74(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45(U)	—	—
RE53-99-0177	53-01646	0.58–0.92	Soil	—	1(U)	—	—	2.7	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0168	53-01647	0.00–0.25	Soil	—	1.1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0171	53-01650	0.00–0.42	Qbt 2	—	0.98(U)	—	51.4	—	—	—	—	—	—	—	11.5	—	—	—	0.47(U)	—	—
RE53-99-0172	53-01651	0.00–0.50	Soil	—	—	—	—	—	—	—	—	22(U)	—	—	—	—	—	—	—	—	—
RE53-99-0173	53-01651	0.00–0.50	Soil	—	—	—	—	—	—	—	—	22(U)	—	—	—	—	—	—	—	—	—
RE53-99-0174	53-01651	0.50–0.67	Soil	—	—	—	—	—	—	—	—	43(U)	—	—	—	—	—	—	—	—	—
RE53-99-0180	53-01652	0.00–0.50	Soil	—	1.1(U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0181	53-01652	0.67–1.00	Qbt 2	—	0.72(U)	—	—	—	—	—	—	20(U)	—	—	—	—	—	—	0.44(U)	—	—
RE53-99-0182	53-01653	0.00–0.50	Soil	—	—	—	—	—	—	8740	—	41(U)	—	—	—	—	—	—	—	—	—
RE53-99-0230	53-01654	7.00–8.00	Qbt 2	—	0.56(UJ)	—	—	—	—	2600	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0231	53-01654	12.00–13.00	Qbt 2	—	0.56(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0232	53-01654	19.00–20.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0233	53-01655	10.00–12.50	Qbt 2	—	0.58(UJ)	—	—	—	—	2600	—	—	—	—	—	—	0.12(U)	—	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
RE53-99-0234	53-01655	14.00–15.00	Qbt 2	—	0.57(UJ)	3	61	—	—	4000	—	—	—	—	—	—	0.11(U)	—	0.45(UJ)	—	—
RE53-99-0235	53-01655	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0236	53-01656	9.00–10.00	Qbt 2	—	0.54(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0237	53-01656	13.00–14.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	15	—	—	—	—	—	—
RE53-99-0238	53-01656	24.00–25.00	Qbt 2	—	0.54(UJ)	—	—	—	—	—	—	—	—	—	14	—	0.11(U)	—	—	—	—
RE53-99-0239	53-01657	9.00–10.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0240	53-01657	13.00–14.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	12	—	0.11(U)	—	—	—	—
RE53-99-0241	53-01657	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0242	53-01658	9.00–10.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	41	—	0.11(U)	—	—	—	—
RE53-99-0243	53-01658	13.00–14.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	28	—	—	—	—	—	—
RE53-99-0244	53-01658	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	34	—	0.11(U)	—	—	—	—
RE53-99-0280	53-01659	9.00–10.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0281	53-01659	13.00–14.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0282	53-01659	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0286	53-01660	9.00–10.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0287	53-01660	13.00–14.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0288	53-01660	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0283	53-01661	9.00–10.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0284	53-01661	13.00–14.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0285	53-01661	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	9.9	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0289	53-01662	9.00–10.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	0.42(U)	—	—
RE53-99-0290	53-01662	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	0.42(U)	—	—
RE53-99-0291	53-01662	24.00–25.00	Qbt 2	—	0.54(UJ)	—	—	—	—	—	13	—	—	—	—	—	0.11(U)	—	0.43(U)	—	—
RE53-99-0292	53-01663	9.00–10.00	Qbt 2	—	0.54(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	0.43(U)	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
RE53-99-0293	53-01663	13.00–14.00	Qbt 2	8900	0.55(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	1.1(U)	—	—
RE53-99-0294	53-01663	24.00–25.00	Qbt 2	—	0.53(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	0.42(U)	—	—
RE53-99-0247	53-01664	1.00–2.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0250	53-01681	1.00–2.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0252	53-01681	14.00–15.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0253	53-01682	1.00–2.00	Soil	—	—	—	—	—	—	34000	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0254	53-01682	4.00–5.00	Qbt 2	—	—	—	58	—	—	21000	—	—	—	—	—	—	—	—	1.1(UJ)	—	—
RE53-99-0255	53-01682	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0256	53-01683	1.00–2.00	Soil	—	—	—	—	—	—	9000	—	—	—	—	—	—	—	—	2.1(UJ)	—	—
RE53-99-0257	53-01683	4.00–5.00	Qbt 2	—	0.51(UJ)	—	—	—	—	5300	12	—	—	—	—	—	—	—	—	—	—
RE53-99-0259	53-01684	1.00–2.00	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0261	53-01684	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0263	53-01685	4.00–5.00	Qbt 2	17800	—	4.3	153	1.8	—	6830	10.6	—	3.2	7.4	—	3870	—	9.3	—	—	—
RE53-99-0279	53-01689	29.00–30.00	Qbt 2	—	—	—	—	—	—	—	7.8	—	—	—	—	—	—	—	—	—	—
RE53-99-0227	53-01690	4.50–6.00	Qbt 2	—	0.56(U)	—	—	—	—	2480	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0229	53-01690	7.50–9.00	Qbt 2	—	0.65(U)	—	—	—	—	—	—	—	—	—	16.2	—	—	—	—	—	73.3
RE53-99-0295	53-01691	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41(UJ)	—	—
RE53-99-0296	53-01691	13.00–14.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41(UJ)	—	—
RE53-99-0297	53-01691	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	0.42(UJ)	—	—
RE53-99-0299	53-01692	13.00–14.00	Qbt 2	—	—	2.8	—	—	—	7000	—	—	—	—	—	—	—	—	1.2(UJ)	—	—
RE53-99-0300	53-01692	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43(UJ)	—	—
RE53-99-0301	53-01693	9.00–10.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.45(UJ)	—	—
RE53-99-0302	53-01693	13.00–14.00	Qbt 2	9100	—	3	71	—	—	—	—	—	3.9	—	—	—	—	—	0.46(UJ)	—	—
RE53-99-0303	53-01693	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	0.43(UJ)	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				**—**	**0.83**	**—**	**—**	**1.83**	**0.4**	**6120**	**—**	**—**	**—**	**14.7**	**—**	**—**	**0.1**	**—**	**1.52**	**1**	**48.8**
Qbt 2,3,4 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**—**	**2200**	**7.14**	**—**	**—**	**4.66**	**11.2**	**1690**	**0.1**	**6.58**	**0.3**	**—**	**—**
RE53-99-0304	53-01694	9.00–10.00	Qbt 2	8200	—	—	57	—	—	3200	—	—	—	—	—	—	—	—	0.45(UJ)	—	—
RE53-99-0305	53-01694	13.00–14.00	Qbt 2	12000	—	4	260	1.3	—	6500	—	—	—	5	—	2300	—	7.1	0.34(J)	—	—
RE53-99-0306	53-01694	24.00–25.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43(UJ)	—	—
RE53-99-0310	53-01695	1.00–2.00	Qbt 2	12000	—	3.4	110	—	—	6400	8.8	—	—	4.9	—	1900	—	—	0.79(J)	—	—
RE53-99-0311	53-01695	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.42(UJ)	—	—
RE53-99-0312	53-01695	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.42(UJ)	—	—
RE53-99-0313	53-01696	12.00–24.00	Qbt 2	—	—	—	—	—	—	2400	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0315	53-01696	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0319	53-01697	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0320	53-01697	4.00–5.00	Qbt 2	—	—	3	—	—	—	2900	—	—	—	—	—	—	—	—	—	—	—
RE53-99-0316	53-01698	1.00–2.00	Qbt 2	—	—	—	—	—	—	2400	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0317	53-01698	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-99-0318	53-01698	14.00–15.00	Qbt 2	12000	—	3.4	130	—	—	—	9.1	—	4.6	5.9	—	2100	—	7	—	—	—
RE53-99-0307	53-01701	1.00–2.00	Qbt 2	—	0.52(UJ)	—	—	—	—	4200	—	—	—	—	—	—	—	—	0.42(UJ)	—	—
RE53-99-0308	53-01701	4.00–5.00	Qbt 2	—	0.52(UJ)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.42(UJ)	—	—
RE53-99-0322	53-01702	1.00–2.00	Qbt 2	—	0.54(UJ)	—	49	—	—	3100	17(J—)	—	—	18	—	—	—	13	0.46	—	—
RE53-00-0004	53-01706	2.00–3.00	Qbt 3	—	—	—	51	—	—	2700	—	—	—	—	—	—	0.11(U)	—	—	—	—
RE53-00-0005	53-01707	3.50–4.50	Qbt 3	—	—	—	—	—	—	2500	—	—	—	—	—	—	—	—	—	—	—
RE53-00-0006	53-01708	5.00–6.00	Qbt 3	—	0.53(UJ)	—	—	—	—	2700	—	—	—	—	21	—	0.11(U)	—	—	—	—
RE53-00-0007	53-01709	8.01–9.01	Qbt 3	—	0.54(UJ)	—	—	—	—	—	—	—	—	—	—	—	0.11(U)	—	1.1(UJ)	—	—
RE53-00-0008	53-01710	6.51–7.51	Qbt 3	11000	—	3.1	100	—	—	5200	8	—	—	—	—	1800	0.11(U)	—	1.1(UJ)	—	—
RE53-00-0009	53-01711	5.50–6.51	Qbt 3	14000	—	3.7	82	—	—	3400	9.3	—	—	5	13	2100	—	7.6	1.1(UJ)	—	—
RE53-00-0010	53-01712	4.00–5.00	Qbt 3	16000	—	3.3	58	1.3	—	2300	10	—	—	—	—	2300	—	7.7	1.1(UJ)	—	—
RE53-00-0011	53-01713	4.00–5.00	Qbt 3	13000	0.56(U)	3.2	96	—	—	3600	8.6	—	—	—	—	2000	—	6.7	—	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
RE53-00-0012	53-01714	3.00–4.00	Qbt 3	—	—	—	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE53-00-0013	53-01715	4.50–5.50	Qbt 3	10000	—	2.9	75	—	—	—	7.6	—	—	4.8	—	1700	—	—	—	—	—
RE53-00-0040	53-01716	0.00–0.50	Soil	—	—	—	—	—	—	6700	—	—	—	—	—	—	—	—	—	—	—
RE53-00-0041	53-01716	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.522	—	—
RE53-00-0042	53-01716	4.00–5.00	Qbt 2	—	—	—	—	—	—	8400	—	—	—	—	—	—	—	—	0.635	—	—
RE53-00-0043	53-01716	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.699	—	—
RE53-00-0044	53-01717	0.00–0.50	Soil	—	—	—	—	—	—	6400	—	—	—	—	—	—	—	—	—	—	—
RE53-00-0090	53-01717	1.00–2.00	Qbt 2	—	—	—	—	—	—	5700	—	—	—	—	—	—	—	—	0.406	—	—
RE53-00-0091	53-01717	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	7.7	—	—	—	—	—	—	—	0.6	—	—
RE53-00-0092	53-01717	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	7.6	—	—	—	—	—	—	—	0.534	—	—
RE53-00-0045	53-01718	0.00–0.50	Soil	—	—	—	—	—	—	7900	—	—	—	—	—	—	—	—	—	1.3(J—)	—
RE53-00-0093	53-01718	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	0.57	—	—	—	—	—	—	0.396	—	—
RE53-00-0094	53-01718	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	7.5	0.6	—	—	—	—	—	—	0.595	—	—
RE53-00-0095	53-01718	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	0.62	—	—	—	—	—	—	0.785	—	—
RE53-00-0047	53-01719	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.511	—	—
RE53-00-0048	53-01719	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.574	—	—
RE53-00-0049	53-01719	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.526	—	—
RE53-00-0051	53-01720	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.325	—	—
RE53-00-0052	53-01720	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.566	—	70
RE53-00-0053	53-01720	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.448	—	84
RE53-00-0055	53-01721	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	17	—	—	—	0.424	—	—
RE53-00-0056	53-01721	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	22	—	—	—	0.402	—	—
RE53-00-0057	53-01721	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	14	—	—	—	0.478	—	—
RE53-00-0059	53-01722	1.00–2.00	Qbt 2	—	—	—	52	—	—	—	—	—	—	—	—	—	—	—	0.433	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
RE53-00-0060	53-01722	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	7.4	—	—	—	—	—	—	—	0.374	—	—
RE53-00-0061	53-01722	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.42	—	—
RE53-00-0063	53-01723	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	—	—
RE53-00-0064	53-01723	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.349	—	—
RE53-00-0065	53-01723	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	7.8	—	—	—	—	—	—	—	0.529	—	—
RE53-00-0067	53-01724	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.382	—	—
RE53-00-0068	53-01724	4.00–5.00	Qbt 2	—	—	—	—	—	510	—	—	—	—	—	—	—	—	—	0.494	—	—
RE53-00-0069	53-01724	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.585	—	—
RE53-00-0070	53-01725	0.00–0.50	Soil	—	—	—	—	—	—	6500	—	—	—	—	—	—	—	—	—	1.5	—
RE53-00-0071	53-01725	1.00–2.00	Qbt 2	—	—	—	—	—	—	3900	—	—	—	—	—	—	—	—	—	1.1	—
RE53-00-0072	53-01725	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.381	—	—
RE53-00-0073	53-01725	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.514	—	—
RE53-00-0074	53-01726	0.00–0.50	Soil	—	—	—	—	—	—	6700	—	—	—	—	—	—	—	—	—	1.1	—
RE53-00-0075	53-01726	1.00–2.00	Qbt 2	—	—	—	—	—	—	3700	—	—	—	—	—	—	—	—	—	—	—
RE53-00-0076	53-01726	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.406	—	—
RE53-00-0077	53-01726	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.506	—	—
RE53-00-0078	53-01727	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.1	—
RE53-00-0080	53-01727	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.577	—	—
RE53-00-0081	53-01727	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.53	—	—
RE53-00-0083	53-01728	1.00–2.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.307	—	—
RE53-00-0084	53-01728	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.481	—	—
RE53-00-0085	53-01728	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.497	—	—
RE53-00-0086	53-01729	0.00–0.50	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2	—
RE53-00-0087	53-01729	1.00–2.00	Qbt 2	—	—	—	—	—	—	2800	—	—	—	—	—	—	—	—	0.4	—	—

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Chromium, Hexavalent Ion	Cobalt	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc
Soil Background Value				—	0.83	—	—	1.83	0.4	6120	—	—	—	14.7	—	—	0.1	—	1.52	1	48.8
Qbt 2,3,4 Background Value				7340	0.5	2.79	46	1.21	—	2200	7.14	—	—	4.66	11.2	1690	0.1	6.58	0.3	—	—
RE53-00-0088	53-01729	4.00–5.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.604	—	—
RE53-00-0089	53-01729	14.00–15.00	Qbt 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.701	—	—

Notes: Numbers in analyte columns represent detected concentrations in mg/kg. Dashes indicate that the sample was either not analyzed or that the result is a nondected value. Letters in parentheses represent lab qualifiers: U and UJ represent nondetected values; J, J+, J- and null values represent detected values.

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Document Catalog Number ER2002-0484 (Please prefix the name of all electronic versions of this document with this number.)

* Required Field

***Document Title / Subject**	Submittal of Addendum II to the "RFI Work Plan and Sampling and Analysis Plan for Potential Release Sites 53-002(a) and 53-002(b) and Associated Piping and Drainages at TA-53"
PRSs	None
Associated Document Catalog Number(s)	ER2002-0280
***Author**	Riebe, Nancy 667-5020 riebe@lanl.gov
***Author Organization**	Remedial Actions
Document Team	Norris, Vivian Word Processor 665-5221 vivianm@lanl.gov
***Document Type**	Letter **Former OU** N/A
Date Due 7/17/2002	**Date Final Complete** 7/24/2002 **Date Sent to DOE** 7/24/2002
Date Sent to NMED 7/24/2002	**Date Sent to RPF (Paper & Electronic)** 9/26/2002
Received Per RPF	**RPF ER ID Number**
CT No	**LA-UR Number**
Performance Measure No	
AA Deliverable ☐	**Certification Required** ☐ **Force Peer Review** ☐
Distribution TO:	John Young
Distribution FROM:	Dave McInroy Everett Trollinger
Distribution COPY:	

	Dave McInroy Everett Trollinger
Distribution COPY:	
Distribution THRU:	
Attachment Notes	ER2002-0280 Addendum, dated July 2002
Status/Comments	ER2002-0280 Addendum, dated July 2002

Reviewer Signatures: (By signing, the reviewer indicates that he/she **reviewed** and **approves** the document.)

Reviewer (Print reviewer's name under title)	**Signature**	**Date**
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Distributed By Nancy Riebe	Nancy Riebe	7/24/02

Document Catalog Number ER2002-0484

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Document Catalog Number ER2002-0280 (Please prefix the name of all electronic versions of this document with this number.)

* Required Field

***Document Title / Subject**	Addendum II to the "RFI Work Plan and Sampling and Analysis Plan for Potential Release Sites 53-002(a) and 53-002(b) and Associated Piping and Drainages at TA-53"
PRSs	53-002(a) 53-002(b)
Associated Document Catalog Number(s)	ER2002-0484
***Author**	Lopez Escobedo, Gabriela M 665-7352 gabriela@lanl.gov
***Author Organization**	Remedial Actions
Document Team	Riebe, Nancy admin 667-5020 riebe@lanl.gov
***Document Type**	Interim Action Plan **Former OU** N/A
Date Due 7/17/2002	**Date Final Complete** 7/24/2002 **Date Sent to DOE** 7/24/2002
Date Sent to NMED 7/24/2002	**Date Sent to RPF (Paper & Electronic)** 9/26/2002
Received Per RPF	**RPF ER ID Number**
CT No	**LA-UR Number** LA-UR-02-4013
Performance Measure No	
AA Deliverable ☐	**Certification Required** ☐ **Force Peer Review** ☐
Distribution TO:	John Young
Distribution FROM:	Dave McInroy Everett Trollinger
Distribution COPY:	

Distribution THRU:	
Attachment Notes	
Status/Comments	

Reviewer Signatures: (By signing, the reviewer indicates that he/she **reviewed** and **approves** the document.)

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ER Program Manager David McInroy		7/24/02
DOE/LAAO Program Manager Everett Trollinger		7/24/02

Document Catalog Number ER2002-0280

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