02-009

TA-21

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Mr. John Young, Corrective Action Project Leader
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SUBJECT: SUBMITTAL OF VOLUNTARY CORRECTIVE MEASURE (VCM) COMPLETION REPORT FOR POTENTIAL RELEASE SITE (PRS) 21-027(d)-99, AT TECHNICAL AREA (TA)-21

Dear Mr. Young:

Enclosed please find two copies of the "Voluntary Corrective Measure Completion Report for Potential Release Site 21-027(d)-99 at Technical Area 21". PRS 21-027(d)-99 consists of former Area of Concern (AOC) C-21-028 (decommissioned aboveground diesel fuel storage tank) and Solid Waste Management Unit (SWMU) 21-027(d) (former drianline and outfall for the secondary containment around the fuel tank. In 1998, the US Department of Energy Environmental Management Office of Science and Technology, Subsurface Contaminant Focus Area, and the Los Alamos National Laboratory Environmental Restoration Project selected Material Disposal Area (MDA) V at TA-21 as a suitable location to demonstrate nontraditional in situ vitrification (NTISV) technology. As part of the NTISV demonstration, a pit was designed to simulate the absorption beds at MDA V. The simulated absorption bed was constructed in the approximate location of former AOC C-21-028, an area thought to be unaffected by releases from PRSs. However, during the construction of the simulated absorption bed, hydrocarbons in the form of weathered diesel were found in the subsurface. It was subsequently agreed during a meeting with New Mexico Environment Department-Hazardous Waste Bureau on March 4, 1999, that the NTISV demonstration could continue simultaneously with the further evaluation and possible remediation of the hydrocarbon contamination in the form of a VCM. AOC C-21-028 and SWMU 21-027(d) were consolidated during the 1999 annual unit audit.

If you have any questions, please contact John Hopkins at (505) 667-9551 or Woody Woodworth at (505) 667-5820

Sincerely,

David McInroy, Acting Program Manager
Environmental Restoration Project
Los Alamos National Laboratory

Sincerely,

for Everett Trollinger, Project Manager
Department of Energy
Office of Los Alamos Site Operations

DM/ET/PB/vn

Enclosure: 1. VCM Completion Report for PRS 21-027(d)-99 at TA-21
2. Certification

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CERTIFICATION

CERTIFICATION BY THE ENVIRONMENTAL RESTORATION (ER) PROJECT TECHNICAL REPRESENTATIVES

Document Title: **SUBMITTAL OF VOLUNTARY CORRECTIVE MEASURE (VCM) COMPLETION REPORT FOR POTENTIAL RELEASE SITE (PRS) 21-027(d)-99, AT TECHNICAL AREA (TA)-21**

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

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ENVIRONMENTAL RESTORATION PROJECT

A Department of Energy
Environmental Cleanup Program

LA-UR-00-3950
May 2002
ER2001-0117

Voluntary Corrective Measures Completion Report for Potential Release Site 21-027(d)-99 at Technical Area 21

Los Alamos
NATIONAL LABORATORY
Los Alamos NM 87545

Produced by the Material Disposal Areas Focus Area

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EXECUTIVE SUMMARY

This voluntary corrective measure (VCM) completion report presents the results of the characterization and remediation of potential release site (PRS) 21-027(d)-99. PRS 21-027(d)-99 consists of former Area of Concern (AOC) C-21-028 and former Solid Waste Management Unit (SWMU) 21-027(d). Former AOC C-21-028 is the location of a decommissioned aboveground diesel fuel tank, and former SWMU 21-027(d) is the location of the drainline and outfall for the secondary containment around the fuel tank. These sites were consolidated during the 1999 annual unit audit (AUA) into PRS 21-027(d)-99.

In 1998, the US Department of Energy (DOE), Environmental Management Office of Science and Technology, Subsurface Contaminant Focus Area, and the Los Alamos National Laboratory (the Laboratory) Environmental Restoration (ER) Project selected Material Disposal Area (MDA) V at Technical Area (TA) 21 as a suitable location to demonstrate nontraditional in situ vitrification (NTISV) technology. As part of the NTISV demonstration, a pit was designed to simulate the absorption beds at MDA V. The simulated absorption bed was constructed in the approximate location of former AOC C-21-028, an area thought to be unaffected by releases from PRSs. However, during the construction of the simulated absorption bed, hydrocarbons in the form of weathered diesel fuel were found in the subsurface. It was subsequently agreed during a meeting with the New Mexico Environment Department (NMED) Hazardous and Radioactive Materials Bureau (HRMB) on March 4, 1999, that the NTISV demonstration could continue simultaneously with the further evaluation and possible remediation of the hydrocarbon contamination in the form of a VCM. The VCM is intended to be a final remedy for the residual hydrocarbon contamination at this PRS.

The human health screening assessment utilized the risk-based evaluation of petroleum releases listed in the New Mexico Underground Storage Tank (UST) Bureau guidelines for corrective action. Residual concentrations of diesel-related organic chemicals remaining in the subsurface at PRS 21-027(d)-99 are less than risk-based screening levels (RBSLs) calculated in the UST guidelines (for commercial, construction, and residential land-use scenarios). An ecological screening assessment was not conducted for this PRS because of the depth of residual hydrocarbon contamination. The surface water assessment concluded the site has a low-to-medium erosion potential. A pathway to groundwater was not considered because the extent of contamination was confined to a much shallower depth than the regional aquifer, which is approximately 1000 ft below the PRS. Therefore, PRS 21-027(d)-99 is proposed for no further action (NFA) with respect to total petroleum hydrocarbons (TPH) (diesel range) contamination, based on NFA Criterion 5, which stipulates the site has been characterized and remediated in accordance with applicable state and federal regulations (Table ES-1). The available data indicates residual diesel-related organic contaminants do not pose an unacceptable level of risk under current and projected future land use.

Table ES-1
Summary of Proposed Actions

PRS Number	PRS Description	HSWA[a]	Radionuclide Component[b]	Proposed Action	Rationale for Recommendation	Section Number
21-027(d)-99	Location of former aboveground storage tank, drainline, outfall	Yes	No	NFA, Criterion 5[c]	Acceptable risk to human and ecological receptors	2.5

[a] If the site is listed in Module VIII of the Laboratory's Hazardous Waste Facility Permit, then "yes" applies. Otherwise, "no" applies.

[b] If a release has occurred at the PRS and radionuclides are associated with the release, then "yes" applies. Otherwise, "no" applies.

[c] NFA Criteria are listed in Section II.B.4.a.(4).(b) , "No Further Action (NFA) Proposals Criteria," in the NMED RCRA Permits Management Program Document Requirement Guide (NMED 1998, 57897).

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1.0 INTRODUCTION

Los Alamos National Laboratory (the Laboratory) is a multidisciplinary research facility owned by the Department of Energy (DOE) and managed by the University of California. The Laboratory is located in north-central New Mexico approximately 60 miles northeast of Albuquerque and 20 miles northwest of Santa Fe. The Laboratory site covers 43 square miles of the Pajarito Plateau, which consists of a series of finger-like mesas separated by deep canyons containing ephemeral and intermittent streams that run from west to east. Mesa tops range in elevation between approximately 6200 ft and 7800 ft. The eastern portion of the plateau stands 300 ft to 900 ft above the Rio Grande.

The Laboratory's Environmental Restoration (ER) Project is involved in a national effort by DOE to clean up facilities formerly involved in weapons production. The goal of the ER Project is to ensure DOE's past operations do not threaten human or environmental health and safety in and around Los Alamos County, New Mexico. To achieve that goal, the ER Project is currently investigating sites potentially contaminated by past Laboratory operations. The sites under investigation are either solid waste management units (SWMUs) or areas of concern (AOCs).

This investigation and the corrective action were conducted in accordance with the Hazardous and Solid Wastes Amendments of 1984 (HSWA) and followed the requirements in Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 1585). Module VIII was issued to the Laboratory by the Environmental Protection Agency (EPA) on May 23, 1990, and modified on May 19, 1994. The approved installation work plan (IWP) (LANL 1998, 62060) describes the methodologies used during the investigation and remediation of the site.

This voluntary corrective measure (VCM) completion report presents the results of the characterization and remediation of potential release site (PRS) 21-027(d)-99. PRS 21-027(d)-99 consists of former Area of Concern (AOC) C-21-028 and former Solid Waste Management Unit (SWMU) 21-027(d). Former AOC C-21-028 is the location of a decommissioned aboveground diesel fuel tank, and former SWMU 21-027(d) is the location of the drainline, and outfall for the secondary containment around the fuel tank. These sites were consolidated during the 1999 annual unit audit (AUA) into PRS 21-027(d)-99 because they were part of the same system, had similar operational histories, chemicals of potential concern (COPCs), geographic proximity, and transport mechanisms for contaminants.

The objectives of this VCM were to

- remove and dispose of contaminated soil/sediment/tuff from the excavation for the simulated absorption bed,
- define nature and extent of petroleum hydrocarbon contamination,
- confirm that any residual hydrocarbons remaining are below cleanup levels and do not pose an unacceptable level of risk, and
- demonstrate the ability of NTISV to process the petroleum hydrocarbon COPCs observed at this location.

This voluntary corrective measure (VCM) completion report addresses PRS 21-027(d)-99 at Technical Area (TA) 21 at the Laboratory (Figure 1.0-1). Section 2.0 of this report summarizes the preliminary conceptual model, investigation activities, data review, revised conceptual model, and screening assessment results of the VCM. Section 3.0 summarizes the various waste streams, and Section 4.0 lists the references cited in this document. Appendix A includes a list of acronyms and a glossary of terms.

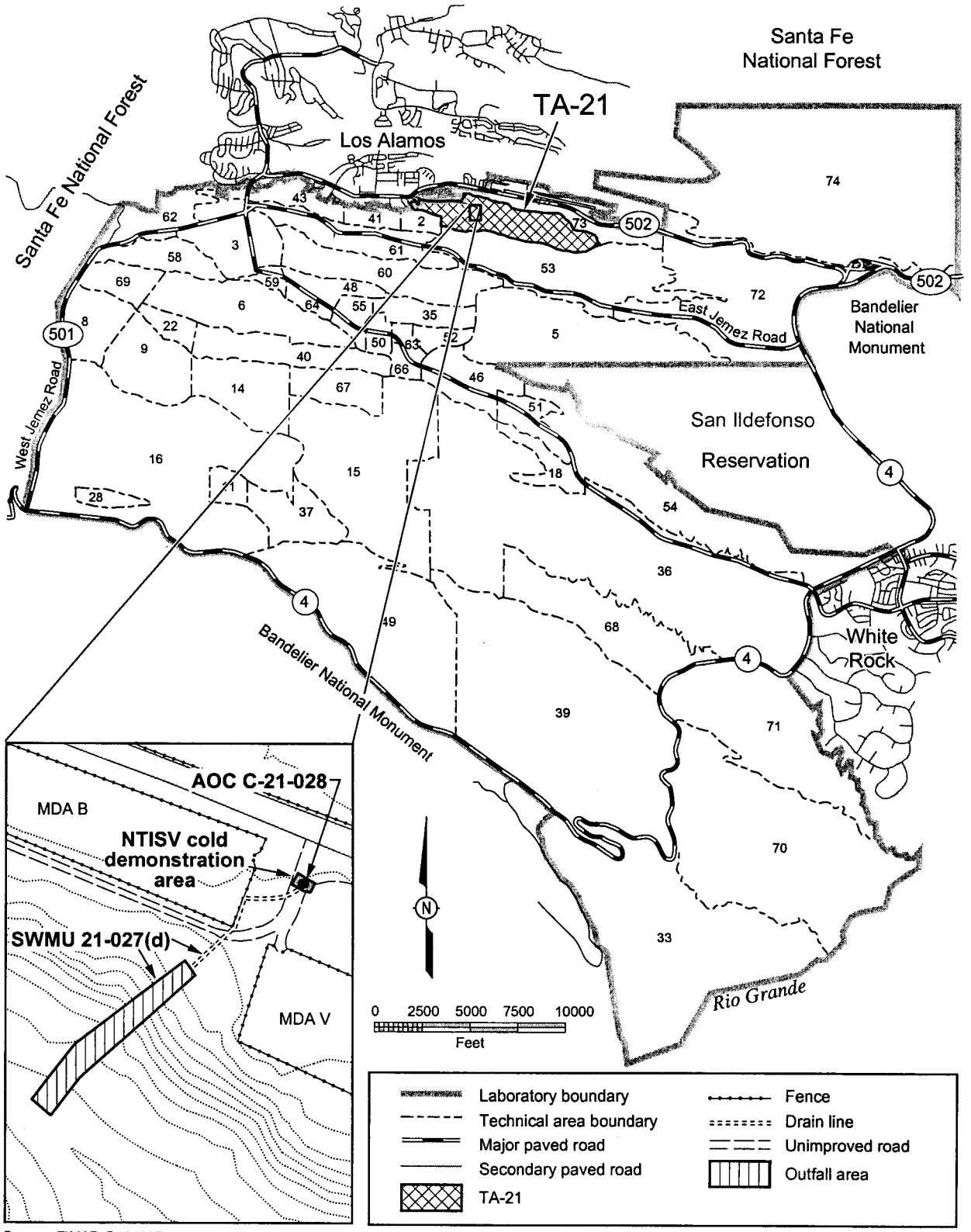

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Figure 1.0-1. Location of TA-21 with respect to other Laboratory technical areas and the surrounding land holdings and the locations of former SWMU 21-027(d) and former AOC C-21-028

The current and anticipated future land use, climate, geology, hydrology, ecological resources, and cultural resources of the general area of the PRS are discussed in detail in Appendix B. Appendix C presents the results of quality assurance/quality control activities for the diesel-related compounds. Appendix D provides the analytical suites and results for premelt and postmelt samples for the diesel-related organic chemicals. Appendix E presents the results of quality assurance/quality control activities for the nondiesel-related compounds. Appendix F provides the analytical suites and results for the 1992 Phase I RFI Outfall and 1999 premelt and postmelt organic chemicals not related to diesel and for inorganic chemicals and radionuclides. A complete set of data is provided with this report in electronic format. There is no appendix for statistical analyses because none were conducted for this report. Appendix G contains the ecological scoping checklist, fate and transport information on chemicals of potential concern (COPCs), and printouts of the Tier 1 report from the computer program "Risk-Based Decision Making for Petroleum Releases at Underground Storage Tank (UST) Sites in New Mexico." Appendix H presents the borehole logs, and Appendix I contains the Laboratory's response to NMED's request for supplemental information (RSI). The RSI response includes NMED's comments, the Laboratory's response to each comment, and describes where the comment is addressed in this report, if applicable.

2.0 PRS 21-027(d)-99

2.1 Description and Operational History

TA-21 is located on Delta Prime (DP) Mesa on the Laboratory's northern boundary immediately east-southeast of the Los Alamos townsite (Figure 1.0-1). PRS 21-027(d)-99, located at TA-21, consists of former AOC C-21-028 and former SWMU 21-027(d) (Figure 2.1-1). Former AOC C-21-028 is the site of a decommissioned 12,788-gal. aboveground storage tank (Structure 47) (LANL 1989, 11941). The tank was situated on a 9-in.-thick concrete slab on the mesa top adjacent to DP Road just west of the former laundry building (Building 20), PRS 21-018(b), (Figure 2.1-2). A ditch used to drain stormwater from the slab extended to the southwest toward BV Canyon (LASL 1948, 24368). The tank was installed during July 1945 (LANL 1989, 11941) to store No. 2 diesel fuel for the operation of the boiler in the DP laundry (Building 20) (Francis 1999, 62745) (Figures 2.1-2 and 2.1-3). The boiler was reportedly diesel powered; however, former employees stated and photographs show the DP laundry was tied to the DP steam plant. Therefore, the storage tank and boiler may have been used to provide power when the structure was built and remained in place as a backup source of power for the laundry. There are no records of the tank being serviced (i.e., filled with fuel).

In 1948, a concrete secondary containment structure was built around the tank to contain any potential releases from the tank (Francis 1999, 62745). A sump was constructed in the center of the south side of the containment, and a drainline was installed in the drainage ditch from the tank containment (LASL 1948, 62912). The first segment of the drainline (approximately 5 ft) from the sump to a gate valve just outside the containment wall was a 4-in. steel pipe. At the gate valve, the drainline changed to a vitrified clay pipe (VCP). When the wastewater treatment laboratory (Structure 33, PRS 21-009) was built (LANL 1991, 7680), the drainage ditch was rerouted around the building, and south toward the rim of DP Mesa (Figure 2.1-2) (LASL 1948, 24368 and LASL 1948, 62912). The new drainline was then installed below ground surface (bgs). The outfall for the drainline began near the mesa edge and continued down the hillside toward BV Canyon. Former SWMU 21-027(d) consists of the drainline and outfall.

The storage tank and concrete containment were removed in 1960 (LANL 1989, 11941), and the drainline was removed in March 1965 (LANL 1991, 7529).

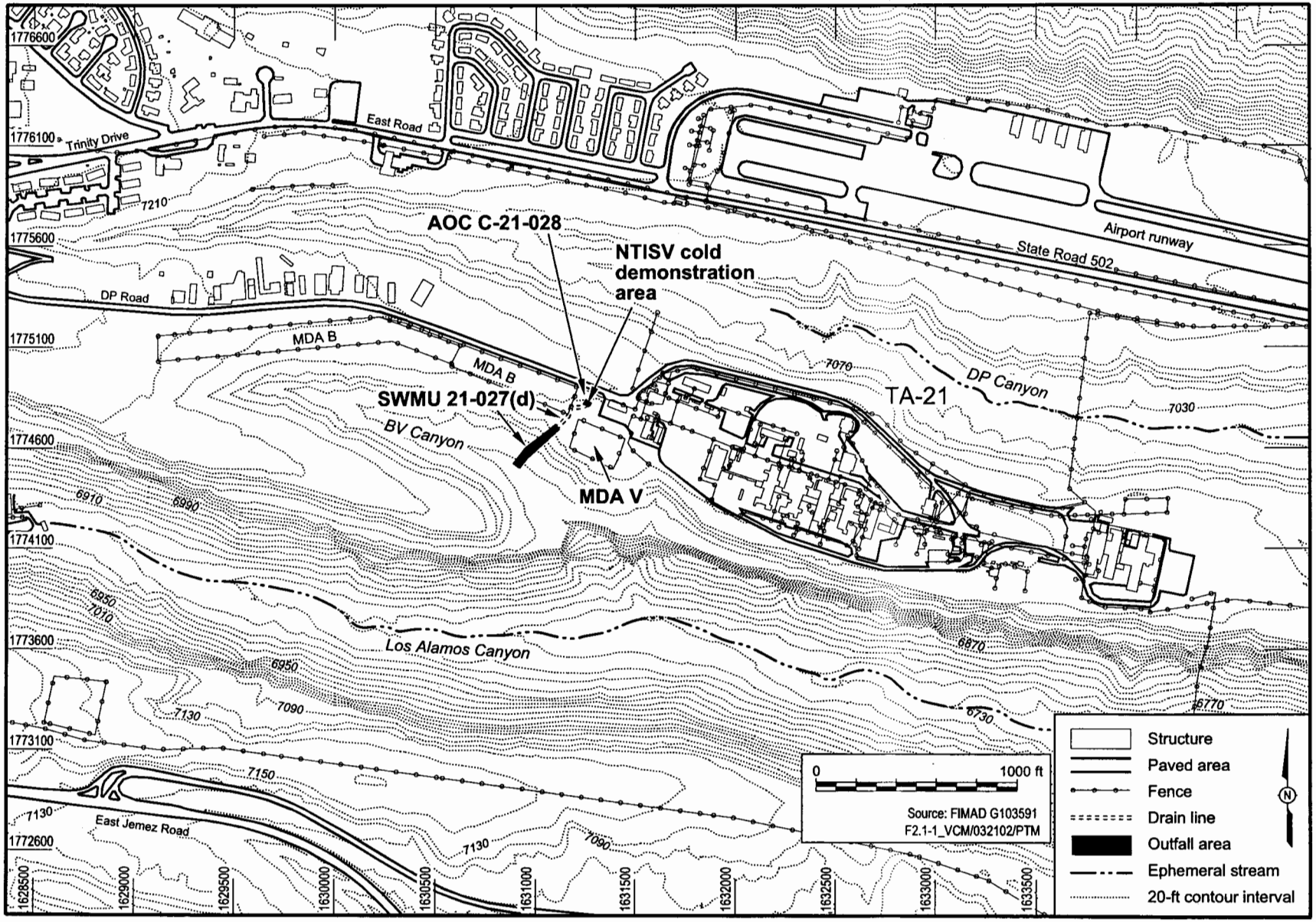

Figure 2.1-1. Locations of former SWMU 21-027(d), former AOC C-21-028, and the NTISV cold demonstration area at TA-21

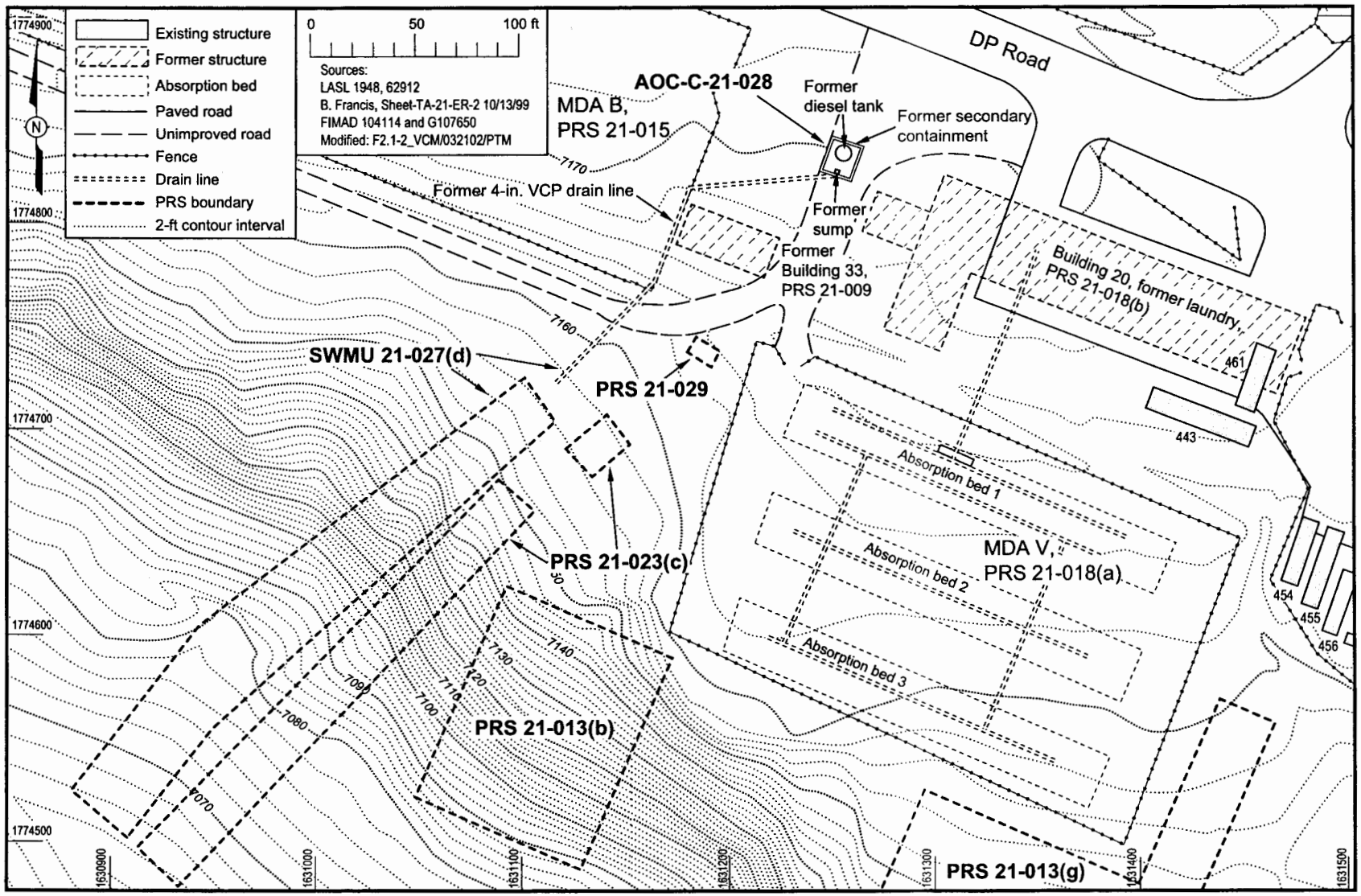

Figure 2.1-2. Former aboveground storage tank AOC C-21-028 detail, location of former SWMU 21-027(d), and adjacent PRSs

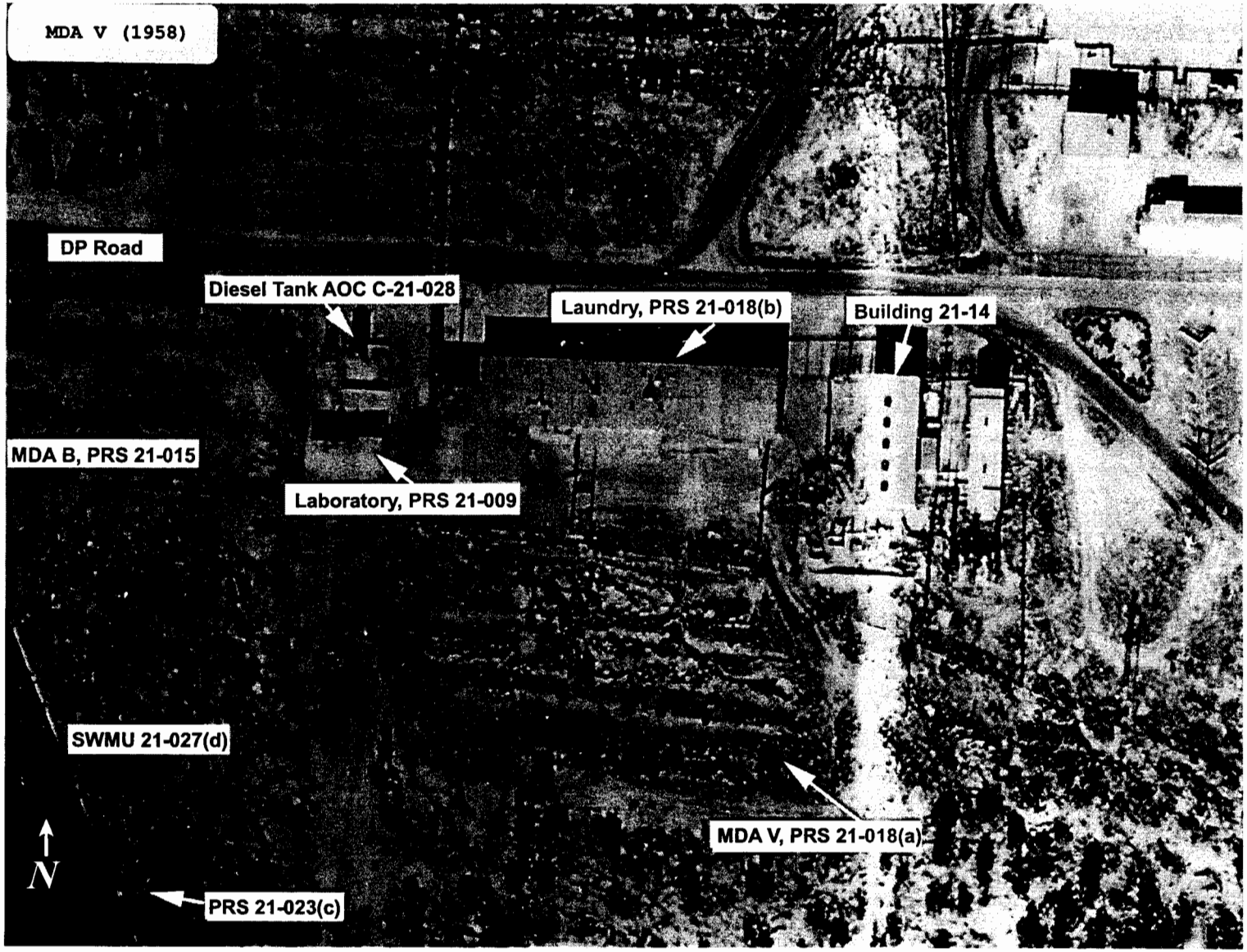

Figure 2.1-3. Photograph taken in 1958 of the aboveground diesel fuel storage tank (AOC C-21-028), outfall area [former SWMU 21-027(d)], and adjacent buildings and MDAs

The SWMU report (LANL 1990, 7511) states it is unknown whether this tank leaked or if there were releases from the drainline.

This PRS is located outside and west of the security fence around TA-21. Because PRS 21-027(d)-99 is bounded to the east and west by MDAs, to the south by BV Canyon, and to the north by DP Road (Figure 2.1-1), it is anticipated this area will remain under DOE control and will not be included in a land transfer to another owner. The use of the land will continue to be industrial. Public access is not limited for this site, and there are no structures remaining at the site.

PRS 21-027(d)-99 is located about 20 ft east of PRS 21-015 (MDA B), approximately 85 ft northwest of PRS 21-018(a)-99 (MDA V), approximately 35 ft north of PRS 21-009 (a former waste treatment laboratory) (Figure 2.1-2), and north, northwest of PRS 21-023(c) (a former septic tank). Figure 2.1-3 presents a 1958 aerial photograph of this site and nearby structures. The proximate PRSs are the probable sources of any nondiesel-related contaminants detected in the outfall area during the 1992 Phase I RCRA Facility Investigation (RFI).

The site-specific environmental information does not differ from the general TA-21 information detailed in Appendix B. There is no watercourse within the PRS boundary, and no debris is present in the area of surface water runoff from PRS 21-027(d)-99 into BV Canyon. The vegetative cover for the mesa's top portion (where the aboveground storage tank was originally located) is estimated to be between 0% and 25% and is described as sparse. Vegetative cover for the outfall portion is estimated to be between 25% and 75%, and pine needles and trees cover the outfall area. There is no evidence of surface erosion, stormwater run-on, or runoff discharging from the former location of the storage tank. Surface water runoff from the mesa top flows to the south in sheet flow toward the outfall area and BV Canyon. On the slope, there is minimal evidence of runoff in a channelized manner but no visible evidence of erosion as the drainage enters BV Canyon. There are no structural or operational factors that might affect the site hydrology. The hydrology of the general area is discussed in Appendix B.

No wetlands or floodplains exist near PRS 21-027(d)-99. The wildlife habitat in this area was assessed during the ecological surveys of TA-1, TA-32, and TA-21 (Bennett 1996, 58236; Biggs 1993, 49730). The surveys show there are no threatened or endangered species (T&E) in the immediate vicinity.

2.2 Previous Investigations

2.2.1 Former AOC C-21-028

No previous investigations were conducted at former AOC C-21-028 (storage tank) because there were no documented releases or visible evidence of releases from the tank (LANL 1991, 7529).

2.2.2 Former SWMU 21-027(d)

The outfall area of former SWMU 21-027(d) was sampled in 1992 in accordance with the TA-21 RFI work plan (LANL 1991, 7529). These activities consisted of a radiological field survey and collection of six surface sediment samples. The sediment samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, americium-241, total uranium, tritium, isotopic plutonium, strontium-90, and gross alpha, beta, and gamma radiation. No organic chemicals were detected in the samples. Inorganic chemicals and radionuclides were detected but were attributed to proximate MDA B (PRS 21-015) and PRS 21-018(a)-99, which includes the absorption beds at MDA V [PRS 21-018(a)]; the former laundry facility, PRS 21-018(b); the former septic system and outfall, PRS 21-023(c). The 1992 Phase I RFI inorganic chemical and radionuclide data will be evaluated as part of future investigations of MDAs B and V. The Phase I RFI results for former SWMU 21-027(d)

were presented in a phase report submitted to the EPA in February 1994 (Environmental Restoration Project 1994, 31591). The site was recommended for no further action (NFA) in the report. EPA Region 6 concurred with the NFA recommendation in 1995 (LANL 1995, 45365), and in December 1996, NMED HRMB subsequently stated the SWMU was suitable for NFA (Dinwiddie 1996, 55815). However, the SWMU remains in Table A of HSWA Module VIII.

2.2.3 Preliminary Conceptual Model

Prior to 1999, there was no evidence to suggest that the decommissioned aboveground diesel fuel storage tank (former AOC C-21-028) had leaked. During site preparation activities for the NTISV cold demonstration, petroleum hydrocarbon contamination was detected in the area of former AOC C-21-028. The Laboratory, DOE, and NMED HRMB, agreed that the NTISV cold demonstration could continue in parallel with a VCM. Observations made during excavation of the simulated absorption bed and analytical data from baseline and excavation samples confirmed the presence of petroleum hydrocarbon contamination in the form of weathered diesel fuel.

Details of the preliminary site conceptual model are presented in the VCM Plan (Environmental Restoration Project 1999, 63182). Preliminary information obtained during NTISV site preparation activities suggested the extent of contamination was limited to the southeast corner of the excavation, where the strongest odors and darkest staining of the tuff were observed.

The likely contaminant source is the former aboveground storage tank, which may have released diesel fuel. Spilled product would be expected to move down through the surface, ultimately moving into the subsurface where fracture flow is a possible transport mechanism. The staining observed during excavation of the simulated absorption bed is evidence of migration in the subsurface through tuff. Prior to the installation of the secondary containment around the tank, some water-driven product migration on the mesa top might have occurred in response to rainfall events. Because the containment berm was installed approximately 3 years after the tank installation, stormwater-driven migration would have occurred for only a brief period of time. Additional data was required to adequately define the nature and extent of contamination at PRS 21-027(d)-99 and to evaluate the need for remediation of petroleum hydrocarbons by excavation and the NTISV cold demonstration.

2.3 Remedial Activities

2.3.1 NTISV Cold Demonstration Background

In 1998, the DOE, Environmental Management Office of Science and Technology, Subsurface Contaminant Focus Area, and the LANL ER Project selected MDA V [PRS 21-018(a)-99] at TA-21 as a suitable location to demonstrate NTISV technology (MSE-TA 1998, 62930). The first phase of the NTISV included a cold (no radiological contamination) demonstration of the technology outside the boundaries of MDA V. The second phase of NTISV was to include a hot demonstration of the technology within absorption bed 1 (Figure 2.1-2) at MDA V, where radiological contamination was expected. MSE Technology Applications, Inc. (MSE-TA) led the demonstration team; Geosafe, Inc. conducted the technology demonstration under subcontract to MSE-TA. The goal was to demonstrate the capabilities of the NTISV technology.

Site preparation activities for the NTISV cold demonstration were initiated during January 1999 and included designing and building a pit to simulate the absorption beds at MDA V. The pit was located north of MDA V in the approximate location of former AOC C-21-028. Before any excavation activities began, baseline samples were collected from the proposed location of the simulated absorption bed. These

samples were analyzed to confirm whether contamination existed at the location. Toluene was detected at extremely low concentrations in these samples (see Section 2.3.2). These results were verbally reported to NMED HRMB on February 24, 1999. NMED HRMB gave verbal approval to excavate a test trench (simulated absorption bed) to identify the source of the contamination. Excavation activities began on March 1, 1999. On March 2, 1999, stained tuff was observed, a strong hydrocarbon odor was detected, and field-screening results from a photoionization detector (PID) were positive (13.8 ppm). All excavation activities were stopped, and NMED HRMB was notified of the presence of contamination (Canepa and Taylor 1999, 62883). On March 3, 1999, NMED HRMB, LANL, and DOE representatives met at the site to examine the stained tuff (Canepa and Taylor 1999, 62883). On March 4, 1999, LANL, DOE, and NMED HRMB representatives held a meeting/conference call to establish a plan of action that would allow the NTISV demonstration to proceed. The following actions were agreed upon at the March 4 meeting (Canepa and Taylor 1999, 62883):

- AOC C-21-028 would be identified as an SWMU in the Hazardous and Solid Waste Amendments of 1984 Module VIII and would be consolidated with SWMU 21-027(d). The new PRS would be added to the Laboratory's 1999 AUA response.
- The NITSV cold demonstration would be considered a VCM for a technology feasibility demonstration. A VCM Plan would be prepared and would include a description of the NTISV cold demonstration and a description of characterization and confirmation sampling to address the petroleum hydrocarbon contamination.
- After the NTISV cold demonstration pit had been excavated, samples would be collected from the excavation.
- Construction of the NTISV demonstration pit would commence before analytical results were received, and the excavated soil, sediment, and/or tuff would be placed back into the excavation, in accordance with the design of the simulated absorption bed. Any soil, sediment and/or tuff not returned to the excavation would be placed in rolloff containers, characterized, and disposed of in accordance with applicable regulatory requirements.

The consolidation proposal was approved by NMED HRMB during the 1999 AUA, and the AOC and SWMU collectively became known as PRS 21-027(d)-99. A VCM Plan for PRS 21-027(d)-99 was submitted to NMED HRMB on April 22, 1999. The VCM described in the plan included continuation of the NTISV cold demonstration in parallel with characterization and possible remediation of the residual petroleum hydrocarbon contamination. The VCM activities were divided into the premelt activities (baseline sampling, excavation sampling, VCP sampling, and borehole sampling) and postmelt activities (borehole sampling and outfall sampling). Details are presented in Sections 2.3.2 and 2.3.4.

The VCM characterization and remediation activities were performed in accordance with the site-specific health and safety plan (Obstar and Wright 1999, 63038) and the following ER Project SOPs.

- ER-SOP-1.01, Rev. 0, "General Instructions for Field Investigations"
- ER-SOP-1.02, Rev. 0, "Sample Container and Preservation"
- ER-SOP-1.03, Rev. 1, "Handling, Packaging and Shipping of Samples"
- ER-SOP-1.04, Rev. 3, "Sample Control and Field Documentation"
- ER-SOP-1.05, Rev. 0, "Field Quality Control Samples"
- ER-SOP-1.06, Rev. 1, "Management of ER Project Wastes"

- ER-SOP-1.08, Rev. 0, "Field Decontamination of Drilling and Sampling Equipment"
- ER-SOP-1.10, Rev. 0, "Waste Characterization"
- ER-SOP-3.01, Rev. 1, "Land Surveying Procedures"
- ER-SOP-4.01, Rev. 2, "Drilling Methods and Drill Site Management"
- ER-SOP-4.04, Rev. 1, "General Borehole Logging"
- ER-SOP-6.09, Rev. 0, "Spade and Scoop Method for Collection of Soil Samples"
- ER-SOP-6.26, Rev. 0, "Core Barrel Sampling for Subsurface Earth Materials"

2.3.2 Premelt Activities

Baseline Sampling

Baseline samples were collected in January 1999 from the proposed location for the simulated absorption bed to verify whether or not the area was uncontaminated. Four samples (MD21-99-0001 through MD21-99-0004) were collected at approximately 3 ft and 6 ft bgs from two locations (21-11014 and 21-11015) (Figure 2.3-1). Three of the samples were collected from sediment, and one was collected from the third unit of the Bandelier tuff. All samples were field screened for gross alpha, beta and gamma radiation. No radioactivity was detected above background. The samples were submitted to an off-site fixed laboratory and analyzed for VOCs, SVOCs, TAL metals, pesticides/polychlorinated biphenyl (PCBs), tritium, and gross alpha, beta, and gamma radiation (Table 2.3-1).

Low concentrations of toluene, a diesel-related organic chemical, were detected in all of the baseline samples. The frequency of toluene detects by media is presented in Table 2.3-2. Concentrations ranged between 0.00026(J) and 0.00033(J) mg/kg. Sample- and location-specific information is presented in Table 2.3-3. The toluene results are all qualified as estimated (J) because they are less than the estimated quantitation limit (EQL) (5 µg/kg) but above the method detection limit (MDL). TAL metals were within the Laboratory's background range for area soils (Ryti et al. 1998, 59730). Tritium and PCBs/pesticides were not detected. Quality control (QC) results are presented in Appendixes C and E, and analytical results are presented in Appendixes D and F.

Excavation and Sampling

The final dimensions of the simulated absorption bed before backfilling were 20 ft by 25 ft by 6 ft with a target treatment area of 10 ft by 15 ft by 6 ft. Petroleum-hydrocarbon-contaminated soil, sediment, and tuff from the excavation was stockpiled and covered. Some of the excavated soil, sediment and tuff contaminated with petroleum hydrocarbons was used to fill in the pit; the remainder was placed in rolloff bins on site and sampled for waste characterization purposes.

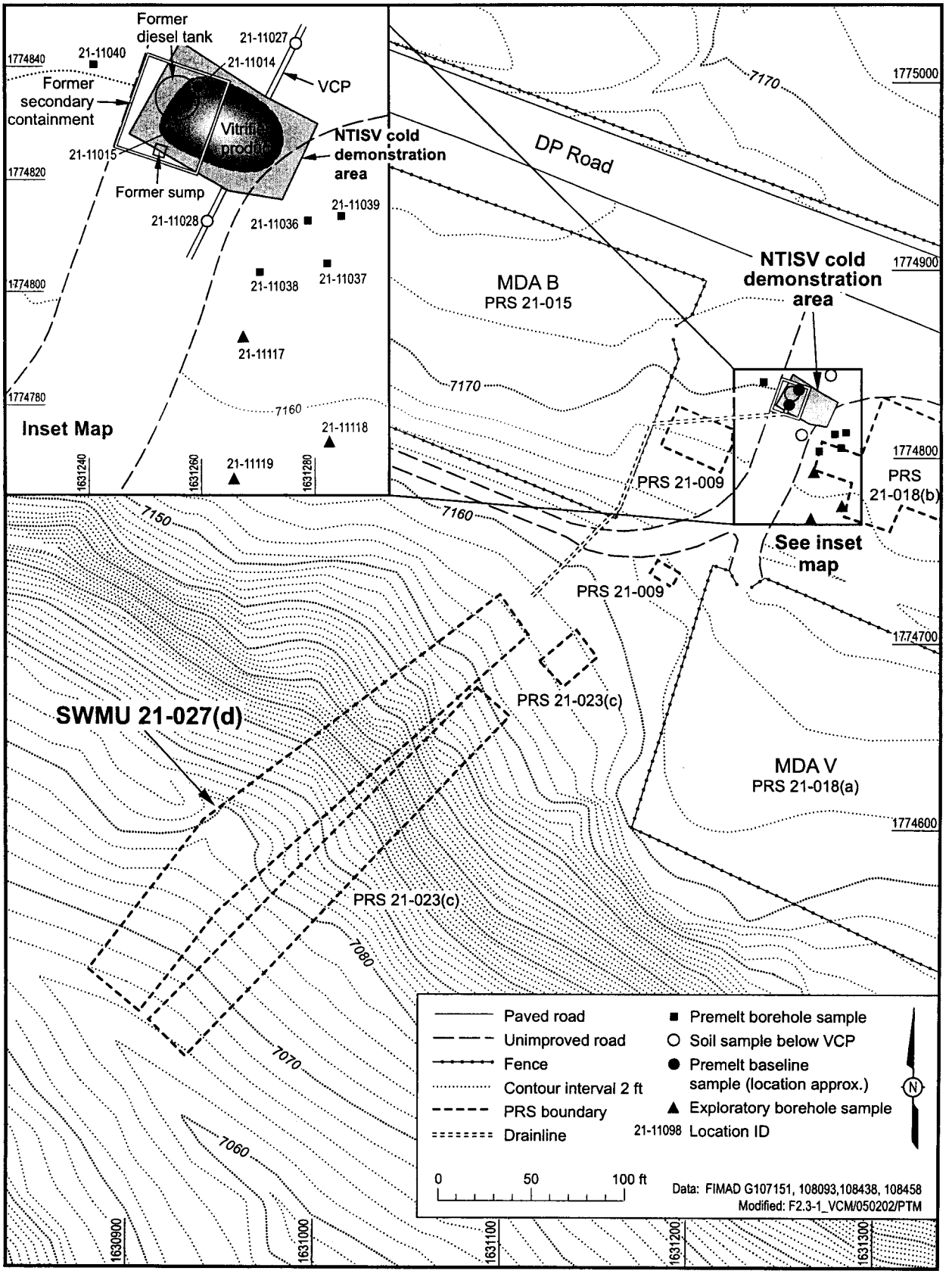

Figure 2.3-1. Premelt baseline, VCP, and borehole sample locations

Table 2.3-1
Summary of Baseline Samples at PRS 21-027(d)-99 (Premelt)

Location ID	Sample ID	Depth (ft)	Media	VOCs	SVOCs	PCBs/ Pesticides	TAL Metals	Gross Alpha/Beta/ Gamma	Tritium
21-11014	MD21-99-0001	2.5–3	Sediment	5148R	5148R	5148R	5148R	5149R	5149R
	MD21-99-0003	5.6–6.4	Tuff*	5148R	5148R	5148R	5148R	5149R	5149R
21-11015	MD21-99-0002	2.5–3.1	Sediment	5148R	5148R	5148R	5148R	5149R	5149R
	MD21-99-0004	5.6–6.4	Sediment	5148R	5148R	5148R	5148R	5149R	5149R

Note: Numbers in the cells for each analytical suite are laboratory request numbers.
* Third unit of the Bandelier Tuff.

Table 2.3-2
Frequency of Toluene Detected in Baseline Samples at PRS 21-027(d)-99 (Premelt)

Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)	Frequency of Detects
Sediment	3	3	0.00026 to 0.00033	3/3
Tuff*	1	1	0.00033	1/1

* Third unit of the Bandelier Tuff.

Table 2.3-3
Detected Toluene in Baseline Samples at PRS 21-027(d)-99 (Premelt)

Sample ID	Location ID	Depth (ft)	Media	Toluene (mg/kg)
MD21-99-0001	21-11014	2.5–3.0	Sediment	0.00029(J)
MD21-99-0003	21-11014	5.6–6.4	Tuff*	0.00033(J)
MD21-99-0002	21-11015	2.5–3.1	Sediment	0.00033(J)
MD21-99-0004	21-11015	5.6–6.4	Sediment	0.00026(J)

* Third unit of the Bandelier Tuff.

Samples were collected from the open excavation of the simulated absorption bed walls and floor on March 8, 1999. Samples were collected from eleven locations (locations 21-11016 through 21-11026) plus one duplicate sample for a total of twelve samples (Table 2.3-4). These sample locations were agreed upon during the March 4, 1999 meeting/conference call with NMED HRMB and documented in the March 8, 1999 letter (Canepa and Taylor 1999, 62883). Figure 2.3-2 presents a schematic illustration of the excavation and sample locations. Five samples were collected from the bottom of the excavation (locations 21-11016 through 21-11020), and one sample was collected from an unstained area on each of the four sidewalls of the excavation (locations 21-11021 through 21-11024). In addition, two stained areas were also sampled: one on the north side wall (location 21-11025) and one on the southeast corner (location 21-11026) of the excavation. A duplicate sample was collected from the southeast corner of the

excavation (location 21-11026). The stained area in the southeast corner emitted a distinct diesel odor. Samples were field screened for organic vapors with a PID for gross alpha radiation with a Ludlum 139 radiation meter, and for gross beta/gamma with an ESP-1 radiation meter with an HP 260 pancake probe. No organic vapors were detected, and no radioactivity was detected above background. The samples were shipped to an off-site laboratory and analyzed for TAL metals, SVOCs, VOCs, and gross alpha, beta, and gamma radiation (Table 2.3-4) as agreed during the March 4, 1999, meeting/conference call with NMED HRMB (Canepa and Taylor 1999, 62883). Elevated gross beta results were detected in several excavation samples. Therefore, additional radionuclide analyses were requested for select samples including isotopic thorium, isotopic uranium, and strontium-90. There were no deviations from the VCM plan for the excavation sampling activities.

Table 2.3-4
Summary of Excavation Samples at PRS 21-027(d)-99 (Premelt)

Location ID	Sample ID	Depth (ft)	Media	VOCs	SVOCs	TAL Metals	Gross Alpha/Beta/ Gamma	Isotopic Thorium	Isotopic Uranium, Strontium-90
21-11016	MD21-99-0009	7.5–8	Sediment	5327R	5327R	5328R	5329R	5329R	5329R
21-11017	MD21-99-0010	7.5–8	Sediment	5327R	5327R	5328R	5329R	NA[a]	NA
21-11018	MD21-99-0011	7.5–8	Sediment	5327R	5327R	5328R	5329R	NA	NA
21-11019	MD21-99-0012	14–14.5	Tuff[b]	5327R	5327R	5328R	5329R	NA	NA
21-11020	MD21-99-0013	13–13.5	Tuff	5327R	5327R	5328R	5329R	5329R	5329R
21-11021	MD21-99-0014	4–5	Sediment	5327R	5327R	5328R	5329R	NA	NA
21-11022	MD21-99-0015	4–5	Sediment	5327R	5327R	5328R	5329R	NA	NA
21-11023	MD21-99-0016	4–5	Sediment	5327R	5327R	5328R	5329R	NA	NA
21-11024	MD21-99-0017	4–5	Sediment	5327R	5327R	5328R	5329R	NA	NA
21-11025	MD21-99-0018	7–7.5	Sediment	5327R	5327R	5328R	5329R	NA	NA
21-11026	MD21-99-0019	10–10.5	Tuff	5327R	5327R	5328R	5329R	NA	NA
	MD21-99-0020 (dup)	10–10.5	Tuff	5327R	5327R	5328R	5329R	NA	NA

Note: Numbers in the cells for each analytical suite are laboratory request numbers.

[a] NA = not analyzed.

[b] Third unit of the Bandelier Tuff.

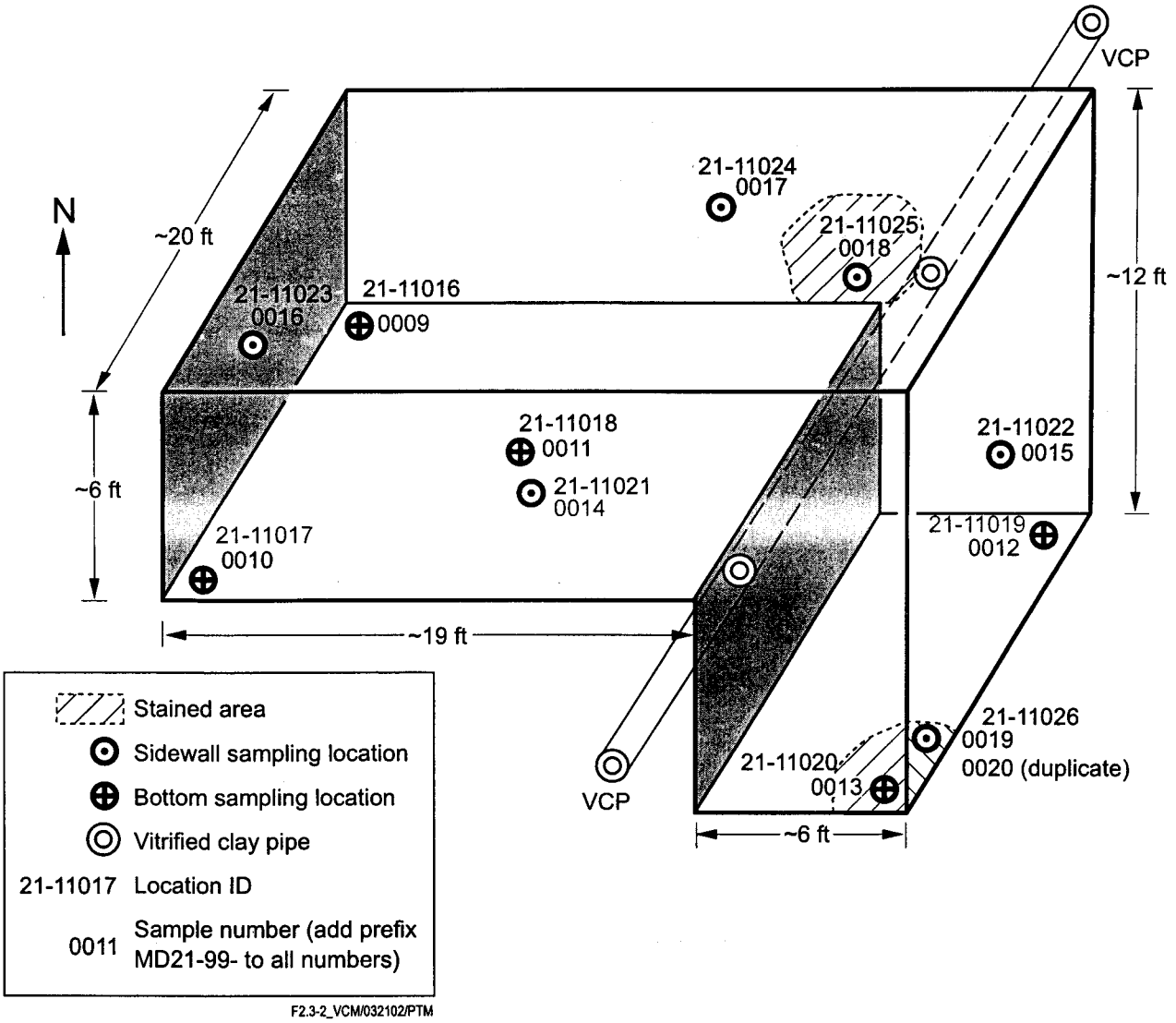

Figure 2.3-2. Schematic illustration of the excavation for the simulated absorption bed and the excavation sample locations

Vitrified Clay Pipe Investigation

During the excavation of the simulated absorption bed, a vitrified clay pipe (VCP) was uncovered (Figure 2.3-2). This VCP was not the drainline from the former AOC C-21-028 containment area because approximately 12 ft of the VCP was removed from the north side of the excavation. This would place the tank too far north of the tank location observed in the historic photograph (Figure 2.1-3) and engineering drawings (LASL 1945, 62919 and LASL 1948, 62912). The drawings indicate the VCP drainline from the storage tank exited the secondary containment from approximately the middle of the south containment wall (LASL 1948, 62912). The photograph and engineering drawings also show the north side of the tank lined up with the north side of Building 21-14, which is still in place. The origin and use of the VCP are not known, but it is believed to be an abandoned potable water system drainline that originated in the utility corridor directly north of the PRS along the south side of DP Road.

Approximately 12 ft of the VCP was removed from the north side of the excavation, and 13 ft was removed from the south side so the remaining VCP was outside the area of influence of the NTISV cold demonstration. During removal, the surrounding soil/tuff and the VCP were field screened for organic vapors with a PID, for gross alpha radiation with a Ludlum 139 radiation meter, and for gross beta/gamma with an ESP-1 radiation meter with an HP 260 pancake probe. No organic vapors were detected, and no radioactivity was detected above background. There were no signs of staining adjacent to or beneath the VCP, and the VCP did not contain any sludge. One tuff sample was collected from beneath the VCP north of the simulated absorption bed (location 21-11027), and one soil sample was collected from beneath the VCP south of the simulated absorption bed (location 21-11028) (Figure 2.3-1). These samples were analyzed for VOCs, SVOCs, TAL metals, TPH (diesel range), and gross alpha/beta/gamma radiation (Table 2.3-5). One sample was also analyzed for isotopic thorium, isotopic uranium, and strontium-90 because elevated gross beta results were detected in the excavation samples. There were no deviations from the VCM Plan for the VCP sampling activities.

Table 2.3-5
Summary of VCP Samples at PRS 21-027(d)-99 (Premelt)

Location ID	Sample ID	Depth (ft)	Media	VOCs	SVOCs	TPH (diesel range)	TAL Metals	Gross Alpha/Beta/ Gamma	Isotopic Thorium	Isotopic Uranium, Strontium-90
21-11027	MD21-99-0021	4–4.5	Tuff [a]	5330R	5330R	5330R	5331R	NA[b]	NA	NA
21-11028	MD21-99-0022	4.5–5	Soil	5330R	5330R	5330R	5331R	5332R	5332R	5332R

Note: Numbers in the cells for each analytical suite are laboratory request numbers.
[a] Third unit of the Bandelier Tuff.
[b] NA = not analyzed.

Borehole Samples

Four boreholes (Figure 2.3-1) were drilled south, east, and southeast (locations 21-11036 through 21-11039) of the petroleum hydrocarbon staining in the absorption bed excavation to document vertical and lateral extent of contamination. In addition, one borehole was drilled west of the excavation (location 21-11040) to further document the lateral extent of petroleum hydrocarbon contamination. Boreholes were drilled with a CME 750 drill rig using hollow-stem augers and a wire line retrieval system for collection of continuous core. Boreholes were drilled to depths ranging between 20 ft and 30 ft bgs. Core samples were collected from each 5-ft interval for field screening. All cores were field screened for organic vapors with a PID, for gross alpha radiation with a Ludlum 139 radiation meter, and for gross beta/gamma with an ESP-1 radiation meter with an HP 260 pancake probe. No radioactivity was detected above background. Organic vapors were detected in borehole 21-11036 at a depth of 7.5 ft to 10 ft bgs. Field-screening data are presented on borehole logs in Appendix H. Photographs of the core were taken and are available upon request. In addition, every borehole sample was screened for TPH (diesel range) using immunoassay field test kits. A detection limit of 400 mg/kg was chosen for the test kits. Screening results from the TPH field test kits were used to determine which samples would be submitted to an off-site laboratory for analysis. The results from the immunoassay field tests assisted in defining the lateral and vertical extent of petroleum hydrocarbon contamination, which allowed the NTISV cold demonstration to proceed before fixed laboratory analytical results were received. A minimum of two samples from each

borehole was sent to an off-site laboratory for analysis. The first sample was collected from the zone with the maximum petroleum hydrocarbon concentration, as determined by the immunoassay field test kits. The second sample was collected from the bottom of the borehole, which defines when test kit results were below 400 mg/kg for two consecutive 5-ft intervals. Samples were submitted to an off-site fixed laboratory and were analyzed for SVOCs, VOCs, TAL metals, TPH (diesel range), and gross alpha, beta, and gamma radiation (Table 2.3-6). There were no deviations from the VCM Plan for the premelt borehole sampling activities.

Table 2.3-6
Summary of Borehole Samples at PRS 21-027(d)-99 (Premelt)

Location ID	Sample ID	Depth (ft)	Media	VOCs	SVOCs	TPH (diesel range)	TAL Metals	Gross Alpha/Beta/ Gamma
21-11036	MD21-99-0030	7.5–8	Tuff*	5435R	5435R	5435R	5436R	5437R
	MD21-99-0031	23–24	Tuff	5435R	5435R	5435R	5436R	5437R
21-11037	MD21-99-0034	7.5–8.5	Sediment	5435R	5435R	5435R	5436R	5437R
	MD21-99-0035	24–24.5	Tuff	5435R	5435R	5435R	5436R	5437R
21-11038	MD21-99-0038	26–26.5	Tuff	5438R	5438R	5438R	5439R	5440R
	MD21-99-0039	18.5–19	Sediment	5438R	5438R	5438R	5439R	5440R
	MD21-99-0040	7.5–8	Sediment	5438R	5438R	5438R	5439R	5440R
21-11039	MD21-99-0041	22.5–23	Tuff	5438R	5438R	5438R	5439R	5440R
	MD21-99-0042	6.5–7	Sediment	5438R	5438R	5438R	5439R	5440R
21-11040	MD21-99-0043	18.5–19	Tuff	5438R	5438R	5438R	5439R	5440R
	MD21-99-0044	12.5–13	Sediment	5438R	5438R	5438R	5439R	5440R

Note: Numbers in the cells for each analytical suite are laboratory request numbers.

* Third unit of the Bandelier Tuff.

Exploratory Boreholes

Three additional exploratory boreholes were drilled south of the petroleum hydrocarbon-contaminated area (locations 21-11117 through 21-11119) (Figure 2.3-1) in an attempt to further define a geologic structure known as a paleochannel. A paleochannel was identified in the simulated absorption bed excavation and in boreholes 21-11036 through 21-11039. The exploratory boreholes were advanced to a maximum depth of 27.5 ft bgs and were logged for stratigraphy to define the paleochannel sediments and the tuff contact. Analytical samples were not collected from these boreholes because the southern extent of the petroleum hydrocarbon contamination was defined by boreholes 21-11036 through 21-11039. The paleochannel consists of fine- to coarse-grained sand and cobbles overlying tuff. The sand and cobbles are assumed to have been deposited as channel sediments before the development of the current canyon and mesa geomorphology. Figure 2.3-3 presents a schematic cross-section of the paleochannel defined by the borings and a plan view of the estimated extent of the paleochannel in this area based on the current data points. Although the paleochannel could be a potential conduit for off-site contaminant migration, characterization samples defined the vertical and horizontal extent of the residual petroleum hydrocarbon contamination within the channel (locations 21-11036, 21-11038, and 21-11039).

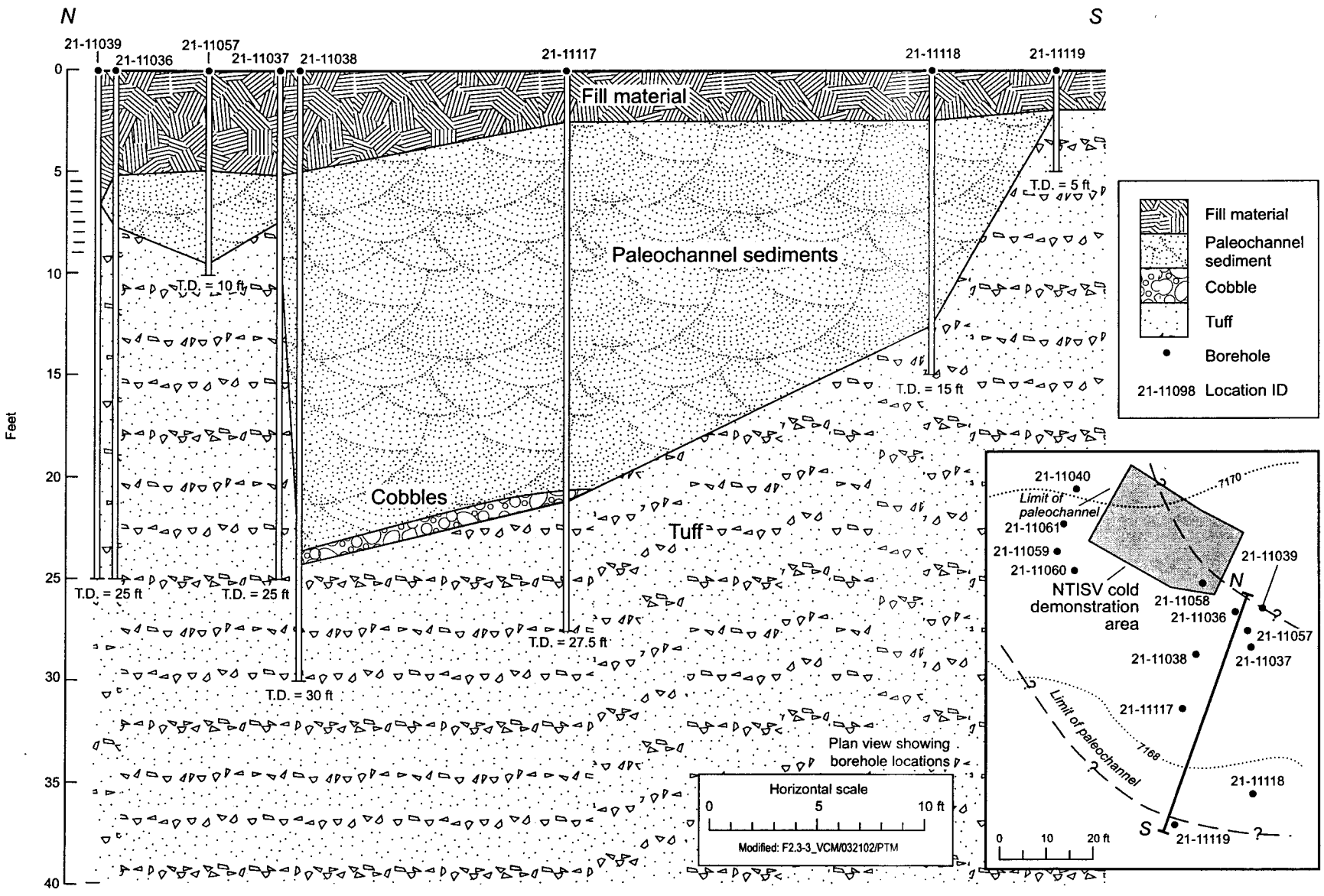

Figure 2.3-3. Cross section through paleochannel and borehole locations

2.3.3 NTISV Cold Demonstration

The NTISV cold demonstration was conducted from April 16 through April 24, 1999. Details describing the cold demonstration and results can be found in the report "Final Report—Cold Demonstration of Nontraditional In Situ Vitrification at the Los Alamos National Laboratory" (MSE-TA 1999, 64804).

2.3.4 Postmelt Activities

Borehole Samples

The VCM Plan proposed three postmelt samples be collected from specific locations southeast of the vitrified glass product; one from the sediment/tuff interface (location 21-11057), one from the approximate depth of the bottom of the simulated absorption bed (location 21-11058), and one from approximately 20 ft bgs (location 21-11058) (Environmental Restoration Project 1999, 63182). Approximately four weeks after the completion of the NTISV cold demonstration, the western half of the vitrified glass product was uncovered utilizing a track hoe. During the excavation of the vitrified glass product, residual petroleum hydrocarbon contamination was observed in the southwest corner of the excavation. NMED HRMB and Laboratory representatives met on site and agreed to modify the sampling activities described in the VCM Plan to include drilling boreholes to investigate the area southwest of the vitrified product and to determine the extent of any remaining contamination southeast of the vitrified product (Canepa and Taylor 1999, 64709.1). Five boreholes were proposed by the Laboratory and approved by NMED HRMB (Canepa and Taylor 1999, 64709.1). Two boreholes were advanced southeast of the vitrified glass product to collect the three samples proposed in the VCM Plan and three boreholes were advanced southwest of the vitrified glass product (Canepa and Taylor 1999, 64709.1). There were no deviations from these proposed postmelt borehole-sampling activities.

Between June 17 and June 19, 1999, five boreholes were drilled west (location 21-11061), southwest (locations 21-11059 and 21-11060), and southeast (locations 21-11057 and 21-11058) of the vitrified glass product (Figure 2.3-4). The borehole depths were variable: 21-11057 (10 ft); 21-11058 (40 ft); 21-11059 (30 ft); 21-11060 (30 ft); and 21-11061 (27.5 ft). Boreholes were drilled with a CME 750 drill rig using hollow-stem augers and a wire line retrieval system for collecting continuous core. Core samples were collected every 2.5 ft and were field screened for organic vapors with a PID, for gross alpha radiation with a Ludlum 139 radiation meter, and for gross beta/gamma with an ESP-1 radiation meter with an HP 260 pancake probe. No radioactivity was detected above background. Organic vapors were detected in one borehole (21-11058) from depths between 7.5 ft and 32.5 ft bgs. Field-screening data are presented on borehole logs in Appendix H. Photographs of the core were taken and are available upon request. Postmelt samples were not field screened using immunoassay field test kits because the premelt samples did not contain elevated concentrations of TPH (diesel range). Therefore, postmelt samples were not expected to contain elevated concentrations of TPH (diesel range) because of the thermal treatment of the area by NTISV.

As proposed in the VCM Plan, the three required samples were collected from locations 21-11057 and 21-11058. Borehole 21-11057 was drilled to a total depth of 10 ft, and one sample (MD21-99-0093) was collected at the sediment/tuff interface. This sample location was positioned adjacent to the premelt sample with the maximum TPH (diesel range) concentration (3300 mg/kg, location 21-11036). Borehole 21-11058 was drilled to a total depth of 40 ft, and four samples (MD21-99-0099 through MD21-99-0101 and MD21-99-0103) were collected. Borehole 21-11058 was positioned adjacent to the southeast corner of the vitrified product in order to collect one sample adjacent to the approximate bottom of the simulated absorption bed and another sample at 20 ft bgs. Results from these samples were used to evaluate the residual petroleum hydrocarbon contamination remaining after the NTISV cold demonstration. Borehole locations are illustrated in Figure 2.3-4.

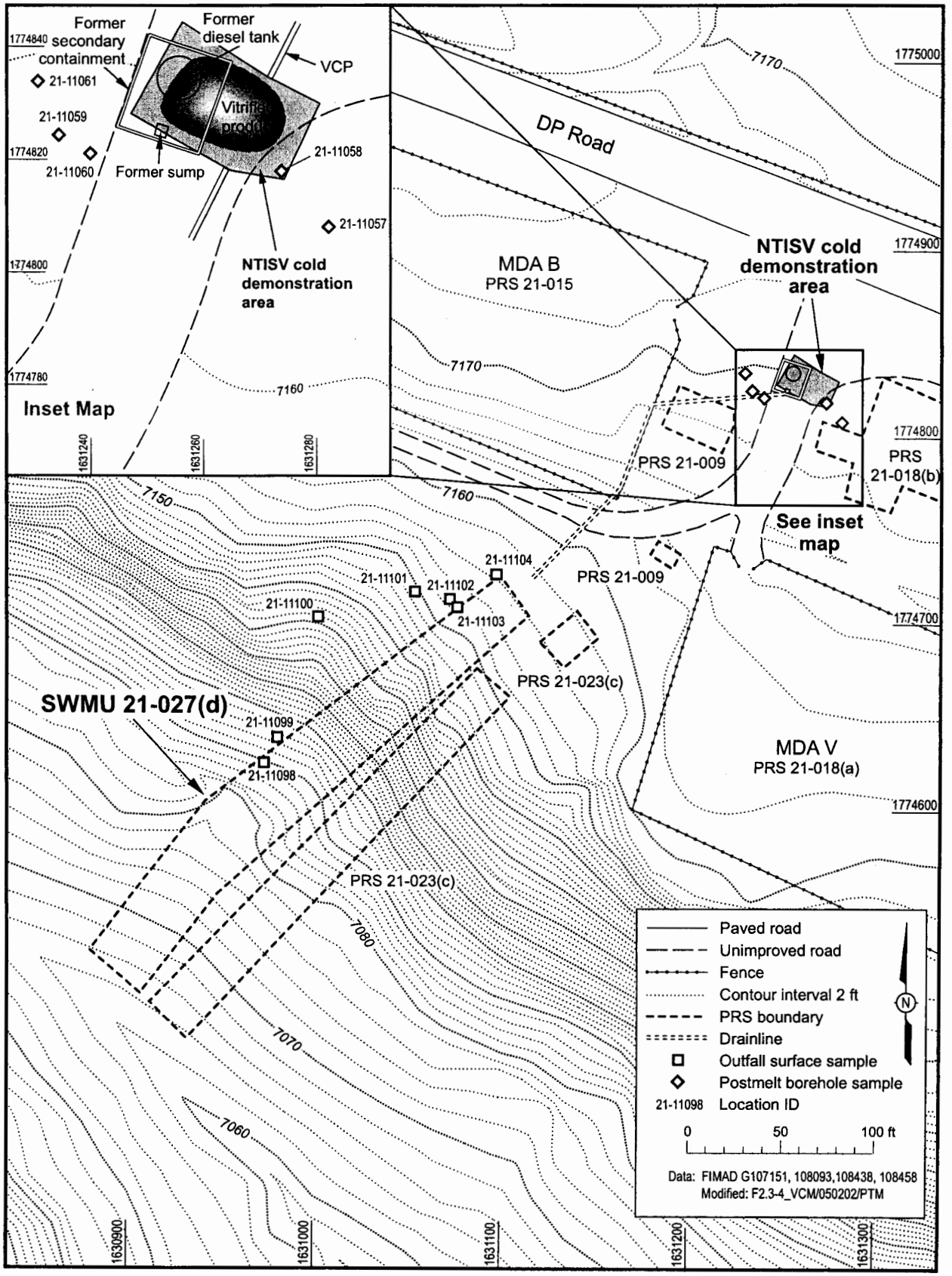

Figure 2.3-4. Postmelt borehole and outfall sample locations

Three boreholes (locations 21-11059 through 21-11061) were drilled west and southwest of the vitrified glass product (Figure 2.3-4) to define the extent of residual petroleum hydrocarbon contamination discovered during excavation of the vitrified product. Three samples were collected from each borehole. The sampling criteria used for sample collection are as follows: one sample was collected adjacent to the block of vitrified product between the approximate depths of 14 ft and 18 ft bgs, a second sample was collected adjacent to the approximate bottom of the vitrified product (about 20 ft bgs), and a third sample was collected from the bottom of the borehole.

All postmelt samples were submitted to an off-site laboratory and analyzed for SVOCs, TPH (diesel range), TAL metals, PCBs, isotopic thorium, isotopic uranium, strontium-90, and gamma spectroscopy, as required by the VCM Plan modification (Canepa and Taylor 1999, 64709.1) and by NMED HRMB in the request for supplemental information (RSI) for the VCM Plan (NMED 1999, 63902). NMED agreed that VOC analyses were not required for the postmelt confirmation samples because the intense heat generated by the NTISV process would have destroyed any residual VOCs (Canepa and Taylor 1999, 63472). The radiological analytes were added at the request of NMED HRMB as a check on elevated (above background) gross beta radiation detected in samples collected from the excavation of the simulated absorption bed. In addition, the ER Project agreed to add PCBs and metals to the analytical suite, based on the apparent uncertainty of COPCs detected during the 1992 Phase I RFI (NMED 1999, 63902). Table 2.3-7 includes the analytical suite, request numbers, sample number, sample media, and depth of samples.

Table 2.3-7
Summary of Borehole Samples at PRS 21-027(d)-99 (Postmelt)

Location ID	Sample ID	Depth (ft)	Media	SVOCs	TPH (diesel range)	PCBs	TAL Metals	Gross Alpha/Beta/ Gamma	Isotopic Thorium, Isotopic Uranium, Strontium-90
21-11057	MD21-99-0093	8.5–10	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
21-11058	MD21-99-0099	8.5–10	Tuff*	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0100	16.5–17.5	Tuff	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0101	17.5–20	Tuff	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0103	39.5–40	Tuff	5747R	5747R	5747R	5748R	5749R	5749R
21-11059	MD21-99-0105	14–15	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0106	19.5–20	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0107	29.5–30	Tuff	5747R	5747R	5747R	5748R	5749R	5749R
21-11060	MD21-99-0111	17–17.5	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0112	19.5–20	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0113	27.5–30	Tuff	5750R	5750R	5750R	5751R	5752R	5752R
21-11061	MD21-99-0117	14–15	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0118	19–20	Sediment	5747R	5747R	5747R	5748R	5749R	5749R
	MD21-99-0119	26.5–27.5	Tuff	5750R	5750R	5750R	5751R	5752R	5752R

Note: Numbers in the cells for each analytical suite are laboratory request numbers.

* Third unit of the Bandelier Tuff.

Outfall Samples

In the July 22, 1999 RSI (NMED 1999, 63902) regarding the VCM Plan (Environmental Restoration Project 1999, 63182), NMED HRMB included a comment requiring the outfall area to be characterized before the PRS could be proposed for NFA. The Laboratory proposed additional samples be collected and analyzed to complete the characterization of the outfall area (NMED 1999, 63902.2). Laboratory and NMED HRMB staff selected seven sample locations (six within the outfall drainage and one outside the drainage) during a site visit on October 7,1999 (Canepa and Taylor 1999, 64709.1). There were no deviations from these proposed outfall-sampling activities.

In accordance with the Characterization Fact Sheet submitted to NMED HRMB on October 21, 1999, (Environmental Restoration Project 1999, 64709.2) the outfall sample analytical suite was to include TPH (diesel range) to confirm that nature and extent of petroleum hydrocarbon contamination associated with PRS 21-027(d)-99 had been defined (Canepa and Taylor 1999, 64709). At the request of NMED HRMB, the outfall sample suite also included americium-241 and plutonium-239 based on radionuclides detected in the area during the 1992 Phase I RFI. VOCs and SVOCs were not included in the analytical suite because they were not detected in any of the 1992 Phase I RFI samples (Environmental Restoration Project 1994, 31591). The seven outfall locations (21-11098 through 21-11104) were sampled on November 19, 1999 (MD21-99-0210 through MD21-99-0216) (Figure 2.3-4). The sediment thickness at these locations allowed material to be collected to a depth of 4 in. (Table 2.3-8). The 1992 Phase I RFI analytical results are discussed in the RFI phase report submitted to the EPA Region 6 in 1994 (Environmental Restoration Project 1994, 31591).

Table 2.3-8
Summary of Outfall Samples at PRS 21-027(d)-99

Location ID	Sample ID	Depth (ft)	Media	TPH (diesel range)	Gross Alpha/ Beta/Gamma	Americium-241, Plutonium-239
21-11098	MD21-99-0210	0–0.3	Sediment	6203R	6204R	6204R
21-11099	MD21-99-0211	0–0.3	Sediment	6203R	6204R	6204R
21-11100	MD21-99-0212	0–0.3	Sediment	6203R	6204R	6204R
21-11101	MD21-99-0213	0–0.3	Sediment	6203R	6204R	6204R
21-11102	MD21-99-0214	0–0.3	Sediment	6203R	6204R	6204R
21-11103	MD21-99-0215	0–0.3	Sediment	6203R	6204R	6204R
21-11104	MD21-99-0216	0–0.3	Sediment	6203R	6204R	6204R

Note: Numbers in the cells for each analytical suite are laboratory request numbers.

2.3.5 Data Review

2.3.5.1 Background

This data review section is restricted to the chemical compounds listed in Table 2.3-9 identified as chemicals associated with diesel fuel and regulated by New Mexico UST Bureau Guidelines for Corrective Action. For further information, see the NMED guidelines at the following website: http://www.nmenv.state.nm.us/NMED_regs/ust_regs.html. These organic chemicals include some SVOCs, VOCs, and TPH (diesel range). Analytical data for the chemical compounds not components of diesel fuel are not evaluated in this VCM report. These compounds include inorganic chemicals,

radionuclides, and the SVOCs and VOCs not listed in Table 2.3-9. Analytical results for these compounds from all previous investigations and this VCM will be evaluated for PRSs 21-015, 21-009, and 21-018(a)-99, which overlap the mesa-top and hillside portions of PRS 21-027(d)-99, as agreed with NMED (NMED 1999, 63902). A complete description of analytical methods, a list of analytes for each suite, data quality assessment results, and the data sets for each of the unrelated (i.e., non-TPH-related) analytes are provided in Appendixes E and F; the data are included with this report in electronic format.

Table 2.3-9
UST-Regulated Organic Compounds

Chemical Compound	Chemical Compound
Benzene	Benzo(k)fluoranthene
Toluene	Chrysene
Ethylbenzene	Dibenz(a, h)anthracene
Xylenes (total)	Fluoranthene
Acenaphthene	Fluorene
Anthracene	Total naphthalenes
Benz(a)anthracene	Phenanthrene
Benzo(a)pyrene	Pyrene
Benzo(b)fluoranthene	TPH (diesel-range)

The purpose of the data review section is to determine whether COPCs are present at concentrations at or above background levels. For organic chemicals, the data review is conducted by identifying organic chemicals detected at the site. The data evaluation presented in this section supports the discussion of nature and extent and further assessments of the data. Data are presented for premelt and postmelt samples.

2.3.5.2 Evaluation of Diesel-Related Organic Chemicals in Premelt Samples

Baseline Samples

Analytical results for the four baseline samples collected during the site preparation activities were presented in Section 2.3.2. The results were used to determine whether the NTISV cold demonstration could continue at the proposed location. Sediment and tuff from the excavation were either used in construction of the simulated absorption bed and subsequently treated thermally during the NTISV cold demonstration or were transported off site for disposal.

Excavation Samples

Eleven samples and one duplicate sample collected from the excavation for the simulated absorption bed were analyzed for SVOCs and VOCs, as listed in Table 2.3-4. Eight samples were collected from sediment, and four samples were collected from tuff. The frequency of detected diesel-related organic chemicals by media is presented in Table 2.3-10. The sample in which an organic chemical was detected is listed in Table 2.3-11. The organic chemical, 2-methylnaphthalene, was detected once in a tuff sample (Figure 2.3-5) and is therefore carried forward as a COPC. No organic chemicals were detected in the sediment samples.

Table 2.3-10
Frequency of Detected Diesel-Related Organic Chemicals in Premelt Samples Collected from the Mesa Top at PRS 21-027(d)-99

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)[a]	Frequency of Detects[b]
Excavation Samples					
2-methylnaphthalene	Tuff[c]	4	1	[0.35] to 1.2	1/4
	Sediment	8	0	[0.35 to 0.40]	0/8
VCP Samples					
TPH (diesel range)	Soil	1	1	48	1/1
	Tuff	1	1	4.8	1/1
Borehole Samples					
Benzene	Tuff	6	1	0.0012 to [0.0068]	1/6
	Sediment	5	0	[0.0053 to 0.0075]	0/5
Phenanthrene	Tuff	6	1	[0.34] to [1.5]	1/6
	Sediment	5	0	[0.35 to 0.40]	0/5
TPH (diesel range)	Tuff	6	1	[4.2] to 3300	1/6
	Sediment	5	0	[4.3 to 4.6]	0/5

[a] Values in square brackets are not detected results.
[b] Value is the ratio of the number of detected values to the number of analyses.
[c] Third unit of the Bandelier Tuff.

Table 2.3-11
Detected Diesel-Related Organic Chemicals in Premelt Excavation, VCP, and Borehole Samples at PRS 21-027(d)-99

Sample ID	Location ID	Depth (ft)	Media	Benzene (mg/kg)	Phenanthrene (mg/kg)	TPH (diesel range) (mg/kg)	2-methylnaphthalene (mg/kg)
Excavation Samples							
MD21-99-0013	21-11020	13.0–13.5	Tuff[a]	—[b]	—	—	1.2
VCP Samples							
MD21-99-0021	21-11027	4.0–4.5	Tuff	—	—	4.8	—
MD21-99-0022	21-11028	4.0–4.5	Soil	—	—	48(J+)	—
Borehole Samples							
MD21-99-0030	21-11036	7.5–8.0	Tuff	—	0.41	3300	—
MD21-99-0035	21-11037	24.0–24.5	Tuff	0.0012 (J)	—	—	—

[a] Third unit of the Bandelier Tuff.
[b] A dash indicates that the chemical compound was not detected in the sample.

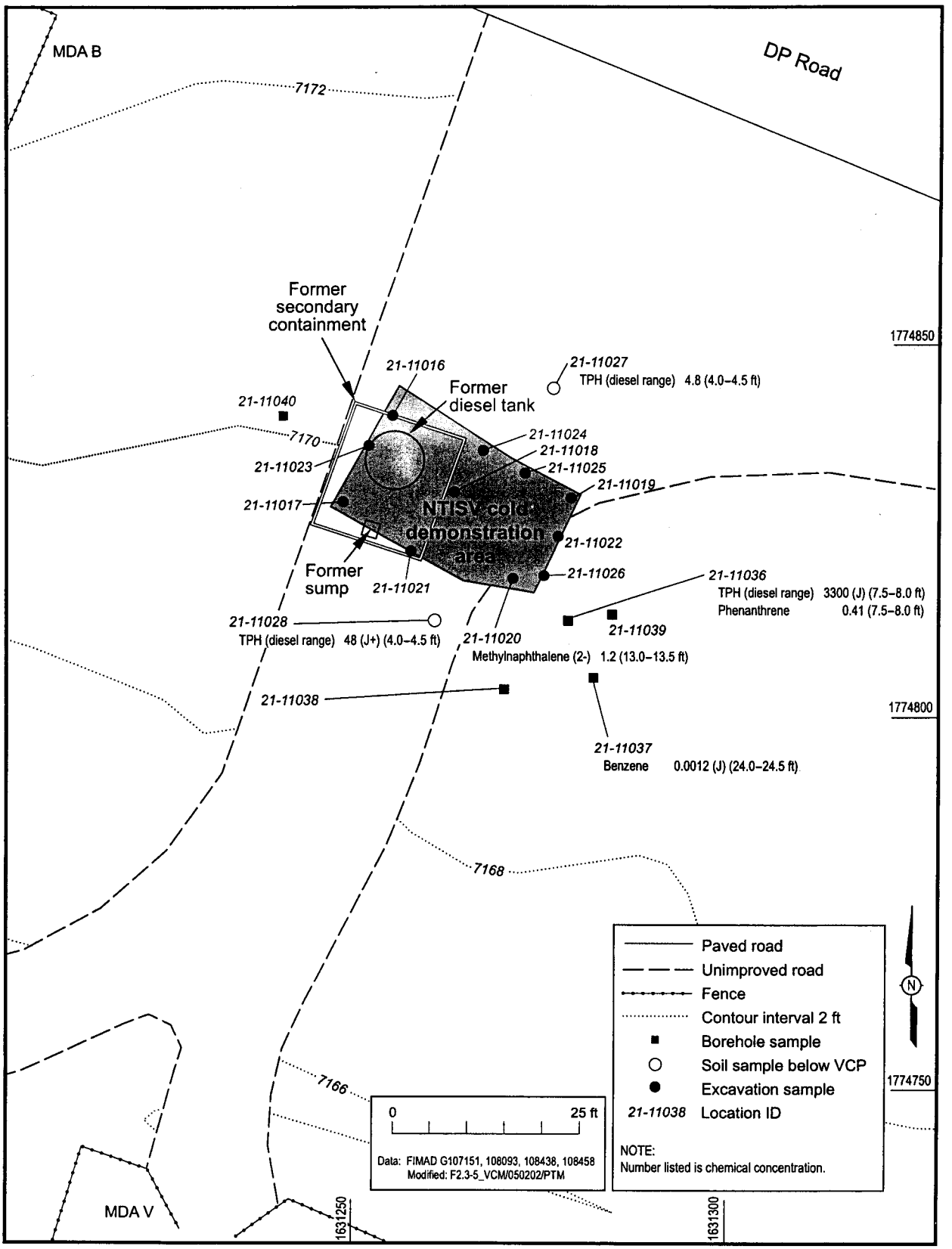

Figure 2.3-5. Locations of detected diesel-related organic chemicals (mg/kg) in premelt excavation, VCP, and borehole samples

VCP Samples

Two samples collected from beneath the VCP uncovered during excavation of the simulated absorption bed were analyzed for SVOCs, VOCs, and TPH (diesel range), as listed in Table 2.3-5. One sample was collected from soil, and one sample was collected from tuff. The frequency of detected diesel-related organic chemicals by media is presented in Table 2.3-10. One organic chemical, TPH (diesel range), was detected in both samples (Table 2.3-11, Figure 2.3-5) and is therefore carried forward as a COPC.

Borehole Samples

Eleven samples collected from boreholes were analyzed for SVOCs, VOCs, and TPH (diesel range), as listed in Table 2.3-6. Five samples were collected from sediment, and six samples were collected from the third member of the Bandelier tuff. The frequency of detected diesel-related organic chemicals by media is presented in Table 2.3-10. Samples in which organic chemicals were detected are listed in Table 2.3-11 and are displayed in Figure 2.3-5. Phenanthrene and TPH (diesel range) were detected in one tuff sample. Benzene was detected in a different tuff sample. These compounds are carried forward as COPCs. No organic chemicals were detected in the sediment samples.

Premelt Data Summary

The four diesel-related organic chemicals detected in the premelt samples are retained as COPCs; they are summarized in Table 2.3-12. They are evaluated further in the site assessment section.

Table 2.3-12
Results of the Diesel-Related Organic Chemical Data Review for Premelt Samples at PRS 21-027(d)-99

Analyte	Media	Result	Rationale
Benzene	Tuff and sediment	Retained	Detected in 1 of 25 samples
Toluene	Tuff and sediment	Eliminated	Not detected
Ethylbenzene	Tuff and sediment	Eliminated	Not detected
Xylenes (total)	Tuff and sediment	Eliminated	Not detected
Acenaphthene	Tuff and sediment	Eliminated	Not detected
Anthracene	Tuff and sediment	Eliminated	Not detected
Benz(a)anthracene	Tuff and sediment	Eliminated	Not detected
Benzo(a)pyrene	Tuff and sediment	Eliminated	Not detected
Benzo(b)fluoranthene	Tuff and sediment	Eliminated	Not detected
Benzo(k)fluoranthene	Tuff and sediment	Eliminated	Not detected
Chrysene	Tuff and sediment	Eliminated	Not detected
Dibenz(a, h)anthracene	Tuff and sediment	Eliminated	Not detected
Fluoranthene	Tuff and sediment	Eliminated	Not detected
Fluorene	Tuff and sediment	Eliminated	Not detected
Total naphthalenes*	Tuff and sediment	Retained	Detected in 1 of 25 samples
Phenanthrene	Tuff and sediment	Retained	Detected in 1 of 25 samples
Pyrene	Tuff, soil and sediment	Eliminated	Not detected
TPH (diesel range)	Tuff and sediment	Retained	Detected in 3 of 25 samples

* 2-methylnaphthalene and naphthalene are included with total naphthalene.

2.3.5.3 Evaluation of Diesel-Related Organic Chemicals in Postmelt Samples

Borehole Samples

Fourteen samples, (seven sediment and seven tuff), collected from five boreholes were analyzed for SVOCs and TPH (diesel range), as listed in Table 2.3-7. The frequency of detected diesel-related organic chemicals by media is presented in Table 2.3-13. Five chemicals were detected at least once, including four SVOCs (acenaphthene, naphthalene, 2-methylnaphthalene, and phenanthrene) and TPH (diesel range). Three SVOCs were detected once in tuff samples, and 2-methylnaphthalene and TPH (diesel range) was detected twice in tuff samples. No organic chemicals were detected in sediment samples. Samples in which organic chemicals were detected are listed in Table 2.3-14. Four SVOCs were detected in samples collected from borehole 21-11058 from different depths. TPH (diesel range) was also detected in two samples collected from different depths from borehole 21-11058. These compounds are therefore carried forward as COPCs. Figure 2.3-6 shows the postmelt borehole locations where diesel-related organic chemicals were detected.

Table 2.3-13
Frequency of Detected Diesel-Related Organic Chemicals in Postmelt Borehole and Outfall Samples Collected from the Mesa Top at PRS 21-027(d)-99

Analyte	Media	Number of Analyses	Number of Detects	Concentration Range (mg/kg)[a]	Frequency of Detects[b]
Borehole Samples					
Acenaphthene	Tuff[c]	7	1	0.2 to [0.41]	1/7
	Sediment	7	0	[0.36 to 0.38]	0/7
2-methylnaphthalene	Tuff	7	2	0.09 to 1.9	2/7
	Sediment	7	0	[0.36 to 0.38]	0/7
Naphthalene	Tuff	7	1	0.16 to [0.41]	1/7
	Sediment	7	0	[0.36 to 0.38]	0/7
Phenanthrene	Tuff	7	1	[0.35 to 0.41]	1/7
	Sediment	7	0	[0.36 to 0.38]	0/7
TPH (diesel-range)	Tuff	7	2	[26]to 1700	2/7
	Sediment	7	0	[28 to 28]	0/7
Outfall Samples					
TPH (diesel range)	Sediment	7	1	[4] to 19	1/7

[a] Values in square brackets are not detected results.
[b] Value is the ratio of the number of detected values to the number of analyses.
[c] Third unit of the Bandelier Tuff.

Table 2.3-14
Detected Diesel-Related Organic Chemicals in
Postmelt Borehole and Outfall Samples at PRS 21-027(d)-99

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene (mg/kg)	Naphthalene (mg/kg)	TPH (diesel range) (mg/kg)	Phenanthrene (mg/kg)	2-methylnaphthalene (mg/kg)
Postmelt Borehole								
MD21-99-0100	21-11058	16.5–17.5	Tuff[a]	0.2(J)	0.16(J)	1700	—[b]	1.9
MD21-99-0101	21-11058	17.5–20.0	Tuff	—	—	1000	0.36(J)	0.09(J)
Outfall Samples								
MD21-99-0212	21-11100	0.00–0.33	Sediment	—	—	19	—	—

[a] Third unit of the Bandelier Tuff.
[b] A dash indicates that the chemical compound was not detected in the sample.

Outfall Samples

Seven samples collected from sediment in the outfall area were analyzed for TPH (diesel range) as listed in Table 2.3-8. The frequency of detected diesel-related organic chemicals by media is presented in Table 2.3-13. TPH (diesel range) was detected in one surface sample (location 21-11100, Figure 2.3-7, Table 2.3-14). This sample location was specifically sited by ER Project and NMED HRMB staff to be outside the outfall drainage channel (Canepa and Taylor 1999, 64709.1) and was intended to be a background sample. TPH was not detected in any of the six samples collected from sediment pockets within the outfall drainage. Any TPH (diesel range) related to PRS 21-027(d)-99 detected in outfall drainage samples would have been weathered diesel because the tank was removed in 1960. However, analytical results indicate that the TPH (diesel range) detected in the sample collected from location 21-11100 was not weathered diesel and the sample location was outside of the outfall drainage.

Postmelt Sample Summary

Five diesel-related organic chemicals were detected in the postmelt samples and are retained as COPCs; and are summarized in Table 2.3-15. They are evaluated further in the site assessment section.

2.3.6 Revised Site Conceptual Model

Historical information and investigation data identified the most probable source of hydrocarbon contamination at this site as the former aboveground storage tank that stored diesel fuel. There are no historical records that document a release from this tank. However, the contaminated sediment/tuff discovered in March 1999 confirms an undocumented release did occur. A secondary containment wall was installed around the tank in 1948. It is probable a release from the tank occurred sometime between 1945 and 1948 before the secondary containment wall was installed because the secondary containment would have prevented a release to the environment.

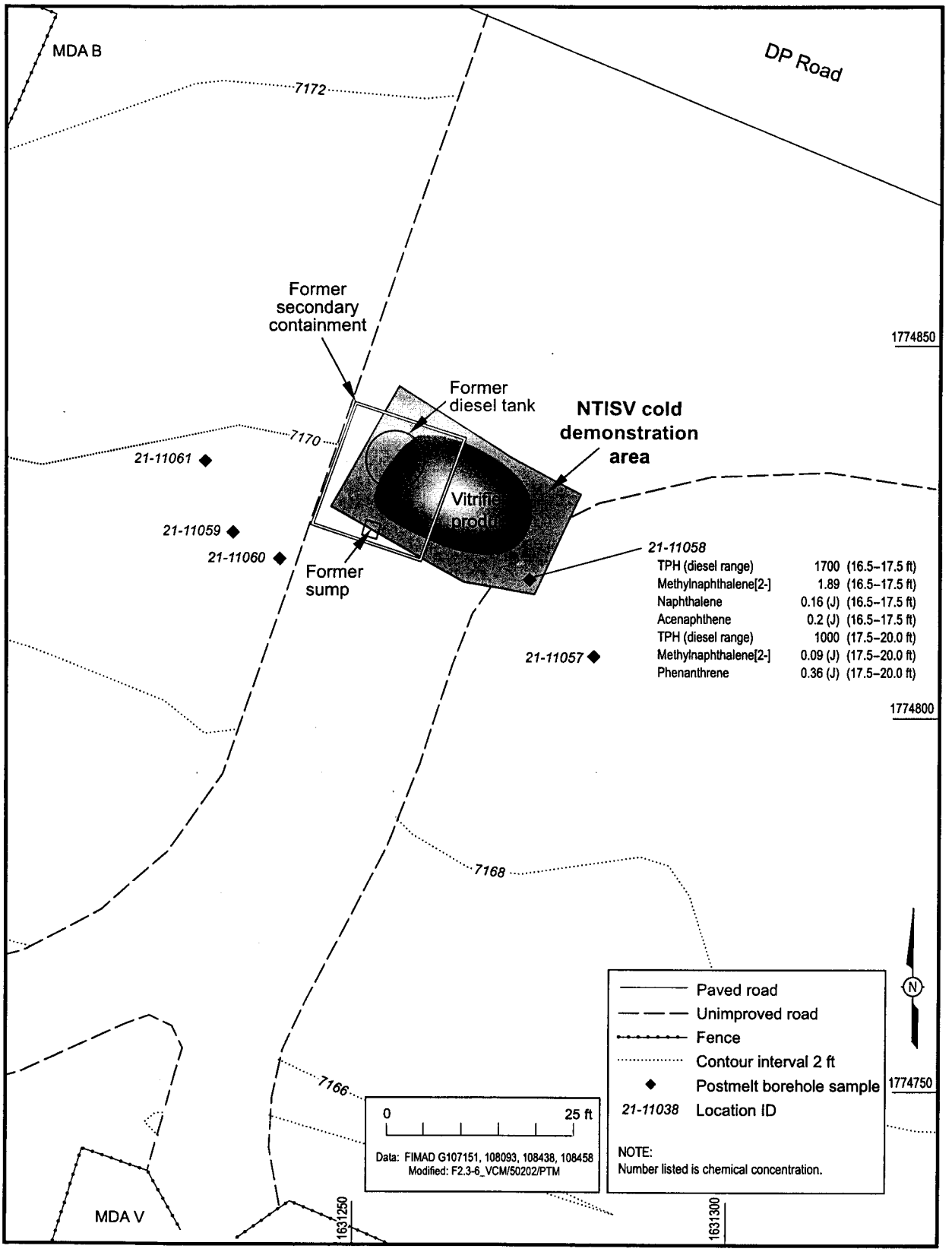

Figure 2.3-6. Locations of detected diesel-related organic chemicals (mg/kg) in postmelt borehole samples

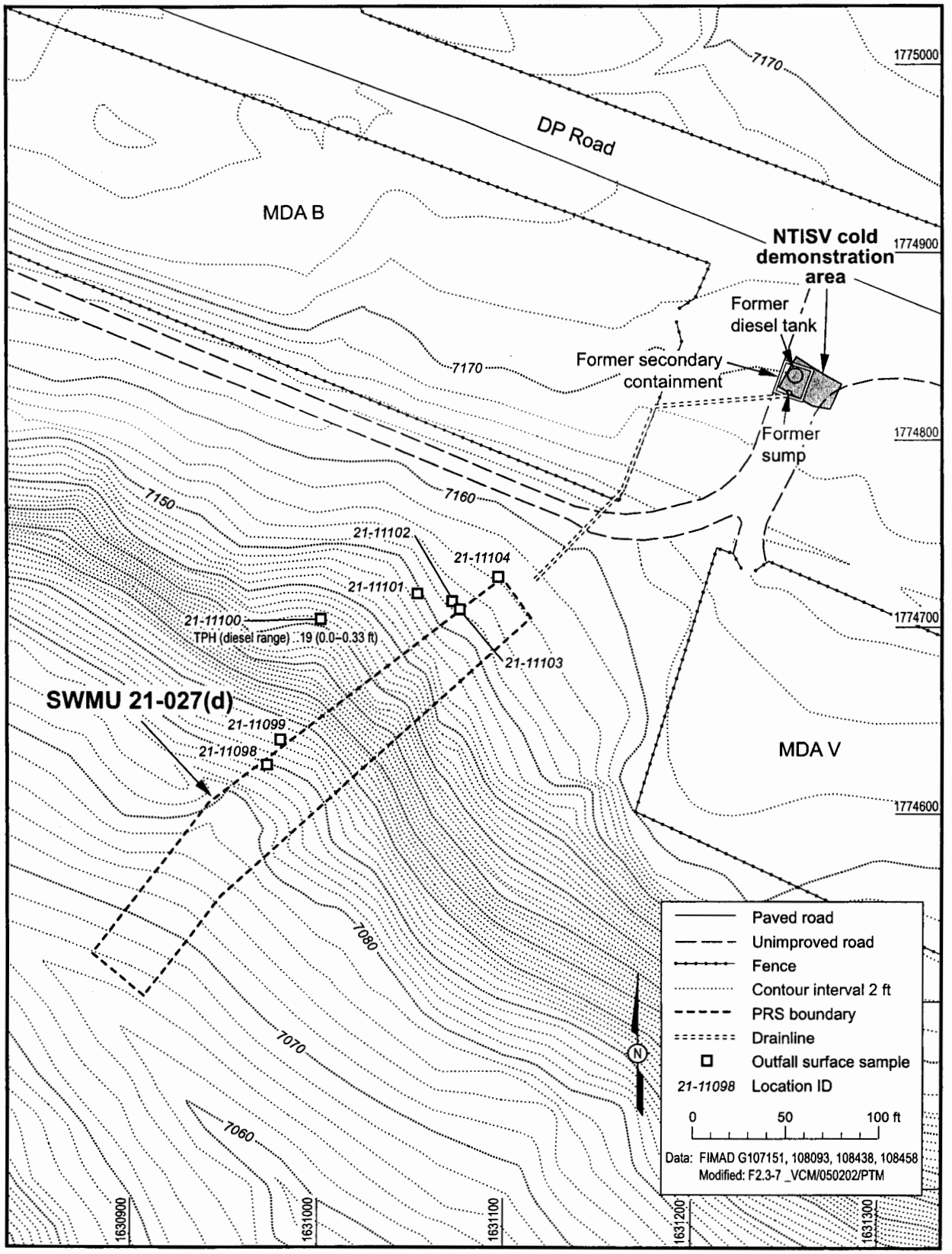

Figure 2.3-7. Location of detected diesel-related organic chemicals (mg/kg) in outfall samples

Table 2.3-15
Results of the Diesel-Related Organic Chemical Data Review for Postmelt Samples at PRS 21-027(d)-99

Analyte	Media	Result	Rationale
Benzene	Tuff and sediment	Eliminated	Not detected
Toluene	Tuff and sediment	Eliminated	Not detected
Ethylbenzene	Tuff and sediment	Eliminated	Not detected
Xylenes (total)	Tuff and sediment	Eliminated	Not detected
Acenaphthene	Tuff and sediment	Retained	Detected in 1 of 21 samples
Anthracene	Tuff and sediment	Eliminated	Not detected
Benz(a)anthracene	Tuff and sediment	Eliminated	Not detected
Benzo(a)pyrene	Tuff and sediment	Eliminated	Not detected
Benzo(b)fluoranthene	Tuff and sediment	Eliminated	Not detected
Benzo(k)fluoranthene	Tuff and sediment	Eliminated	Not detected
Chrysene	Tuff and sediment	Eliminated	Not detected
Dibenz(a, h)anthracene	Tuff and sediment	Eliminated	Not detected
Fluoranthene	Tuff and sediment	Eliminated	Not detected
Fluorene	Tuff and sediment	Eliminated	Not detected
Total naphthalenes*	Tuff and sediment	Retained	Detected in 2 of 21 samples
Phenanthrene	Tuff and sediment	Retained	Detected in 1 of 21 samples
Pyrene	Tuff and sediment	Eliminated	Not detected
TPH (diesel range)	Tuff and sediment	Retained	Detected in 3 of 21 samples

* 2-methylnaphthalene and naphthalene are included with total naphthalene.

The revised conceptual model integrates historical and process knowledge and information collected from the premelt and postmelt investigation activities with knowledge about the physical environment at PRS 21-027(d)-99. The nature and extent of contamination is defined using information obtained from investigation activities and analytical data, and the chemical fate and transport mechanisms at this site are updated. Consideration of impacted media is limited to soil, sediment, and tuff because the depth to groundwater is approximately 1000 ft bgs.

2.3.6.1 Nature and Extent

Contamination in the mesa-top portion of the PRS includes residual TPH (diesel range) and diesel-related organic chemicals defined in Section 2.3.5. The analytical results support the preliminary conceptual model and the historical site knowledge, which indicate that diesel fuel from former AOC C-21-028 was the type of petroleum hydrocarbon contamination at this site.

This section is divided into three subsections: premelt activities, postmelt activities, and outfall sampling.

Premelt Activities

Diesel contamination was detected during excavation of the simulated absorption bed for the NTISV cold demonstration. Most of the contaminated soil/sediment/tuff was excavated. Analytical results from the samples collected from the bottom and sidewalls of the excavation indicated all contamination had been removed except for the southeast corner. 2-methylnaphthalene was detected at 1.2 mg/kg in one tuff sample at a depth of 13.5 ft bgs in the southeast corner of the excavation (Figure 2.3-5). Analytical results were previously discussed in Section 2.3.5.2.

TPH (diesel range) was detected in both samples collected beneath the VCP at a depth of 4.5 ft bgs (Figure 2.3-5). TPH (diesel range) concentrations were 4.8 mg/kg and 48(J+) mg/kg. Analytical results were previously discussed in Section 2.3.5.2.

Residual diesel contamination was detected in boreholes advanced to define the horizontal and vertical extent of contamination southeast of the simulated absorption bed excavation. Benzene was detected at 0.0012(J) mg/kg in one tuff sample at a depth of 24.5 ft bgs in borehole 21-11037. Phenanthrene was detected at 0.41 mg/kg in one tuff sample at a depth of 8 ft bgs in borehole 21-11036. TPH (diesel range) was detected in one tuff sample at a depth of 8 ft bgs in borehole 21-11036. Analytical results were previously discussed in Section 2.3.5.2.

The horizontal extent of diesel-related organic chemicals and TPH (diesel range) is defined because COPCs were not detected in any of the perimeter premelt boreholes to the west (21-11040), south (21-11038), southeast (21-11037), and east (21-11039) of the simulated absorption bed excavation, and in excavation samples to the north (21-11019, 21-11022, 21-11024, and 21-11025) with three exceptions. Benzene was detected at an estimated concentration of 0.0012(J) mg/kg in one sample from borehole 21-11037 at a depth of 24.5 ft bgs (Figure 2.3-5). Benzene was detected below the EQL and above the method detection limit. Benzene was not detected in any other samples collected during this investigation. The maximum TPH (diesel range) concentration was detected in a borehole between the source area and borehole 21-11037 where benzene was detected at depth (Figure 2.3-5). This indicates that the benzene detected in borehole 21-11037 is residual contamination from PRS 21-027(d)-99 and is near the perimeter of the horizontal extent of contamination. The horizontal extent of contamination has been adequately determined because the concentration of benzene has been spatially delineated relative to practical quantitation limits (NMED 2000, 72718). TPH (diesel range) was detected at a depth of 4.5 ft bgs in the two samples collected beneath the VCP at concentrations of 4.8 mg/kg and 48(J+) mg/kg. There were no other diesel-related organic chemicals detected in the samples collected beneath the VCP, which indicates the TPH (diesel range) contamination is residual contamination from PRS 21-027(d)-99 and located near the perimeter of the extent of contamination.

The vertical extent of diesel-related organic chemicals and TPH (diesel range) is defined because COPCs were not detected in any of the bottom samples from the premelt boreholes with one exception. As previously discussed, benzene was detected at a concentration of 0.0012(J) mg/kg in one sample in premelt borehole 21-11037 at a depth of 24.5 ft bgs (Figure 2.3-5). Benzene was detected below the EQL and above the method detection limit. Benzene was not detected in any other sample during this investigation. The low concentration of benzene in borehole 21-11037 suggests that the benzene detected is residual contamination associated with PRS 21-027(d)-99 and is located near the perimeter of the vertical extent of contamination. The vertical extent of contamination has been adequately determined because the concentration of benzene has been spatially delineated relative to practical quantitation limits (NMED 2000, 72718).

Postmelt Activities

Residual diesel contamination was only detected in one of the postmelt boreholes, borehole 21-11058 (Figure 2.3-6). Acenaphthene was detected at 0.2(J) mg/kg in one tuff sample at a depth of 17.5 ft bgs; naphthalene was detected at 0.16(J) mg/kg in one tuff sample at a depth of 17.5 ft bgs; 2-methylnaphthalene was detected at 1.9 mg/kg and 0.09(J) mg/kg in two tuff samples at depths ranging between 16.5 and 20.0 ft bgs; and phenanthrene was detected at 0.36(J) mg/kg in one tuff sample at a depth of 20 ft bgs. Analytical results were previously discussed in Section 2.3.5.3.

TPH (diesel range) was also only detected in postmelt borehole 21-11058 in two tuff samples at depths ranging between 16.5 and 20 ft bgs (Figure 2.3-6). TPH (diesel range) concentrations ranged between 1000 mg/kg and 1700 mg/kg. Analytical results were previously discussed in Section 2.3.5.3.

The horizontal extent of diesel-related organic chemicals and TPH (diesel range) is defined because none of these COPCs was detected in perimeter postmelt boreholes to the west (21-11061), southwest (21-11059), south (21-11060), and southeast (21-11057) of the simulated absorption bed. The bottom borehole samples were collected from variable depths as previously discussed in Section 2.3.4 and Table 2.3-7. Vertical extent is defined because no COPCs were detected in any of the bottom samples collected from postmelt boreholes.

Outfall Sampling

TPH (diesel range) was detected in one sample collected from the outfall area (location 21-11100, Figure 2.3-7). This sample location was specifically located by ER Project and NMED HRMB staff to be outside the outfall drainage channel (Canepa and Taylor 1999, 64709.1) and was intended to be a background sample. TPH was not detected in any of the six samples collected from sediment pockets within the outfall drainage. Therefore, the vertical and horizontal extent of TPH (diesel range) is defined because TPH was not detected in any of the samples collected within the PRS boundary.

2.3.6.2 Fate and Transport

The fate of organic chemicals in the environment is complex and dependent on physical, biological, and chemical processes. The preliminary conceptual model suggested the predominant release mechanism from the mesa-top portion was migration through subsurface tuff with influence by fracture flow. A small portion of the release may have migrated along the surface, with some transport off site by way of surface water runoff. However, this pathway was a minor transport pathway because of the presence of a secondary containment system and the absence of weathered TPH (diesel range) in the outfall drainage of PRS 21-027(d)-99.

The revised conceptual model indicates that petroleum hydrocarbons released from PRS 21-027(d)-99 migrated through the subsurface sediment (variable thicknesses of fill material) into unsaturated tuff, where migration occurred in one of two ways: (1) by movement through the pores of the tuff and (2) by movement through interconnected fractures. The released hydrocarbons migrated downward in unsaturated soil/sediment because of gravity and capillary forces. Hydrocarbons moved through porous tuff matrix or fractures, when encountered, until the bulk hydrocarbons were transformed into residual saturation, an impermeable layer was encountered, or the hydrocarbons met the capillary fringe above the groundwater table. The last two conditions were not considered because an impermeable layer was not identified during subsurface characterization activities and the depth to groundwater is approximately 1000 ft below the site.

As bulk hydrocarbons migrate through an area of unsaturated zone of sediment or tuff, a small amount of the total hydrocarbon mass adsorbs to the soil, sediment, or tuff particles by way of capillary forces. These bulk hydrocarbons are identified as immobile or residual saturation. Residual saturation can potentially reside in the soil, sediment, and tuff for many years in this state (Dragun 1988, 57645).

TPH (diesel range) and diesel-related organic chemicals are known to be relatively immobile in soils and under environmental conditions normally encountered at Laboratory sites, i.e., semiarid conditions and soils with a neutral to alkaline soil pH. These chemicals adsorb to tuff and sediment and generally do not infiltrate to extreme depths. Because of their relative insolubility and the strong adsorption properties of tuff and sediments, a small subsurface area of residual diesel-related contaminants and TPH (diesel range) is not likely to demonstrate much vertical migration. It should be noted, the bulk of the source term was either removed during excavation activities or thermally treated during the NTISV cold demonstration. Analytical data suggests only a small limited area of residual contamination remains southeast of the excavation between boreholes 21-11036 and 21-11058 between 7.5 ft and 24.5 ft bgs. In addition, several small isolated areas of contamination exist adjacent to the two sample locations beneath the VCP encountered within the simulated absorption bed excavation (locations 21-11027 and 21-11028). The staining observed within the excavation and the distribution of residual contamination between these two boreholes is evidence of migration in the subsurface through tuff. There is no evidence of fracture flow or migration through the paleochannel sediments at this PRS.

2.3.7 Evaluation of Petroleum Hydrocarbons

Contamination southeast of the thermal treatment area was evaluated to determine the effect of the NTISV technology on the residual diesel hydrocarbon contamination. As discussed earlier, diesel contamination was detected in the premelt borehole samples southeast of the target treatment area. Two diesel-related organic chemicals (benzene and phenanthrene) and TPH (diesel range) were detected in tuff samples collected from premelt boreholes 21-11036 and 21-11037 (Figure 2.3-5). Phenanthrene and TPH (diesel range) were detected in borehole 21-11036 at a depth of 7.5 to 8 ft. Phenanthrene was detected at a concentration of 0.41 mg/kg and TPH (diesel range) was detected at a concentration of 3300 mg/kg. Borehole 21-11036 is located approximately 25 ft southeast of the center of the excavation. Benzene was detected at a concentration of 0.0012(J) mg/kg in borehole 21-11037 at a depth of 24 ft to 24.5 ft bgs. Borehole 21-11037 is located approximately 33 ft southeast of the center of the excavation. The distribution of contamination within these two boreholes suggests the contamination migrated deeper through tuff to the southeast and downgradient of the former aboveground storage tank. It is assumed the TPH (diesel range) and diesel-related organic chemical concentrations would be greater closer to the simulated absorption bed and the source area. Table 2.3-11 and Figure 2.3-5 present the concentrations of detected COPCs in premelt borehole samples.

The tuff and sediment within the simulated absorption bed (treatment area) were heated and altered to vitrified glass product during the NTISV cold demonstration. The intense heat generated by the vitrification process also changed the physical characteristics of the sediments and tuff adjacent to the treatment area. The estimated dimensions of the vitrified glass product are 23 ft long in the north/south direction and 25 ft long in the east/west direction. The estimated depth to the top surface of the vitrified glass is 10 ft bgs on the outside edges and 13 ft bgs in the center. The estimated depth to the bottom of the vitrified glass is 23 ft bgs. The degree to which media physical characteristics were changed was dependent on the distance from the treatment area. Historical information on postmelt cool down temperatures obtained from Geosafe, Inc. indicates the 100°C isotherm line is typically located approximately 12 ft from a 690-tonne melt at a depth of 8 ft bgs and approximately 7.5 ft from a 190-tonne melt at 14 ft bgs (Geosafe Corporation 1998, 72710). The 100°C isotherm line for the cold demonstration is assumed to be between 7.5 ft and 12 ft from the melt edge.

After completion of the thermal treatment of the simulated absorption bed, two postmelt boreholes (21-11057 and 21-11058) were drilled southeast of the vitrified glass product. Borehole 21-11058 was positioned between the estimated location of the 100°C isotherm and the edge of the vitrified glass product. Borehole 21-11058 is located approximately 17 ft southeast of the center of the vitrified glass product and 10 ft from the edge of the vitrified glass product. Four diesel-related organic chemicals (acenaphthene, 2-methylnaphthalene, naphthalene, and phenanthrene) and TPH (diesel range) were detected in the tuff samples collected from this borehole. Table 2.3-14 and Figure 2.3-6 present the concentrations of detected COPCs in postmelt samples. Borehole 21-11057 was positioned approximately 30 ft from the center of the melt area and is located southeast of borehole 21-11036. No diesel-related organic chemicals or TPH (diesel range) were detected in borehole 21-11057. Table 2.3-14 and Figure 2.3-6 present the concentrations of detected COPCs in postmelt borehole samples.

Borehole 21-11058 is located between the vitrified glass product and borehole 21-11036, where the maximum concentration of 3300 mg/kg, TPH (diesel range), was detected. The TPH (diesel range) concentration decreases with depth within this borehole and is approximately half the TPH (diesel range) concentration detected in premelt borehole 21-11036. If borehole 21-11058 was drilled and sampled prior to the NTISV cold demonstration, it is assumed the concentrations would be greater than the COPC concentrations detected in borehole 21-11036 because it is closer to the source area. This apparent reduction in TPH (diesel range) concentrations and low concentrations of diesel-related organic chemicals in postmelt samples suggest the NTISV technology may have reduced TPH (diesel range) concentrations. A more specific conclusion on the amount of influence cannot be made because of the limited data set available for this evaluation.

2.4 Site Assessments

2.4.1 Screening Assessments

PRS 21-027(d)-99 was evaluated according to the Laboratory's RCRA-based guidance for human health and ecological risks. However, because the source of the petroleum hydrocarbon contamination at the site is from a former aboveground storage tank release, it is assessed with regard to analytes characteristic of petroleum hydrocarbon fuels, specifically diesel fuel. The diesel-related analytes[1] identified in the NMED Guidance include VOCs, SVOCs, and TPH (diesel range) and serve as the analyte suite upon which this assessment is based (see Table 2.3-9). For further information, see the NMED guidelines at the following website: http://www.nmenv.state.nm.us/NMED_regs/ust_regs.html. The decision to assess UST analytes is documented in the Record of Communication (Environmental Restoration Project 2000, 72709). The Record of Communication also indicates that inorganic chemical and/or radionuclide contaminants detected at the site will be addressed during future investigations and risk assessments for PRS 21-018(a)-99 (MDA V) which overlaps the location of PRS 21-027(d)-99. Petroleum-based contaminant levels are compared to target cleanup concentrations or RBSLs in the UST guidelines for the appropriate conceptual models and screening assessment results are reported in a manner consistent with ER Project VCM and RFI reports. Future land use for the site is and will continue to be industrial, although risk calculations for residential land use are included in this report (Environmental Restoration Project 2000, 72709).

[1] Broad categories for petroleum hydrocarbons (e.g., diesel range organics) are considered with regard to individual hydrocarbon constituents.

2.4.1.1 Human Health

(a) Scoping

Although the future land use of this site is industrial, potential risks were evaluated for residential, commercial, and construction land-use scenarios. The human receptors considered in this evaluation are residential (child and adult), commercial adult, and construction worker. Surficial soils (0 to 1 ft) and subsurface soils (1 ft to the water table) were used for evaluation of pathways. The vertical extent of the residual diesel-related chemical contamination defined during the investigation and excavation of the simulated absorption bed is between 7.5 ft and 24.5 ft bgs. The maximum depth a sample was collected from is 40 ft bgs. For construction workers, surficial soil refers to soil from the surface to 15 ft, which is a typical construction depth.

For human health to be adversely affected, people must come into contact with a COPC through a complete exposure pathway. For a pathway to be complete there must be (1) a source of contamination, (2) a mechanism by which the contaminant is released, (3) a medium through which a contaminant travels from the point of release to the receptor location, and (4) a route of exposure by which the receptor takes in the contaminant that causes or threatens adverse health effects (EPA 1989, 8021). Potential exposure pathways from soils include ingestion, inhalation of vapors and soil particulates, and dermal contact.

The tier 1 pathways evaluated for current land use include an on-site construction worker (outdoor inhalation and dermal contact/ingestion). The tier 1 pathways evaluated for future on-site land use include residential child and adult (indoor inhalation), commercial adult (indoor inhalation) and construction worker (outdoor inhalation and dermal contact/ingestion). No off-site pathways were evaluated because contamination did not extend beyond the boundaries of this PRS. The tier 1 site conceptual exposure scenarios for this PRS are presented in the Tier 1 Report, Form No. 2 provided in Appendix G. The pathways justification are presented in the Tier 1 Report, Form No. 3, Resident, Commercial Worker, and Construction Worker provided in Appendix G.

For the location of former AOC C-21-028 located on the mesa top, the maximum concentrations of benzene, acenaphthene, total naphthalenes (naphthalene and 2-methylnaphthalene), and phenanthrene, were used in these evaluations. These TPH components were detected in sediment and tuff samples as previously discussed in Section 2.3.5, and Tables 2.3-11 and 2.3-14. There were no TPH components detected in samples from the outfall drainage of PRS 21-027(d)-99.

(b) Screening Evaluation

The tier 1 report compares the maximum detected concentrations to RBSLs for residential, commercial, and construction scenarios (Tier 1 Report, Appendix G). Only the components of TPH were retained for evaluation (Tables 2.3-12 and 2.3-15); however, the tier 1 process does not include TPH for evaluation of potential human health risk. The RBSLs were selected from tables in Chapter 4, Risked-Based Evaluation of Petroleum Releases (Tables 4-17, 4-18, and 4-19). For further information, see guidelines at the following website: http://www.nmenv.state.nm.us/NMED_regs/ust_regs.html.

After the data review, four COPCs (benzene, acenaphthene, total naphthalenes (naphthalene and 2-methylnaphthalene), and phenanthrene) were retained for evaluation of potential human health risk for residential and commercial adult scenarios. As previously discussed in Section 2.3.5, these four COPCs were detected in locations 21-11020, 21-11036, and 21-11037. Results of the comparison of the tier 1 RBSLs with maximum detected concentrations for residential (child and adult) and commercial adult scenarios are presented in the Tier 1 Report, Form 4-Resident and Commercial Adult, Appendix G. No

chemical was detected at a concentration equal to or greater than the RBSL for either the residential or commercial land use scenarios.

Two COPCs (total naphthalene and phenanthrene) were retained for evaluation of potential human health risk for a construction worker (depth 0 to 15 ft) scenario. Total naphthalene was detected at location 21-11020 and phenanthrene was detected at location 21-11036, as previously discussed in Section 2.3.5. Results of the comparison of the tier 1 RBSLs with maximum detected concentrations are presented in the Tier 1 Report, Form 4-Construction Worker, Appendix G. No chemical was detected at a concentration equal to or greater than the RBSL for a construction worker scenario.

Table 2.4-1 presents the screening evaluation of carcinogenic and noncarcinogenic COPCs; each had a maximum concentration one or more orders of magnitude less than its respective RBSL. These COPCs are eliminated from further assessment.

Table 2.4-1
Screening Evaluation of Carcinogenic and Noncarcinogenic COPCs in Subsurface Mesa-Top Tuff and Sediment

Diesel-Related Chemical	Maximum Concentration (mg/kg)	RBSL (mg/kg)
Benzene	0.0012(J)	0.0207
Acenaphthene	0.2	2570
Total naphthalenes*	2.06	34.5
Phenanthrene	0.41	4630

* 2-methylnaphthalene and naphthalenes are included with total naphthalenes.

(c) Uncertainty Analysis

The majority of the source term was excavated and removed during site preparation activities for the NTISV cold demonstration. Any contaminated material returned to the simulated absorption bed was treated thermally during the NTISV cold demonstration. The residual hydrocarbon contamination is located in the subsurface southeast of the treatment area and the extent of residual contamination was defined as discussed in Section 2.3.6.1. Forty-three samples of sediment and tuff from all depths were collected from the area immediately adjacent to the demonstration area. The QA/QC issues associated with the analytical data do not affect the sufficiency and quality of the data for decision-making purposes (Appendix C). Although some of the results are potentially biased low or high, the data are considered adequate for assessing potential impacts to human receptors and are representative of contamination present at the site. An assessment of all sample results shows that all TPH components are below the RBSLs, and all COPCs were eliminated from further assessment.

(d) Interpretation

COPCs were eliminated for all land use scenarios because concentrations were below the RBSLs (http://www.nmenv.state.nm.us/NMED_regs/ust_regs.html) (Table 2.4-1). Results of the tier 1 RBSLs comparison are presented in the Tier 1 Report, Form 4 for the Resident, Commercial Worker, and Construction Worker scenarios, Appendix G.

2.4.1.2 Ecological

(a) Scoping

There is no evidence of any terrestrial receptors on the mesa top portion of the PRS; their absence is due to the lack of habitat and forage in this area. The outfall portion is undisturbed canyon slope. Ecological receptors are plants, small mammals, and birds. Larger mammals, such as deer, are restricted to the portion of the outfall that is not vertical. Because so much of the outfall is exposed tuff, earthworms are not expected to be present in abundance. No aquatic habitat is present on or near the site. There is no evidence of burrowing in this area, and deep-rooted plants are absent. Terrestrial receptors are likely present in the surrounding mesa top area, particularly nearer the canyon slope and across DP Road where habitat and forage are available for small mammals and songbirds.

(b) Screening Evaluation

An ecological screening evaluation was not conducted for the mesa top portion because the residual hydrocarbon contamination is located between 7.5 ft and 24.5 ft bgs where exposure to ecological receptors would not occur. In addition, there are no transport pathways to move the residual subsurface contamination off site where ecological receptors may be exposed. An ecological screening evaluation was not conducted for the outfall because no TPH components were detected in the outfall drainage of PRS 21-027(d)-99.

(c) Uncertainty Analysis

An uncertainty analysis was not performed for this assessment.

(d) Interpretation

There is no potential ecological risk at this site because residual contaminants are unavailable to receptors on site, and no migration to off-site receptors is possible.

2.4.2 Other Applicable Assessments

2.4.2.1 Surface Water Assessment

Surface water assessments for former SWMU 21-027(d) and former AOC C-021-028 were conducted on April 12, 1999. Former SWMU 21-027(d) has an erosion score of 45, indicating a medium erosion potential, and former AOC C-021-028 has an erosion score of 15.3, indicating a low erosion potential. The surface water assessment document is included in Appendix B. The assessment states there is no debris in the watercourse, no evidence of visible erosion, and low to medium potential for erosion. Runoff terminates in BV canyon located south of the mesa-top area. There are no manmade or natural hydraulic structures or features that might affect the site hydrology. Therefore, the results of the assessment indicate a low potential for contaminant transport from the mesa-top portion of the PRS.

2.4.2.2 Groundwater Assessment

A groundwater assessment was not conducted because the depth to the regional aquifer is approximately 1000 ft below this PRS. The vertical extent of the residual diesel-related chemical contamination defined during the investigation and excavation of the simulated absorption bed is between 7.5 ft and 24.5 ft bgs.

2.4.2.3 Underground Storage Tanks Assessment

The computer program "Risk-Based Decision-Making for Petroleum Releases at Underground Storage Tank Sites in New Mexico" was used for evaluating the human health screening assessment. The tier 1 report for PRS 21-027(d)-99 is provided in Appendix G.

2.5 Conclusions and Recommendations

The objectives of this VCM were to

- remove and dispose of contaminated soil/sediment/tuff from the excavation for the simulated absorption bed,
- demonstrate the ability of NTISV to process the petroleum hydrocarbon COPCs observed at this location,
- define the nature and extent of petroleum hydrocarbon contamination, and
- confirm that any residual hydrocarbons remaining are below cleanup levels and do not pose an unacceptable level of risk.

The majority of diesel-contaminated soil/sediment/tuff at PRS 21-027(d)-99 was excavated during site preparation for the NTISV cold demonstration. Some of the excavated soil/sediment/tuff was returned to the excavation during construction of the simulated absorption bed; the remainder was characterized and disposed of off site.

Residual petroleum contaminated soil/sediment/tuff was detected adjacent to the southeast corner of the excavation. All soil/sediment/tuff in the simulated absorption bed was thermally treated during the NTISV technology demonstration. Analytical data collected before and after the demonstration indicates that the TPH (diesel range)contaminant concentrations located between the vitrified glass product and the 100°C isotherm were reduced by thermal destruction.

The vertical and horizontal extent of petroleum hydrocarbon contamination on the mesa top and outfall has been defined in accordance with project requirements, and no further sampling for extent is required. The revised site conceptual model presented in Section 2.3.6 identifies the most probable contaminant source at PRS 21-027(d)-99 as the former aboveground diesel fuel storage tank. Investigation results confirmed subsurface migration of petroleum-related hydrocarbons in the unsaturated zone was limited.

The maximum concentrations of four diesel-related organic chemicals were screened against the human health RBSLs established in the NMED UST corrective action guidelines for the tier 1 model for residential, commercial and construction land-use scenarios (Appendix G). All COPCs were eliminated from the human health screening process because the maximum concentrations were below levels that are a concern for human receptors. An ecological screening assessment was not conducted because residual contaminants are unavailable to receptors on site and no migration to off-site receptors is possible. No human health or ecological risk assessments were completed because no COPCs were retained from the screening assessments for this site. The surface water assessment concluded the site has a low to medium erosion potential. A pathway to groundwater is not considered because the depth to the regional aquifer is approximately 1000 ft beneath the residual contamination. Therefore, PRS 21-027(d)-99 is recommended for no further action, based on NFA criterion 5, which stipulates the site is characterized and remediated in accordance with applicable state and federal regulations. The available data indicates residual diesel-related organic contaminants do not pose an unacceptable level of risk under current and projected future land use. Note: The inorganic chemical and radionuclide contaminants detected at the site will be addressed during future investigations and risk assessments for PRS

21-018(a)-99 (MDA V) which overlaps the location of PRS 21-027(d)-99 (Environmental Restoration Project 2000, 72709).

3.0 WASTE MANAGEMENT

All wastes were managed in accordance with applicable regulatory requirements. Wastes generated during VCM activities included diesel-contaminated soil/sediment/tuff, VCP, plastic sheeting, personal protective equipment, and miscellaneous investigation-derived waste, including disposable sampling equipment.

4.0 REFERENCES

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Copies of the reference library are maintained at the NMED Hazardous Waste Bureau; the DOE Los Alamos Area Office; United States EPA, Region 6; and the ER Project Material Disposal Areas Focus Area. This library is a living collection of documents that was developed to ensure that the administrative authority has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the administrative authority are not included.

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Appendix A

Acronyms, Glossary, and Metric Conversion Tables

APPENDIX A ACRONYMS, GLOSSARY, AND METRIC CONVERSION TABLES

A-1.0 ACRONYMS

AOC	area of concern
AUA	annual unit audit
BGS	below ground surface
COPC	chemical of potential concern
CST	Chemical Science and Technology (Laboratory Division)
CVAA	cold vapor atomic absorption
DOE	US Department of Energy
DNA	delayed neutron assay
EDL	estimated detection limit
EPA	US Environmental Protection Agency
EQL	estimated quantitation limit
ER	environmental restoration
ETVAA	electro thermal vaporization atomic absorption
FIMAD	Facility for Information Management, Analysis, and Display
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GPC	gel permeation chromatography
HRMB	Hazardous and Radioactive Materials Bureau (NMED)
HSWA	Hazardous and Solid Waste Amendments of 1984
IA	interim action
ICS	interference check sample
ICPES	inductively coupled plasma emission spectroscopy
Laboratory	Los Alamos National Laboratory
LANL	Los Alamos National Laboratory
LCS	laboratory check sample
MDA	material disposal area

MDL	method detection limit
NFA	no further action
NMED	New Mexico Environment Department (New Mexico Environmental Improvement Division before 1991)
PCB	polychlorinated biphenyl
PID	photoionization detector
PRS	potential release site
QA	quality assurance
QC	quality control
RBSL	risk-based screening level
SWMU	solid waste management unit
SOP	standard operating procedure
SOW	statement of work
SVOC	semivolatile organic compound
T&E	threatened and endangered
TA	technical area
TAL	target analyte list
TPH	total petroleum hydrocarbons
TPU	total propagated uncertainty
UST	underground storage tank
VCP	vitrified clay pipe
VOC	volatile organic compound

A-2.0 GLOSSARY

Administrative authority (AA). The Director of the New Mexico Environment Department, or his/her designee, or the U.S. Environmental Protection Agency.

Alluvium. Clay, silt, sand, and gravel transported by water and deposited on streambeds, flood plains, and alluvial fans.

Area of concern (AOC). An area at the Laboratory known or suspected to be contaminated with radionuclides but not contaminated by hazardous chemicals or hazardous waste.

Background value (BV). The upper tolerance limits (UTLs) of background sample results, calculated as the upper 95% confidence limit for the 95th percentile. When a UTL cannot be calculated, either the detection limit or the maximum reported value is used as a BV; BVs are used as simple threshold numbers to identify potentially contaminated site sample results that are greater than background levels in that geological sample medium (or group of media). All inorganic chemicals and radionuclides have BVs.

Baseline risk assessment (also known as risk assessment). A site-specific analysis of the potential adverse effects of hazardous substances that are released from a site in the absence of any control or mitigation actions. A baseline risk assessment consists of four steps: data collection and analysis, exposure assessment, toxicity assessment, and risk characterization.

Calibration. Process used to identify the relationship between the true (reference) analyte concentration or other variable and the response of a measurement instrument, chemical analysis method, or other measurement system.

Chemical of potential concern (COPC). Chemical, detected at a site, that has the potential to adversely affect human and/or ecological receptors due to its concentration, distribution, and mechanism of toxicity. A COPC remains a concern until exposure pathways and receptors are evaluated in a site-specific risk assessment.

Cold vapor atomic absorption (CVAA). An analytical technique used for measuring mercury; it is described in EPA Methods 7470A (Mercury in Liquid Waste) and 7471A (Mercury in Solid or Semisolid Waste). The technique is based on the absorption of radiation at 253.7-nm by mercury vapor. The mercury is reduced to the elemental state and aerated from solution in a closed system. The mercury vapor passes through a cell positioned in the light path of an atomic absorption spectrophotometer. Absorbance (peak height) is measured as a function of mercury concentration.

Data validation. Systematic process that applies a defined set of performance-based criteria to a body of data; may result in qualification of the data. The data validation process is performed independently of the analytical laboratory that generates the data set and occurs before conclusions are drawn from the data. The process may comprise a standardized data review (routine data validation) and/or a problem-specific data review (focused data validation).

Department of Energy (DOE). Federal agency that sponsors energy research and regulates nuclear materials for weapons production.

Detection limit. Minimum concentration that can be determined by a single measurement by an instrument; implies a specified statistical confidence that the analytical concentration is greater than zero.

Dose. Quantity of radiation that is absorbed, per unit of mass, by the body or by any portion of the body.

Ecological screening level (ESL). An organism's exposure-response threshold for a given chemical constituent. The concentration of a substance in a particular medium corresponds to a hazard quotient (HQ) of 1.0 for a given organism below which no risk is indicated.

Environmental Protection Agency (EPA). Federal agency responsible for enforcing environmental laws. While state regulatory agencies may be authorized to administer some of this responsibility, the EPA retains oversight authority to ensure protection of human health and the environment.

Ephemeral. Said of a stream or spring that flows only during and immediately after periods of rainfall or snowmelt.

Estimated detection limit (EDL). The detection limit required by the Laboratory statement of work (SOW) for analytical services (RFP No. 9-XS1-Q4257). The Laboratory value reflect the contract-required detection limits (CRDLs) of the Contract Laboratory Program (CLP) methods.

Estimated quantitation limit. The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine analytical-laboratory operating conditions. Sample estimated quantitation limits are highly matrix-dependent, and the specified estimated quantitation limits might not always be achievable.

Evapotranspiration. The combined discharge of water from the earth's surface to the atmosphere by evaporation from lakes, streams, and soil surfaces, and by transpiration from plants.

Exposure pathway. Mode by which a receptor may be exposed to contaminants in environmental media (e.g., drinking water, ingesting food, or inhaling dust).

External standard. External standard calibration involves comparison of instrument responses from the sample to the responses from the target compounds in the calibration standards. Sample peak areas (or peak heights) are compared to peak areas (or heights) of the standards.

Fallout radionuclides. Radionuclides that are present at globally elevated levels in the environment as a result of the fallout from atomic weapons tests. The Laboratory background data sets consist of Environmental Surveillance samples taken from marginal and regional locations for the following radionuclides associated with fallout: tritium, cesium-137, americium-241, plutonium-238, plutonium-239/240, and strontium-90. Samples were collected from regional and marginal locations in the vicinity of the Laboratory that are (1) representative of geological media found within Laboratory boundaries and (2) were not impacted by Laboratory operations.

Fault. A fracture, or zone of fractures, in rock along which there has been vertical or horizontal movement; adjacent rock surfaces are displaced.

Field blank (also known as field reagent blank). A blank sample either prepared in the field or carried to the sampling site, exposed to sampling conditions (e.g., bottle caps removed, preservatives added), and returned to a laboratory for analysis in the same manner in which environmental samples are analyzed. Used to identify the presence of contamination potentially added during the sampling and analysis process.

Field duplicate. A second sample collected as near as possible to the original sample.

Gamma radiation. A form of electromagnetic, high-energy radiation emitted from a nucleus. Gamma rays are essentially the same as x-rays and require heavy shielding, such as concrete or steel, to be blocked.

Groundwater. Water in a subsurface saturated zone; water beneath the regional water table.

Hazard quotient (HQ). The ratio of a calculated exposure (E) to or dose (D) from a given contaminant (I) to a given receptor (j) over a reference value (TRV) for contaminant (I) determined to be protective of receptor (j), i.e., $HQ_{ij} = E_{ij}$ [or D_{ij}]TRV_{ij}.

Hazardous and Solid Waste Amendments (HSWA). The Hazardous and Solid Waste Amendments of 1984 (Public Law No. 98-616, 98 Stat. 3221), which amended the Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6901 et seq.

Holding time. The maximum elapse of time that one can expect to store a sample without unacceptable changes in analyte concentrations. Holding times apply under prescribed conditions and deviations from these conditions may affect the holding time. Extraction holding time refers to the time lapse from

sample collection to sample preparation; Analytical holding time refers to the time lapse between sample preparation and analysis.

HSWA module. A portion of the Laboratory's permit to operate under RCRA that contains requirements specific to Los Alamos National Laboratory. It is this portion of the permit that contains the list of solid waste management units that must be cleaned up in accordance with RCRA procedures.

Hydraulic conductivity. The rate at which water moves through a medium in a unit of time under a unit hydraulic gradient through a unit area measured perpendicular to the direction of flow.

Hydrogeology. The science that applies geologic methods to the understanding of hydrologic phenomena.

Inductively coupled plasma emission spectroscopy (ICPES). ICPES determines trace elements, including metals, in solutions. The instrument measures characteristic emission spectra by optical spectrometry. Samples are nebulized, and the resulting aerosol is transported to the plasma torch. Element-specific emission spectra are produced by a radio-frequency inductively coupled plasma. The spectra are dispersed by a grating spectrometer, and photosensitive devices are used to monitor the intensities of the emission lines.

Inductively coupled plasma mass spectroscopy (ICPMS). ICPMS is applicable to the determination of sub-mg/l concentrations of a large number of elements in water samples and in waste extracts or digests. When dissolved constituents are required, samples must be filtered and acid preserved before analysis. No digestion is required before analysis for dissolved elements in water samples. The method measures ions produced by a radio-frequency inductively coupled plasma. Analyte species originating in a liquid are nebulized, and the resulting aerosol transported by argon gas into the plasma torch. The ions produced are entrained in the plasma gas and introduced, by means of an interface, into a mass spectrometer. The ions produced in the plasma are sorted according to their mass-to-change ratios and quantified with a channel electron multiplier.

Internal standards. Compounds added to the sample after sample preparation for qualitative and quantitative instrument analysis—the compounds serve as a standard of retention time and response, which is invariant from run to run with the instruments. (Handbook of Environmental Analysis, by Roy-Keith Smith, 3rd ed.)

Laboratory control sample (LCS). A known matrix that has been spiked with compound(s) representative of the target analytes. The LCS is used to document laboratory performance. The acceptance criteria for LCSs are method specific.

Laboratory qualifier (or laboratory flag). Codes applied to the data by the contract analytical laboratory to indicate, on a gross scale, a verifiable or potential data deficiency. These flags are applied using the Environmental protection Agency (EPA) contract laboratory program (CLP) guidelines.

Matrix spike. An aliquot of sample spiked with a known concentration of target analyte(s). Matrix spike samples are used to measure the ability to recover prescribed analytes from a native sample matrix. The spiking typically occurs before sample preparation and analysis.

Matrix spike duplicate. An intralaboratory duplicate sample spiked with a known amount of target analyte(s). Spiking occurs before sample preparation and analysis.

Method blank. An analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing and which is prepared and analyzed in the same manner as the corresponding environmental samples. The method blank is used to assess the potential for contamination to the sample during preparation and analysis.

Method detection limit (MDL). The minimum concentration of a substance that can be measured and reported with a known statistical confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of samples of a given matrix type that contain the analyte after subjecting the sample to the usual preparation and analyses. The MDL is used to establish detection status.

Minimum detectable activity. For the *analysis* of *radionuclides*, the minimum detectable activity is the lowest detectable radioactivity for a given analytical technique. The following equation shall be used to calculate the MDA unless otherwise noted or approved by the Laboratory:

$$MDA = \frac{4.65(BKG)^{0.5} + 2.71}{2.22 \times EFF \times V \times T_S \times Y}$$

where BKG = the total background counts,
EFF = the fraction detector efficiency,
V = the volume or unit weight,
T_s = the *sample* count duration, and
Y = the fractional *chemical* recovery obtained from the *tracer* recovery.

Depending on the type of *analysis*, other terms may also be required in the denominator (e.g., gamma abundance).

Model. A mathematical approximation of a physical, biological, or social system.

No further action (NFA). A recommendation that not further investigation or remediation is warranted based on specific criteria.

Nondetect. Sample result that is less than the MDL. The laboratory reports nondetects as undetected at the EQL.

Operable unit (OU). At the Laboratory, one of 24 areas originally established for administering the ER Project. Set up as groups of potential release sites, the OUs were aggregated based on geographic proximity for the purpose of planning and conducting RCRA facility assessments and RCRA facility investigations. As the project matured, it became apparent that 24 were too many to allow efficient communication and to ensure consistency in approach. Therefore, in 1994, the 24 OUs were reduced to six administrative "field units."

Perched groundwater. Groundwater that lies above the regional water table and is separated from it by an unsaturated zone.

Polychlorinated biphenyls (PCBs). Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substances. PCBs are colorless, odorless compounds that are chemically, electrically, and thermally stable and have proven to be toxic to both humans and animals.

Potential release site (PRS). A site suspected of releasing or having the potential to release contaminants into the environment. PRS is a generic term that includes solid waste management units, hazardous waste sites listed in Module 7 of the Laboratory's Hazardous Waste Facility Permit, and sites that have been identified as potentially contaminated by radioactivity.

Quality assurance. All those planned and systematic actions necessary to provide adequate confidence that a facility, structure, system, or component will perform satisfactorily in service.

Quality control (QC). (1) All those actions necessary to control and verify the features and characteristics of a material, process, product, or service to specified requirements. QC is the process

through which actual quality performance is measured and compared with standards. (2) All methods and procedures used to obtain accurate and reliable results from environmental sampling and analysis. Includes rules for when, where, and how samples are taken; sample storage, preservation and transport; and the use of blanks, duplicates, and split samples during the analysis.

Radionuclide. A nuclide (species of atom) that exhibits radioactivity.

RCRA facility investigation (RFI). The investigation that determines if a release has occurred and the nature and extent of the contamination at a hazardous waste facility. The RFI is generally equivalent to the remedial investigation portion of the Comprehensive Environment Response, Compensation, and Liability Act (CERCLA) process.

Receptor. A person, plant, animal, or geographical location that is exposed to a chemical or physical agent released to the environment by human activities.

Recharge. The process by which water is added to the zone of saturation, either directly from the overlying unsaturated zone or indirectly by way of another material in the saturated zone.

Regional aquifer. Geologic material(s) or unit(s) of regional extent whose saturated portion yields significant quantities of water to wells, contains the regional zone of saturation, and is characterized by the regional water table or potentiometric surface.

Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of hazardous waste or hazardous constituents into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles that contain any hazardous wastes or hazardous constituents).

Reporting limit. The numerical value that an analytical laboratory (in conjunction with its client) selects to determine if a target analyte is detected. Results below the RL are considered not detected, while results greater than the RL are considered detected. The RLs are not necessarily based on instrument sensitivity. RLs can be established at the instrument detection limit, method detection limit, estimated quantitation limit, and contract-required detection limit.

Resource Conservation and Recovery Act (RCRA). The Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976. (40 CFR 270.2)

Runoff. The portion of the precipitation on a drainage area that is discharged from the area either by sheet flow or adjacent stream channels.

Run-on. Surface water flowing onto an area as a result of runoff occurring higher up the slope.

Sample. A portion of a material (e.g., rock, soil, water, air), which, alone or in combination with other samples, is expected to be representative of the material or area from which it is taken. Samples are typically sent to a laboratory for analysis or inspection or are analyzed in the field. When referring to samples of environmental media, the term field sample may be used.

Sample matrix. In chemical analysis, that portion of a sample which is exclusive of the analytes of interest. Together, the matrix and analytes of interest form the sample.

Screening action level (SAL). Medium-specific concentration level for a chemical derived using conservative criteria below for which it is generally assumed that there is no potential for unacceptable risk to human health. The derivation of a SAL is based on conservative exposure and land-use assumptions. However, if an applicable regulatory standard exists that is less than the value derived by risk-based computations, it will be used for the SAL.

Screening assessment. A process designed to determine whether contamination detected in a particular medium at a site may present a potentially unacceptable human-health and /or ecological risk. The

assessment utilizes screening levels that are either human-health or ecologically based concentrations derived by using chemical-specific toxicity information and standardized exposure assumptions below which no additional actions are generally warranted.

Sediment. (1) A mass of fragmented inorganic solid that comes from the weathering of rock and is carried or dropped by air, water, gravity, or ice; or a mass that is accumulated by any other natural agent and that forms in layers on the earth's surface such as sand, gravel, silt, mud, fill, or loess. (2) A solid material that is not in solution and either is distributed through the liquid or has settled out of the liquid.

Site characterization. Defining the pathways and methods of migration of the hazardous waste or constituents, including the media affected, the extent, direction and speed of the contaminants, complicating factors influencing movement, concentration profiles, etc. (U.S. Environmental Protection Agency, May 1994. "RCRA Corrective Action Plan, Final," Publication EPA-520/R-94/004, Office of Solid Waste and Emergency Response, Washington, DC)

Site conceptual model. A qualitative or quantitative description of sources of contamination, environmental transport pathways for contamination, and biota that may be impacted by contamination (called receptors) and whose relationships describe qualitatively or quantitatively the release of contamination from the sources, the movement of contamination along the pathways to the exposure points, and the uptake of contaminant by the receptors.

Solid waste management unit (SWMU). Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released. This definition includes regulated units (i.e., landfills, surface impoundments, waste piles, and land treatment units) but does not include passive leakage or one-time spills from production areas and units in which wastes have not been managed (e.g., product storage areas).

Spring. The site where groundwater discharges to the ground surface.

Standard operating procedure (SOP). A document that details the method for an operation, analysis, or action with thoroughly prescribed techniques and steps, and is officially approved as the method for performing certain routine or repetitive tasks.

Stratigraphy. The science dealing with the succession, age, composition, and history of strata.

Surrogate compound or surrogate. An organic compound used in the analyses of organic target analytes that is similar in composition and behavior to target analytes but is not normally found in field samples. Surrogates are added to every blank and spike sample to evaluate the efficiency with which analytes are recovered during extraction and analysis.

Target analyte. An element, chemical, or parameter, the concentration, mass, or magnitude of which is designed to be quantified by use of a particular test method.

Technical area (TA). The Laboratory established technical areas as administrative units for all its operations. There are currently 49 active TAs spread over 43 square miles.

Tentatively identified compound (TIC). Chemical compound detected in a sample that is not a target analyte, IS, or surrogate compound. Up to 30 chromatographic peaks may be subject to mass spectral matching for identification as TICs.

Topography. The physical configuration of the land surface in an area.

Total propagated uncertainty (TPU). The range of concentrations (expressed as plus or minus the measured concentration) that include the theoretical or true concentration of an analyte with a specific

degree of confidence. Radiochemical results are required to be accompanied by sample-specific uncertainty bounds (TPU) that reflect the 67% confidence level (1-sigma TPU). The TPU includes not only the measurement or counting error but also the technique-specific error term that includes uncertainty values for each contributing measurement process and a sample-specific contribution reflecting specific chemical recoveries, detectors used, etc. All radiochemical result uncertainties incorporate terms for technique-related and sample-specific measurement errors.

Tracer. A substance, usually a radioactive isotope, added to a sample to determine the efficiency (chemical or physical losses) of the chemical extraction, reaction, or analysis. The tracer is assumed to behave in the same manner as that of the target radionuclides. Recovery guidelines for tracer results are 30% to 110% under the current contract laboratory statement of work and will be 40% to 105% under the new statement of work. Correction of the analytical results for the tracer recovery is performed for each sample. The concentration of the tracer added needs to be sufficient to result in a maximum of 10% uncertainty at the 95% confidence level in the measured recovery.

Tuff. A compacted deposit of volcanic ash and dust that contains rock and mineral fragments accumulated during an eruption.

Underground storage tank [as defined in Section 9001(1) of the Solid Waste Disposal Act]. The term "underground storage tank" means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10% or more beneath the surface of the ground. Such term does not include any

(a) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;

(b) tank used for string heating oil for consumptive use on the premises where stored;

(c) septic tank;

(d) pipeline facility (including gathering lines) regulated under

(i) the Natural Gas Pipeline Safety Act of 1968 (49 USC App. 1671 et seq.),

(ii) the Hazardous Liquid Pipeline Safety Act of 1979 (49 USC App. 2001 et seq.), or

(iii) which is an intrastate pipeline facility regulated under state laws comparable to the provisions of law referred to in Clause (i) or (ii) of this subparagraph;

(e) surface impoundment, pit, pond, or lagoon;

(f) storm-water or wastewater collection system;

(g) flow-through process tank;

(h) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

(i) storage tank situated in an underground area (such as a basement, cellar, mine working, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

US Department of Energy (DOE). Federal agency that sponsors energy research and regulates nuclear materials for weapons production.

US Environmental Protection Agency (EPA). Federal agency responsible for enforcing environmental laws. While state regulatory agencies may be authorized to administer some of this responsibility, the EPA retains oversight authority to ensure protection of human health and the environment.

Vadose zone. The unsaturated zone. Portion of the subsurface above the regional water table in which pores are not fully saturated.

Welded tuff. A volcanic deposit hardened by the action of heat, pressures from overlying material, and hot gases.

A-3.0 METRIC CONVERSION TABLES

Metric to English Conversions

Multiply SI (Metric) Unit	by	To Obtain US Customary Unit
kilometers (km)	0.622	miles (mi)
kilometers (km)	3281	feet (ft)
meters (m)	3.281	feet (ft)
meters (m)	39.37	inches (in.)
centimeters (cm)	0.03281	feet (ft)
centimeters (cm)	0.394	inches (in.)
millimeters (mm)	0.0394	inches (in.)
micrometers or microns (μm)	0.0000394	inches (in.)
square kilometers (km^2)	0.3861	square miles (mi^2)
hectares (ha)	2.5	acres
square meters (m^2)	10.764	square feet (ft^2)
cubic meters (m^3)	35.31	cubic feet (ft^3)
kilograms (kg)	2.2046	pounds (lb)
grams (g)	0.0353	ounces (oz)
grams per cubic centimeter (g/cm^3)	62.422	pounds per cubic foot (lb/ft^3)
milligrams per kilogram (mg/kg)	1	parts per million (ppm)
micrograms per gram (μg/g)	1	parts per million (ppm)
liters (l)	0.26	gallons (gal.)
milligrams per liter (mg/l)	1	parts per million (ppm)
degrees Celsius (°C)	9/5 + 32	degrees Fahrenheit (°F)

Metric Prefixes

Term	Power of 10	Symbol
mega-	10^6	M
kilo-	10^3	k
deci-	10^{-1}	d
centi-	10^{-2}	c
milli-	10^{-3}	m
micro-	10^{-6}	μ
nano-	10^{-9}	n
pico-	10^{-12}	p

Appendix B

Operational and Environmental Setting

APPENDIX B OPERATIONAL AND ENVIRONMENTAL SETTING

B-1.0 OPERATIONAL HISTORY AND LAND USE

Technical Area (TA) 21 is located on DP Mesa on the northern boundary of Los Alamos National Laboratory (the Laboratory) and is immediately east-southeast of the Los Alamos townsite (Figure 1.0-1, Section 1). It extends from the mesa top to the stream channels in the adjacent canyons, DP Canyon to the north and Los Alamos Canyon to the south.

During World War II, the Laboratory was established for the research, development, and testing of the first deliverable nuclear weapon. In 1945, the operations for establishing the chemical and metallurgical properties of the nuclear material necessary to achieve and sustain the required nuclear fission reaction were transferred to the newly built facilities at TA-21. The facilities were located in the areas of DP West and DP East (Figure B-1.0-1).

DP West operations began during September 1945. The main purpose was to produce metal and alloys of plutonium from the nitrate solution feedstock provided by other production facilities. This involved several acid dissolution and chemical precipitation steps to separate the plutonium and other valuable actinides from the feedstocks. A major research objective at DP West was the development of new purification techniques that would increase the efficiency of the separation processes (Christensen and Maraman 1969, 4779). Details of the purification techniques are discussed in the TA-21 operable unit work plan (LANL 1991, 7528). Other operations performed at DP West were nuclear fuel reprocessing and unrelated activities. In 1977, a transfer of work to the new plutonium facility at TA-55 began, and much of the DP West complex was vacated.

DP East operation also began during September 1945. These facilities were used to process polonium and actinium and to produce initiators (a nuclear weapons component). In 1964, Building TA-21-209 was built to house research in high-temperature and actinide chemistry. Building TA-21-155 currently houses the Tritium Systems Test Assembly for developing and demonstrating effective technology for handling and processing deuterium and tritium fuels for use in fusion reactors.

TA-21 includes five material disposal areas (MDAs): A, B, T, U, and V. Process, transuranic, and liquid wastes were disposed of at the MDAs from the early 1940s until the late 1970s; details of the disposal methods are presented in the TA-21 operable unit work plan (LANL 1991, 7528). The major contributors to waste streams at TA-21 were plutonium-processing activities. However, because plutonium was scarce, waste-stream recycling became a common practice to remove as much plutonium as possible from the waste stream. Other chemicals present in the waste streams included a wide range of chemicals used during separation processes and are discussed in the work plan (LANL 1991, 7528). Airborne effluents were released from some of the buildings at DP West and DP East and are also discussed in the work plan (LANL 1991, 7528).

TA-21 is currently under Department of Energy (DOE) control. All the MDAs are fenced and controlled. The land has historically been used for industrial applications. Any future use of the land (either by DOE or following land transfer of the property) would still be industrial. Future and current land-use maps can be found in the 1995 update to the Laboratory site development plan (LANL 1995, 57224).

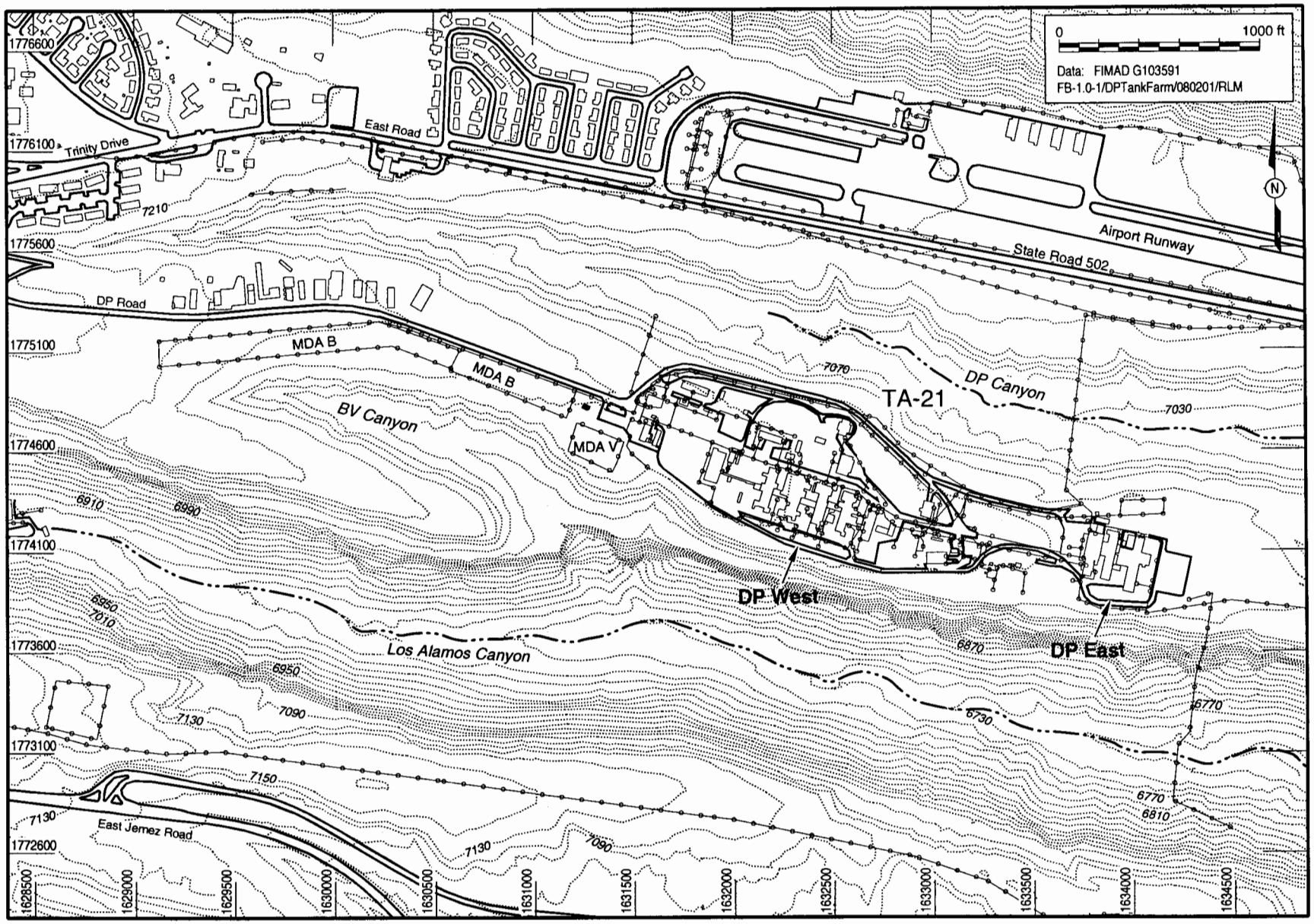

Figure B-1.0-1. DP East and DP West at TA-21

B-2.0 CLIMATE

Los Alamos County has a semiarid, temperate mountain climate. Annual precipitation, including both rain and snow, averages about 18 in. Recorded extremes in annual precipitation range between 6.8 in. and 30.3 in. An average of 40% of the annual precipitation falls during thunderstorms in July and August, often in brief, high-intensity rains. Significant amounts of surface water often run off during these rainfall events. Daily rainfall extremes of 1 in. or greater occur in most years, and the estimated 100-yr daily rainfall extreme is about 2.5 in. Snowstorms with accumulations exceeding 4 in. are common in Los Alamos. Snowfall is greatest from December through March; heavy snowfall is infrequent in other months (Bowen 1990, 6899). The average snowfall is 51 in. annually.

Summers are generally sunny, with moderate, warm days and cool nights. Summer afternoon temperatures in Los Alamos County are typically in the 70s and 80s (°F), infrequently reaching 90°F; nighttime temperatures are typically in the 50s (°F). Typical winter temperatures range between 30°F and 50°F during the day and 15°F and 25°F during the night, occasionally dropping to 0°F or below (Bowen 1990, 6899).

Strong winds occur predominantly during the spring. The predominant wind direction, especially for strong winds, is south-southwest. Because of complex terrain, surface winds in Los Alamos often vary greatly with time of day and location. The winds toward the eastern edge of the Pajarito Plateau near the Rio Grande Valley differ from those at the western edge adjacent to the mountains. Along the eastern edge, the daily wind cycle is a moderate southwesterly up-valley wind during the day and either a light northwesterly to northerly drainage wind or moderate southwesterly wind at night. Along the western edge, the predominant winds are southerly to northwesterly during the day and southwesterly and northeasterly at night toward the Rio Grande Valley. TA-21 is located approximately midway between the western and eastern edges of the Pajarito Plateau. No tornadoes have been reported to have touched down in Los Alamos County. Strong dust devils can produce winds up to 75 mph at isolated spots in the county, especially at lower elevations. Strong winds with gusts exceeding 60 mph are common during the spring.

B-3.0 GEOLOGY

TA-21 is centrally located on the Pajarito Plateau, approximately midway between the flanks of the Jemez Mountains on the west and the Rio Grande to the east. The geology of the area is summarized in this section. Additional information on the geologic setting of the TA-21 area and information on the Pajarito Plateau can be found in the installation work plan (LANL 1998, 62060), the TA-21 operable unit work plan (LANL 1991, 7528), and the hydrogeologic work plan (LANL 1998, 59599).

B-3.1 Stratigraphy

The following sections describe the rock units below the TA-21 area; these units were encountered during environmental restoration investigations at the TA. The descriptions begin with the oldest (deepest) and proceed to the youngest (topmost) (Figure B-3.1-1).

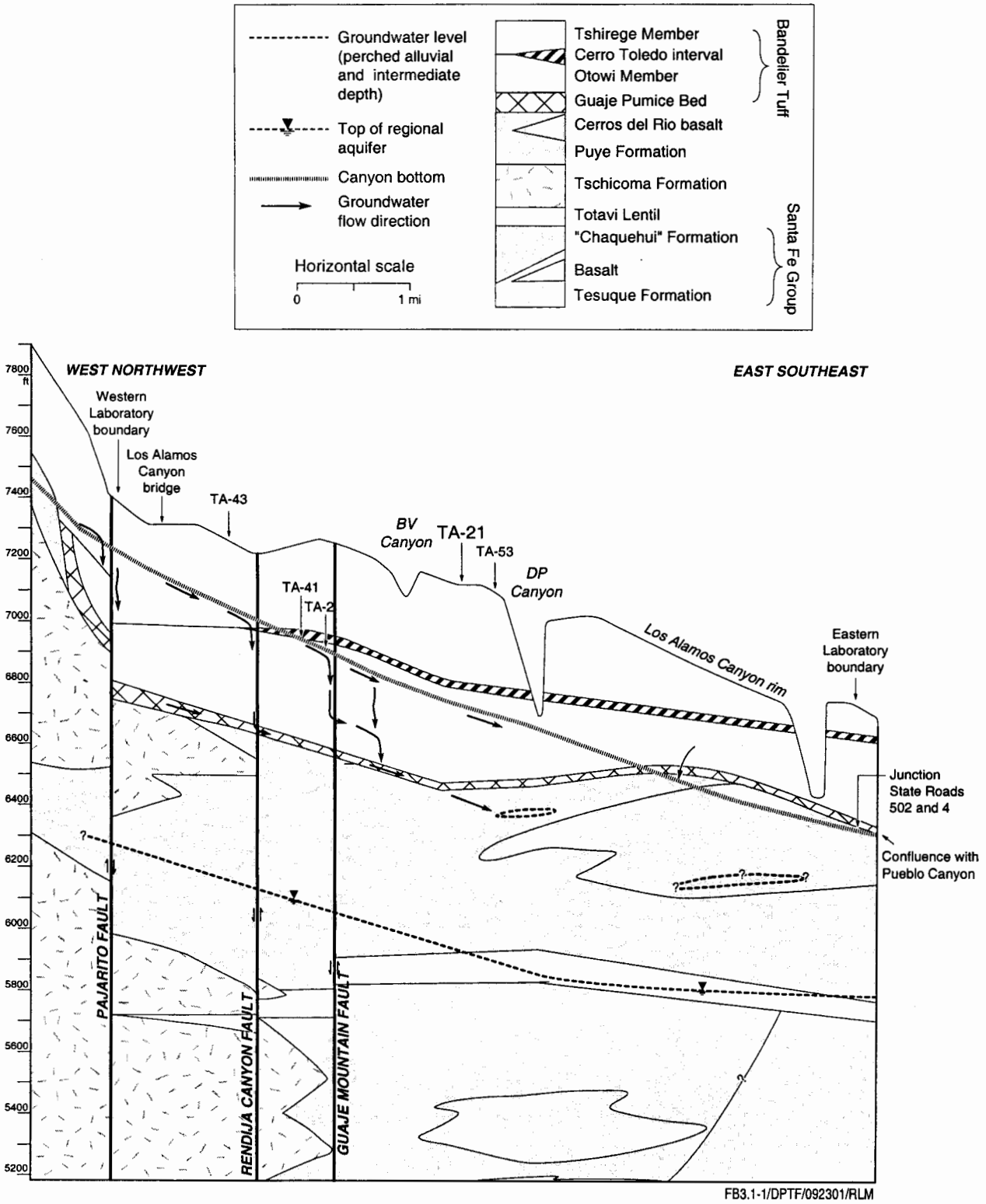

Figure B-3.1-1. Generalized stratigraphy beneath TA-21

Santa Fe Group

The Santa Fe Group consists of predominately fluvial, slightly consolidated sedimentary rocks that crop out in the lower reaches of Los Alamos Canyon, along White Rock Canyon, and in extensive areas east of the Rio Grande. The Santa Fe Group was divided into formations and members based on geologic mapping and faunal assemblages of late tertiary mammals (Galusha and Blick 1971, 21526). The stratigraphy was refined based on additional mapping and dates on interbedded volcanic ash layers, lava flows, and dikes (Manley 1979, 11714). Changes were proposed in stratigraphic nomenclature based on sedimentary facies pattern (Cavazza 1989, 21501). In the vicinity of the Pajarito Plateau, the Santa Fe Group consists of the Tesuque Formation and overlying Chamita Formation.

Tesuque Formation. The Tesuque Formation is a massive, thick unit consisting of arkosic sediments, derived primarily from Precambrian basement and Tertiary volcanic sources to the east and northeast. This unit is a light pink to buff siltstone and silty sandstone with a few lenses of pebbly conglomerate and clay. It is poorly to moderately consolidated and has an age range of about 7–21 million years (Manley 1979, 11714; Cavazza 1989, 21501). This formation exists in deep well boreholes under the Pajarito Plateau and is the primary aquifer for municipal and industrial water supply in Los Alamos County. Regional cross sections suggest that it does not exist beneath TA-21.

Chamita Formation. The Chamita Formation overlies and interfingers with the Tesuque Formation. It consists of arkosic siltstones, sandstones, pebbly conglomerate, and includes two prominent beds of white ash. Because of similarities of appearance and interfingering relations, the differentiation of Chamita from Tesuque deposits is difficult in borehole investigations, and it does not outcrop in the area of TA-21. Regional cross sections suggest that it does not exist beneath TA-21. The estimated age ranges between 12 million years and 4.5 million years (MacFadden 1977, 21569; Manley 1979, 11714).

William Purtymun described a trough of late Miocene coarse-grained sediments at the top of the Santa Fe Group that postdate the Chamita Formation (Purtymun 1995, 45344). Purtymun called these deposits the Chaquehui Formation, and they are important for the development of high-yield, low-drawdown municipal and industrial water supply wells for the Los Alamos area. The trough is 3–4 mi wide and extends 7–8 mi from the northeast to the southwest. It is filled with up to 1500 ft of gravels, cobbles, and boulders derived from highlands to the north and east. Regional cross sections suggest it exists beneath TA-21 and most of the Laboratory.

The Puye Formation

The Puye Formation is a fanglomerate deposit consisting of poorly sorted boulders, cobbles, and coarse sands made up of dacitic to latitic debris eroded from the contemporaneous Tschicoma Formation (Turbeville et al. 1989, 21587; Spell et al. 1990, 21586). In the lower reaches of Los Alamos Canyon and along the Rio Grande, the Puye Formation also contains basaltic debris derived from contemporaneous volcanism and erosion of the Cerros del Rio volcanic field. The Puye Formation contains numerous interbedded lapilli tuff beds and laharic deposits. Lacustrine deposits are volumetrically significant in the distal parts of the fan. Regional cross sections show this deposit under TA-21.

The lower part of the Puye Formation includes the Totavi lentil (Griggs 1964, 8795), a deposit of well-rounded cobbles and boulders of Precambrian quartzites and crystalline rocks. The Totavi lentil probably represents channel deposits of the ancestral Rio Grande, and it may interfinger with the fanglomerate facies of the Puye Formation along White Rock Canyon.

The Bandelier Tuff

The Bandelier Tuff under TA-21 consists of the Otowi and Tshirege Members, which are stratigraphically separated in many places by the tephras and volcaniclastic sediments of the Cerro Toledo interval. The Bandelier Tuff was emplaced during cataclysmic eruptions of the Valles Caldera between 1.61 and 1.22 million years ago. The tuff is composed of pumice, minor rock fragments, and crystals supported in an ashy matrix. It is a prominent cliff-forming unit because of its generally strong consolidation. Because the Bandelier Tuff is the most prominent rock type on the Pajarito Plateau, its detailed stratigraphy is of considerable importance and is discussed further below (see also Broxton and Reneau 1995, 49726).

Otowi Member. Griggs (1964, 8795), Smith and Bailey (1966, 21584), Bailey et al. (1969, 21498), and Smith et al. (1970, 9752) describe the nature and extent of the Otowi Member. It consists of moderately consolidated (indurated), porous, and nonwelded vitric tuff (ignimbrite) that forms gentle colluvium-covered slopes along the base of canyon walls. The Otowi ignimbrites contain light gray to orange pumice that is supported in a white to tan ash matrix (Broxton et al. 1995, 50119; Broxton et al. 1995, 50121; Goff 1995, 49682). The ash matrix consists of glass shards, broken pumice and crystal fragments, and fragments of perlite.

The Guaje Pumice Bed occurs at the base of the Otowi Member, making a significant and extensive marker horizon. The Guaje Pumice Bed (Bailey et al. 1969, 21498; Self et al. 1986, 21579) contains well-sorted pumice fragments whose mean size varies between 0.8 and 1.6 in. Its thickness averages approximately 28 ft below most of the plateau with local areas of thickening and thinning. Its distinctive white color and texture make it easily identifiable in borehole cuttings and core, and it is an important marker bed for the base of the Bandelier Tuff.

Tephras and Volcaniclastic Sediments of the Cerro Toledo Interval. The Cerro Toledo interval is an informal name given to a sequence of volcaniclastic sediments and tephras of mixed provenance that separates the Otowi and Tshirege Members of the Bandelier Tuff (Broxton et al. 1995, 50121; Goff 1995, 49682; Broxton and Reneau 1995, 49726). Although it is intercalated between the two members of the Bandelier Tuff, it is not considered part of that formation (Bailey et al. 1969, 21498). Outcrops of the Cerro Toledo interval generally occur wherever the top of the Otowi Member appears in Los Alamos Canyon and in canyons to the north; the interval outcrops in the TA-21 area. The unit contains primary volcanic deposits normally assigned to the Cerro Toledo rhyolite, as described by Smith et al. (1970, 9752), as well as intercalated and reworked volcaniclastic sediments not normally included in the Cerro Toledo rhyolite. The occurrence of the Cerro Toledo interval is widespread; however, its thickness is variable ranging between several feet and more than 100 ft.

The predominant rock types in the Cerro Toledo interval are rhyolitic tuffaceous sediments and tephra at TA-21 (Stix et al 1988, 49680; Heiken et al. 1986, 48638; Broxton et al. 1995, 50121; Goff 1995, 49682). The tuffaceous sediments are the reworked equivalents of Cerro Toledo rhyolite tephra that erupted from the Cerro Toledo and Rabbit Mountain rhyolite domes located in the Sierra de los Valles. At TA-21, oxidation and clay-rich horizons suggest that at least two periods of soil development occurred within the Cerro Toledo deposits. Because these soils are rich in clay, they may act as barriers to the movement of vadose zone groundwater. Some of the epiclastic tuffaceous deposits contain both crystal-poor and crystal-rich varieties of pumice. The ashy matrix of these deposits is commonly rich with crystals and contains subhedral sanadine and quartz. The mixed pumice and the crystal-rich nature of the matrix suggest that these reworked tuffs were derived from both the Cerro Toledo rhyolite and the underlying Otowi Member. The pumice falls tend to form porous and permeable horizons within the Cerro Toledo interval, and locally, they may provide important pathways for moisture transport in the vadose zone. A subordinate lithology within the Cerro Toledo interval includes clast-supported gravel, cobble, and boulder deposits made up of porphyritic dacite derived from the Tschicoma Formation that are interbedded with

the tuffaceous rocks, and in some deposits, dacitic materials are volumetrically more important than rhyolitic detritus (Broxton and Reneau 1996, 55429; Broxton et al. 1995, 50121; Goff 1995, 49682).

Tshirege Member. The Tshirege Member is the upper member of the Bandelier Tuff and is the most widely exposed bedrock unit of the Pajarito Plateau (Griggs 1964, 8795; Smith and Bailey 1966, 21584; Bailey et al. 1969, 21498; Smith et al. 1970, 9752). Emplacement of this unit occurred during eruptions of the Valles Caldera approximately 1.2 million years ago (Izett and Obradovich 1994, 48817; Spell et al. 1996, 55542). The Tshirege Member is a multiple-flow, ash-and-pumice sheet that forms the prominent cliffs in most of the canyons on the Pajarito Plateau and at TA-21. It is a compound cooling unit whose physical properties vary vertically and laterally. The consolidation in this member is largely due to compaction and welding at high temperatures after the tuff was emplaced. Its light brown, orange brown, purplish, and white cliffs have numerous, mostly vertical fractures (called joints) that average between several feet and several tens of feet. The Tshirege Member includes thin but distinctive layers of bedded, sand-sized particles called surge deposits that demark separate flow units within the tuff. The Tshirege Member is generally over 200 ft thick.

The Tshirege Member differs from the Otowi Member most notably in its generally greater degree of welding compaction. Time breaks between the successive emplacement of flow units caused the tuff to cool as several distinct cooling units. For this reason, the Tshirege Member is a compound cooling unit, consisting of at least four cooling subunits that display variable physical properties vertically and horizontally (Smith and Bailey 1966, 21584; Crowe et al. 1978, 5720; Broxton et al. 1995, 50121). These variations in physical properties reflect zonal patterns of varying degrees of welding and glass crystallization that accompanies welding (Smith 1960, 48819; Smith 1960, 48820). The welding and crystallization variabilities in the Tshirege Member produce recognizable vertical variations in its properties, such as density, porosity, hardness, composition, color, and surface weathering patterns. The subunits are mappable based on a combination of hydrologic properties and lithologic characteristics.

There is a certain amount of confusion because of the inconsistent use of subunit names for the Tshirege Member (Baltz et al. 1963, 8402; Weir and Purtymun 1962, 11890; Crowe et al. 1978, 5720; Vaniman and Wohletz 1990, 21589; Vaniman 1991, 9995; Goff 1995, 49682; Broxton et al. 1995, 50121). To avoid confusion, this discussion follows the nomenclature of Broxton and Reneau (1995, 49726), which has been adopted by the Environmental Restoration (ER) Project.

Broxton et al. (1995, 50121) provide extensive descriptions of the Tshirege Member cooling units. The follow paragraphs describe, in ascending order, subunits of the Tshirege Member.

The Tsankawi Pumice Bed forms the base of the Tshirege Member. Where exposed, it is commonly 20 in. to 30 in. thick. This pumice-fall deposit contains moderately well-sorted pumice lapilli (diameters reaching about 2.5 in.) in a crystal-rich matrix. Several thin ash beds are interbedded with the pumice-fall deposits.

Qbt 1g is the lowermost subunit of the thick ignimbrite sheet overlying the Tsankawi Pumice Bed. It consists of porous, nonwelded, and poorly sorted ash-flow tuffs. The *g* in this designation stands for glass because none of the glass in ash shards and pumices shows crystallization by devitrification or vapor-phase crystallization. This unit is poorly indurated but nonetheless forms steep cliffs because of a resistant bench near the top of the unit; the bench forms a harder, protective cap over the softer underlying tuffs. A thin (4-in. to 10-in.) and pumice-poor surge deposit commonly occurs at the base of this unit.

Qbt 1v forms alternating cliff-like and sloping outcrops composed of porous, nonwelded, crystallized tuffs. The *v* stands for vapor-phase crystallization, which together with in situ crystallization devitrification, has

converted much of the glass in shards and pumices into microcrystalline aggregates. The base of this unit is a thin, horizontal zone of preferential weathering that marks the abrupt transition from glassy tuffs below (in Unit 1g) to the crystallized tuffs above. This feature forms a widespread marker horizon (locally termed the vapor-phase notch) throughout the Pajarito Plateau, which is readily visible in canyon walls at TA-21. The lower part of Qbt 1v is orange brown, resistant to weathering, and has distinctive columnar (vertical) joints; hence, the term *colonnade tuff* is appropriate for its description. A distinctive white band of alternating cliff- and slope-forming tuffs overlies the colonnade tuff. The tuffs of Qbt 1v are commonly nonwelded (pumices and shards retain their initial equant shapes) and have an open, porous structure.

Qbt 2 forms a distinctive, medium brown, vertical cliff that stands out in marked contrast to the slope-forming, lighter-colored tuffs above and below at TA-21. It displays the greatest degree of welding in the Tshirege Member. A series of surge beds commonly mark its base. It is typically nonporous and has low permeability relative to the other units of the Tshirege Member. Vapor-phase crystallization of flattened shards and pumice is extensive in this unit.

Qbt 3 is a nonwelded to partially welded, vapor-phase altered tuff, which forms many of the upper cliffs in the TA-21 area. Its base consists of a purple gray, unconsolidated, porous, and crystal-rich nonwelded tuff that underlies a broad, gently sloping bench developed on top of Qbt 2. This basal, nonwelded portion forms relatively soft outcrops that weather into low rounded mounds with a white color, which contrast with the cliffs of partially welded tuff in the middle and upper portions of Qbt 3.

B-3.2 Geochemistry

Certain minerals present in Bandelier Tuff are important in terms of sorption of chemical species from water. Among them are alkali feldspar and a combination of three silica polymorphs (i.e., quartz, cristobalite, and tridymite). These minerals are found throughout the thickness of the Bandelier Tuff, and their absolute abundance throughout the tuff can have a significant effect on the retardation of several constituents in the TA-21 MDA contaminants. Less important in terms of transport are organic materials, which can react with certain constituents to form relatively mobile compounds. The organic content of geologic materials on the Pajarito Plateau mesas is typically less than 1 wt %; however, the fractures can contain higher organic concentrations than the tuff matrix.

In addition to the minerals found in the tuff matrix, clay minerals are found in abundance in fractures and interbeds in the Bandelier Tuff. The primary clay minerals are smectites, with lesser amounts of kaolinite. The clay minerals have high sorptive capacity for many TA-21 inventory constituents. Hematite (i.e., iron oxide) coatings are also found but with less frequency than clay coatings. Hematite has a very large surface area for binding certain metals and is therefore also important when considering transport in fractures.

B-3.3 Seismology and Fractures

There are three major faults that are considered significant with respect to seismic potential across the Laboratory complex: the Pajarito, the Guaje Mountain, and the Rendija Canyon faults. Figure B-3.3-1 shows the location of major faults in the Laboratory complex with respect to TA-21.

The Pajarito fault system has experienced Holocene movement and historic seismicity (Gardner and House 1987, 6682; Gardner et al. 1990, 48813). Characterized by northerly trending normal faults that intertwine along their traces, the Pajarito fault system shows dominantly down-to-the-east movement and produces a series of prominent fault scarps west of the Laboratory. The vertical throw on this fault system is over several hundred feet south and west of the Laboratory but decreases northward of Los Alamos Canyon where the fault system is less prominent.

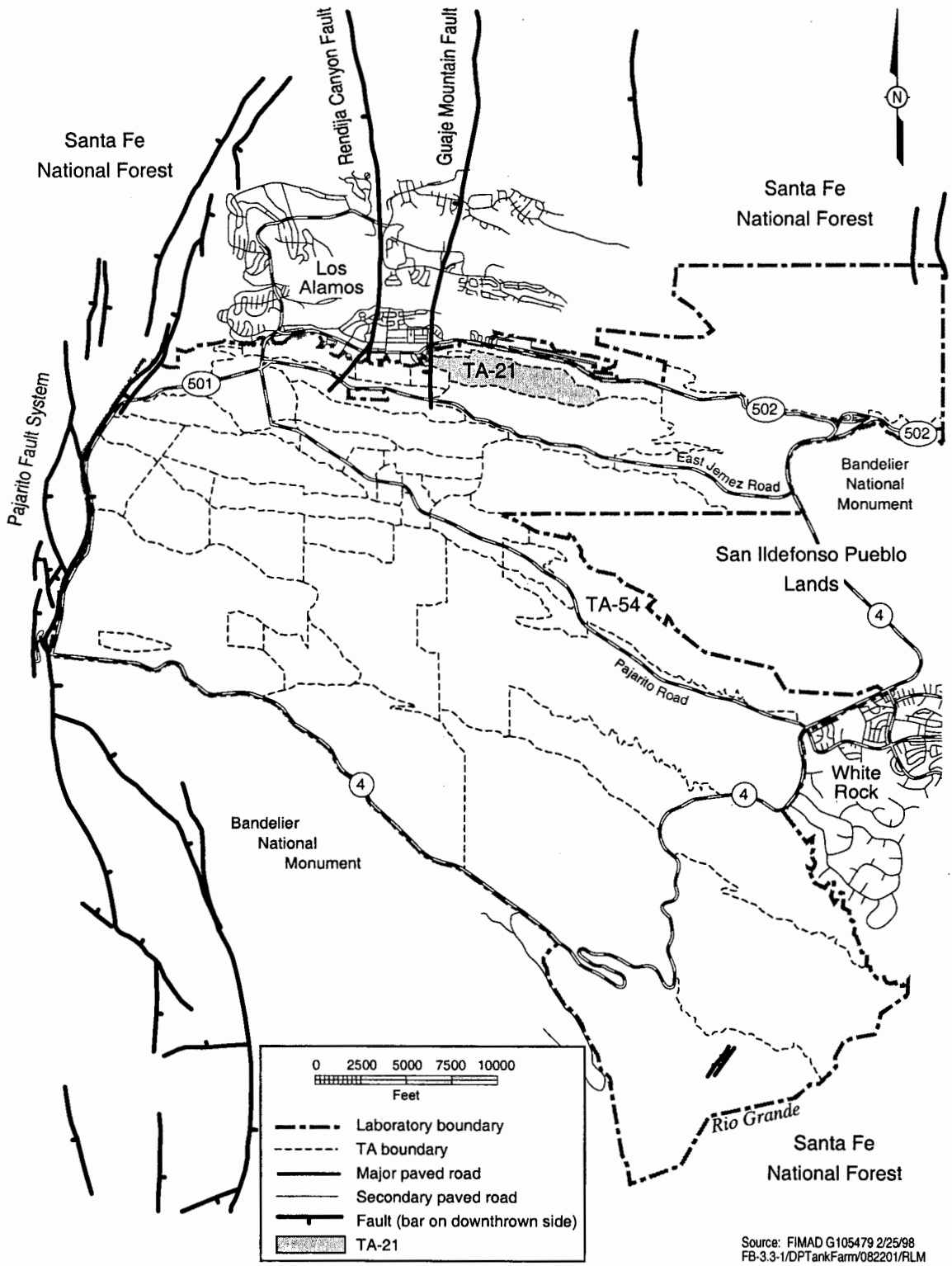

Figure B-3.3-1. Locations of major faults in Laboratory complex

The Rendija Canyon and Guaje Mountain faults are also normal faults, are downthrown to the west, and are considered secondary faults within the Pajarito fault system. The Rendija Canyon fault is located 3 mi east of the Pajarito fault, and the Guaje Mountain fault is located about 1.2 mi east of the Rendija Canyon fault. The Rendija Canyon fault crosses Pueblo Canyon near its confluence with Acid Canyon and Los Alamos Canyon near TA-41 but does not have clear surface expression south of Sandia Canyon. The Guaje Mountain fault parallels the Rendija Canyon fault (Figure B-3.3-2) and is projected to cross Los Alamos Canyon near TA-2, although there is no clear offset of the Tshirege Member south of North Mesa. North of the Laboratory, both of these faults have zones of gouge and breccia up to several meters wide and produce visible offset of stratigraphic horizons and recognizable scarps. However, these features are not apparent within most of the Laboratory and TA-21. Vaniman and Wohletz (1990, 21589) and Wohletz (1995, 54404) project these faults south of Los Alamos Canyon based on Tshirege Member rock fracture density variations, orientations, and size.

Geologic evidence reveals that the Pajarito fault has ruptured within the past 1.2 million years, perhaps as recently as 50,000 years ago. Field investigations show that the Rendija Canyon fault has ruptured within the past 10,000 years and that the Guaje Mountain fault has ruptured within the past 6000 years. The recurrence interval of seismic events along the Rendija Canyon and Guaje Mountain faults is estimated to be between 10,000 and 150,000 years.

A number of small-to-moderate earthquakes not associated with mapped faults (termed *background earthquakes*) have occurred in north-central New Mexico within the past 100 years. Since 1973, local seismicity has been monitored by the Los Alamos Seismograph Network. Measured events have not exceeded a magnitude of 4, which is relatively weak compared with earthquakes producing damage to buildings and structures. Details about a seismic hazard evaluation that was completed for the Laboratory can be found in a report by Wong et al. (1995, 70097, Sections 8 through 11).

Abundant fractures extend through the upper units of the Bandelier Tuff, including the Tshirege Unit-3 ignimbrite. The origin of the fractures has not been fully determined, but the most probable cause is brittle failure of the tuff caused by cooling contraction soon after initial emplacement (Vaniman 1991, 9995; Wohletz 1995, 54404). It is probable that past tectonic activity on the Pajarito fault system and the Guaje Mountain Fault Zone has also caused fracture development, reorientation, and extension (Wohletz 1995, 54404).

Fractures at TA-21

An extensive field survey of fractures in the Bandelier Tuff at TA-21 was conducted during 1992. Wohletz (1995, 54404) measured strike, dip, and aperture in 1662 fractures in Unit 2 of the Tshirege Member of the Bandelier Tuff (Qbt 2) exposed on cliffs below TA-21 in Los Alamos Canyon. The fracture traverse was 7312 ft long, extending east from a starting point 1200 ft east of the access gate to TA-2 and roughly due south of the eastern end of the DP Tank Farm site. Fractures were plotted on photomosaic maps of the canyon wall and their horizontal position calculated relative to the starting point of the fracture traverse. Linear fracture densities for 10-ft and 100-ft intervals, cumulative fracture width (sum of all fracture apertures within a given interval) for 10-ft and 100-ft intervals, and the relative fracture dips from vertical were calculated from the field data.

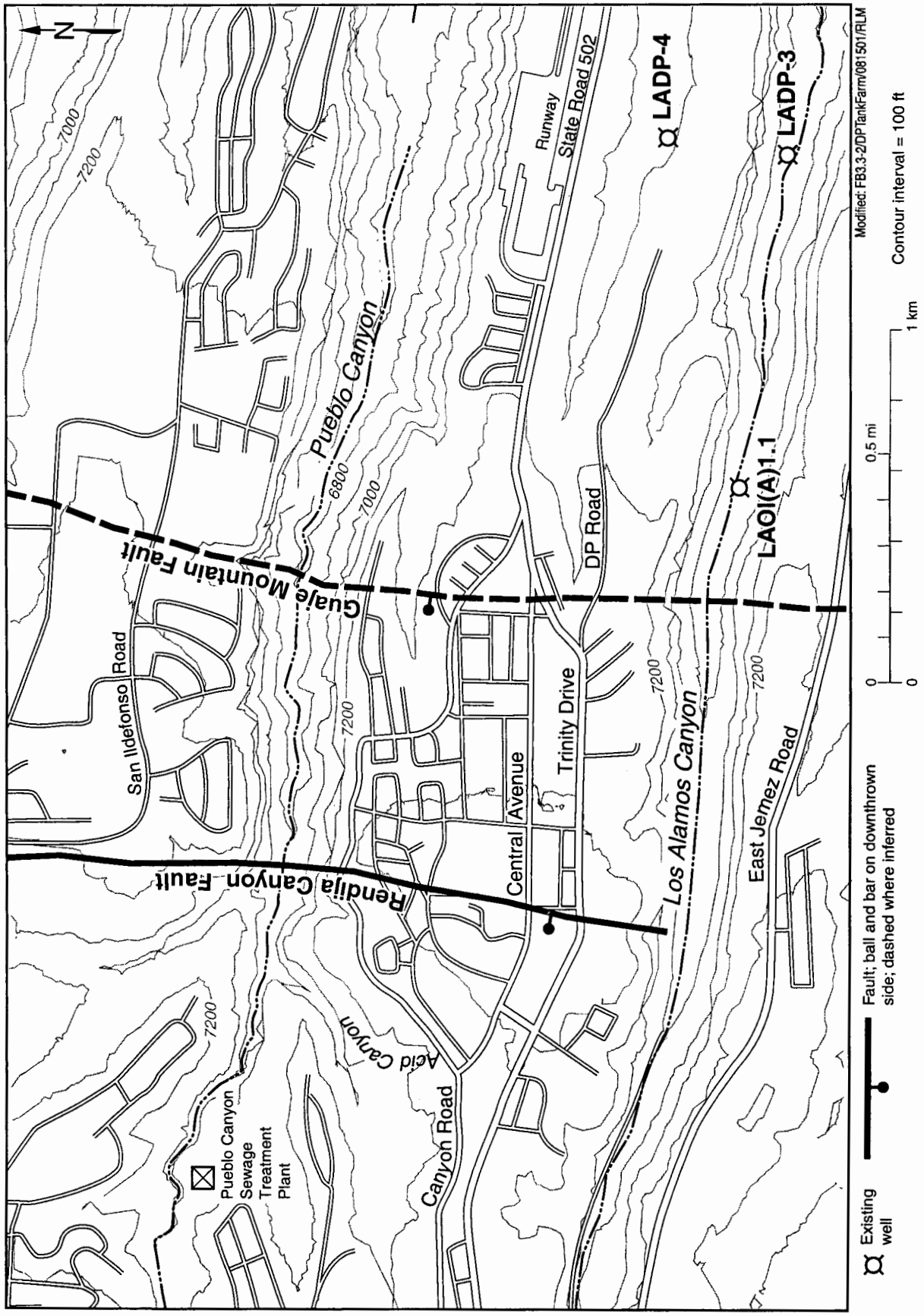

Figure B-3.3-2 Location of Guaje Mountain Fault Zone at DP Tank Farm

The average background fracture spacing at TA-21 is about 5 ft. A 1500-ft-wide zone starting near MDA V and extending to the east has a fracture spacing of 1–2 ft. The spacing decreases abruptly near MDA V and then increases gradually, reaching the 5-ft background value about 1500 ft to the east. Wohletz suggested that this fracture zone represents a fabric of the Pajarito Fault Zone. Measured strikes show that the fractures in this zone make up two conjugate sets, one trending northwest and the other northeast. The northeast-trending set (988 fractures) has a mean strike of N43E, and the northwest-trending set (674 fractures) has a mean strike of N33W. Fracture dips range between nearly horizontal and vertical, although most are steeply dipping. The majority of fractures in both the northeast- and northwest-trending sets dip steeply toward the north, with mean dips of 73° and 74° from the horizontal, respectively.

Fracture apertures range between 0 cm and 15 cm. The northeast and northwest sets of fractures have mean apertures of 0.82 cm and 0.93 cm, respectively. These mean apertures increase to 1.1 cm and 1.5 cm within the fracture zone. The background cumulative fracture width is about 0.5 m of fracture opening per 100-ft interval. This increases to about 1.4 m per 100-ft interval within the fracture zone. Fracture apertures decreased both above and below Unit 2, although no data were recorded for those units. Fracture fillings were described as sparse to absent in Unit 2 but prominent in Unit 3 (Qbt 3).

B-3.4 Soils

Soils on the Pajarito Plateau were initially mapped and described by Nyhan et al. (1978, 5702). The Nyhan study included only Laboratory-controlled lands and certain United States Forest Service lands within Los Alamos County.

Soils were formed in a semiarid climate and were derived from chemical, biological, and physical weathering of local bedrock units, fallout pumice deposits, eolian deposits, and sediments derived from these geological materials (Nyhan et al. 1978, 5702). A large variety of soils have developed on the Pajarito Plateau as the result of interactions of the underlying bedrock, slope, and climate. The mineral components of the soils are in large part derived from the Bandelier Tuff, but dacitic lavas of the Tschicoma Formation, basalts of the Cerros del Rio volcanic field, and sedimentary rocks of the Puye Formation are locally important. Alluvium derived from the Pajarito Plateau and from the east side of the Jemez Mountains contributes to soils in the canyons and also to those on some of the mesa tops.

The soils on the slopes between the mesa tops and canyon floors have been mapped as mostly steep rock outcrops consisting of approximately 90% bedrock outcrop and patches of shallow, undeveloped colluvial soils. South-facing canyon walls are steep and usually have little or no soil material or vegetation; in contrast, the north-facing walls generally have areas of very shallow dark-colored soils and are more heavily vegetated. The canyon floors generally contain poorly developed, deep, well-drained soils (Nyhan et al. 1978, 5702).

Soils in the vicinity of TA-21 are typical of those across the Pajarito Plateau and are generally poorly developed, derived from Bandelier Tuff bedrock, and formed in a semiarid climate. Soils on the TA-21 mesa top are mainly shallow, well-drained sandy loams of the Hackroy series. As described by Nyhan et al. (1978, 5702), "The surface layer of the Hackroy soils is a brown sand loam, or loam, about 10-cm thick. The subsoil is a reddish brown clay, gravelly clay, or clay loam, about 20-cm thick. The depth to bedrock and the effective rooting depth area 20–50 cm." Hackroy soils are classified as Alfisols, in part reflecting the clayey subsurface horizons. Intermixed with the Hackroy soils on the mesa tops are small areas of deeper loams of the Nyjack series and patches of bedrock. The Nyjack soils are texturally similar to Hackroy soils and are distinguished by thicknesses of 7.9 in. (50 cm) to 40.2 in. (102 cm) and by the common presence of pumice fragments in the lower soil (Nyhan et al. 1978, 5702). Areas of exposed rock are predominant toward the east end of the mesa and TA-21 development.

B-4.0 HYDROLOGY

The hydrogeology of the Pajarito Plateau is generally separable in terms of mesas and canyons forming the plateau. Mesas are generally devoid of water, both on the surface and within the rock forming the mesa. Canyons range from wet to relatively dry; the wettest canyons contain continuous streams and contain perennial groundwater in the canyon bottom alluvium. Dry canyons have only occasional streamflow and may lack alluvial groundwater. Intermediate perched groundwater has been found at certain locations on the plateau at depths ranging between 100 ft and 400 ft (30 m and 122 m). The regional aquifer is found at depths of about 600–1000 ft (180–360 m).

B-4.1 Hydrological Conceptual Model

The hydrogeologic model (Figure B-4.1-1) shows that, under natural conditions, relatively small volumes of water move beneath mesa tops; this is because of low rainfall, high evaporation, and efficient water use by vegetation. Atmospheric evaporation may extend deeper into mesas, further inhibiting downward flow.

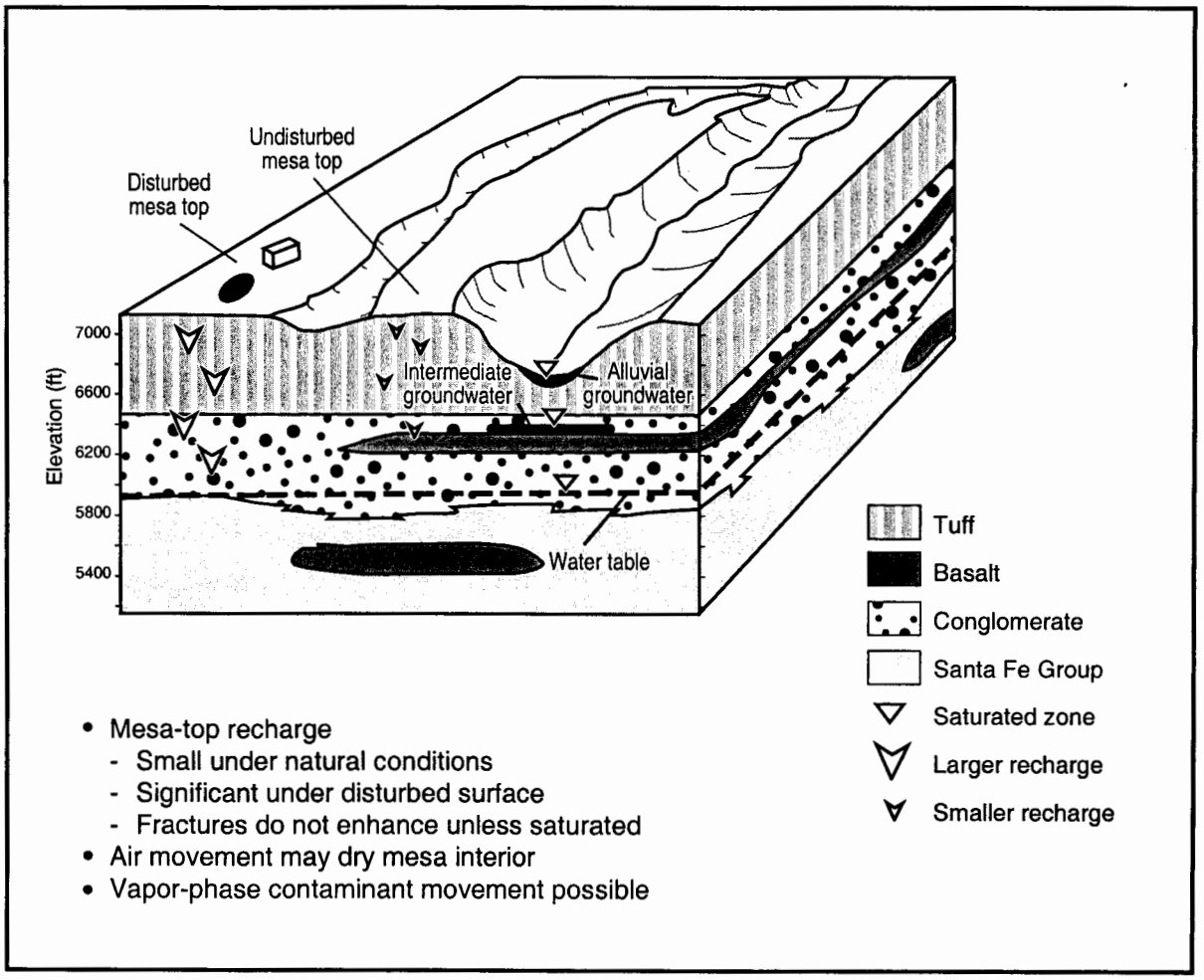

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Figure B-4.1-1. Hydrogeologic conceptual model for mesas

The amount of mesa-top recharge along the western portion of the Laboratory is uncertain. Higher rainfall, increased vegetative cover, and increased welding and jointing of the tuff might lead to different recharge rates than those observed in better-studied portions of the Laboratory. If surface conditions are disturbed, mesa-top recharge can be locally significant. Such change occurs when the soil is compacted, when the vegetation is disturbed, or when more water is artificially added to the hydrologic system by features such as blacktop, lagoons, or effluent disposal. Fractures within mesas do not enhance the movement of dissolved contaminants unless saturated conditions develop. Contaminants in vapor form readily migrate through mesas. Vapors denser than air will sink.

B-4.2 Surface Water

The Rio Grande is the primary river in north-central New Mexico. All surface water drainage and groundwater discharge from the plateau ultimately arrives at the Rio Grande (Figure B-4.2-1). Most Los Alamos surface water occurs as ephemeral, intermittent, or interrupted (perennial, ephemeral, and intermittent stretches) streams in canyons cut into the Pajarito Plateau. (Ephemeral streams flow in response to precipitation; intermittent streams flow in response to the availability of snowmelt or groundwater discharge; and perennial streams flow at all times except during extreme drought.) Springs on the flanks of the Jemez Mountains (west of the Laboratory's western boundary) supply flow to the upper reaches of Cañon de Valle and to Guaje, Los Alamos, Pajarito, and Water Canyons (Purtymun 1975, 11787; Stoker 1993, 56021). These springs discharge water perched in the Bandelier Tuff and Tschicoma Formation at rates from 2 gpm to 135 gpm (Abeele et al. 1981, 6273). The volume of flow from the springs maintains natural perennial reaches of varying lengths in each of the canyons.

Perennial flow occurs in the upper reaches (west of the Los Alamos Reservoir) of Los Alamos Canyon and in the lower reaches east of the confluence with Pueblo Canyon. Typically, the overflow of water from the reservoir during spring snowmelt results in nearly continuous surface water flow between the western Laboratory boundary and TA-2 for several weeks to several months each year (LANL 1995, 50290); the flow does not reach TA-21. For most of the year, the only surface flow in Los Alamos Canyon is in the lower part of the canyon because of discharge from the Los Alamos County Sewage Treatment Plant and discharge from Basalt and Los Alamos Springs east of the Laboratory boundary (LANL 1995, 50290) (Figure B-4.2-2). Surface water in Los Alamos Canyon rarely flows across the length of the Laboratory. Most often surface waters are depleted by infiltration into canyon alluvium creating saturated zones of seasonally variable extent (LANL 1995, 50290).

Surface flow in DP Canyon, a tributary to Los Alamos Canyon, is generated by rainfall and snowmelt events. DP Spring located in DP Canyon (Figure B-4.2-2), discharges continuously except for a dry period during the winter and spring of 1996.

At the Laboratory, surface water runoff and sediment transport are among the potential migration pathways by which contaminants might be transported to off-site receptors. Surface water may also access subsurface contaminants exposed by soil erosion. Soil erosion is dependent on several factors, including soil properties, the amount of vegetative cover, the slope of the contaminated area, exposure, the intensity and frequency of precipitation, and seismic activity.

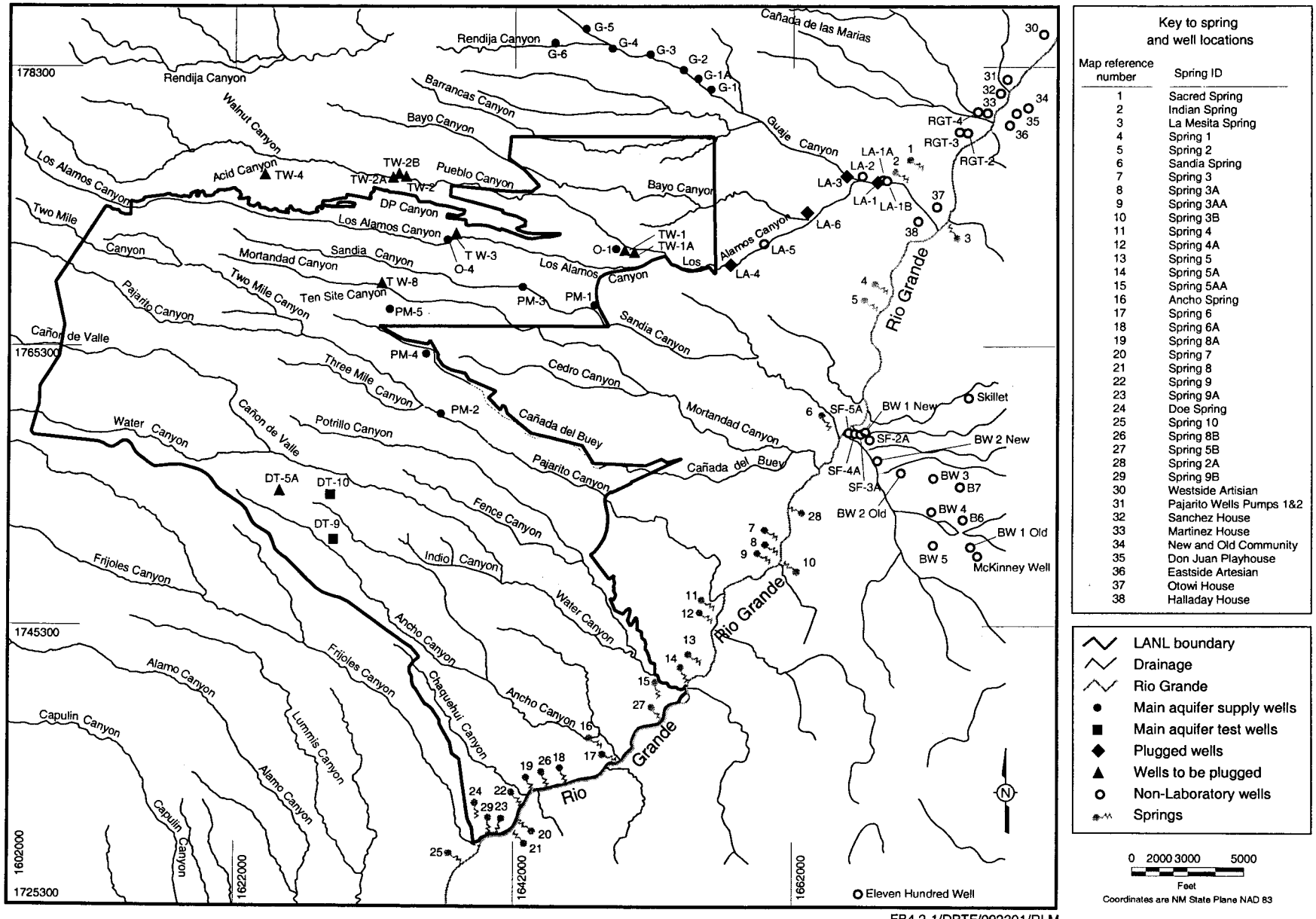

Figure B-4.2-1. Surface water drainage to Rio Grande and well locations

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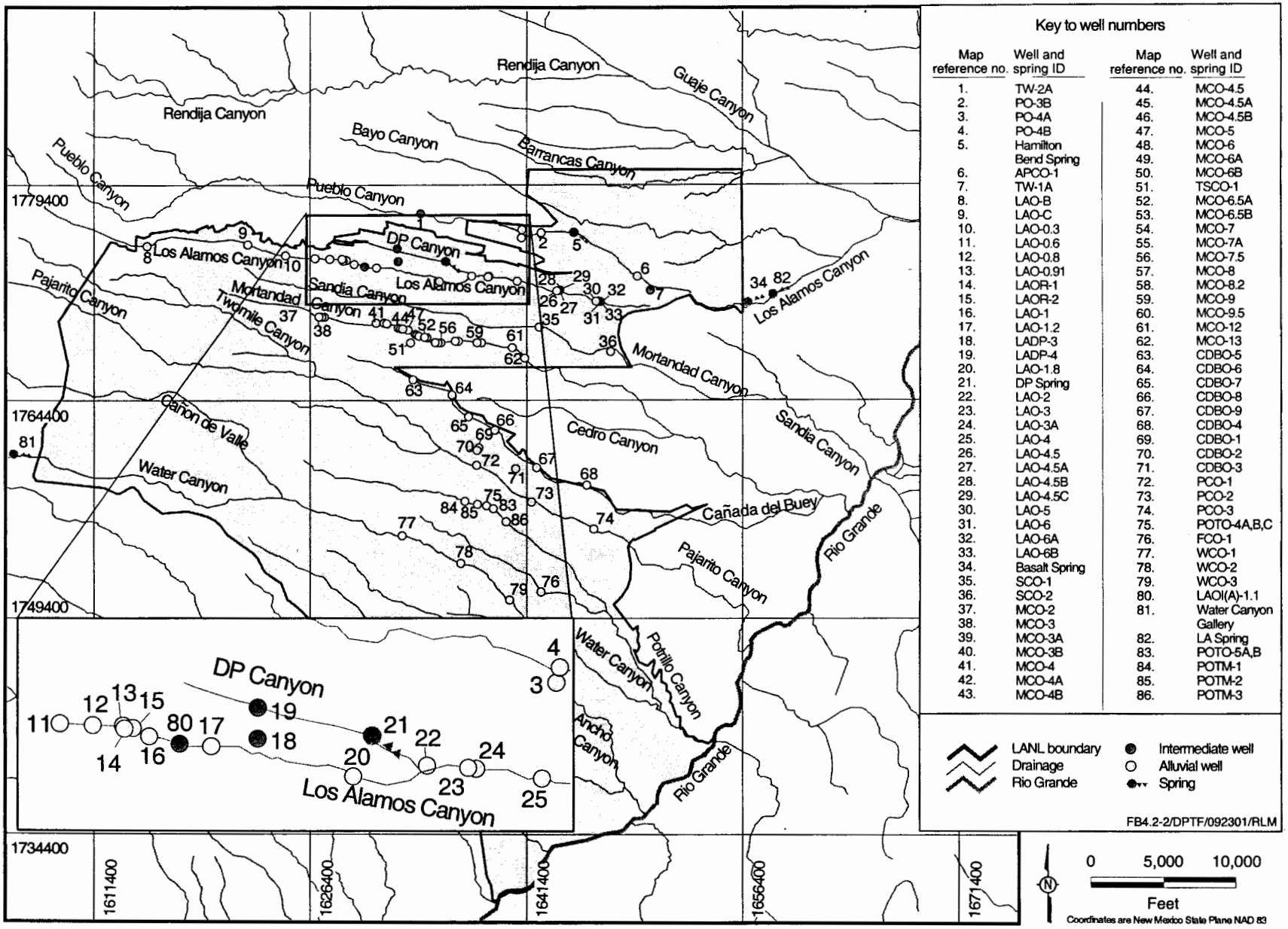

Figure B-4.2-2. Locations of wells and springs near TA-21

The Laboratory's ER Project has developed standard operating procedure (SOP) 2.01 to assess sediment transport and erosion concerns at specific potential release sites (PRSs). SOP 2.01 provides a basis for prioritizing and scheduling actions to control erosion of potentially contaminated soils at specific PRSs. The procedure is a two-part evaluation. Part A is a compilation of existing PRS analytical data, site maps, and knowledge of-process information. Part B is an assessment of the erosion/sediment transport potential at the PRS. Erosion potential is numerically rated from 1 to 100 using a matrix system. PRSs that score below 40–60 have a low erosion potential. Part A of this assessment is initiated and completed by the Laboratory's ER Project; Part B is completed by the Laboratory's Water Quality and Hydrology Group (ESH-18). A Surface Water Assessment Team, which includes representatives from the ER Project, ESH-18, the Laboratory's Facility Management group (FSS-7), and the DOE Oversight Bureau, evaluates each completed assessment. If necessary, a best management practice or other action is implemented based on the results of the assessment. The SOP 2.01 assessments for Area of Concern (AOC) C-21-028 and PRS 21-027(d) are attached at the end of this appendix. The score for the AOC is 15.3 and the PRS is 45.0.

B-4.3 Groundwater

In the Los Alamos area, groundwater occurs as (1) water in shallow alluvium in some of the larger canyons, (2) intermediate perched groundwater (a perched groundwater body lies above a less permeable layer and is separated from the underlying aquifer by an unsaturated zone), and (3) the regional aquifer of the Los Alamos area. Numerous wells have been installed over the past several decades at the Laboratory and in the surrounding area to investigate the presence of groundwater in these zones and to monitor groundwater quality. The locations of the existing wells around TA-21 are shown in Figure B-4.2-2.

The Laboratory has formulated a comprehensive groundwater protection plan (LANL 1995, 50124) for an enhanced set of characterization and monitoring activities. The hydrogeologic work plan (LANL 1998, 59599) details the implementation of extensive groundwater characterization across the Pajarito Plateau within an area potentially affected by past and present Laboratory operations, such as those at TA-21.

B-4.3.1 Alluvial Waters

Intermittent and ephemeral streamflows in the canyons of the Pajarito Plateau have deposited alluvium that can be as much as 100 ft thick. The alluvium in canyons that head on the Jemez Mountains is generally composed of sands, gravels, pebbles, cobbles, and boulders derived from the Tschicoma Formation and Bandelier Tuff. The alluvium in canyons that head on the plateau is comparatively more fine grained, consisting of clays, silts, sands, and gravels derived from the Bandelier Tuff. Saturated hydraulic conductivity of the alluvium typically ranges between 10^{-2} cm/s for a sand and 10^{-4} cm/s for a silty sand (Abeele et al. 1981, 6273).

In contrast to the underlying volcanic tuff and sediments, alluvium is quite permeable. Ephemeral runoff in some canyons infiltrates the alluvium until downward movement is impeded by the less permeable tuff and sediments and results in the buildup of a shallow alluvial groundwater body. Depletion by evapotranspiration and movement into the underlying rocks limit the horizontal and vertical extent of the alluvial water (Purtymun et al. 1977, 11846). The limited saturated thickness and extent of the alluvial groundwater preclude its use as a viable source of water for municipal and industrial needs. Lateral flow of the alluvial perched groundwaters is in an easterly, down-canyon direction.

Two saturated zones are known to exist in the alluvium of Los Alamos Canyon. The first is in the upper part of Los Alamos Canyon and extends eastward from the Los Alamos Reservoir to the vicinity of

observation well LAO-4.5 west of State Road 4 (Figure B-4.2-2). The second is in the lower part of Los Alamos Canyon and extends from Basalt Spring to the Rio Grande (Figure B-4.2-2). In middle and upper Los Alamos Canyon, the saturated thickness in the alluvium varies seasonally from a few feet in the winter months to 25 ft in the spring and summer months when recharge is the greatest (Environmental Protection Group 1994, 45363).

Alluvial groundwater has been found in DP Canyon at wells LAUZ-1 and LAUZ-2 installed for the ER investigations at TA-21. The wells were drilled to a depth of 15 ft. Alluvial water was encountered in both wells at approximately 4.5 ft below the surface. The saturated zone at the time was approximately 3.5 ft thick.

B-4.3.2 Intermediate Perched Waters

Two intermediate perched zones, one beneath the other, have been encountered in Los Alamos Canyon between TA-2 and the confluence with DP Canyon. The upper intermediate perched zone occurs within the Guaje Pumice Bed. This zone was encountered in boreholes LADP-3 (at 325 ft) and LAOI(A)-1.1 (at 295 ft) (Broxton and Eller 1995, 58207; Longmire et al. 1996, 54168). The saturated thickness of this zone decreases from west to east, ranging between 22 ft at LAOI(A)-1.1 and 5 ft at LADP-3.

A deeper intermediate perched zone was encountered in LAOI(A)-1.1 in the Puye Formation at about 317 ft. Possibly the same zone was also observed at a depth of 253 ft in the Puye Formation during development of water supply well O-4 (Stoker et al. 1992, 12017) (Figure B-4.2-1). However, no intermediate perched zone was found at LADP-3 in the approximately 19 ft of the Puye Formation that was penetrated. Another hole was drilled from the mesa top at MDA V in TA-21 to investigate the lateral extent of the Guaje Pumice intermediate perched zone under DP Mesa; the location of this well is approximately midway between LAOI(A)-1.1 and LADP-3. There was no perched water in the hole.

B-4.3.3 Regional Aquifer

The regional aquifer of the Los Alamos area is the only aquifer capable of large-scale municipal water supply (Purtymun 1984, 6513). The surface of the regional aquifer rises westward from the Rio Grande within the Santa Fe Group into the lower part of the Puye Formation beneath the central and western part of the Pajarito Plateau. The depths to groundwater below the mesa tops range between about 1000 ft along the western margin of the plateau and about 600 ft at the eastern margin. Figure B-4.3-1 shows the location of wells and generalized water-level contours on top of the regional aquifer. The regional aquifer is typically separated from the alluvial groundwater and intermediate perched zone groundwater by 350–620 ft of tuff, basalt, and sediments (Environmental Protection Group 1993, 23249).

The regional aquifer beneath TA-21 is at an elevation of approximately 5900 ft or approximately 1100 ft below the surface and is located chiefly within sediments of the Puye and Tesuque Formations (Broxton and Eller 1995, 58207). Thus, for mesa-top sites at TA-21, more than 1100 ft of tuff and volcaniclastic sediments separate the surface from the regional aquifer.

B-4.4 Vadose Zone

The region beneath the mesa surface and above the regional aquifer is referred to as the vadose zone. The source of moisture for the vadose zone is precipitation, but much of it runs off, evaporates, or is absorbed by plants. The subsurface vertical movement of the remaining water (often referred to as recharge) is influenced by properties and conditions of the vadose zone.

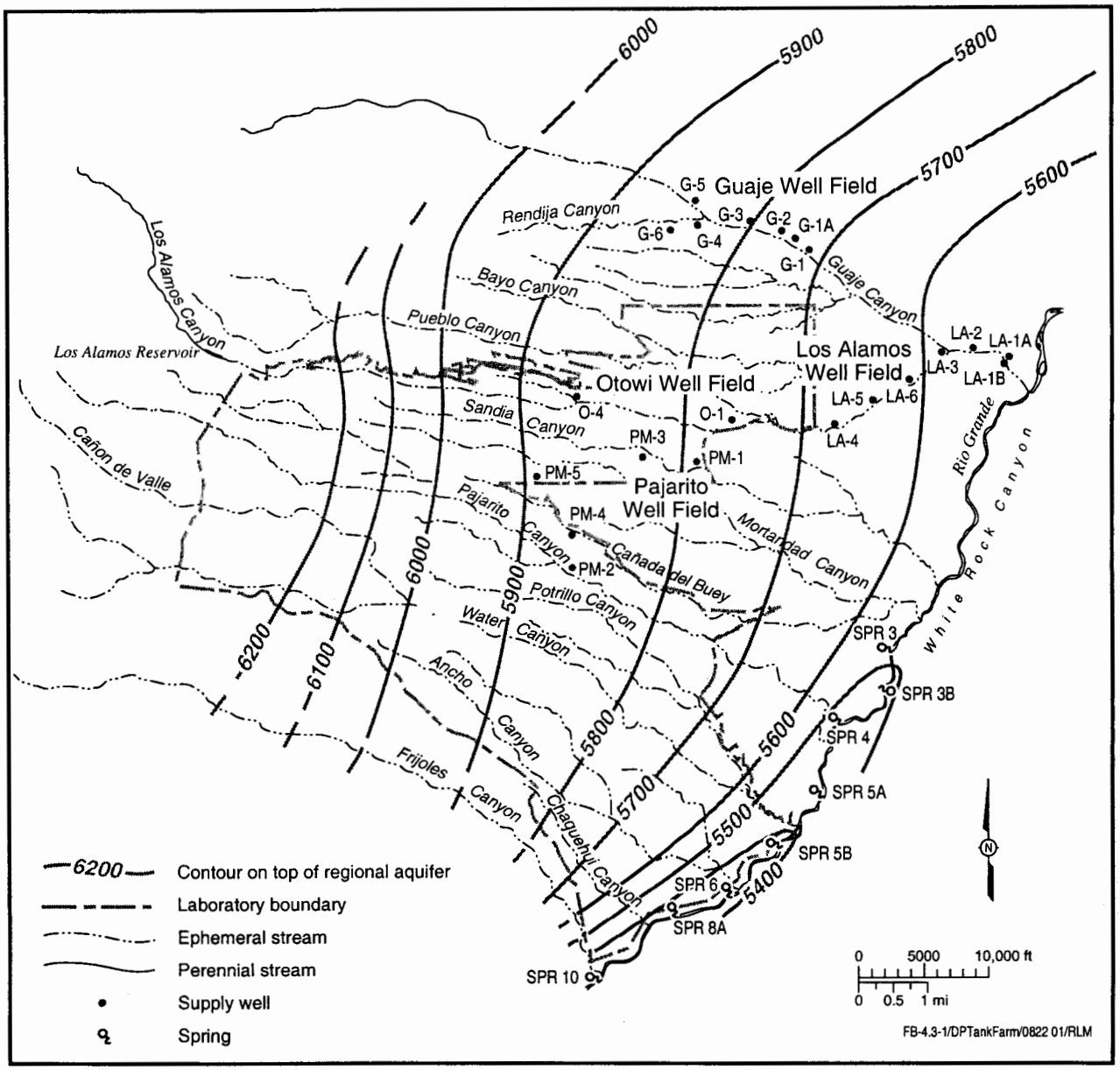

Figure B-4.3-1. Locations of wells and generalized water-level contours on top of the regional aquifer (modified from Purtymun 1984, 6513)

Two properties of rock that influence fluid flow are the degree of welding and devitrification; both are effects of prolonged presence of residual gases and high temperatures when the rock was deposited. Because different units of the Bandelier Tuff were deposited at different temperatures and because individual units were laid out in variable thicknesses over different landscapes, cooling was not uniform. Consequently, welding varies spatially, both between and within separate depositional layers. Welded tuffs tend to be more fractured than nonwelded tuffs. While water moves slowly through the unsaturated tuff matrix, it can move relatively rapidly through fractures if nearly saturated conditions exist (Hollis et al. 1997, 63131). Modeling studies indicate that when fractures disappear at contacts between stratigraphic subunits, when fracture fills are encountered, or when coatings are disturbed or broken, moisture is

absorbed into the matrix. Thus, fractures may provide conduits for fluid flow but only in discrete, disconnected intervals of the subsurface. Because they are open to the passage of both air and water, fractures can have both wetting and drying effects, depending on the relative abundance of water in the fractures and matrix. Devitrification is vapor-phase crystallization. The variability of welding and crystallization in the Tshirege Member produces recognizable vertical variations in its properties such as density, porosity, hardness, composition, color, and surface weathering patterns.

As a rule, the Bandelier Tuff is very dry and does not readily transmit moisture. Most of the pore spaces in the tuff are of capillary size and have a strong tendency to hold water against gravity by surface-tension forces. Moisture content is generally more variable near the top of the mesa than in the central portions because of variations in temperature, humidity, and evapotranspiration. Vegetation is very effective at removing moisture near the surface. During the summer rainy season when rainfall is highest, near-surface moisture content is variable because of higher rates of evaporation and of transpiration by vegetation, which flourishes during this time.

The various units of the Bandelier Tuff tend to have relatively high porosities. Porosity ranges between 30% and 60% by volume, generally decreasing for more highly welded tuff. Permeability varies for each cooling unit of the Bandelier Tuff. Values for the Tshirege Member of the Bandelier Tuff at TA-54, determined using in situ vacuum and water injection tests and laboratory analyses of cores range between 0.1 and 0.6 darcies. No specific TA-21 data are available. Moisture content of native tuff is low, generally less than 5% by volume throughout the profile. Previous studies at TA-21 disposal areas where liquid has been added have shown that moisture content changes little below 40 ft. The specific retention of the tuff ranges between 18% and 38% by volume, indicating a considerable field capacity for holding moisture (Purtymun and Stoker 1990, 7508; Kearl et al. 1986, 15368).

Hydraulic conductivity is dependent on the porous medium and the fluid. Saturated tuff has a hydraulic conductivity in the range of 0.02 cm/hr for welded tuff to 1.12 cm/hr for nonwelded tuff. The hydraulic conductivity of unsaturated tuff varies with moisture content and has values two to five orders of magnitude lower than saturated tuff (Purtymun and Stoker 1990, 7508).

The moisture characteristic curve is important in unsaturated porous media in relating water content to suction, tension, or negative pressure head. However, tests have only been done on crushed Bandelier Tuff, and the applicability of these results to intact tuff remains in question.

B-5.0 ECOLOGICAL RESOURCES

Biological resource field surveys were conducted within Operable Unit 1106 (TA-21) and Operable Unit 1078 (TA-1) for compliance with the Federal Endangered Species Act of 1973; New Mexico Wildlife Conservation Act; Executive Order 11990, "Protection of Wetlands"; Executive Order 11988, "Floodplain Management"; CFR Title 10 Part 1022, "Compliance with Floodplain/Wetlands Environmental Review Requirements"; and DOE Order 5400.1, "General Environmental Protection Program" (Bennett 1996, 58236).

The Pajarito Plateau is a biologically diverse area. This diversity is due partly to the dramatic 5000-ft elevation gradient from the Rio Grande to the Jemez Mountains (a distance of 12 mi) and partly to the many steep canyons that dissect the area. The pronounced east-west canyon and mesa orientations, with concomitant differences in soils, moisture, and solar radiation, produce an interlocking finger effect among ecological life zones, resulting in many transitional overlaps of plant and animal communities within small areas.

Flora

The elevation of TA-21 ranges between 6680 and 7220 ft above mean sea level. The topography is varied, ranging from steep canyon walls or cliffs to gently sloping mesa tops. Mesa tops are characterized by development and disturbance. Canyon areas are relatively free from development and disturbance.

TA-21 is primarily a mesa-top site in a developed, industrialized area. The preurban natural overstory of the mesa was a ponderosa pine community; no overstory now exists at the site. The understory currently present includes grasses and forbs commonly found in disturbed soils: western wheat grass, Canada bluegrass, bottlebrush squirrel tail, cheat grass, sand dropseed, summer cypress, prickly lettuce, and horseweed; it is similar to the understory that existed before the site became industrialized.

The overstory of Los Alamos Canyon is described as a ponderosa pine forest with a variety of shrubs. The understory for Los Alamos Canyon is characterized by numerous grasses such as mountain muhly, brome grass, bluegrass and blue grama, and a variety of composites and other forbs.

The overstory of DP Canyon is a ponderosa pine forest with a dominant shrub species of Gambel's oak and codominance of mountain mahogany. The understory of DP Canyon is characterized by numerous grasses (brome grass, mountain muhly, and bluegrass), upland sedges, and a variety of forbs.

Fauna

The mesa top provides limited habitat for biota and does not contain sensitive habitats. Threatened or endangered species are not present on the mesa top or in Los Alamos and DP Canyons (Bennett 1996, 58236).

Floodplains and Wetlands

Los Alamos Canyon has stretches of riverine and palustrine wetlands. There is a palustrine wetland just south of the west end of MDA B in Los Alamos Canyon and there is a riverine wetland just south of MDA V in Los Alamos Canyon. Floodplains also exist within Los Alamos Canyon.

B-6.0 CULTURAL RESOURCES

Pursuant to the National Historic Preservation Act of 1966 (amended), a cultural resource survey was conducted at Operable Unit 1106 during the summer of 1991 (McGehee et al. 1992, 28310). There are no archeological sites in the TA-21 area that are eligible for inclusion in the National Register of Historic Places.

B-7.0 REFERENCES

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Copies of the reference library are maintained at the NMED Hazardous Waste Bureau; the DOE Los Alamos Area Office; United States EPA, Region VI; and the ER Project Material Disposal Areas Focus

Area. This library is a living collection of documents that was developed to ensure that the administrative authority has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the administrative authority are not included.

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Appendix C

Results of Quality Assurance/Quality Control Activities for Diesel-Related Organic Chemical Analyses

APPENDIX C RESULTS OF QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES FOR DIESEL-RELATED ORGANIC CHEMICAL ANALYSES

C-1.0 QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES

This appendix consists of an assessment of the quality and usability of diesel-related analytical results for soil samples collected during 1992 and 1999 at Potential Release Site (PRS) 21-027(d)-99. In this appendix, soil refers to solid samples and may include sediment, soil, and tuff samples.

The qualifiers presented in this appendix are the product of either an Environmental Restoration (ER) Project routine validation or focused validation. Total petroleum hydrocarbon (TPH) (diesel range) results were validated using Environmental Protection Agency (EPA) guidelines (EPA 1999, 66649). Table C-1.0-1 presents the analytical suites for diesel-related organic analyses for all samples collected during 1992 and 1999.

Table C-1.0-1
Analytical Suites for Diesel-Related Organic Chemical Analyses

Chemical Category	Analyte List	Analytical Method
Organic chemicals	TPH (diesel range)	EPA Method 8015
	VOCs[a]	EPA Method 8260
	SVOCs[b]	EPA Method 8270

[a] VOCs = volatile organic compounds.
[b] SVOCs = semivolatile organic compounds.

Quality assurance (QA), quality control (QC), and data validation procedures were implemented in accordance with the requirements of Laboratory guidance (LANL 1996, 54609) and the ER Project analytical services statement of work (SOW) for contract laboratories (LANL 1995, 49738). The results of the QA/QC activities were used to estimate accuracy, bias, and precision of the analytical measurements. QC samples, e.g., method blanks and laboratory control samples (LCSs), were used to assess accuracy and bias. Internal standards, external standards, surrogates, and tracers were also used to assess accuracy. The type and frequency of QC analyses are described in the ER Project analytical services SOW (LANL 1995, 49738). Other QC factors, such as sample preservation and holding times, were also assessed. The requirements for sample preservation and holding times are given in LANL-ER-SOP-1.02, Rev. 0, "Sample Containers and Preservation." The focused validation performed followed the same procedure discussed above and included a more detailed review of the raw data generated by the analytical laboratory.

Data validation results for TPH (diesel range) analyses are presented in Section C-2.0. The data, including the qualified data, are usable for evaluation and interpretive purposes.

Twenty-nine samples were analyzed for VOCs using EPA SW-846 Method 5035/8260, while seven samples were analyzed for VOCs using EPA SW-846 Method 5030/8260 (Request 13100). Fifty samples were analyzed for SVOCs using EPA SW-846 Method 8270. Thirty-four samples were analyzed for TPH (diesel range) using EPA SW-846 Method 8015. Table C-1.0-2 summarizes the samples analyzed for diesel-related organics.

Table C-1.0-2
Summary of Samples Analyzed for Diesel-Related Organic Chemicals, PRS 21-027(d)-99

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
13100/ Outfall	July 1992	AAA0615 AAA0616 AAA0617 AAA0618 AAA0619 AAA0620 AAA0621	SVOCs/EPA SW-846 Method 8270 VOCs/EPA SW-846 Method 5030/8260	CST[a]
5148/ Baseline	January 1999	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	SVOCs/EPA SW-846 Method 8270 Encore/VOCs/EPA SW-846 Method 5035/8260	Kemron
5327/ Excavation	March 1999	MD21-99-0009 MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0013 MD21-99-0014 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018 MD21-99-0019 MD21-99-0020	SVOCs/EPA SW-846 Method 8270 Encore/VOCs/EPA SW-846 Method 5035/8260	Kemron
5330/ VCP[b]	March 1999	MD21-99-0021 MD21-99-0022	TPH (diesel range)/EPA SW-846 Method 8015 SVOCs/EPA SW-846 Method 8270 Encore/VOCs/EPA SW-846 Method 5035/8260	Kemron
5435/ Premelt boreholes	March 1999	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	TPH (diesel range)/EPA SW-846 Method 8015 SVOCs/EPA SW-846 Method 8270 Encore/VOCs/EPA SW-846 Method 5035/8260	Kemron
5438/ Premelt boreholes	March 1999	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	TPH (diesel range)/EPA SW-846 Method 8015 SVOCs/EPA SW-846 Method 8270 Encore/VOCs/EPA SW-846 Method 5035/8260	Kemron
5747/ Postmelt boreholes	June 1999	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	TPH (diesel range)/EPA SW-846 Method 8015 SVOCs/EPA SW-846 Method 8270	Severn Trent

Table C-1.0-2 (continued)

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
5750/ Postmelt boreholes	June 1999	MD21-99-0113 MD21-99-0119	TPH (diesel range)/EPA SW-846 Method 8015 SVOCs/EPA SW-846 Method 8270	Severn Trent
6203/ Outfall	November 1999	MD21-99-0210 MD21-99-0211 MD21-99-0212 MD21-99-0213 MD21-99-0214 MD21-99-0215 MD21-99-0216	TPH (diesel range)/EPA SW-846 Method 8015	RECRA

[a] CST = Chemical Science and Technology (Laboratory division).
[b] VCP = vitrified clay pipe.

LCSs, method blanks, field duplicate samples, internal standards, holding times, and surrogates were analyzed to assess accuracy and precision for diesel-related organic chemical analyses. Each of these QA/QC sample types are defined in the ER Project analytical services SOW (LANL 1995, 49738) and described briefly in the sections below.

For SVOC and TPH (diesel range) analyses, soil samples must be extracted within 14 days (extraction holding time). The extracts must be analyzed within 40 days (analysis holding time). For VOCs, the samples must be analyzed within 14 days. The organic methods for extraction and analysis for this data set are detailed in Table C-1.0-3. All extraction and analysis holding times were met for all samples.

Table C-1.0-3
Analytical Methods for Diesel-Related Organic Analyses

Analytical Method	Analytical Description	Target Compound List*
EPA SW-846 Method 3540, Extraction EPA SW-846 Method 8270, Analysis	SVOCs	ER Project analytical services SOW (LANL 1995, 49738). Acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, total naphthalenes, phenanthrene, and pyrene
EPA SW-846 Method 5035, Sampling EPA SW-846 Method 5035, Extraction EPA SW-846 Method 8260, Analysis	VOCs	ER Project analytical services SOW (LANL 1995, 49738). Benzene, toluene, ethylbenzene, and xylenes (total)
EPA SW-846 Method 5030, Extraction EPA SW-846 Method 8260, Analysis	VOCs (Request 13100)	ER Project analytical services SOW (LANL 1995, 49738). Benzene, toluene, ethylbenzene, and xylenes (total)
EPA SW-846 Method 3540, Extraction EPA SW-846 Method 8015, Analysis	TPH (diesel range)	ER Project analytical services SOW (LANL 1995, 49738).

* The target compound list was obtained from Table 4-1, Chapter 4, "Risk Based Decision Evaluation of Petroleum Releases," of 20 NMAC 5, "Underground Storage Tank Regulations."

An LCS is a known matrix that has been spiked with compound(s) representative of the target analytes. The LCS is used to document laboratory performance. For organic analyses, the acceptance criteria for LCS analytes are method specific. The LCS serves as a monitor of the overall performance of each step during the analysis, including sample extraction and injection.

The method blank is an analyte-free matrix to which all reagents (surrogates and internal standards) are added in the same volumes and proportions as those used in the environmental sample processing; the method blank is prepared and analyzed in the same manner as the corresponding environmental samples. The method blanks are used as a measurement of bias and potential cross contamination during sample preparation and analysis. For analytes detected in the method blank, results are regarded as not detected if the sample results are less than or equal to 5 times the concentration of the analyte in the method blank (10 times for common laboratory contaminants) (EPA 1999, 66649).

Internal standards are chemical compounds added to every client sample and QA/QC sample at a known concentration that is used to compensate for analyte concentration changes that might occur during extract storage and to compensate for quantitation variations that occur during analysis. Internal standards are used as the basis for quantitating target analytes. The area counts for internal standards must be between -50% and +100% for the associated continuing calibration verification (EPA 1999, 66649).

Surrogates are organic chemicals used in the analysis of organic target analytes. These compounds are similar in composition and behavior to target analytes but are not normally found in environmental samples. Surrogates are added to every blank, sample, and spike to evaluate the efficiency with which analytes are recovered during extraction and analysis.

Field duplicate samples are used to assess precision of organic chemical analyses. All relative percent differences between the sample and field duplicate should be ±35%.

C-2.0 RESULTS OF DATA VALIDATION

The data qualifiers are defined in Table C-2.0-1. Table C-2.0-2 presents the data quality evaluation for diesel-related organic chemicals at PRS 21-027(d)-99.

Table C-2.0-1
Data Qualifiers Used in the Data Validation Procedure

Qualifier	Explanation
U	The analyte was analyzed for but not detected. Reported value is the sample-specific estimated quantitation limit or detection limit.
J	The reported value should be regarded as estimated.
J+	The reported value should be regarded as estimated and biased high.
J-	The reported value should be regarded as estimated and biased low.
UJ	The analyte was analyzed for but was not detected. The reported value is an estimate of the sample-specific quantitation limit or detection limit.
R	The sample results were rejected because of serious deficiencies in the ability to analyze the sample and meet QC criteria; presence or absence of the analyte cannot be verified.

Table C-2.0-2
Organic Chemical Data Quality Evaluation For Diesel-Related Analytes, PRS 21-027(d)-99

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
Baseline Samples					
5148R	21-11014 21-11015 21-11014	MD21-99-0001 MD21-99-0002 MD21-99-0003	VOCs	Toluene	The results for this analyte should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.
5148R	21-11014	MD21-99-0003	VOCs	Xylene (total)	The result for this analyte should be regarded as not detected (U) because the result was less than 5 times the concentrations for these analytes in the method blank. This result is therefore indistinguishable from laboratory contamination.
5148R	21-11015	MD21-99-0004	VOCs	Toluene	The result for this analyte should be regarded as estimated (J) because the result was less than the practical quantitation limit but above the method detection limit.
Excavation Samples					
5327R	21-11017 21-11018 21-11019 21-11021 21-11022 21-11023 21-11024 21-11025 21-11026 21-11026	MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0014 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018 MD21-99-0019 MD21-99-0020	VOCs	Toluene	The results for this analyte should be regarded as not detected (U) because the results were less than 5 times the concentrations for this analyte in the method blank. These results are therefore indistinguishable from laboratory contamination.
5327R	21-11020	MD21-99-0013	VOCs	Xylene (total)	The result for this analyte should be regarded as not detected (U) because the result was less than 5 times the concentrations for this analyte in the method blank. This result is therefore indistinguishable from laboratory contamination.
5327R	21-11026 21-11026	MD21-99-0019 MD21-99-0020	SVOCs	All target analytes	The reporting limits for these analytes should be regarded as estimated (UJ) because the associated internal standard recoveries did not pass acceptance criteria.

Table C-2.0-2 (continued)

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
VCP Samples					
5330R	21-11028	MD21-99-0022	TPH (diesel range)	Organics, Diesel Range	The result for these analytes should be regarded as estimated and biased high (J+) because the associated surrogate recoveries were high.
5330R	21-11027 21-11028	MD21-99-0021 MD21-99-0022	VOCs	Toluene	The results for these analytes should be regarded as not detected (U) because the results were less than 5 times the concentrations for these analytes in the method blank. These results are therefore indistinguishable from laboratory contamination.
5330R	21-11028	MD21-99-0022	SVOCs	All target analytes	The reporting limits for these analytes should be regarded as estimated (UJ) because the associated internal standard recoveries did not pass acceptance criteria.
Premelt Borehole Samples					
5435R	21-11036	MD21-99-0031	TPH (diesel range)	Organics, Diesel Range	The result for this analyte should be regarded as not detected (U) because the result was less than 5 times the concentrations for these analytes in the method blank. This result is therefore indistinguishable from laboratory contamination.
5435R	21-11037	MD21-99-0035	VOCs	Benzene	The result for this analyte should be regarded as estimated (J) because the result was less than the practical quantitation limit but above the method detection limit.
Postmelt Borehole Samples					
5747R	21-11058	MD21-99-0100	SVOCs	Acenaphthene Naphthalene	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.
5747R	21-11058	MD21-99-0101	SVOCs	Methylnaphthalene[2-] Phenanthrene	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.

The analytical results for samples collected at PRS 21-027(d)-99 are subdivided into the following groups: outfall samples, baseline samples, excavation samples, VCP samples, premelt borehole samples, and postmelt borehole. The groups are discussed below.

Outfall Samples

Request 13100. CST analyzed seven samples for SVOCs and VOCs. The raw data could not be located for this request number; therefore, no data qualifiers were applied.

Request 6203. RECRA analyzed seven samples for TPH (diesel range). No target analytes were detected in the method blank. All initial and continuing calibration verifications met acceptance criteria. All surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

Baseline Samples

Request 5148. Kemron analyzed four samples for SVOCs and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For VOCs, the method blank was free of target analyte contamination except for xylene (total). The sample results qualified as not detected (U) because of this laboratory contamination are presented in Table C-2.0-2. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the method detection limit are also presented in Table C-2.0-2.

Excavation Samples

Request 5327. Kemron analyzed 12 samples for SVOCs and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria with the exception of the continuing calibration standard that was used for qualification and quantification of samples MD21-99-0019 and MD21-99-0020. The internal standard areas were less than 50% from the previous continuing standard. The reporting limits for both of these samples are qualified as estimated (UJ) as shown in Table C-2.0-2. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For VOCs, the method blank was free of target analyte contamination except for toluene and xylene (total). The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table C-2.0-2. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

VCP Samples

Request 5330. Kemron analyzed two samples for SVOCs, VOCs, and DROs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria with the exception of the continuing calibration standard that was used for qualification and quantification of sample MD21-99-0022. The internal standard areas were less than 50% from the previous continuing standard. Therefore, the reporting limits for this sample are qualified as estimated (UJ), as shown in Table C-2.0-2. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For VOCs, the method blank was free of target analyte contamination except for toluene. The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table C-2.0-2. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For TPH (diesel range), the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All surrogate recoveries met acceptance criteria with the exception of sample MD21-99-0022. The surrogate recovered high; therefore, the results for this sample were qualified as estimated and biased high (J+), as shown in Table C-2.0-2. The extraction and analysis holding times were met.

Premelt Borehole Samples

Request 5435. Kemron analyzed four samples for SVOCs, VOCs, and TPH (diesel range).

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For VOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the method detection limit are also shown in Table C-2.0-2.
- For TPH (diesel range), target analytes were detected in the method blank. The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table C-2.0-2. All initial and continuing calibration verifications met acceptance criteria. All surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

Request 5438. Kemron analyzed seven samples for SVOCs, VOCs, and TPH (diesel range).

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

- For VOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For TPH (diesel range), the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

Postmelt Borehole Samples

Request 5747. Quanterra analyzed 12 samples for SVOCs and TPH (diesel range).

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the method detection limit are also shown in Table C-2.0-2.
- For TPH (diesel range), no target analytes were detected in the method blank. All initial and continuing calibration verifications met acceptance criteria. All surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

Request 5750. Quanterra analyzed two samples for SVOCs and TPH (diesel range).

- For SVOCs, the method blank was below the reporting limit for all target analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.
- For TPH (diesel range), no target analytes were detected in the method blank. All initial and continuing calibration verifications met acceptance criteria. All surrogate recoveries met acceptance criteria. The extraction and analysis holding times were met.

C-3.0 REFERENCES

The following list includes all references cited in this appendix. Parenthetical information following each reference provides the author, publication date, and the ER record identification (ER ID) number. This information also is included in the citations in the text. ER ID numbers are assigned by the Laboratory's ER Project to track records associated with the Project. These numbers can be used to locate copies of the actual documents at the ER Project's Records Processing Facility and, where applicable, with the ER Project reference library titled "Reference Set for Material Disposal Areas, Technical Area 21."

Copies of the reference library are maintained at the New Mexico Environment Department Hazardous Waste Bureau; the Department of Energy Los Alamos Area Office; United States Environmental Protection Agency, Region 6; and the ER Project MDAs Focus Area. This library is a living collection of documents that was developed to ensure that the administrative authority has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the administrative authority are not included.

EPA (US Environmental Protection Agency), February 1999. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA-540/R-94-013, Office of Solid Waste and Emergency Response, Washington, DC. (EPA 1999, 66649)

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

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

Appendix D

Analytical Suites and Results
for Diesel-Related Organic Chemicals

APPENDIX D ANALYTICAL SUITES AND RESULTS FOR DIESEL-RELATED ORGANIC CHEMICALS

D-1.0 TARGET ANALYTES AND DETECTION LIMITS

Routine analytical services through the Los Alamos National Laboratory (Laboratory) Sample Management Office were used for this voluntary corrective measure. All routine analyses were performed; no deviations were requested or noted in the analytical data packages.

Tables D-1.0-1 and D-1.0-2 list diesel-related target analytes and estimated quantitation limits (EQLs) for semivolatile organic compounds (SVOCs) and volatile organic compounds (VOCs). The EQLs are specified in the Environmental Restoration (ER) Project analytical services statement of work for contract laboratories (LANL 1995, 49738) and the quality assurance project plan (LANL 1996, 54609).

Table D-1.0-1
Diesel-Related Target Analytes and Maximum EQLs for SVOC Analyses

Target Analyte	Soil/Solids EQL* (µg/kg)	Target Analyte	Soil/Solids EQL* (µg/kg)
Acenaphthene	330	Dibenz(a,h)anthracene	330
Anthracene	330	Fluoranthene	330
Benz(a)anthracene	330	Fluorene	330
Benzo(a)pyrene	330	2-Methylnaphthalene	330
Benzo(b)fluoranthrene	330	Total naphthalene	330
Benzo(k)fluoranthrene	330	Phenanthrene	330
Chrysene	330	Pyrene	330

Note: All analyses were done by Environmental Protection Agency (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 spectrometry (GC/MS) detection and quantitation.

* 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 D-1.0-2
Diesel-Related Target Analytes and Maximum EQLs for VOC Analyses

Target Analyte	Soil/Solids EQL (µg/kg)
Benzene	5
Toluene	5
Ethylbenzene	5
o,m,p-Xylene (mixed)	5

Note: All analyses were 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 GC/MS.

D-2.0 ANALYTE SUITES AND REQUEST NUMBERS

Analytical data collected at Potential Release Site (PRS) 21-027(d)-99 are available in the Facility for Information Management, Analysis, and Display (FIMAD). During focused validation, the data steward reviewed data entries against analytical report hard copies and ER Project baseline validation reports. Any inconsistencies were corrected locally, summarized, and submitted to centralized data management personnel for correction in FIMAD.

Tables in Sections 2.3.2 and 2.3.4 of this report present the analytical suites and request numbers for each sample collected during the 1992 and 1999 investigations. Each request number represents a batch of samples sent to an off-site analytical laboratory for a specific suite of analyses; the request numbers can be used to track the original data packages from the off-site analytical laboratories. The tables present the following information for each sample: location ID, sample depth, and sample media. Table D-2.0-1 lists the request numbers and analytical laboratories that analyzed each batch of samples for diesel-related organic analytes.

Table D-2.0-1
Request Numbers and Analytical Laboratories for Diesel-Related Organic Analytes, PRS 21-027(d)-99

Request Number	Analytical Laboratory
13100	CST
5148	Kemron
5327	Kemron
5330	Kemron
5435	Kemron
5438	Kemron
5747	Severn Trent
5750	Severn Trent
6203	RECRA

D-3.0 ANALYTICAL RESULTS

Tables in Section 2.3.5 of this report presents summaries of the diesel-related analyses for the samples collected at PRS 21-027(d)-99. The tables present the number of samples taken, the detection frequency, and concentration range for each analyte detected.

Tables in Section 2.3.5 also present summaries of analytical results for constituents identified as chemicals of potential concern for samples. The tables list the organic analytes whose concentrations were detected. Data qualifiers are discussed in Appendix C of this report.

Table D-3.2-1 presents analytical results for diesel-related organic chemicals at PRS 21-027(d)-99. The data set is being submitted in electronic format to the New Mexico Environment Department (NMED) Hazardous Waste Bureau, the Department of Energy (DOE), and the ER Project Records Processing Facility. Copies of the reports that include electronic versions of the data set can be recognized by the notation "Data disks included with this copy" displayed on the covers.

Table D-3.2-1
Diesel-Related Organic Chemicals for PRS 21-027(d)-99

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-01329	AAA0615	0–0.5	Sediment	Acenaphthene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Anthracene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Benzene	0.005	U
21-01329	AAA0615	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Benzo(a)pyrene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Chrysene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01329	AAA0615	0–0.5	Sediment	Fluoranthene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Fluorene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Naphthalene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Phenanthrene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Pyrene	0.33	U
21-01329	AAA0615	0–0.5	Sediment	Toluene	0.005	U
21-01329	AAA0615	0–0.5	Sediment	Xylene (total)	0.005	U
21-01330	AAA0616	0–0.5	Sediment	Acenaphthene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Anthracene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Benzene	0.005	U
21-01330	AAA0616	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Benzo(a)pyrene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Chrysene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01330	AAA0616	0–0.5	Sediment	Fluoranthene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Fluorene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Naphthalene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Phenanthrene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Pyrene	0.33	U
21-01330	AAA0616	0–0.5	Sediment	Toluene	0.005	U
21-01330	AAA0616	0–0.5	Sediment	Xylene (total)	0.005	U
21-01331	AAA0617	0–0.5	Sediment	Acenaphthene	0.33	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-01331	AAA0617	0–0.5	Sediment	Anthracene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Benzene	0.005	U
21-01331	AAA0617	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Benzo(a)pyrene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Chrysene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01331	AAA0617	0–0.5	Sediment	Fluoranthene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Fluorene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Naphthalene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Phenanthrene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Pyrene	0.33	U
21-01331	AAA0617	0–0.5	Sediment	Toluene	0.005	U
21-01331	AAA0617	0–0.5	Sediment	Xylene (total)	0.005	U
21-01331	AAA0618	0–0.5	Sediment	Acenaphthene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Anthracene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Benzene	0.005	U
21-01331	AAA0618	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Benzo(a)pyrene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Chrysene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01331	AAA0618	0–0.5	Sediment	Fluoranthene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Fluorene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Naphthalene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Phenanthrene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Pyrene	0.33	U
21-01331	AAA0618	0–0.5	Sediment	Toluene	0.005	U
21-01331	AAA0618	0–0.5	Sediment	Xylene (total)	0.005	U
21-01332	AAA0619	0–0.5	Sediment	Acenaphthene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Anthracene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Benzene	0.005	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-01332	AAA0619	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Benzo(a)pyrene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Chrysene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01332	AAA0619	0–0.5	Sediment	Fluoranthene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Fluorene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Naphthalene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Phenanthrene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Pyrene	0.33	U
21-01332	AAA0619	0–0.5	Sediment	Toluene	0.005	U
21-01332	AAA0619	0–0.5	Sediment	Xylene (total)	0.005	U
21-01333	AAA0620	0–0.5	Sediment	Acenaphthene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Anthracene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Benzene	0.005	U
21-01333	AAA0620	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Benzo(a)pyrene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Chrysene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01333	AAA0620	0–0.5	Sediment	Fluoranthene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Fluorene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Naphthalene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Phenanthrene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Pyrene	0.33	U
21-01333	AAA0620	0–0.5	Sediment	Toluene	0.005	U
21-01333	AAA0620	0–0.5	Sediment	Xylene (total)	0.005	U
21-01334	AAA0621	0–0.5	Sediment	Acenaphthene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Anthracene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Benzene	0.005	U
21-01334	AAA0621	0–0.5	Sediment	Benzo(a)anthracene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Benzo(a)pyrene	0.33	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-01334	AAA0621	0–0.5	Sediment	Benzo(b)fluoranthene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Benzo(k)fluoranthene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Chrysene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Dibenz(a,h)anthracene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Ethylbenzene	0.005	U
21-01334	AAA0621	0–0.5	Sediment	Fluoranthene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Fluorene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Methylnaphthalene[2-]	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Naphthalene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Phenanthrene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Pyrene	0.33	U
21-01334	AAA0621	0–0.5	Sediment	Toluene	0.005	U
21-01334	AAA0621	0–0.5	Sediment	Xylene (total)	0.005	U
21-11014	MD21-99-0001	2.5–3	Sediment	Acenaphthene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Anthracene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzene	0.006	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzo(a)anthracene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzo(a)pyrene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzo(b)fluoranthene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzo(k)fluoranthene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chrysene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dibenz(a,h)anthracene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Ethylbenzene	0.006	U
21-11014	MD21-99-0001	2.5–3	Sediment	Fluoranthene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Fluorene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Methylnaphthalene[2-]	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Naphthalene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Phenanthrene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Pyrene	0.4	U
21-11014	MD21-99-0001	2.5–3	Sediment	Toluene	0.00029	J
21-11014	MD21-99-0001	2.5–3	Sediment	Xylene (total)	0.006	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Acenaphthene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Anthracene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzene	0.0058	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzo(a)anthracene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzo(a)pyrene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzo(b)fluoranthene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzo(k)fluoranthene	0.38	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chrysene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dibenz(a,h)anthracene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Ethylbenzene	0.0058	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Fluoranthene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Fluorene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Methylnaphthalene[2-]	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Naphthalene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Phenanthrene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Pyrene	0.38	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Toluene	0.00033	J
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Xylene (total)	0.00023	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Acenaphthene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Anthracene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzene	0.0061	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzo(a)anthracene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzo(a)pyrene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzo(b)fluoranthene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzo(k)fluoranthene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chrysene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dibenz(a,h)anthracene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Ethylbenzene	0.0061	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Fluoranthene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Fluorene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Methylnaphthalene[2-]	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Naphthalene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Phenanthrene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Pyrene	0.4	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Toluene	0.00033	J
21-11015	MD21-99-0002	2.5–3.1	Sediment	Xylene (total)	0.0061	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Acenaphthene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Acenaphthene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Anthracene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzene	0.0057	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzo(a)anthracene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzo(a)pyrene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzo(b)fluoranthene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzo(k)fluoranthene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chrysene	0.38	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Ethylbenzene	0.0057	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Fluoranthene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Fluorene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Methylnaphthalene[2-]	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Naphthalene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Phenanthrene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Pyrene	0.38	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Toluene	0.00026	J
21-11015	MD21-99-0004	5.6–6.4	Sediment	Xylene (total)	0.0057	U
21-11017	MD21-99-0009	7.5–8	Sediment	Acenaphthene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Anthracene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzene	0.0069	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzo(a)anthracene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzo(a)pyrene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzo(b)fluoranthene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzo(k)fluoranthene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chrysene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Ethylbenzene	0.0069	U
21-11017	MD21-99-0009	7.5–8	Sediment	Fluoranthene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Fluorene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Methylnaphthalene[2-]	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Naphthalene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Phenanthrene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Pyrene	0.38	U
21-11017	MD21-99-0009	7.5–8	Sediment	Toluene	0.0069	U
21-11017	MD21-99-0009	7.5–8	Sediment	Xylene (total)	0.0069	U
21-11017	MD21-99-0010	7.5–8	Sediment	Acenaphthene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Anthracene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzene	0.0073	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzo(a)anthracene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzo(a)pyrene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzo(b)fluoranthene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzo(k)fluoranthene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chrysene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Ethylbenzene	0.0073	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11017	MD21-99-0010	7.5–8	Sediment	Fluoranthene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Fluorene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Methylnaphthalene[2-]	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Naphthalene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Phenanthrene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Pyrene	0.37	U
21-11017	MD21-99-0010	7.5–8	Sediment	Toluene	0.00039	U
21-11017	MD21-99-0010	7.5–8	Sediment	Xylene (total)	0.0073	U
21-11018	MD21-99-0011	7.5–8	Sediment	Acenaphthene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Anthracene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzene	0.0062	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzo(a)anthracene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzo(a)pyrene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzo(b)fluoranthene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzo(k)fluoranthene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chrysene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Ethylbenzene	0.0062	U
21-11018	MD21-99-0011	7.5–8	Sediment	Fluoranthene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Fluorene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Methylnaphthalene[2-]	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Naphthalene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Phenanthrene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Pyrene	0.37	U
21-11018	MD21-99-0011	7.5–8	Sediment	Toluene	0.00028	U
21-11018	MD21-99-0011	7.5–8	Sediment	Xylene (total)	0.0062	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Acenaphthene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Anthracene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzene	0.0056	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzo(a)anthracene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzo(a)pyrene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzo(b)fluoranthene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzo(k)fluoranthene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chrysene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dibenz(a,h)anthracene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Ethylbenzene	0.0056	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Fluoranthene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Fluorene	0.37	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11019	MD21-99-0012	14–14.5	Qbt 3	Methylnaphthalene[2-]	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Naphthalene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Phenanthrene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Pyrene	0.37	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Toluene	0.00028	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Xylene (total)	0.0056	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Acenaphthene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Anthracene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzene	0.0061	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzo(a)anthracene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzo(a)pyrene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzo(b)fluoranthene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzo(k)fluoranthene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chrysene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dibenz(a,h)anthracene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Ethylbenzene	0.0061	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Fluoranthene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Fluorene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Methylnaphthalene[2-]	1.2	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Naphthalene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Phenanthrene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Pyrene	0.37	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Toluene	0.00034	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Xylene (total)	0.00051	U
21-11021	MD21-99-0014	4–5	Sediment	Acenaphthene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Anthracene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Benzene	0.0061	U
21-11021	MD21-99-0014	4–5	Sediment	Benzo(a)anthracene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Benzo(a)pyrene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Benzo(b)fluoranthene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Benzo(k)fluoranthene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Chrysene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Dibenz(a,h)anthracene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Ethylbenzene	0.0061	U
21-11021	MD21-99-0014	4–5	Sediment	Fluoranthene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Fluorene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Methylnaphthalene[2-]	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Naphthalene	0.4	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11021	MD21-99-0014	4–5	Sediment	Phenanthrene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Pyrene	0.4	U
21-11021	MD21-99-0014	4–5	Sediment	Toluene	0.00033	U
21-11021	MD21-99-0014	4–5	Sediment	Xylene (total)	0.0061	U
21-11022	MD21-99-0015	4–5	Sediment	Acenaphthene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Anthracene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Benzene	0.0053	U
21-11022	MD21-99-0015	4–5	Sediment	Benzo(a)anthracene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Benzo(a)pyrene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Benzo(b)fluoranthene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Benzo(k)fluoranthene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Chrysene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Dibenz(a,h)anthracene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Ethylbenzene	0.0053	U
21-11022	MD21-99-0015	4–5	Sediment	Fluoranthene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Fluorene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Methylnaphthalene[2-]	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Naphthalene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Phenanthrene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Pyrene	0.39	U
21-11022	MD21-99-0015	4–5	Sediment	Toluene	0.00026	U
21-11022	MD21-99-0015	4–5	Sediment	Xylene (total)	0.0053	U
21-11023	MD21-99-0016	4–5	Sediment	Acenaphthene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Anthracene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Benzene	0.0057	U
21-11023	MD21-99-0016	4–5	Sediment	Benzo(a)anthracene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Benzo(a)pyrene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Benzo(b)fluoranthene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Benzo(k)fluoranthene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Chrysene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Ethylbenzene	0.0057	U
21-11023	MD21-99-0016	4–5	Sediment	Fluoranthene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Fluorene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Methylnaphthalene[2-]	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Naphthalene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Phenanthrene	0.38	U
21-11023	MD21-99-0016	4–5	Sediment	Pyrene	0.38	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11023	MD21-99-0016	4–5	Sediment	Toluene	0.00026	U
21-11023	MD21-99-0016	4–5	Sediment	Xylene (total)	0.0057	U
21-11024	MD21-99-0017	4–5	Sediment	Acenaphthene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Anthracene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Benzene	0.006	U
21-11024	MD21-99-0017	4–5	Sediment	Benzo(a)anthracene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Benzo(a)pyrene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Benzo(b)fluoranthene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Benzo(k)fluoranthene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Chrysene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Dibenz(a,h)anthracene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Ethylbenzene	0.006	U
21-11024	MD21-99-0017	4–5	Sediment	Fluoranthene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Fluorene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Methylnaphthalene[2-]	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Naphthalene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Phenanthrene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Pyrene	0.39	U
21-11024	MD21-99-0017	4–5	Sediment	Toluene	0.00027	U
21-11024	MD21-99-0017	4–5	Sediment	Xylene (total)	0.006	U
21-11025	MD21-99-0018	7–7.5	Sediment	Acenaphthene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Anthracene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzene	0.0075	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzo(a)anthracene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzo(a)pyrene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzo(b)fluoranthene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzo(k)fluoranthene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chrysene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Ethylbenzene	0.0075	U
21-11025	MD21-99-0018	7–7.5	Sediment	Fluoranthene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Fluorene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Methylnaphthalene[2-]	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Naphthalene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Phenanthrene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Pyrene	0.38	U
21-11025	MD21-99-0018	7–7.5	Sediment	Toluene	0.00045	U
21-11025	MD21-99-0018	7–7.5	Sediment	Xylene (total)	0.0075	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11026	MD21-99-0019	10–10.5	Qbt 3	Acenaphthene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Anthracene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzene	0.006	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzo(a)anthracene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzo(a)pyrene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzo(b)fluoranthene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzo(k)fluoranthene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chrysene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dibenz(a,h)anthracene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Ethylbenzene	0.006	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Fluoranthene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Fluorene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Methylnaphthalene[2-]	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Naphthalene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Phenanthrene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Pyrene	0.36	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Toluene	0.00024	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Xylene (total)	0.006	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Acenaphthene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Anthracene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzene	0.0059	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzo(a)anthracene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzo(a)pyrene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzo(b)fluoranthene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzo(k)fluoranthene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chrysene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dibenz(a,h)anthracene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Ethylbenzene	0.0059	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Fluoranthene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Fluorene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Methylnaphthalene[2-]	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Naphthalene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Phenanthrene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Pyrene	0.35	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Toluene	0.00023	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Xylene (total)	0.0059	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Acenaphthene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Anthracene	1.5	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzene	0.0057	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzo(a)anthracene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzo(a)pyrene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzo(b)fluoranthene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzo(k)fluoranthene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chrysene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dibenz(a,h)anthracene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Ethylbenzene	0.0057	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Fluoranthene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Fluorene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Methylnaphthalene[2-]	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Naphthalene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Organics, diesel range	4.8	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Phenanthrene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Pyrene	1.5	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Toluene	0.00032	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Xylene (total)	0.0057	U
21-11028	MD21-99-0022	4.5–5	Sediment	Acenaphthene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Anthracene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzene	0.0057	U
21-11028	MD21-99-0022	4.5–5	Sediment	Benzo(a)anthracene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzo(a)pyrene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzo(b)fluoranthene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzo(k)fluoranthene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Chrysene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dibenz(a,h)anthracene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Ethylbenzene	0.0057	U
21-11028	MD21-99-0022	4.5–5	Sediment	Fluoranthene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Fluorene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Methylnaphthalene[2-]	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Naphthalene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Phenanthrene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Pyrene	0.38	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Toluene	0.00027	U
21-11028	MD21-99-0022	4.5–5	Sediment	Xylene (total)	0.0057	U
21-11028	MD21-99-0022	4–4.5	Sediment	Organics, diesel range	48	J+
21-11036	MD21-99-0030	7.5–8	Qbt 3	Acenaphthene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Anthracene	0.34	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzene	0.0063	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzo(a)anthracene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzo(a)pyrene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzo(b)fluoranthene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzo(k)fluoranthene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chrysene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dibenz(a,h)anthracene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Ethylbenzene	0.0063	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Fluoranthene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Fluorene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Methylnaphthalene[2-]	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Naphthalene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Organics, diesel range	3300	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Phenanthrene	0.41	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Pyrene	0.34	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Toluene	0.0063	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Xylene (total)	0.0063	U
21-11036	MD21-99-0031	23–24	Qbt 3	Acenaphthene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Anthracene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzene	0.0063	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzo(a)anthracene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzo(a)pyrene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzo(b)fluoranthene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzo(k)fluoranthene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chrysene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dibenz(a,h)anthracene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Ethylbenzene	0.0063	U
21-11036	MD21-99-0031	23–24	Qbt 3	Fluoranthene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Fluorene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Methylnaphthalene[2-]	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Naphthalene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Organics, diesel range	5.7	U
21-11036	MD21-99-0031	23–24	Qbt 3	Phenanthrene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Pyrene	0.34	U
21-11036	MD21-99-0031	23–24	Qbt 3	Toluene	0.0063	U
21-11036	MD21-99-0031	23–24	Qbt 3	Xylene (total)	0.0063	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Acenaphthene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Anthracene	0.37	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzene	0.0067	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzo(a)anthracene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzo(a)pyrene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzo(b)fluoranthene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzo(k)fluoranthene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chrysene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Ethylbenzene	0.0067	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Fluoranthene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Fluorene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Methylnaphthalene[2-]	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Naphthalene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Organics, diesel range	4.4	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Phenanthrene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Pyrene	0.37	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Toluene	0.0067	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Xylene (total)	0.0067	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Acenaphthene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Anthracene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzene	0.0012	J
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzo(a)anthracene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzo(a)pyrene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzo(b)fluoranthene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzo(k)fluoranthene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chrysene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dibenz(a,h)anthracene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Ethylbenzene	0.0063	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Fluoranthene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Fluorene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Methylnaphthalene[2-]	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Naphthalene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Organics, diesel range	4.2	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Phenanthrene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Pyrene	0.35	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Toluene	0.0063	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Xylene (total)	0.0063	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Acenaphthene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Anthracene	0.36	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzene	0.0055	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzo(a)anthracene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzo(a)pyrene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzo(b)fluoranthene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzo(k)fluoranthene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chrysene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dibenz(a,h)anthracene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Ethylbenzene	0.0055	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Fluoranthene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Fluorene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Methylnaphthalene[2-]	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Naphthalene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Organics, diesel range	4.4	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Phenanthrene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Pyrene	0.36	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Toluene	0.0055	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Xylene (total)	0.0055	U
21-11038	MD21-99-0039	18.5–19	Sediment	Acenaphthene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Anthracene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzene	0.0063	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzo(a)anthracene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzo(a)pyrene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzo(b)fluoranthene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzo(k)fluoranthene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chrysene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Ethylbenzene	0.0063	U
21-11038	MD21-99-0039	18.5–19	Sediment	Fluoranthene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Fluorene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Methylnaphthalene[2-]	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Naphthalene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Organics, diesel range	4.6	U
21-11038	MD21-99-0039	18.5–19	Sediment	Phenanthrene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Pyrene	0.38	U
21-11038	MD21-99-0039	18.5–19	Sediment	Toluene	0.0063	U
21-11038	MD21-99-0039	18.5–19	Sediment	Xylene (total)	0.0063	U
21-11038	MD21-99-0040	7.5–8	Sediment	Acenaphthene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Anthracene	0.37	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11038	MD21-99-0040	7.5–8	Sediment	Benzene	0.0067	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzo(a)anthracene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzo(a)pyrene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzo(b)fluoranthene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzo(k)fluoranthene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chrysene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Ethylbenzene	0.0067	U
21-11038	MD21-99-0040	7.5–8	Sediment	Fluoranthene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Fluorene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Methylnaphthalene[2-]	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Naphthalene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Organics, diesel range	4.4	U
21-11038	MD21-99-0040	7.5–8	Sediment	Phenanthrene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Pyrene	0.37	U
21-11038	MD21-99-0040	7.5–8	Sediment	Toluene	0.0067	U
21-11038	MD21-99-0040	7.5–8	Sediment	Xylene (total)	0.0067	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Acenaphthene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Anthracene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzene	0.0063	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzo(a)anthracene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzo(a)pyrene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzo(b)fluoranthene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzo(k)fluoranthene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chrysene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dibenz(a,h)anthracene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Ethylbenzene	0.0063	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Fluoranthene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Fluorene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Methylnaphthalene[2-]	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Naphthalene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Organics, diesel range	4.2	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Phenanthrene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Pyrene	0.34	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Toluene	0.0063	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Xylene (total)	0.0063	U
21-11039	MD21-99-0042	6.5–7	Sediment	Acenaphthene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Anthracene	0.36	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11039	MD21-99-0042	6.5–7	Sediment	Benzene	0.006	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzo(a)anthracene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzo(a)pyrene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzo(b)fluoranthene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzo(k)fluoranthene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chrysene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dibenz(a,h)anthracene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Ethylbenzene	0.006	U
21-11039	MD21-99-0042	6.5–7	Sediment	Fluoranthene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Fluorene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Methylnaphthalene[2-]	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Naphthalene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Organics, diesel range	4.4	U
21-11039	MD21-99-0042	6.5–7	Sediment	Phenanthrene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Pyrene	0.36	U
21-11039	MD21-99-0042	6.5–7	Sediment	Toluene	0.006	U
21-11039	MD21-99-0042	6.5–7	Sediment	Xylene (total)	0.006	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Acenaphthene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Anthracene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzene	0.0068	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzo(a)anthracene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzo(a)pyrene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzo(b)fluoranthene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzo(k)fluoranthene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chrysene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dibenz(a,h)anthracene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Ethylbenzene	0.0068	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Fluoranthene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Fluorene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Methylnaphthalene[2-]	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Naphthalene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Organics, diesel range	4.2	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Phenanthrene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Pyrene	0.35	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Toluene	0.0068	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Xylene (total)	0.0068	U
21-11040	MD21-99-0044	12.5–13	Sediment	Acenaphthene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Anthracene	0.35	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11040	MD21-99-0044	12.5–13	Sediment	Benzene	0.0065	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzo(a)anthracene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzo(a)pyrene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzo(b)fluoranthene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzo(k)fluoranthene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chrysene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dibenz(a,h)anthracene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Ethylbenzene	0.0065	U
21-11040	MD21-99-0044	12.5–13	Sediment	Fluoranthene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Fluorene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Methylnaphthalene[2-]	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Naphthalene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Organics, diesel range	4.3	U
21-11040	MD21-99-0044	12.5–13	Sediment	Phenanthrene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Pyrene	0.35	U
21-11040	MD21-99-0044	12.5–13	Sediment	Toluene	0.0065	U
21-11040	MD21-99-0044	12.5–13	Sediment	Xylene (total)	0.0065	U
21-11057	MD21-99-0093	8.5–9	Sediment	Acenaphthene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Anthracene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzo(a)anthracene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzo(a)pyrene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzo(b)fluoranthene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzo(k)fluoranthene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Chrysene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Fluoranthene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Fluorene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Methylnaphthalene[2-]	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Naphthalene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Organics, diesel range	28	U
21-11057	MD21-99-0093	8.5–9	Sediment	Phenanthrene	0.37	U
21-11057	MD21-99-0093	8.5–9	Sediment	Pyrene	0.37	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Acenaphthene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Anthracene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzo(a)anthracene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzo(a)pyrene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzo(b)fluoranthene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzo(k)fluoranthene	0.41	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chrysene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dibenz(a,h)anthracene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Fluoranthene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Fluorene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Methylnaphthalene[2-]	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Naphthalene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Organics, diesel range	31	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Phenanthrene	0.41	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Pyrene	0.41	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Acenaphthene	0.2	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Anthracene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzo(a)anthracene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzo(a)pyrene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzo(b)fluoranthene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzo(k)fluoranthene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chrysene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dibenz(a,h)anthracene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Fluoranthene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Fluorene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Methylnaphthalene[2-]	1.9	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Naphthalene	0.16	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Organics, diesel range	1700	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Phenanthrene	0.36	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Pyrene	0.36	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Acenaphthene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Anthracene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzo(a)anthracene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzo(a)pyrene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzo(b)fluoranthene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzo(k)fluoranthene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chrysene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dibenz(a,h)anthracene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Fluoranthene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Fluorene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Methylnaphthalene[2-]	0.09	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Naphthalene	0.37	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Organics, diesel range	1000	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Phenanthrene	0.36	J

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11058	MD21-99-0101	17.5–20	Qbt 3	Pyrene	0.37	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Acenaphthene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Anthracene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzo(a)anthracene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzo(a)pyrene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzo(b)fluoranthene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzo(k)fluoranthene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chrysene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dibenz(a,h)anthracene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Fluoranthene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Fluorene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Methylnaphthalene[2-]	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Naphthalene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Organics, diesel range	26	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Phenanthrene	0.35	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Pyrene	0.35	U
21-11059	MD21-99-0105	14–15	Sediment	Acenaphthene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Anthracene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Benzo(a)anthracene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Benzo(a)pyrene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Benzo(b)fluoranthene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Benzo(k)fluoranthene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Chrysene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Fluoranthene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Fluorene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Methylnaphthalene[2-]	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Naphthalene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Organics, diesel range	28	U
21-11059	MD21-99-0105	14–15	Sediment	Phenanthrene	0.37	U
21-11059	MD21-99-0105	14–15	Sediment	Pyrene	0.37	U
21-11059	MD21-99-0106	19.5–20	Sediment	Acenaphthene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Anthracene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzo(a)anthracene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzo(a)pyrene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzo(b)fluoranthene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzo(k)fluoranthene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Chrysene	0.38	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11059	MD21-99-0106	19.5–20	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Fluoranthene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Fluorene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Methylnaphthalene[2-]	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Naphthalene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Organics, diesel range	28	U
21-11059	MD21-99-0106	19.5–20	Sediment	Phenanthrene	0.38	U
21-11059	MD21-99-0106	19.5–20	Sediment	Pyrene	0.38	U
21-11059	MD21-99-0107	29–30	Qbt 3	Acenaphthene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Anthracene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzo(a)anthracene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzo(a)pyrene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzo(b)fluoranthene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzo(k)fluoranthene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Chrysene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dibenz(a,h)anthracene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Fluoranthene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Fluorene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Methylnaphthalene[2-]	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Naphthalene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Organics, diesel range	27	U
21-11059	MD21-99-0107	29–30	Qbt 3	Phenanthrene	0.36	U
21-11059	MD21-99-0107	29–30	Qbt 3	Pyrene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Acenaphthene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Anthracene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzo(a)anthracene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzo(a)pyrene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzo(b)fluoranthene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzo(k)fluoranthene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Chrysene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dibenz(a,h)anthracene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Fluoranthene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Fluorene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Methylnaphthalene[2-]	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Naphthalene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Organics, diesel range	28	U
21-11060	MD21-99-0111	17–17.5	Sediment	Phenanthrene	0.36	U
21-11060	MD21-99-0111	17–17.5	Sediment	Pyrene	0.36	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11060	MD21-99-0112	19.5–20	Sediment	Acenaphthene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Anthracene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzo(a)anthracene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzo(a)pyrene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzo(b)fluoranthene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzo(k)fluoranthene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Chrysene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dibenz(a,h)anthracene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Fluoranthene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Fluorene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Methylnaphthalene[2-]	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Naphthalene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Organics, diesel range	28	U
21-11060	MD21-99-0112	19.5–20	Sediment	Phenanthrene	0.37	U
21-11060	MD21-99-0112	19.5–20	Sediment	Pyrene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Acenaphthene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Anthracene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzo(a)anthracene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzo(a)pyrene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzo(b)fluoranthene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzo(k)fluoranthene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chrysene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dibenz(a,h)anthracene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Fluoranthene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Fluorene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Methylnaphthalene[2-]	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Naphthalene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Organics, diesel range	28	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Phenanthrene	0.37	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Pyrene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Acenaphthene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Anthracene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Benzo(a)anthracene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Benzo(a)pyrene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Benzo(b)fluoranthene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Benzo(k)fluoranthene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Chrysene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Dibenz(a,h)anthracene	0.37	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11061	MD21-99-0117	14–15	Sediment	Fluoranthene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Fluorene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Methylnaphthalene[2-]	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Naphthalene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Organics, diesel range	28	U
21-11061	MD21-99-0117	14–15	Sediment	Phenanthrene	0.37	U
21-11061	MD21-99-0117	14–15	Sediment	Pyrene	0.37	U
21-11061	MD21-99-0118	19–20	Sediment	Acenaphthene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Anthracene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Benzo(a)anthracene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Benzo(a)pyrene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Benzo(b)fluoranthene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Benzo(k)fluoranthene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Chrysene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Dibenz(a,h)anthracene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Fluoranthene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Fluorene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Methylnaphthalene[2-]	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Naphthalene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Organics, diesel range	28	U
21-11061	MD21-99-0118	19–20	Sediment	Phenanthrene	0.38	U
21-11061	MD21-99-0118	19–20	Sediment	Pyrene	0.38	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Acenaphthene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Anthracene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzo(a)anthracene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzo(a)pyrene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzo(b)fluoranthene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzo(k)fluoranthene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chrysene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dibenz(a,h)anthracene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Fluoranthene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Fluorene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Methylnaphthalene[2-]	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Naphthalene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Organics, diesel range	27	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Phenanthrene	0.35	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Pyrene	0.35	U
21-11098	MD21-99-0210	0–0.333	Sediment	Organics, diesel range	4.3	U

Table D-3.2-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result (mg/kg)	Report Qualifier
21-11099	MD21-99-0211	0–0.333	Sediment	Organics, diesel range	4.1	U
21-11100	MD21-99-0212	0–0.333	Sediment	Organics, diesel range	19	None
21-11101	MD21-99-0213	0–0.333	Sediment	Organics, diesel range	4.2	U
21-11102	MD21-99-0214	0–0.333	Sediment	Organics, diesel range	4.1	U
21-11103	MD21-99-0215	0–0.333	Sediment	Organics, diesel range	4.2	U
21-11104	MD21-99-0216	0–0.333	Sediment	Organics, diesel range	4	U

D-4.0 REFERENCES

The following list includes all references cited in this document. Parenthetical information following each reference provides the author, publication date, and the ER identification (ID) number. This information also is included in the citations in the text. ER ID numbers are assigned by the Laboratory's ER Project to track records associated with the Project. These numbers can be used to locate copies of the actual documents at the ER Project's Records Processing Facility and, where applicable, with the ER Project reference library titled "Reference Set for Material Disposal Areas, Technical Area 21."

Copies of the reference library are maintained at the NMED Hazardous Waste Bureau; the DOE Los Alamos Area Office; United States EPA, Region 6; and the ER Project Material Disposal Areas Focus Area. This library is a living collection of documents that was developed to ensure that the administrative authority has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the administrative authority are not included.

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

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

PMK	Kontrol	Localized ID	Sample ID	Institution Code	Sample Storage	Transport Medium	Begin Date	End Date	Begin Time	End Time	Minimum Depth	Maximum Depth	Analyzed Sample	Analysis Comment	Protocol	Analysis Date	Analyzed Volume	Analyzed Volume Unit	Analyte	Measurement	Unit	Analytical Method Reference	Analytical Method Version	Limit Type	Limit Value	Limit Qualifier	Limit Detection Value	Limit Quantification Value	Lab
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Arsenic	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Barium	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Arsenic	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Cadmium	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Chromium	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Copper	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Lead	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Nickel	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Bioavailable Zinc	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Cadmium	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Chromium	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Copper	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Lead	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Nickel	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210
21-0472	Habitat	21-0472	21-0472	1101-NUMI-1101-NUMI-PM	Wet	No	0	0.5	17	N	Mid	Mid	1101-01		0001-0001	10/14/20			Zinc	0.28	Mg/Kg	N	1.1_1.2_1.3	N					JBENTLEY-1-1-20210210

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01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	11	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	50.00	Aminosyn-PF	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	12	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	100.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	13	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	150.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	14	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	200.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	15	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	250.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	16	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	300.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	17	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	350.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	18	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	400.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	19	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	450.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	20	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	500.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	21	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	550.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	22	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	600.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	23	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	650.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	24	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	700.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	25	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	750.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	26	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	800.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	27	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	850.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	28	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	900.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	29	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	950.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	30	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1000.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	31	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1050.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	32	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1100.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	33	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1150.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	34	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1200.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	35	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1250.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	36	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1300.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	37	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1350.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	38	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1400.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	39	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1450.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	40	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1500.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	41	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1550.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	42	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1600.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	43	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1650.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	44	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1700.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	45	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1750.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	46	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1800.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	47	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1850.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	48	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1900.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	49	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	1950.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	50	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2000.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	51	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2050.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	52	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2100.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	53	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2150.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	54	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2200.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	55	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2250.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	56	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2300.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	57	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2350.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	58	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2400.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	59	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2450.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	60	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2500.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	61	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2550.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	62	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2600.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	63	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2650.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	64	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2700.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	65	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2750.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	66	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2800.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	67	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2850.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	68	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2900.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	69	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	2950.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	70	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3000.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	71	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3050.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	72	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3100.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	73	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3150.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	74	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3200.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	75	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3250.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	76	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3300.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	77	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3350.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	78	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3400.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	79	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3450.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	80	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3500.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	81	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3550.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	82	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3600.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	83	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3650.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	84	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3700.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	85	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3750.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	86	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3800.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	87	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3850.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	88	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3900.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	89	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	3950.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	90	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4000.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	91	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4050.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	92	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4100.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	93	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4150.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	94	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4200.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	95	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4250.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	96	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4300.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	97	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4350.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	98	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4400.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	99	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4450.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	100	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4500.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	101	35	17	N	Main	Main	00:00	12/12/2000	7001000	1	50.00	4550.00	Aminosyn-RenalNitrice	0.07	Vials	N	0	0_1148	N			Sanofi-Aventis	
01-00700	Fresenius Kabiva	01-1000	0001-01-01-00	00:00:00	01-01-00	00:00	No	102

Appendix E

Results of Quality Assurance/Quality Control Activities for Nondiesel-Related Chemical Analyses

APPENDIX E RESULTS OF QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES FOR NONDIESEL-RELATED CHEMICAL ANALYSES

E-1.0 SUMMARY OF QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES

This appendix consists of an assessment of the quality and usability of nondiesel-related analytical results for samples collected during 1992 and 1999 at Potential Release Site (PRS) 21-027(d)-99. The qualifiers in this appendix are the product of either an Environmental Restoration (ER) Project routine validation or the focused validation.

Quality assurance (QA), quality control (QC), and data validation procedures were implemented in accordance with the requirements of Laboratory guidance (LANL 1996, 54609) and the Laboratory ER Project analytical services statement of work (SOW) for contract laboratories (LANL 1995, 49738). The results of the QA/QC activities were used to estimate accuracy, bias, and precision of the analytical measurements. QC samples, e.g., method blanks and laboratory control samples (LCSs), were used to assess accuracy and bias. Internal standards, external standards, surrogates, and tracers were also used to assess accuracy and bias. The type and frequency of QC analyses are described in the ER Project analytical services SOW (LANL 1995, 49738). Other QC factors, such as sample preservation and holding times, were also assessed. The requirements for sample preservation and holding times are given in LANL-ER-SOP-1.02, Rev. 0, "Sample Containers and Preservation." The focused validation performed followed the same procedure discussed above and included a more detailed review of the raw data generated by the analytical laboratory.

Data qualifiers used in this appendix are defined in Table E-1.0-1.

Table E-1.0-1
Data Qualifiers Used in the Data Validation Procedure

Qualifier	Explanation
U	The analyte was analyzed for but not detected. Reported value is the sample-specific estimated quantitation limit or detection limit.
J	The reported value should be regarded as estimated.
J+	The reported value should be regarded as estimated and biased high.
J-	The reported value should be regarded as estimated and biased low.
UJ	The analyte was analyzed for but not detected. Reported value is an estimate of the sample-specific quantitation limit or detection limit.
R	The sample results were rejected because of serious deficiencies in the ability to analyze the sample and meet QC criteria; presence or absence cannot be verified.

E-2.0 ORGANIC CHEMICAL ANALYSES

E-2.1 Fixed Laboratory Analyses

Table E-2.1-1 presents a summary of soil samples collected at PRS 21-027(d)-99.

LCSs, method blanks, field duplicate samples, internal standards, holding times, and surrogates were analyzed to assess accuracy and precision for organic chemical analyses. Each of these QA/QC sample

types is defined in the ER Project analytical services SOW (LANL 1995, 49738) and described briefly below.

Table E-2.1-1
Summary of Samples Analyzed for Nondiesel-Related Organic Chemicals, PRS 21-027(d)-99

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
13100/ Outfall	July 1992	AAA0615 AAA0616 AAA0617 AAA0618 AAA0619 AAA0620 AAA0621	SVOCs,[a] EPA[b] SW-846 Method 8270 VOCs,[d] EPA SW-846 Method 5030/8260	CST[c]
5148/ Baseline	January 1999	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	Pesticides/PCBs,[e] EPA SW-846 Method 8081/8082 SVOCs, EPA SW-846 Method 8270 Encore/VOCs, EPA SW-846 Method 5035/8260	Kemron
5327/ Excavation	March 1999	MD21-99-0009 MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0013 MD21-99-0014 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018 MD21-99-0019 MD21-99-0020	SVOCs, EPA SW-846 Method 8270 Encore/VOCs, EPA SW-846 Method 5035/8260	Kemron
5330/ VCP[f]	March 1999	MD21-99-0021 MD21-99-0022	SVOCs, EPA SW-846 Method 8270 Encore/VOCs, EPA SW-846 Method 5035/8260	Kemron
5435/ Premelt boreholes	March 1999	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	SVOCs, EPA SW-846 Method 8270 Encore/VOCs, EPA SW-846 Method 5035/8260	Kemron
5438/ Premelt boreholes	March 1999	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	SVOCs, EPA SW-846 Method 8270 Encore/VOCs, EPA SW-846 Method 5035/8260	Kemron

Table E-2.1-1 (continued)

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
5747/ Postmelt boreholes	June 1999	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	SVOCs, EPA SW-846 Method 8270 PCBs, EPA SW-846 Method 8082	Severn Trent
5750/ Postmelt boreholes	June 1999	MD21-99-0113 MD21-99-0119	SVOCs, EPA SW-846 Method 8270 PCBs, EPA SW-846 Method 8082	Severn Trent

[a] SVOC = semivolatile organic compound.
[b] EPA = Environmental Protection Agency.
[c] CST = Chemical Science and Technology (Laboratory Division).
[d] VOC = volatile organic compound.
[e] PCB = polychlorinated biphenyl.
[f] VCP = vitrified clay pipe.

For SVOCs and pesticide and PCB analyses, soil samples must be extracted within 14 days (extraction holding time). The extracts must be analyzed within 40 days (analysis holding time). For VOC analyses, the samples must be analyzed within 14 days. The organic chemical methods for extraction and analysis set are detailed in Table E-2.1-2. All extraction and analysis holding times were met for all samples.

Table E-2.1-2
Analytical Methods for Nondiesel-Related Organic Chemical Analyses

Analytical Method	Analytical Description	Target Compound List
EPA SW-846 Method 3540, Extraction EPA SW-846 Method 8270, Analysis	SVOCs	ER Project analytical services SOW (LANL 1995, 49738)
EPA SW-846 Method 5035, Sampling EPA SW-846 Method 5035, Extraction EPA SW-846 Method 8260, Analysis	VOCs	ER Project analytical services SOW (LANL 1995, 49738)
EPA SW-846 Method 5030, Extraction EPA SW-846 Method 8260, Analysis	VOCs (Request 13100)	ER Project analytical services SOW (LANL 1995, 49738)
EPA SW-846 Method 3540, Extraction EPA SW-846 Method 8082, Analysis	PCBs	ER Project analytical services SOW (LANL 1995, 49738)
EPA SW-846 Method 3540, Extraction EPA SW-846 Method 8081, Analysis	Pesticides	ER Project analytical services SOW (LANL 1995, 49738)

An LCS is a known matrix that has been spiked with compound(s) representative of the target analytes. The LCS is used to document laboratory performance. For organic chemical analyses, the acceptance criteria for LCS analytes are method specific. The LCS serves as a monitor of the overall performance of each step during the analysis, including sample extraction and injection.

The method blank is an analyte-free matrix to which all reagents (surrogates and internal standards) are added in the same volumes and proportions as those used in the environmental sample processing; the method blank is prepared and analyzed in the same manner as the corresponding environmental samples. The method blanks are used as a measurement of bias and potential cross contamination during sample preparation and analysis. For analytes detected in the method blank, results are regarded as not detected if the sample results are less than or equal to five times the concentration of the analyte in the method blank (10 times for common laboratory contaminants) (EPA 1999, 66649).

Internal standards are chemical compounds added to every client sample and QA/QC sample at a known concentration that is used to compensate for analyte concentration changes that might occur during extract storage and to compensate for quantitation variations that occur during analysis. Internal standards are used as the basis for quantitating target analytes. The area counts for internal standards must be between -50% and +100% for the associated continuing calibration verification (EPA 1999, 66649).

Surrogates are organic chemicals used in the analysis of organic chemical testing methods. These compounds are similar in composition and behavior to target analytes but are not normally found in environmental samples. Surrogates are added to every client sample and QA/QC sample to evaluate the efficiency with which analytes are recovered during extraction and analysis.

Field duplicate samples are used to assess precision of organic chemical analyses. All relative percent differences between the sample and field duplicates should be ±35%.

E-2.2 Results of Data Validation

The data validation results for samples collected at PRS 21-027(d)-99 are divided into the following groups: outfall samples, baseline samples, excavation samples, VCP samples, premelt borehole samples, and postmelt borehole. The data, including the qualified data, are usable for evaluation and interpretive purposes. The extraction and analysis holding times were met for all analytes for all request numbers, except for request 13100, which could not be verified for holding time requirements.

Outfall Samples

Request 13100. CST analyzed seven samples for SVOCs and VOCs. Raw data could not be located for this request number; therefore, no data qualifiers were applied.

Baseline Samples

Request 5148. Kemron analyzed four samples for pesticides/PCBs, SVOCs, and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria.
- For VOCs, the method blank was free of target analyte contamination except for acetone, methylene chloride, and chloroform. The sample results qualified as not detected (U) because of

this laboratory contamination are shown in Table E-2.2-1. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria.

- For pesticides/PCBs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. The reporting limits for all samples should be regarded as estimated (UJ) because the associated surrogate recoveries were low. The samples are qualified as shown in Table E-2.2-1. The retention time windows and breakdown criteria met acceptance criteria.

Excavation Samples

Request 5327. Kemron analyzed 12 samples for SVOCs and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria with the exception of the continuing calibration standard that was used for qualification and quantification of samples MD21-99-0019 and MD21-99-0020. The internal standard areas were less than 50% from the previous continuing standard. The reporting limits for both of these samples are qualified as estimated (UJ) as shown in Table E-2.2-1. All internal standard and surrogate recoveries met acceptance criteria.

- For VOCs, the method blank was free of contamination except for acetone and methylene chloride. The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table E-2.2-1. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria with the exception of samples MD21-99-0012 and MD21-99-0013. The surrogate recoveries were high; therefore, all detected results associated with this surrogate were qualified as estimated and biased high (J+), as shown in Table E-2.2-1.

VCP Samples

Request 5330. Kemron analyzed two samples for SVOCs and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria with the exception of the continuing calibration standard that was used for qualification and quantification of sample MD21-99-0022. The internal standard areas were less than 50% from the previous continuing standard. Therefore, the reporting limits for this sample are qualified as estimated (UJ), as shown in Table E-2.2-1. All internal standard and surrogate recoveries met acceptance criteria.

- For VOCs, the method blank was free of target analyte contamination except for acetone and methylene chloride. The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table E-2.2-1. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria.

Table E-2.2-1
Organic Chemical Data Quality Evaluation For Nondiesel-Related Analytes, PRS 21-027(d)-99

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
Baseline Samples					
5148R	21-11014 21-11014 21-11015	MD21-99-0001 MD21-99-0003 MD21-99-0004	Pesticides/ PCBs	All target analytes	The reporting limits for these analytes should be regarded as estimated (UJ) because the associated surrogate recoveries were low.
5148R	21-11014 21-11015 21-11014 21-11015	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	VOCs	Acetone Chloroform Methylene chloride	The results for these analytes should be regarded as not detected (U) because the results were less than 10 times for acetone and methylene chloride and 5 times for chloroform the concentrations for these analytes in the method blank. These results are therefore indistinguishable from laboratory contamination.
Excavation Samples					
5327R	21-11017 21-11017 21-11018 21-11021 21-11022 21-11024 21-11025	MD21-99-0009 MD21-99-0010 MD21-99-0011 MD21-99-0014 MD21-99-0015 MD21-99-0017 MD21-99-0018	VOCs	Methylene chloride	The result for this analyte should be regarded as not detected (U) because the result was less than 10 times the concentrations for this analyte in the method blank. This result is therefore indistinguishable from laboratory contamination.
5327R	21-11019	MD21-99-0012	VOCs	Isopropyltoluene[4-] Trimethylbenzene[1,2,4-] Trimethylbenzene[1,3,5-] Butylbenzene[sec-]	The results for these analytes should be regarded as estimated and biased high (J+) because the associated surrogate recovery was high.
5327R	21-11020	MD21-99-0013	VOCs	Isopropyltoluene[4-] Trimethylbenzene[1,2,4-] Trimethylbenzene[1,3,5-] Butylbenzene[n-] Butylbenzene[sec-] Isopropylbenzene	The results for these analytes should be regarded as estimated and biased high (J+) because the associated surrogate recovery was high.
5327R	21-11019 21-11020 21-11023 21-11026 21-11026	MD21-99-0012 MD21-99-0013 MD21-99-0016 MD21-99-0019 MD21-99-0020	VOCs	Acetone Methylene chloride	The results for these analytes should be regarded as not detected (U) because the results were less than 10 times the concentrations for these analytes in the method blank. These results are therefore indistinguishable from laboratory contamination.

Table E-2.2-1 (continued)

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
5327R	21-11026 21-11026	MD21-99-0019 MD21-99-0020	SVOCs	All nondiesel-related analytes	The reporting limits for these analytes should be regarded as estimated (UJ) because the associated internal standard recoveries did not pass acceptance criteria.
VCP Samples					
5330R	21-11027	MD21-99-0021	VOCs	Acetone Methylene chloride	The results for these analytes should be regarded as not detected (U) because the results were less than 10 times the concentrations for these analytes in the method blank. These results are therefore indistinguishable from laboratory contamination.
5330R	21-11028	MD21-99-0022	SVOCs	All nondiesel-related analytes	The reporting limits for these analytes should be regarded as estimated (UJ) because the associated internal standard recoveries did not pass acceptance criteria.
5330R	21-11028	MD21-99-0022	VOCs	Methylene chloride	The result for this analyte should be regarded as not detected (U) because the result was less than 10 times the concentration for this analyte in the method blank. This result is therefore indistinguishable from laboratory contamination.
Premelt Borehole Samples					
5435R	21-11036	MD21-99-0030	VOCs	Butanone[2-] Trichlorofluoromethane Trimethylbenzene[1,3,5-]	The results for these analytes should be regarded as estimated and biased high (J+) because the associated surrogate recovery was high.
5435R	21-11036 21-11036 21-11037 21-11037	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	VOCs	Acetone	The results for this analyte should be regarded as not detected (U) because the results were less than 10 times the concentrations for this analyte in the method blank. These results are therefore indistinguishable from laboratory contamination.

Table E-2.2-1 (continued)

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
5438R	21-11038 21-11038 21-11038 21-11039 21-11039 21-11040 21-11040	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	VOCs	Acetone	The results for this analyte should be regarded as not detected (U) because the results were less than 10 times the concentrations for this analyte in the method blank. These results are therefore indistinguishable from laboratory contamination.
Postmelt Borehole Samples					
5747R	21-11057 21-11058 21-11058	MD21-99-0093 MD21-99-0099 MD21-99-0101	SVOCs	Di-n-butylphthalate	The results for this analyte should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.
5747R	21-11057 21-11058 21-11058 21-11058 21-11058	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103	SVOCs	Bis(2-ethylhexyl)phthalate	The results for this analyte should be regarded as not detected (U) because the results were less than 10 times the concentrations for this analyte in the method blank. These results are therefore indistinguishable from laboratory contamination.
5747R	21-11058	MD21-99-0100	SVOCs	Dibenzofuran Di-n-butylphthalate	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.
5747R	21-11059 21-11059 21-11059 21-11060 21-11060 21-11061	MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117	SVOCs	Bis(2-ethylhexyl)phthalate	The results for this analyte should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.
5747R	21-11058	MD21-99-0100	SVOCs	Chloroaniline[4-]	The result for this analyte should be regarded as not detected (U) because the mass spectrum does not meet method criteria.
5747R	21-11058	MD21-99-0101	SVOCs	n-Nitrosodiphenylamine	The result for this analyte should be regarded as not detected (U) because the mass spectrum does not meet method criteria.
5747R	21-11061	MD21-99-0118	SVOCs	Bis(2-ethylhexyl)phthalate Diethylphthalate	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.

Table E-2.2-1 (continued)

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
5750R	21-11060	MD21-99-0113	SVOCs	Bis(2-ethylhexyl)phthalate Butylbenzylphthalate Diethylphthalate	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the method detection limit.
5750R	21-11061	MD21-99-0119	SVOCs	Bis(2-ethylhexyl)phthalate	The result for this analyte should be regarded as estimated (J) because the result was less than the practical quantitation limit but above the method detection limit.
5750R	21-11061	MD21-99-0119	PCBs	All target analytes	The reporting limits for these analytes should be regarded as estimated (UJ) because the associated surrogate recoveries were low.

Premelt Borehole Samples

Request 5435. Kemron analyzed four samples for SVOCs and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria.
- For VOCs, the method blank was free of target analyte contamination except for acetone. The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table E-2.2-1. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria, with the exception of sample MD21-99-0030. The surrogate recovered high; therefore, the analytes associated with this surrogate should be regarded as estimated and biased high (J+), as shown in Table E-2.2-1.

Request 5438. Kemron analyzed seven samples for SVOCs and VOCs.

- For SVOCs, the method blank results were below the reporting limits for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria.
- For VOCs, the method blank was free of contamination except for acetone. The sample results qualified as not detected (U) because of this laboratory contamination are shown in Table E-2.2-1. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria.

Postmelt Borehole Samples

Request 5747. Quanterra analyzed 12 samples for SVOCs and PCBs.

- For SVOCs, the method blank was free of contamination except for bis(2-ethylhexyl)phthalate. The sample results qualified as not detected (U) because of this laboratory contamination are

shown in Table E-2.2-1. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. N-Nitrosodiphenylamine and 4-Chloroaniline are qualified as not detected because the mass spectrum does not meet method specifications. The affected samples are shown in Table E-2.2-1. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the method detection limit are shown in Table E-2.2-1.

- For PCBs, the method blank was below the reporting limit for all target analytes. All initial and continuing calibration verifications met acceptance criteria. The surrogate recoveries all passed acceptance criteria. The retention time window criteria and breakdown criteria were within the specified ranges.

Request 5750. Quanterra analyzed two samples for SVOCs and PCBs.

- For SVOCs, the method blank was below the reporting limit for all analytes. All initial and continuing calibration verifications met acceptance criteria. All internal standard and surrogate recoveries met acceptance criteria. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the method detection limit are presented in Table E-2.2-1.
- For PCBs, the method blank was below the reporting limit for all target analytes. All initial and continuing calibration verifications met acceptance criteria. The surrogate recoveries met acceptance criteria with the exception of sample MD21-99-0119. The reporting limits are qualified as estimated (UJ) because of the low surrogate recovery as shown in Table E-2.2-1. The retention time window criteria and breakdown criteria were within the specified ranges.

E-3.0 INORGANIC CHEMICAL ANALYSES

E-3.1 Fixed Laboratory Analyses

Table E-3.1-1 presents a summary of soil samples collected. Fifty soil samples were analyzed for the target analyte list (TAL) metals. Table E-3.1-2 presents the inorganic chemical analytical methods for this data set.

Preparation blanks, LCSs, field duplicate samples, interference check samples (ICSs), and serial dilution samples were analyzed to assess accuracy and precision for inorganic chemical analyses. Each of these QA/QC sample types is defined in the ER Project analytical services SOW (LANL 1995, 49738) and described briefly below.

Preparation blanks are used to assess the existence and magnitude of contamination resulting from laboratory or field activities. If the sample results are less than or equal to five times the result for the analyte in the preparation blank, the analyte is regarded as not detected.

The LCS serves as a monitor of the overall performance of each step during the analysis, including sample digestion. The analytical results for the samples were qualified according to EPA functional guidelines for inorganic data review (EPA 1994, 48639), if the individual LCS recovery indicated an unacceptable bias in the measurement of individual analytes. The LCS recoveries should fall into the control limits of 80% to 120%.

Table E-3.1-1
Summary of Samples Analyzed for Inorganic Chemicals, PRS 21-027(d)-99

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
13099/ Outfall	July 1992	AAA0615 AAA0616 AAA0617 AAA0618 AAA0619 AAA0620 AAA0621	Uranium/delayed neutron assay[a]	CST
13101/ Outfall	July 1992	AAA0615 AAA0616 AAA0617 AAA0618 AAA0619 AAA0620 AAA0621	TAL metals/EPA SW-846 Method 6010 B Lithium, molybdenum, strontium/EPA SW-846 Method 6010B Arsenic, lead, selenium, thallium/ETVAA[b]/EPA SW 846 Method 7000 Series	Rust Geotech
5148/ Baseline	January 1999	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	TAL metals/EPA SW-846 Method 6010 B Antimony, lead, thallium/EPA SW-846 Method 7000 Series Mercury/EPA SW-846 Method 7471A	Kemron
5328/ Excavation	March 1999	MD21-99-0009 MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0013 MD21-99-0014 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018 MD21-99-0019 MD21-99-0020	TAL metals/EPA SW-846 Method 6010 B Thallium/antimony/EPA SW-846 Method 7000 Series Mercury/EPA SW-846 Method 7471A	Kemron
5331/ VCP	March 1999	MD21-99-0021 MD21-99-0022	TAL metals/EPA SW-846 Method 6010 B Thallium/antimony/EPA SW-846 Method 7000 Series Mercury/EPA SW-846 Method 7471A	Kemron
5436/ Premelt boreholes	March 1999	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	TAL metals/EPA SW-846 Method 6010 B Thallium/antimony/EPA SW-846 Method 7000 Series Mercury/EPA SW-846 Method 7471A	Kemron
5439/ Premelt boreholes	March 1999	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	TAL metals/EPA SW-846 Method 6010 B Thallium/antimony/EPA SW-846 Method 7000 Series Mercury/EPA SW-846 Method 7471A	Kemron

Table E-3.1-1 (continued)

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
5748/ Postmelt boreholes	June 1999	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	TAL metals/EPA SW-846 Method 6010 B Mercury/EPA SW-846 Method 7471A	Paragon/ATI
5751/ Postmelt boreholes	June 1999	MD21-99-0113 MD21-99-0119	TAL metals/EPA SW-846 Method 6010 B Mercury/EPA SW-846 Method 7471A	Quanterra

[a] DNA = delayed neutron assay.
[b] ETVAA = electro thermal vaporization atomic absorption.

Table E-3.1-2
Analytical Methods for Nondiesel-Related Inorganic Chemical Analysis

Analytical Method	Analytical Description	Analytical Suite
EPA SW-846 Method 6010B	ICPES[a]	Aluminum, antimony, arsenic, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, sodium, silver, thallium, vanadium, and zinc (TAL metals)
EPA SW-846 Method 6010B	ICPES	Lithium, molybdenum, strontium (request 13101 additional)
EPA SW-846 Method 7471A	CVAA[b]	Mercury (TAL metal) (requests 5148, 5328, 5331, 5436, 5439, 5748, 5751)
EPA SW-846 Method 7040	GFAA[c]	Antimony (requests 5148, 5328, 5331, 5436, 5439)
EPA SW-846 Method 7060	ETVAA	Arsenic (request 13101)
EPA SW-846 Method 7421	ETVAA	Lead (request 13101)
EPA SW-846 Method 7421	GFAA	Lead (request 5148)
EPA SW-846 Method 7740	ETVAA	Selenium (request 13101)
EPA SW-846 Method 7841	ETVAA	Thallium (request 13101)
EPA SW-846 Method 7841	GFAA	Thallium (requests 5148, 5328, 5331, 5436, 5439)
Delayed neutron assay	DNA	Uranium (request 13099)

[a] ICPES = inductively coupled plasma emission spectroscopy.
[b] CVAA = cold vapor atomic absorption.
[c] GFAA = graphite furnace atomic absorption.

The ICS verifies the laboratory's interelement and background correction factors. The ICS consists of two solutions: solution A and solution AB. Solution A consists of the interferents, and solution AB consists of the analytes mixed with the interferents. An ICS analysis consists of analyzing both solutions, consecutively, starting with solution A, for all wavelengths used for each analyte reported. Results for the ICPES analysis of solution AB must fall within the control limits of ±20% of the true value for the analytes included in the solution (EPA 1994, 48639).

The serial dilution sample determines whether or not significant physical or chemical interferences exist because of the sample matrix. The serial dilution analysis is accomplished by diluting the sample by a factor of five and comparing the dilution-corrected results with those of the undiluted parent sample. The results are required to agree within ±10% of the undiluted parent sample results where the undiluted results are greater than or equal to the method detection limit (EPA 1994, 48639).

Field duplicate samples are used to assess precision of inorganic chemical analyses. All relative percent differences between the sample and field duplicate should be within ±35%.

E-3.2 Results of Data Validation

The inorganic chemical data set meets the standards with two exceptions.

- The antimony results for selected samples were rejected because of matrix spike recoveries that were less than 30%. These rejected samples are shown in Table E-3.2-1.
- The manganese results for selected samples were rejected because of matrix spike recoveries that were less than 30%. These rejected samples are shown in Table E-3.2-1.

The holding times were met for all samples under the following request numbers. Request 13099 could not be verified for holding time requirements.

Request 13099. CST analyzed seven soil samples for uranium. The raw data could not be located for this request number; therefore, no data qualifiers were applied.

Request 13101. Rust Geotech analyzed seven soil samples for lithium, molybdenum, strontium, and TAL metals. Mercury was not analyzed for this request number. The method blank results were below detection limits for all analytes. The recoveries for the LCS met acceptance criteria of 80% to 120%. No other information was in the data package; therefore, the initial continuing calibration and interference check verifications could not be assessed. No matrix spike samples were analyzed.

Request 5148. Kemron analyzed four soil samples for TAL metals. The method blank results were below detection limits for all analytes. The recoveries for the LCS met acceptance criteria of 80% to 120%. All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. Except for antimony and thallium, matrix spike recoveries all met acceptance criteria (75% to 125%) (Table E-3.2-1). The results for thallium should be regarded as estimated and biased low (J-). The results for antimony should be regarded as unusable (R) because the matrix spike recoveries were less than 30%. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

Table E-3.2-1
Inorganic Chemical Data Quality Evaluation for Nondiesel-Related Analytes, PRS 21-027(d)-99

Request Number	Location ID	Sample ID	Analyte	Explanation
5148R	21-11015	MD21-99-0002	Mercury	The result for this analyte should be regarded as estimated (J) because the result was less than the practical quantitation limit but above the instrument detection limit.
5148R	21-11014	MD21-99-0003	Cadmium Mercury Silver	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5148R	21-11015	MD21-99-0004	Cadmium Mercury	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5148R	21-11014 21-11015 21-11014 21-11015	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	Thallium	The results for this analyte should be regarded as estimated and biased low (J-) because the associated matrix spike recovery was low (49%).
5148R	21-11014 21-11015 21-11014 21-11015	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	Antimony	The results for this analyte should be regarded as unusable (R) because the associated matrix spike recovery was less than 30%.
5328R	21-11017	MD21-99-0009	Mercury Silver Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11018	MD21-99-0011	Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11017 21-11019 21-11020	MD21-99-0010 MD21-99-0012 MD21-99-0013	Mercury Thallium Selenium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11021	MD21-99-0014	Mercury Silver	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11022	MD21-99-0015	Mercury Selenium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11023 21-11025	MD21-99-0016 MD21-99-0018	Mercury Silver Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11024	MD21-99-0017	Mercury	The result for this analyte should be regarded as estimated (J) because the result was less than the practical quantitation limit but above the instrument detection limit.

Table E-3.2-1 (continued)

Request Number	Location ID	Sample ID	Analyte	Explanation
5328R	21-11026	MD21-99-0019	Beryllium Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11026	MD21-99-0020	Beryllium Mercury Nickel Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5328R	21-11017 21-11017 21-11018 21-11019 21-11020 21-11021 21-11022 21-11023 21-11024 21-11025 21-11026 21-11026	MD21-99-0009 MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0013 MD21-99-0014 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018 MD21-99-0019 MD21-99-0020	Antimony	The results for this analyte should be regarded as not detected (U) because the results were less than five times the result for this analyte in the preparation blank.
5328R	21-11017 21-11018 21-11019 21-11020 21-11022 21-11023 21-11024 21-11025	MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0013 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018	Cadmium	The results for this analyte should be regarded as estimated and biased high (J+) because the associated matrix spike recovery was high (131%).
5331R	21-11027	MD21-99-0021	Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5331R	21-11027	MD21-99-0021	Cadmium	The result for this analyte should be regarded as estimated and biased high (J+) because the associated matrix spike recovery was high (131%).
5331R	21-11028	MD21-99-0022	Mercury Silver Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5331R	21-11027 21-11028	MD21-99-0021 MD21-99-0022	Antimony	The results for this analyte should be regarded as not detected (U) because the results were less than five times the result for this analyte in the preparation blank.
5436R	21-11036	MD21-99-0030	Cobalt Copper Nickel Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5436R	21-11036	MD21-99-0031	Beryllium Cobalt Copper Nickel	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.

Table E-3.2-1 (continued)

Request Number	Location ID	Sample ID	Analyte	Explanation
5436R	21-11037	MD21-99-0034	Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5436R	21-11037	MD21-99-0035	Beryllium Cobalt Nickel	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5436R	21-11037	MD21-99-0034	Cadmium	The result for this analyte should be regarded as estimated and biased high (J+) because the associated matrix spike recovery was high (127%).
5436R	21-11036 21-11036 21-11037 21-11037	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	Manganese	The results for this analyte should be regarded as unusable (R) because the associated matrix spike recovery was less than 30%.
5436R	21-11036 21-11036 21-11037 21-11037	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	Antimony	The reporting limits for this analyte should be regarded as estimated (UJ) because the associated matrix spike recovery was low (38%).
5436R	21-11036 21-11037	MD21-99-0031 MD21-99-0035	Vanadium	The results for this analyte should be regarded as not detected (U) because the results were less than five times the result for this analyte in the preparation blank.
5439R	21-11038 21-11038	MD21-99-0038 MD21-99-0040	Beryllium Cobalt Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5439R	21-11038 21-11040	MD21-99-0039 MD21-99-0044	Cobalt Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5439R	21-11039	MD21-99-0041	Beryllium Cobalt Copper Mercury Nickel	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5439R	21-11039	MD21-99-0042	Mercury Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5439R	21-11040	MD21-99-0043	Beryllium Chromium, total Cobalt Copper Mercury Nickel	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.

Table E-3.2-1 (continued)

Request Number	Location ID	Sample ID	Analyte	Explanation
5439R	21-11038 21-11038 21-11038 21-11039 21-11040 21-11040	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0042 MD21-99-0043 MD21-99-0044	Cadmium	The results for this analyte should be regarded as estimated and biased high (J+) because the associated matrix spike recovery was high (127%).
5439R	21-11038 21-11038 21-11038 21-11039 21-11039 21-11040 21-11040	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	Manganese	The results for this analyte should be regarded as unusable (R) because the associated matrix spike recovery was less than 30%.
5439R	21-11038 21-11038 21-11038 21-11039 21-11039 21-11040 21-11040	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	Antimony	The reporting limits for this analyte should be regarded as estimated (UJ) because the associated matrix spike recovery was low (38%).
5439R	21-11039	MD21-99-0041	Vanadium	The result for this analyte should be regarded as not detected (U) because the result was less than five times the result for this analyte in the preparation blank.
5748R	21-11057	MD21-99-0093	Arsenic Barium Beryllium Cadmium Cobalt Nickel Potassium Sodium Thallium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11058	MD21-99-0099	Cadmium Cobalt Mercury Sodium Thallium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11058	MD21-99-0100	Arsenic Barium Beryllium Cadmium Cobalt Copper Magnesium Nickel Potassium Silver Sodium Thallium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.

Table E-3.2-1 (continued)

Request Number	Location ID	Sample ID	Analyte	Explanation
5748R	21-11058	MD21-99-0101	Arsenic Barium Beryllium Cadmium Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11058 21-11059	MD21-99-0103 MD21-99-0105	Arsenic Barium Beryllium Cadmium Calcium Chromium, total Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11059	MD21-99-0106	Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium, total Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11059	MD21-99-0107	Beryllium Cadmium Calcium Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.

Table E-3.2-1 (continued)

Request Number	Location ID	Sample ID	Analyte	Explanation
5748R	21-11060	MD21-99-0111	Arsenic Beryllium Cadmium Calcium Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11060 21-11061 21-11061	MD21-99-0112 MD21-99-0117 MD21-99-0118	Arsenic Barium Beryllium Cadmium Calcium Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5748R	21-11057 21-11058 21-11058 21-11058 21-11058 21-11059 21-11060	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0107 MD21-99-0111	Antimony Selenium	The results for these analytes should be regarded as not detected (U) because the results were less than five times the results for these analytes in the preparation blank.
5748R	21-11060	MD21-99-0112	Selenium	The result for this analyte should be regarded as not detected (U) because the result was less than five times the result for this analyte in the preparation blank.
5748R	21-11061 21-11061	MD21-99-0117 MD21-99-0118	Antimony	The results for this analyte should be regarded as not detected (U) because the results were less than five times the result for this analyte in the preparation blank.
5748R	21-11057 21-11058 21-11058 21-11058 21-11058 21-11059 21-11059 21-11059 21-11060 21-11060 21-11061 21-11061	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	Iron	The results for this analyte should be regarded as estimated and biased high (J+) because the associated LCS recovery was high (135%).

Table E-3.2-1 (continued)

Request Number	Location ID	Sample ID	Analyte	Explanation
5751R	21-11060	MD21-99-0113	Barium Beryllium Calcium Cobalt Copper Magnesium Nickel Potassium Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.
5751R	21-11061	MD21-99-0119	Cobalt Copper Nickel Sodium Vanadium	The results for these analytes should be regarded as estimated (J) because the results were less than the practical quantitation limit but above the instrument detection limit.

Request 5328. Kemron analyzed 12 soil samples for TAL metals. The method blank results were below detection limits for all analytes, with the exception of antimony. The results for antimony should be regarded as not detected (U) because the results were less than five times the result for antimony in the preparation blank (Table E-3.2-1). The recoveries for the LCS met acceptance criteria of 80% to 120%. All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. The matrix spike recoveries all met acceptance criteria (75% to 125%), with the exception of cadmium (Table E-3.2-1). The results for cadmium should be regarded as estimated and biased high (J+) because the associated matrix spike recovery was high. The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

Request 5331. Kemron analyzed two soil samples for TAL metals. The method blank results were below detection limits for all analytes, with the exception of antimony. The results for antimony should be regarded as not detected (U) because the results were less than five times the result for antimony in the preparation blank (Table E-3.2-1). The recoveries for the LCS met acceptance criteria of 80% to 120%. All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. The matrix spike recoveries all met acceptance criteria (75% to 125%), with the exception of cadmium. The result for cadmium should be regarded as estimated and biased high (J+) because the associated matrix spike recovery was high (Table E-3.2-1). The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

Request 5436. Kemron analyzed four soil samples for TAL metals. The method blank results were below detection limits for all analytes, with the exception of vanadium. The results for vanadium should be regarded as not detected (U) because the results were less than five times the result for vanadium in the preparation blank (Table E-3.2-1). The recoveries for the LCS met acceptance criteria of 80% to 120%. All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. The matrix spike recoveries all met acceptance criteria (75% to 125%), except for antimony, cadmium, and manganese. Antimony and manganese failed low, while cadmium failed high (Table E-3.2-1). The manganese results were rejected (R) because the manganese matrix spike recovery was

less than 30%. The reporting limits for antimony were regarded as estimated (UJ), and the result for cadmium in sample MD21-99-0034 is estimated and biased high (J+). The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

Request 5439. Kemron analyzed seven soil samples for TAL metals. The method blank results were below detection limits for all analytes, with the exception of vanadium. The results for vanadium should be regarded as not detected (U) because the results were less than five times the result for vanadium in the preparation blank (Table E-3.2-1). The recoveries for the LCS met acceptance criteria of 80% to 120%. All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. The matrix spike recoveries all met acceptance criteria (75% to 125%), except for antimony, cadmium, and manganese (Table E-3.2-1). The manganese results were rejected (R) because the manganese matrix spike recovery was less than 30%. The reporting limits for antimony were regarded as estimated (UJ), and the results for cadmium are estimated and biased high (J+). The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

Request 5748. Paragon/ATI analyzed 12 soil samples for TAL metals. The method blank results were below detection limits for all analytes, with the exception of antimony and selenium. The results for these analytes should be regarded as not detected (U) because the results were less than five times the results for these analytes in the preparation blank (Table E-3.2-1). The recoveries for the LCS met acceptance criteria of 80% to 120%, with the exception of iron. The results for this analyte should be regarded as estimated and biased high (J+) because the associated LCS recovery was high (Table E-3.2-1). All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. The matrix spike recoveries all met acceptance criteria (75% to 125%). The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

Request 5751. Quanterra analyzed two soil samples for TAL metals. The method blank results were below detection limits for all analytes. The recoveries for the LCS met acceptance criteria of 80% to 120%. All initial and continuing calibration verifications were within acceptance criteria. The ICS met acceptance criteria. The matrix spike recoveries all met acceptance criteria (75% to 125%). The sample-specific analytes qualified as estimated (J) because the results were less than the reporting limit but greater than the instrument detection limit are also shown in Table E-3.2-1.

E-4.0 RADIONUCLIDE CHEMICAL ANALYSES

E-4.1 Fixed-Laboratory Analyses

Table E-4.1-1 presents a summary of soil samples collected. Thirty-five soil samples were analyzed for radionuclides by the methods listed in Table E-4.1-2. The maximum allowable reporting limits, as defined in the ER Project analytical services SOW for radiochemicals, are provided in Appendix F.

Precision and bias of radiochemical analyses performed at off-site fixed laboratories were assessed using matrix spike samples, LCSs, and method blanks.

The ER Project analytical services SOW (LANL 1995, 49738) specifies that spike sample recoveries should be within ± 25% of the certified value.

Table E-4.1-1
Summary of Samples Analyzed for Radionuclides, PRS 21-027(d)-99

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
13099/ Outfall	July 1992	AAA0615 AAA0616 AAA0617 AAA0618 AAA0619 AAA0620 AAA0621	Tritium/liquid scintillation Strontium-90/proportional counting Isotopic plutonium/americium-241/chemical separation alpha spectroscopy	CST Rust Geotech
5149/ Baseline	January 1999	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	Tritium/liquid scintillation Gross alpha/beta/gamma radiation	Weston
5329/ Excavation	March 1999	MD21-99-0009 MD21-99-0010 MD21-99-0011 MD21-99-0012 MD21-99-0013 MD21-99-0014 MD21-99-0015 MD21-99-0016 MD21-99-0017 MD21-99-0018 MD21-99-0019 MD21-99-0020	Strontium-90/proportional counting Isotopic uranium/isotopic thorium/chemical separation alpha spectroscopy Gross alpha/beta radiation	Quanterra
5332/ VCP	March 1999	MD21-99-0022	Strontium-90/proportional counting Isotopic uranium/isotopic thorium/chemical separation alpha spectroscopy	Quanterra
5437/ Premelt boreholes	March 1999	MD21-99-0030 MD21-99-0031 MD21-99-0034 MD21-99-0035	Gross alpha/beta/gamma radiation	Paragon
5440/ Premelt boreholes	March 1999	MD21-99-0038 MD21-99-0039 MD21-99-0040 MD21-99-0041 MD21-99-0042 MD21-99-0043 MD21-99-0044	Gross alpha/beta radiation	Paragon
5749/ Postmelt boreholes	June 1999	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	Gamma-emitting radionuclides/gamma spectroscopy Strontium-90/proportional counting Isotopic uranium/isotopic thorium/chemical separation alpha spectroscopy	Paragon/ATI

Table E-4.1-1 (continued)

Request Number/ Sample Area	Collection Date	Sample ID	Analytical Suite/ Analytical Method	Analytical Laboratory
5749/ Postmelt boreholes	June 1999	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	Gamma-emitting radionuclides/gamma spectroscopy Strontium-90/proportional counting Isotopic uranium/isotopic thorium/chemical separation alpha spectroscopy	Paragon/ATI
5752/ Postmelt boreholes	June 1999	MD21-99-0113 MD21-99-0119	Gamma-emitting radionuclides/gamma spectroscopy Strontium-90/proportional counting Isotopic uranium/isotopic thorium/chemical separation alpha spectroscopy	Weston
6204/ Outfall	November 1999	MD21-99-0210 MD21-99-0211 MD21-99-0212 MD21-99-0213 MD21-99-0214 MD21-99-0215 MD21-99-0216	Isotopic plutonium/americium-241/chemical separation alpha spectroscopy	Quanterra

Table E-4.1-2
Analytical Methods for Radiochemical Analyses

Radiation and Radionuclide(s)	Analytical Technique
Gamma-emitting radionuclides	Gamma spectroscopy
Americium-241	Chemical separation/alpha spectroscopy
Gross alpha/beta radiation	Direct counting
Gross gamma radiation	Gamma spectroscopy
Isotopic plutonium	Chemical separation/alpha spectroscopy
Isotopic thorium	Chemical separation/alpha spectroscopy
Isotopic uranium	Chemical separation/alpha spectroscopy
Tritium	Liquid scintillation
Strontium-90	Proportional counting

LCSs were analyzed to assess accuracy for radionuclide analyses. The LCSs serve as a monitor of the overall performance of each step during the analysis, including the radiochemical separation preparation. The ER Project analytical services SOW specifies that LCS recoveries should be within ± 25% of the

certified value (LANL 1995, 49738). The analytical results for individual LCSs were all within the ± 25% recovery control limit.

Method blanks are also used to assess bias. The ER Project analytical services SOW specifies that the method blank concentration should not exceed the required minimum detectable activity (LANL 1995, 49738).

E-4.2 Results of Data Validation

Radionuclides with reported values less than the minimum detectable activity were qualified as nondetected (U) (Table E-4.2-1). Each radionuclide result was also compared with the corresponding 1-sigma total propagated uncertainty. If the result was not greater than three times the total propagated uncertainty, it was qualified as nondetected (U) (Table E-4.2-1).

Certain gamma spectroscopy analytes are subject to spectral interference from energies of other radionuclides. When this occurs, it is not possible to reliably measure these radionuclides. Laboratory results indicated spectral interference for several gamma spectroscopy analytes. These values were, therefore, rejected (R). All other radionuclide results, including the qualified data, are usable for evaluation and interpretive purposes.

Request 13099. Rust Geotech analyzed seven soil samples for isotopic plutonium, americium-241, and strontium-90. CST analyzed these samples for tritium. The raw data for these analyses could not be found. Data qualifiers were applied (from electronic) but could not be verified.

Request 5149. Weston analyzed four soil samples for tritium and gross alpha/beta/gamma radiation. The method blank results were below the minimum detectable activity concentrations (Table E-4.2-1). The LCS results met acceptance criteria.

Request 5329. Quanterra analyzed two soil samples for isotopic uranium, isotopic thorium, strontium-90, and gross alpha/beta radiation.

- For strontium-90, the samples were analyzed using Method RICHRC5006. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria.
- For isotopic uranium, the samples were analyzed using Method RICHRC5079. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria, with the exception of uranium-235. The reporting limits for these samples are regarded as estimated and biased low (UJ-) because the LCS sample recovery was low (Table E-4.2-1).
- For isotopic thorium, the samples were analyzed using Method RICHRC5011. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria.
- For gross alpha/beta radiation, the samples were analyzed using Method RICHRC5011. The method blank results were below minimum detectable concentrations. The LCS sample recoveries all met acceptance criteria

Table E-4.2-1
Radionuclide Chemical Data Quality Evaluation for Nondiesel-Related Analytes, PRS 21-27(d)-99

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
5149R	21-11014 21-11015 21-11014 21-11015	MD21-99-0001 MD21-99-0002 MD21-99-0003 MD21-99-0004	Liquid scintillation	Tritium	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
5329R	21-11017 21-11020	MD21-99-0009 MD21-99-0013	Alpha spectroscopy	Thorium-230	The results for this analyte should be regarded as not detected (U) because the results were less than three times the 1-sigma total propagated uncertainty.
5329R	21-11017 21-11020	MD21-99-0009 MD21-99-0013	Alpha spectroscopy	Uranium-235	The reporting limits for this analyte should be regarded as estimated and biased low (UJ-) because the associated LCS recovery was low.
5329R	21-11017 21-11020	MD21-99-0009 MD21-99-0013	Proportional counting	Strontium-90	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
5332R	21-11028	MD21-99-0022	Alpha spectroscopy	Uranium-235	The reporting limits for this analyte should be regarded as estimated and biased low (UJ-) because the associated LCS recovery was low.
5332R	21-11028	MD21-99-0022	Proportional counting	Strontium-90	The result for this analyte should be regarded as not detected (U) because the result was less than the minimum detectable concentration.
5749R	21-11057 21-11058 21-11058 21-11058 21-11058 21-11059 21-11059 21-11059 21-11060 21-11060 21-11061 21-11061	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	Gamma spectroscopy	Americium-241 Cesium-134 Cesium-137 Cobalt-60 Europium-152 Sodium-22	The results for these analytes should be regarded as not detected (U) because the results were less than the minimum detectable concentration.

Table E-4.2-1 (continued)

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
5749R	21-11057 21-11058 21-11058 21-11058 21-11058 21-11059 21-11059 21-11059 21-11060 21-11060 21-11061	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117	Gamma spectroscopy	Ruthenium-106	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
5749R	21-11061	MD21-99-0118	Gamma spectroscopy	Ruthenium-106	The result for this analyte should be regarded as unusable (R) because of spectral interference.
5749R	21-11057 21-11058 21-11058 21-11058 21-11059	MD21-99-0093 MD21-99-0099 MD21-99-0100 MD21-99-0101 MD21-99-0106	Gamma spectroscopy	Uranium-235	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
5749R	21-11058 21-11059 21-11059 21-11060 21-11060 21-11061 21-11061	MD21-99-0103 MD21-99-0105 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	Gamma spectroscopy	Uranium-235	The results for this analyte should be regarded as unusable (R) because of spectral interference.
5749R	21-11057 21-11058 21-11058 21-11059 21-11059 21-11060	MD21-99-0093 MD21-99-0101 MD21-99-0103 MD21-99-0105 MD21-99-0107 MD21-99-0111	Alpha spectroscopy	Uranium-235	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
5749R	21-11058 21-11060	MD21-99-0100 MD21-99-0112	Alpha spectroscopy	Uranium-235	The results for this analyte should be regarded as not detected (U) because the results were less than three times the 1-sigma total propagated uncertainty.
5749R	21-11057 21-11058 21-11058 21-11059 21-11059 21-11059 21-11060 21-11060 21-11061 21-11061	MD21-99-0093 MD21-99-0100 MD21-99-0103 MD21-99-0105 MD21-99-0106 MD21-99-0107 MD21-99-0111 MD21-99-0112 MD21-99-0117 MD21-99-0118	Proportional counting	Strontium-90	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.

Table E-4.2-1 (continued)

Request Number	Location ID	Sample ID	Analytical Suite	Analyte	Explanation
5752R	21-11060 21-11061	MD21-99-0113 MD21-99-0119	Gamma spectroscopy	Americium-241 Cesium-134 Cesium-137 Cobalt-60 Europium-152 Ruthenium-106 Sodium-22 Uranium-235	The results for these analytes should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
5752R	21-11060 21-11061	MD21-99-0113 MD21-99-0119	Alpha spectroscopy	Uranium-235	The results for this analyte should be regarded as not detected (U) because the results were less than the minimum detectable concentration.
6204R	21-11099	MD21-99-0211	Alpha spectroscopy	Americium-241	The result for this analyte should be regarded as not detected (U) because the result was less than the minimum detectable concentration.
6204R	21-11098 21-11100 21-11101 21-11102 21-11104	MD21-99-0210 MD21-99-0212 MD21-99-0213 MD21-99-0214 MD21-99-0216	Alpha spectroscopy	Americium-241	The results for this analyte should be regarded as not detected (U) because the results were less than three times the 1-sigma total propagated uncertainty.
6204R	21-11099	MD21-99-0211	Alpha spectroscopy	Plutonium-238	The result for this analyte should be regarded as not detected (U) because the result was less than the minimum detectable concentration.
6204R	21-11098 21-11100 21-11101 21-11102 21-11103 21-11104	MD21-99-0210 MD21-99-0212 MD21-99-0213 MD21-99-0214 MD21-99-0215 MD21-99-0216	Alpha spectroscopy	Plutonium-238	The results for this analyte should be regarded as not detected (U) because the results were less than three times the 1-sigma total propagated uncertainty.

Request 5332. Quanterra analyzed one soil sample for isotopic uranium, isotopic thorium, and strontium-90.

- For strontium-90, the sample was analyzed using Method RICHRC5006. The method blank results were below minimum detectable concentrations. The tracer yield and LCS recovery all met acceptance criteria.
- For isotopic uranium, the sample was analyzed using Method RICHRC5079. The method blank results were below minimum detectable concentrations. The tracer yield and LCS recoveries all met acceptance criteria, with the exception of uranium-235. The reporting limits for these samples are regarded as estimated and biased low (UJ-) because the LCS recovery was low (Table E-4.2-1).

- For isotopic thorium, the sample was analyzed using Method RICHRC5011. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria.

Request 5437. Paragon/ATI analyzed four soil samples for gross alpha/beta/gamma radiation.

- For gross alpha/beta radiation, the samples were analyzed using PAI SOP714R4. The method blank results were below minimum detectable concentrations. The LCS met acceptance criteria.
- For gross gamma radiation, the samples were analyzed using PAI SOP713R4. The method blank results were below minimum detectable concentrations. The LCS met acceptance criteria.

Request 5440. Paragon/ATI analyzed seven soil samples for gross alpha/beta radiation. For gross alpha/beta radiation, the samples were analyzed using PAI SOP714R4. The method blank results were below minimum detectable concentrations. The LCS met acceptance criteria.

Request 5749. Paragon/ATI analyzed 12 soil samples for isotopic uranium, isotopic thorium, strontium-90, and gamma-emitting radionuclides.

- For strontium-90, the samples were analyzed using PAI SOP724R5. The method blank results were below minimum detectable concentrations. The LCS and matrix spike recoveries met acceptance criteria.
- For isotopic thorium and isotopic uranium, the samples were analyzed using PAI SOP714R4. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria.
- For gamma-emitting radionuclides, the samples were analyzed using PAI SOP713R4. The method blank results were below minimum detectable concentrations. The LCS recoveries all met acceptance criteria. Any radionuclide results rejected because of spectral interference are shown in Table E-4.2-1.

Request 5752. Weston analyzed two soil samples for isotopic uranium, isotopic thorium, strontium-90, and gamma-emitting radionuclides.

- For strontium-90, the samples were analyzed using EICHROM SRW01 Modified. The method blank results were below minimum detectable concentrations. The tracer yields and LCS and matrix spike recoveries all met acceptance criteria.
- For isotopic uranium, the samples were analyzed using EML TH-01 Modified. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria, with the exception of sample MD21-99-0113. The tracer yield was below the acceptable recovery limits. The tracer yield recovery for the duplicate analysis on sample MD21-99-0113 was acceptable. The results for the duplicate analyses were used for data quality evaluation. The matrix spike recoveries met acceptance criteria.
- For isotopic thorium, the samples were analyzed using EML U-02 Modified. The method blank results were below minimum detectable concentrations. The tracer yields and LCS and matrix spike recoveries all met acceptance criteria.
- For gamma-emitting radionuclides, the samples were analyzed using LANL ER-130 Modified. The method blank results were below minimum detectable concentrations. The LCS recoveries all met acceptance criteria.

Request 6204. Quanterra analyzed seven soil samples for isotopic plutonium and americium-241.

- For isotopic plutonium, the samples were analyzed using RICHRC-5010. The method blank results were below minimum detectable concentrations. The tracer yields were all low. The samples were reanalyzed with passing tracer yields. The reanalysis is reported. The LCS recoveries all met acceptance criteria.
- For americium-241, the samples were analyzed using RICHRC-5032. The method blank results were below minimum detectable concentrations. The tracer yields and LCS recoveries all met acceptance criteria, with the exception of sample MD21-99-0211. The sample was reanalyzed for low tracer yield. The reanalysis had a passing tracer yield. The reanalysis is reported.

E-5.0 REFERENCES

The following list includes all references cited in this appendix. Parenthetical information following each reference provides the author, publication date, and the ER record identification (ER ID) number. This information also is included in the citations in the text. ER ID numbers are assigned by the Laboratory's ER Project to track records associated with the Project. These numbers can be used to locate copies of the actual documents at the ER Project's Records Processing Facility and, where applicable, with the ER Project reference library titled "Reference Set for Material Disposal Areas, Technical Area 21."

Copies of the reference library are maintained at the New Mexico Environment Department Hazardous Waste Bureau; the Department of Energy Los Alamos Area Office; United States Environmental Protection Agency, Region 6; and the ER Project MDAs Focus Area. This library is a living collection of documents that was developed to ensure that the administrative authority has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the administrative authority are not included.

EPA (US Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA-540/R-94-013, Office of Solid Waste and Emergency Response, Washington, DC. (EPA 1994, 48639)

EPA (US Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA-540/R-94-013, Office of Solid Waste and Emergency Response, Washington, DC. (EPA 1999, 66649)

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

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

Appendix F

Analytical Suites and Results for Nondiesel-Related Chemicals

APPENDIX F ANALYTICAL SUITES AND RESULTS FOR NONDIESEL-RELATED CHEMICALS

F-1.0 TARGET ANALYTES AND DETECTION LIMITS

Routine analytical services through the Los Alamos National Laboratory (Laboratory) Sample Management Office were used for this voluntary corrective measure (VCM). All routine analyses were performed; no deviations were requested or noted in the analytical data packages.

Tables in the following sections list target analytes and the maximum estimated detection limits (EDLs) or estimated quantitation limits (EQLs) for inorganic chemicals, radionuclides, and nondiesel-related organic chemicals; the limits are specified in the Environmental Restoration (ER) Project analytical services statement of work for contract laboratories (LANL 1995, 49738) and the quality assurance project plan (LANL 1996, 54609). In most cases, the limits for the analytes were significantly lower than the detection or quantitation limits reported in the tables.

F-1.1 Inorganic Analyses

Table F-1.1-1 lists the target analytes, analytical techniques, sample preparation methods, and EDLs for inorganic chemical analyses. Inductively coupled plasma emission spectroscopy (ICPES) is generally used for sample analysis; however, if the EDL is exceeded or false positives are known to be a problem, the analytical laboratory must use graphite furnace atomic absorption (GFAA) techniques (e.g., Method 7841 for thallium and Method 7421 for lead) or inductively coupled plasma mass spectroscopy (e.g., SW-846 Method 6020).

F-1.2 Radiochemical Analyses

Table F-1.2-1 lists target analytes, EQLs, and techniques for radiochemical analyses. The methods utilized by the analytical laboratory for the analyses must be submitted to the Laboratory for approval.

F-1.3 Organic Analyses

Tables F-1.3-1 and F-1.3-2 list the target analytes and EQLs for nondiesel-related semivolatile organic compound (SVOC) and volatile organic compound (VOC) analyses. The Environmental Protection Agency (EPA) method for SVOC analysis is SW-846 Method 8270C, Revision 2, December 1996, "Semivolatile Organic Compounds by Gas Chromatography (GC/MS)." This method is based on solvent extraction, concentration, and gas chromatography/mass spectrometry (GC/MS) detection and quantitation. The EPA method for analysis of VOCs is SW-846 Method 8260B, Revision 2, December 1996, "Volatile Organic Compounds by Gas Chromatography (GC/MS)." This method is based on purge-and-trap sample extraction/concentration followed by GC/MS analysis.

Table F-1.3-3 lists target analytes and EQLs for organochlorine pesticide analyses. The EPA method is SW-846 Method 8081A, Revision 1, December 1996, "Organochlorine Pesticides by Gas Chromatography." This method is based on solvent extraction, concentration, and GC/electron capture detection and quantitation. Table F-1.3-3 also lists target analytes and EQLs for polychlorinated biphenyl (PCB) analyses. The EPA Method is SW-846 Method 8082, Revision 0, December 1996, "Polychlorinated Biphenyls (PCBs) by Gas Chromatography." This method is based on solvent extraction, concentration, and GC/electron capture detection and quantitation.

Table F-1.1-1
Target Analytes and Maximum EDLs for Inorganic Chemical Analyses

Analyte	EPA Sample Preparation Method	Analytical Technique	EDL (mg/kg)
Aluminum	3050A	ICPES	40
Antimony	3050A	GFAA/ICPES	12
Arsenic	7060/3050A	GFAA/ICPES	2
Barium	3050A	ICPES	40
Beryllium	3050A	ICPES	1
Cadmium	3050A	ICPES	1
Calcium	3050A	ICPES	1000
Chromium	3050A	ICPES	2
Cobalt	3050A	ICPES	10
Copper	3050A	ICPES	5
Cyanide	9012	Colorimetric	0.05
Iron	3050A	ICPES	20
Lead	7421/3050A	GFAA/ICPES	0.6
Magnesium	3050A	ICPES	1000
Manganese	3050A	ICPES	3
Mercury	7471	CVAA*	0.1
Nickel	3050A	ICPES	8
Potassium	3050A	ICPES	1000
Selenium	7740/3050A	GFAA/ICPES	1
Silver	3050A	ICPES	2
Sodium	3050A	ICPES	1000
Thallium	7841/3050A	GFAA/ICPES	2
Vanadium	3050A	ICPES	10
Zinc	3050A	ICPES	4

* CVAA = cold vapor atomic absorption.

Table F-1.2-1
Target Analytes and Maximum EQLs for Radiochemical Analyses

Analyte	Soil/Solid EQL (pCi/g)	Analytical Technique[a]
Strontium-90	2.0	Proportional counting
Plutonium-238, -239	0.1	Alpha spectroscopy
Uranium-234, -235, -238	0.1	Alpha spectroscopy
Thorium-228, -230, -232	0.1	Alpha Spectroscopy
Americium-241	0.1	Alpha spectroscopy
Gamma-emitting isotopes[b]	Americium 241 = 1 Cesium 137 = 1 Lead 210 = 2 Radium 226 = 1 Thorium 234 = 1	Gamma spectroscopy
Tritium	300 pCi/L	Liquid scintillation
Gross alpha/beta	Not applicable	Proportional counting
Gross gamma	Not applicable	Gamma spectroscopy

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

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

Table F-1.3-1
Nondiesel-Related Target Analytes and EQLS for SVOC Analyses

Target Analyte	Soil/Solids EQL* (µg/kg)	Target Analyte	Soil/Solids EQL* (µg/kg)
Acenaphthylene	330	2,4-Dinitrotolulene	330
Aniline	660	2,6-Dinitrotolulene	330
Azobenzene	660	Di-n-octyl phthalate	330
Benzoic acid	3300	Bis(2-ethylhexyl)phthalate	330
Benzo(g,h,i)perylene	330	Hexachlorobenzene	330
Benzyl alcohol	1300	Hexachlorobutadiene	330
Bis(2-chloroethoxy)methane	330	Hexachlorocyclopentadiene	330
Bis(2-chloroethyl)ether	330	Hexachloroethane	330
4-Bromophenyl phenylether	330	Indeno(1,2,3-cd)pyrene	330
Butylbenzylphthalate	330	Isophorone	330
4-Chloroaniline	1300	2-Methylphenol	330
4Chloro-3-methylphenol	660	4-Methylphenol	330
2-Chloronaphthalene	330	2-Nitroaniline	1600
2-Chlorophenol	330	3-Nitroaniline	1600
4-Chloropehnyl phenylether	330	4-Nitroaniline	660
Dibenzofuran	330	Nitrobenzene	330
1,2-Dichlorobenzene	330	2-Nitrophenol	330
1,3-Dichlorobenzene	330	4-Nitrophenol	1600
1,4-Dichlorobenzene	330	N-Nitrosodimethylamine	330
3,3'-Dichlorobenzidine	660	N-Nitrosodiphenylamine	330
2,4-Dichlorophenol	330	N-Nitro-di-n-propylamine	330
Diethylphthalate	330	2,2'-oxybis(1-Chloropropane)	330
Dimethyl phthalate	330	Pentachlorophenol	1600
2,4-Dimethylphenol	330	Phenol	330
2,4-Dinitrophenol	1600	1,2,4-Trichlorobenzene	330
Di-n-butylphthalate	330	2,4,5-Trichlorophenol	1600
4,6-Dinitro-2-methylphenol	1600	2,4,6-Trichlorophenol	330

* 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 F-1.3-2
Nondiesel-Related Target Analytes and Maximum EQLs for VOC Analyses

Target Analyte	Soil/Solids EQL* (µg/kg)	Target Analyte	Soil/Solids EQL* (µg/kg)
Chloromethane	10	1,1,2-Trichloroethane	5
Vinyl chloride	10	1,3-Dichloropropane	5
Bromomethane	10	Chlorodibromomethane	5
Chloroethane	10	4-Methyl-2-Pentanone	20
Acetone	20	2-Hexanone	20
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	Styrene	5
1,1-Dichloroethane	5	Bromoform	5
Carbon disulfide	5	1,1,2,2-Tetrachloroethane	5
1,1-Dichloroethane	5	1,2,3-Trichloropropane	5
1,2-Dichloroethane	5	Isopropylbenzene	5
1,2-Dichloroethene (total)	10	Bromobenzene	5
Bromochloromethane	5	n-Propylbenzene	5
Chloroform	5	2-Chlorotolulene	5
1,1-Dichloropropene	5	4-Chlorotolulene	5
2-Butanone	20	1,3,5-Trimethylbenzene	5
2,2-Dichloropropane	5	tert-Butylbenzene	5
1,1,1-Trichloroethane	5	1,2,4-Trimethylbenzene	5
Carbon tetrachloride	5	Sec.-Butylbenzene	5
1,2-Dichloropropane	5	1,3-Dichlorobenzene	5
Trichloroethene	5	1,4-Dichlorobenzene	5
Dibromomethane	5	p-Isopropyltoluene	5
Bromodichloromethane	5	1,2-Dichlorobenzene	5
t-1,3-Dichloropropene	5	n-Butylbenzene	5
c-1,3-Dichloroprepene	5	1,2-Dimbromo-3-Chloropropane	10

* EQLs for the samples are based on no 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 F-1.3-3
Target Analytes and Maximum EQLs for Pesticide/PCB Analyses

Analyte	Soil/Solids EQL (µg/kg)*	Analyte	Soil/Solids EQL (µg/kg)*
Aldrin	1.65	Endrin	3.3
α-BHC	1.65	Endrin ketone	3.3
β-BHC	1.65	Endrin aldehyde	3.3
δ-BHC	1.65	Heptachlor	1.65
γ-BHC (lindane)	1.65	Heptachlor epoxide	1.65
α-Chlordane	1.65	Methoxychlor	16.5
γ-Chlordane	1.65	Toxaphene	165
4,4'-DDD	3.3	Aroclor-1016	33
4,4'-DDE	3.3	Aroclor-1221	66
4,4'-DDT	3.3	Aroclor-1232	33
Dieldrin	3.3	Aroclor-1242	33
Endosulfan I	1.65	Aroclor-1248	33
Endosulfan II	3.3	Aroclor-1254	33
Endosulfan sulfate	3.3	Aroclor-1260	33

* EQLs for the samples are based on no 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.

F-2.0 ANALYTE SUITES AND REQUEST NUMBERS

Analytical data collected at PRS 21-027(d)-99 are available in the Facility for Information Management, Analysis, and Display (FIMAD). During focused validation, the data steward reviewed data entries against analytical report hard copies and ER Project baseline validation reports. Any inconsistencies were corrected locally, summarized, and submitted to centralized data management personnel for correction in FIMAD.

Tables in Sections 2.3.2 and 2.3.4 of this report present the nondiesel organic analyte suites and request numbers for each sample collected during the 1992 and 1999 investigations. Each request number represents a batch of samples sent to an off-site analytical laboratory for a specific suite of analyses; the request numbers can be used to track the original data packages from the off-site analytical laboratories. The tables present the following information for each sample: location ID, sample depth, and sample media. Table F-2.0-1 lists the request numbers and analytical laboratories that analyzed each batch of samples for nondiesel-related organic analytes.

Table F-2.0-1
Request Numbers and Analytical Laboratories for Nondiesel-Related Organic Analytes, PRS 21-027(d)-99

Request Number	Analytical Laboratory	Request Number	Analytical Laboratory
13099R	Rust Geotech, Grand Junction, Colorado	5437R	Analytical Technologies
13100R	CST	5438R	Kemron
13101R	Rust Geotech, Grand Junction, Colorado	5439R	Kemron
5148R	Kemron	5440R	Severn Trent Laboratory
5149R	Weston	5747R	Severn Trent Laboratory
5327R	Kemron	5748R	Paragon/ Analytical Technologies
5328R	Kemron	5749R	Paragon/ Analytical Technologies
5329R	Severn Trent Laboratory	5750R	Severn Trent Laboratory
5330R	Kemron	5751R	Severn Trent Laboratory
5331R	Kemron	5752R	Severn Trent Laboratory
5332R	Severn Trent Laboratory	6203R	RECRA
5435R	Kemron	6204R	Quanterra
5436R	Kemron		

F-3.0 ANALYTICAL RESULTS

Table F-3.0-1 presents analytical results for nondiesel-related analyses of samples. The data set is being submitted in electronic format to the New Mexico Environment Department Hazardous Waste Bureau, the Department of Energy, and the ER Project Records Processing Facility. Copies of the reports that include electronic versions of the data set can be recognized by the notation "Data disks included with this copy" displayed on the covers.

Table F-3.0-1
Nondiesel-Related Organic Chemicals for Potential Release Site 21-027(d)-99

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0618	0–0.5	Sediment	Strontium-90	0.4	pCi/g	U
21-01332	AAA0619	0–0.5	Sediment	Strontium-90	0.3	pCi/g	U
21-01333	AAA0620	0–0.5	Sediment	Strontium-90	0.3	pCi/g	U
21-01334	AAA0621	0–0.5	Sediment	Strontium-90	0.3	pCi/g	U
21-11014	MD21-99-0001	2.5–3	Sediment	Gross beta radiation	15.05	pCi/g	None
21-11014	MD21-99-0001	2.5–3	Sediment	Gross alpha radiation	16.69	pCi/g	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Gross alpha radiation	13.29	pCi/g	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Gross alpha radiation	10.26	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Manganese	342	mg/kg	
21-01329	AAA0615	0–0.5	Sediment	Strontium-90	0	pCi/g	U
21-01330	AAA0616	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Uranium	4.6	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Americium-241	0.067	pCi/g	None
21-01330	AAA0616	0–0.5	Sediment	Plutonium-238	0.012	pCi/g	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01330	AAA0616	0–0.5	Sediment	Plutonium-239	1.35	pCi/g	None
21-01330	AAA0616	0–0.5	Sediment	Selenium	0.32	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Lead	16	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Thallium	0.21	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Aniline	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01330	AAA0616	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bromoform	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01330	AAA0616	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Silver	0.63	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Calcium	1570	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Cobalt	3.9	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Potassium	1340	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Iron	9630	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Antimony	4.8	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Nickel	4.2	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Sodium	83	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Molybdenum	2.3	mg/kg	U
21-01330	AAA0616	0–0.5	Sediment	Manganese	297	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Magnesium	1440	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Zinc	42.7	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Vanadium	14.5	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Cadmium	1.4	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Beryllium	0.56	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Aluminum	10700	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Arsenic	2.3	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Barium	79.9	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Chromium (total)	7.3	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Copper	5.3	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01330	AAA0616	0–0.5	Sediment	Strontium	14	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Lithium	8.5	mg/kg	None
21-01330	AAA0616	0–0.5	Sediment	Tritium	900	pCi/L	U
21-01331	AAA0617	0–0.5	Sediment	Uranium	7.3	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Americium-241	0.141	pCi/g	None
21-01331	AAA0617	0–0.5	Sediment	Plutonium-238	0.025	pCi/g	None
21-01331	AAA0617	0–0.5	Sediment	Plutonium-239	4.46	pCi/g	None
21-01331	AAA0617	0–0.5	Sediment	Thallium	0.23	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Selenium	0.34	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Lead	21.1	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0617	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Aniline	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bromoform	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0617	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Beryllium	0.79	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Iron	11600	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Silver	0.68	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Barium	114	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Cadmium	1.4	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Chromium (total)	8.5	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Potassium	1860	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Manganese	341	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Magnesium	1930	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Vanadium	19	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Antimony	5.2	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Nickel	5.7	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Sodium	97.2	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Zinc	48.1	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Molybdenum	2.5	mg/kg	U
21-01331	AAA0617	0–0.5	Sediment	Copper	7.8	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Cobalt	5.7	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Calcium	2560	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Arsenic	2.2	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Aluminum	13300	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Strontium	22	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Lithium	10.4	mg/kg	None
21-01331	AAA0617	0–0.5	Sediment	Tritium	1100	pCi/L	None
21-01331	AAA0618	0–0.5	Sediment	Uranium	6.5	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Americium-241	0.16	pCi/g	None
21-01331	AAA0618	0–0.5	Sediment	Plutonium-238	0.025	pCi/g	None
21-01331	AAA0618	0–0.5	Sediment	Plutonium-239	4.6	pCi/g	None
21-01331	AAA0618	0–0.5	Sediment	Thallium	0.22	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0618	0–0.5	Sediment	Selenium	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Lead	20.8	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Aniline	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0618	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bromoform	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01331	AAA0618	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Silver	0.65	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Molybdenum	2.8	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Manganese	342	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Magnesium	1770	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Potassium	1860	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Iron	10900	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Copper	7.7	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Cobalt	4.8	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Zinc	45.6	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Vanadium	18	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Antimony	5	mg/kg	U
21-01331	AAA0618	0–0.5	Sediment	Arsenic	2.5	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Barium	109	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Beryllium	0.62	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Cadmium	1.2	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Calcium	2500	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Aluminum	12200	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Chromium (total)	8	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Nickel	5.9	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Sodium	101	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Strontium	21.7	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Lithium	9.4	mg/kg	None
21-01331	AAA0618	0–0.5	Sediment	Tritium	1200	pCi/L	None
21-01332	AAA0619	0–0.5	Sediment	Uranium	4.9	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Americium-241	0.076	pCi/g	None
21-01332	AAA0619	0–0.5	Sediment	Plutonium-238	0.016	pCi/g	None
21-01332	AAA0619	0–0.5	Sediment	Plutonium-239	0.868	pCi/g	None
21-01332	AAA0619	0–0.5	Sediment	Lead	16.5	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Thallium	0.22	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Selenium	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01332	AAA0619	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Aniline	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01332	AAA0619	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bromoform	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01332	AAA0619	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Silver	0.67	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Cadmium	1	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Chromium (total)	5.2	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Cobalt	2.6	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Nickel	2.8	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Sodium	80.1	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01332	AAA0619	0–0.5	Sediment	Molybdenum	2.4	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Manganese	329	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Magnesium	1200	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Potassium	1100	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Iron	7250	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Zinc	28.7	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Vanadium	9.8	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Antimony	5.1	mg/kg	U
21-01332	AAA0619	0–0.5	Sediment	Copper	4.2	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Calcium	2970	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Aluminum	6830	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Arsenic	1.9	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Beryllium	0.38	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Barium	72.8	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Strontium	20.2	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Lithium	6	mg/kg	None
21-01332	AAA0619	0–0.5	Sediment	Tritium	1200	pCi/L	None
21-01333	AAA0620	0–0.5	Sediment	Uranium	7.2	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Americium-241	0.092	pCi/g	None
21-01333	AAA0620	0–0.5	Sediment	Plutonium-239	1.54	pCi/g	None
21-01333	AAA0620	0–0.5	Sediment	Selenium	0.34	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Lead	23.7	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Thallium	0.22	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01333	AAA0620	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Aniline	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01333	AAA0620	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bromoform	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01333	AAA0620	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Silver	0.67	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Beryllium	0.51	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Cadmium	0.89	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Chromium (total)	5.6	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Iron	7250	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Copper	6.3	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Antimony	5.2	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Nickel	4.7	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Sodium	88	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Manganese	319	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Magnesium	1520	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Vanadium	11.4	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Potassium	1200	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Cobalt	3.3	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Calcium	3590	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01333	AAA0620	0–0.5	Sediment	Barium	88.2	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Aluminum	7950	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Arsenic	1.8	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Molybdenum	2.5	mg/kg	U
21-01333	AAA0620	0–0.5	Sediment	Zinc	34.7	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Strontium	25	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Plutonium-238	0.012	pCi/g	None
21-01333	AAA0620	0–0.5	Sediment	Lithium	7.8	mg/kg	None
21-01333	AAA0620	0–0.5	Sediment	Tritium	1300	pCi/L	None
21-01334	AAA0621	0–0.5	Sediment	Uranium	5.5	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Americium-241	0.064	pCi/g	None
21-01334	AAA0621	0–0.5	Sediment	Plutonium-238	0.007	pCi/g	U
21-01334	AAA0621	0–0.5	Sediment	Plutonium-239	1.11	pCi/g	None
21-01334	AAA0621	0–0.5	Sediment	Selenium	0.34	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Thallium	0.23	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Lead	15.5	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01334	AAA0621	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Aniline	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01334	AAA0621	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bromoform	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01334	AAA0621	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Aluminum	6880	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Silver	0.68	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Barium	49.6	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Calcium	2090	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Cobalt	2.6	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Copper	2.9	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Potassium	925	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Magnesium	1000	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Vanadium	9.6	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Antimony	5.2	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Nickel	2.2	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Sodium	100	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Molybdenum	2.5	mg/kg	U
21-01334	AAA0621	0–0.5	Sediment	Zinc	22.6	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Manganese	196	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Iron	6740	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Chromium (total)	4.4	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Cadmium	0.69	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Beryllium	0.37	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Arsenic	1.8	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Strontium	14.5	mg/kg	None
21-01334	AAA0621	0–0.5	Sediment	Lithium	6.2	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01334	AAA0621	0–0.5	Sediment	Tritium	1100	pCi/L	None
21-11014	MD21-99-0001	2.5–3	Sediment	Tritium	0.86	pCi/g	U
21-11014	MD21-99-0001	2.5–3	Sediment	Arsenic	8.5	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Barium	360	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Beryllium	1.7	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Cadmium	0.15	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Calcium	8400	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Chromium (total)	22	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Cobalt	6.9	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Copper	14	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Iron	24000	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Magnesium	6400	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Manganese	290	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Nickel	18	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Potassium	4600	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Selenium	1.2	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Silver	0.6	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Sodium	630	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Vanadium	41	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Zinc	58	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Aluminum	33000	mg/kg	None
21-11014	MD21-99-0001	2.5–3	Sediment	Lead	20	mg/kg	J-
21-11014	MD21-99-0001	2.5–3	Sediment	Antimony	1.1	mg/kg	J-
21-11014	MD21-99-0001	2.5–3	Sediment	Thallium	0.26	mg/kg	J-
21-11014	MD21-99-0001	2.5–3	Sediment	Mercury	0.12	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	BHC[alpha-]	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	BHC[beta-]	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	BHC[delta-]	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	BHC[gamma-]	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Heptachlor	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aldrin	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Heptachlor epoxide	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Endosulfan I	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Dieldrin	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	DDE[4,4'-]	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Endrin	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Endosulfan II	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	DDD[4,4'-]	0.004	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0001	2.5–3	Sediment	Endosulfan sulfate	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	DDT[4,4'-]	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Methoxychlor[4,4'-]	0.02	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Endrin ketone	0.004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Endrin aldehyde	0.0004	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Chlordane[alpha-]	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Chlordane[gamma-]	0.002	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Toxaphene (technical grade)	0.2	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1016	0.04	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1221	0.08	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1232	0.04	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1242	0.04	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1248	0.04	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1254	0.04	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Aroclor-1260	0.04	mg/kg	UJ
21-11014	MD21-99-0001	2.5–3	Sediment	Bis(2-ethylhexyl)phthalate	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Di-n-octylphthalate	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Indeno(1,2,3-cd)pyrene	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzo(g,h,i)perylene	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzyl alcohol	1.6	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzene[1,3-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzene[1,4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzene[1,2-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Methylphenol[2-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Methylphenol[4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitroso-di-n-propylamine[N-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Hexachloroethane	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitrobenzene	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Isophorone	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitrophenol[2-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dimethylphenol[2,4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Benzoic acid	4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bis(2-chloroethoxy)methane	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorophenol[2,4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichlorobenzene[1,2,4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chloroaniline[4-]	1.6	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Hexachlorobutadiene	0.4	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0001	2.5–3	Sediment	Chloro-3-methylphenol[4-]	0.8	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Hexachlorocyclopentadiene	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichlorophenol[2,4,6-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chloronaphthalene[2-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dimethyl phthalate	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Acenaphthylene	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dibenzofuran	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dinitrotoluene[2,4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dinitrotoluene[2,6-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Diethylphthalate	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chlorophenyl-phenyl[4-] ether	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitroaniline[4-]	0.8	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitrosodiphenylamine[N-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Azobenzene	0.8	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bromophenyl-phenylether[4-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Hexachlorobenzene	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Di-n-butylphthalate	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Butylbenzylphthalate	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzidine[3,3'-]	0.8	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Nitrosodimethylamine[N-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Aniline	0.8	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Phenol	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bis(2-chloroethyl)ether	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chlorophenol[2-]	0.4	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorodifluoromethane	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chloromethane	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Vinyl chloride	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bromomethane	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chloroethane	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichlorofluoromethane	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloroethene[1,1-]	0.006	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0001	2.5–3	Sediment	Iodomethane	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Carbon disulfide	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Acetone	0.0045	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Methylene chloride	0.0023	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloroethane[1,1-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloropropane[2,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Butanone[2-]	0.024	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bromochloromethane	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chloroform	0.00024	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichloroethane[1,1,1-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Carbon tetrachloride	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloropropene[1,1-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloroethane[1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichloroethene	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloropropane[1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dibromomethane	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bromodichloromethane	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloropropene[trans-1,3-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloropropene[cis-1,3-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichloroethane[1,1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Tetrachloroethene	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichloropropane[1,3-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chlorodibromomethane	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Hexanone[2-]	0.024	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dibromoethane[1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chlorobenzene	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Tetrachloroethane[1,1,1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Styrene	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bromoform	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Isopropylbenzene	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Bromobenzene	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichloropropane[1,2,3-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Tetrachloroethane[1,1,2,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Propylbenzene[1-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Chlorotoluene[2-]	0.006	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0001	2.5–3	Sediment	Chlorotoluene[4-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trimethylbenzene[1,3,5-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Butylbenzene[tert-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trimethylbenzene[1,2,4-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Butylbenzene[sec-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzene[1,3-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzene[1,4-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Isopropyltoluene[4-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dichlorobenzene[1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Butylbenzene[n-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.006	mg/kg	U
21-11014	MD21-99-0001	2.5–3	Sediment	Gross gamma radiation	21.43	pCi/g	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Tritium	0.43	pCi/g	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Arsenic	8.2	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Barium	400	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Beryllium	2.1	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Cadmium	0.22	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Calcium	5500	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chromium (total)	22	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Cobalt	9.2	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Copper	13	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Iron	26000	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Magnesium	6500	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Manganese	540	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nickel	22	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Potassium	4600	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Selenium	1.2	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Silver	0.61	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Sodium	690	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Vanadium	41	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Zinc	59	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aluminum	34000	mg/kg	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Lead	15	mg/kg	J-
21-11015	MD21-99-0002	2.5–3.1	Sediment	Antimony	3.9	mg/kg	J-
21-11015	MD21-99-0002	2.5–3.1	Sediment	Thallium	0.28	mg/kg	J-
21-11015	MD21-99-0002	2.5–3.1	Sediment	Mercury	0.04	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0002	2.5–3.1	Sediment	BHC[alpha-]	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	BHC[beta-]	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	BHC[delta-]	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	BHC[gamma-]	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Heptachlor	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aldrin	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Heptachlor epoxide	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Endosulfan I	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dieldrin	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	DDE[4,4'-]	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Endrin	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Endosulfan II	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	DDD[4,4'-]	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Endosulfan sulfate	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	DDT[4,4'-]	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Methoxychlor[4,4'-]	0.02	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Endrin ketone	0.004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Endrin aldehyde	0.0004	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlordane[alpha-]	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlordane[gamma-]	0.002	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Toxaphene (technical grade)	0.2	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1016	0.04	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1221	0.08	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1232	0.04	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1242	0.04	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1248	0.04	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1254	0.04	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aroclor-1260	0.04	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dibenzofuran	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dinitrotoluene[2,4-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dinitrotoluene[2,6-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Diethylphthalate	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlorophenyl-phenyl[4-] ether	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitroaniline[4-]	0.8	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitrosodiphenylamine[N-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Azobenzene	0.8	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bromophenyl-phenylether[4-]	0.4	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0002	2.5–3.1	Sediment	Hexachlorobenzene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Di-n-butylphthalate	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Butylbenzylphthalate	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzidine[3,3'-]	0.8	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bis(2-ethylhexyl)phthalate	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Di-n-octylphthalate	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Indeno(1,2,3-cd)pyrene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzo(g,h,i)perylene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzyl alcohol	1.6	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitrosodimethylamine[N-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Aniline	0.8	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Phenol	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bis(2-chloroethyl)ether	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlorophenol[2-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzene[1,3-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzene[1,4-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzene[1,2-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Methylphenol[2-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Methylphenol[4-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitroso-di-n-propylamine[N-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Hexachloroethane	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitrobenzene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Isophorone	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitrophenol[2-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dimethylphenol[2,4-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Benzoic acid	4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bis(2-chloroethoxy)methane	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorophenol[2,4-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichlorobenzene[1,2,4-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chloroaniline[4-]	1.6	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Hexachlorobutadiene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chloro-3-methylphenol[4-]	0.8	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Hexachlorocyclopentadiene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichlorophenol[2,4,6-]	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chloronaphthalene[2-]	0.4	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dimethyl phthalate	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Acenaphthylene	0.4	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorodifluoromethane	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chloromethane	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Vinyl chloride	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bromomethane	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chloroethane	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichlorofluoromethane	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloroethene[1,1-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Iodomethane	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Carbon disulfide	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Acetone	0.0039	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Methylene chloride	0.0035	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloroethane[1,1-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloropropane[2,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Butanone[2-]	0.024	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bromochloromethane	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chloroform	0.00061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichloroethane[1,1,1-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Carbon tetrachloride	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloropropene[1,1-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloroethane[1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichloroethene	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloropropane[1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dibromomethane	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bromodichloromethane	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloropropene[trans-1,3-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloropropene[cis-1,3-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichloroethane[1,1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Tetrachloroethene	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichloropropane[1,3-]	0.0061	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlorodibromomethane	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Hexanone[2-]	0.024	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dibromoethane[1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlorobenzene	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Tetrachloroethane[1,1,1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Styrene	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bromoform	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Isopropylbenzene	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Bromobenzene	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichloropropane[1,2,3-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Tetrachloroethane[1,1,2,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Propylbenzene[1-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlorotoluene[2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Chlorotoluene[4-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trimethylbenzene[1,3,5-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Butylbenzene[tert-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trimethylbenzene[1,2,4-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Butylbenzene[sec-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzene[1,3-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzene[1,4-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Isopropyltoluene[4-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dichlorobenzene[1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Butylbenzene[n-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0061	mg/kg	U
21-11015	MD21-99-0002	2.5–3.1	Sediment	Gross gamma radiation	25.05	pCi/g	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Gross alpha radiation	20.88	pCi/g	None
21-11015	MD21-99-0002	2.5–3.1	Sediment	Gross beta radiation	26.84	pCi/g	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Tritium	0.83	pCi/g	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Arsenic	2.6	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Barium	88	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Beryllium	0.9	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Cadmium	0.06	mg/kg	J
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Calcium	1700	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chromium (total)	7.4	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Cobalt	2.1	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Copper	2.4	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Iron	9300	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Magnesium	2100	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Manganese	140	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nickel	6.3	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Potassium	1500	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Selenium	1.2	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Silver	0.24	mg/kg	J
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Sodium	590	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Vanadium	13	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Zinc	30	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aluminum	16000	mg/kg	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Lead	6.1	mg/kg	J-
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Antimony	0.45	mg/kg	J-
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Thallium	0.16	mg/kg	J-
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Mercury	0.01	mg/kg	J
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	BHC[alpha-]	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	BHC[beta-]	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	BHC[delta-]	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	BHC[gamma-]	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Heptachlor	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aldrin	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Heptachlor epoxide	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Endosulfan I	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dieldrin	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	DDE[4,4'-]	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Endrin	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Endosulfan II	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	DDD[4,4'-]	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Endosulfan sulfate	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	DDT[4,4'-]	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Methoxychlor[4,4'-]	0.019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Endrin ketone	0.0038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Endrin aldehyde	0.00038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlordane[alpha-]	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlordane[gamma-]	0.0019	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Toxaphene (technical grade)	0.19	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1016	0.038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1221	0.076	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1232	0.038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1242	0.038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1248	0.038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1254	0.038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aroclor-1260	0.038	mg/kg	UJ
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzyl alcohol	1.5	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitrophenol[2-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Benzoic acid	3.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorophenol[2,4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chloroaniline[4-]	1.5	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Hexachlorobutadiene	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chloro-3-methylphenol[4-]	0.76	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dimethyl phthalate	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Acenaphthylene	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dibenzofuran	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Diethylphthalate	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitroaniline[4-]	0.76	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Azobenzene	0.76	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Hexachlorobenzene	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Di-n-butylphthalate	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Butylbenzylphthalate	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzidine[3,3'-]	0.76	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Di-n-octylphthalate	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Aniline	0.76	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Phenol	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlorophenol[2-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Methylphenol[2-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Methylphenol[4-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Hexachloroethane	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Nitrobenzene	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Isophorone	0.38	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorodifluoromethane	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chloromethane	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Vinyl chloride	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bromomethane	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chloroethane	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichlorofluoromethane	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloroethene[1,1-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Iodomethane	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Carbon disulfide	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Acetone	0.0068	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Methylene chloride	0.0028	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloroethane[1,1-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloropropane[2,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Butanone[2-]	0.023	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bromochloromethane	0.0058	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chloroform	0.00046	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichloroethane[1,1,1-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Carbon tetrachloride	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloropropene[1,1-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloroethane[1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichloroethene	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloropropane[1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dibromomethane	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bromodichloromethane	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloropropene[trans-1,3-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Methyl-2-pentanone[4-]	0.023	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloropropene[cis-1,3-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichloroethane[1,1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Tetrachloroethene	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichloropropane[1,3-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlorodibromomethane	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Hexanone[2-]	0.023	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dibromoethane[1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlorobenzene	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Styrene	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bromoform	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Isopropylbenzene	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Bromobenzene	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichloropropane[1,2,3-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Propylbenzene[1-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlorotoluene[2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Chlorotoluene[4-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trimethylbenzene[1,3,5-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Butylbenzene[tert-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trimethylbenzene[1,2,4-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Butylbenzene[sec-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzene[1,3-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzene[1,4-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Isopropyltoluene[4-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dichlorobenzene[1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Butylbenzene[n-]	0.0058	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0058	mg/kg	U
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Gross gamma radiation	54.34	pCi/g	None
21-11014	MD21-99-0003	5.6–6.4	Qbt 3	Gross beta radiation	26.02	pCi/g	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Tritium	0.33	pCi/g	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Arsenic	2.8	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Barium	110	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Beryllium	0.93	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Cadmium	0.09	mg/kg	J
21-11015	MD21-99-0004	5.6–6.4	Sediment	Calcium	1700	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chromium (total)	8	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Cobalt	2.5	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Copper	4.9	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Iron	11000	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Magnesium	2100	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Manganese	130	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nickel	6.2	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Potassium	1600	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Selenium	1.1	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Silver	0.57	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Sodium	560	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Vanadium	15	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Zinc	27	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aluminum	17000	mg/kg	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Lead	6.5	mg/kg	J-
21-11015	MD21-99-0004	5.6–6.4	Sediment	Antimony	1.4	mg/kg	J-
21-11015	MD21-99-0004	5.6–6.4	Sediment	Thallium	0.16	mg/kg	J-
21-11015	MD21-99-0004	5.6–6.4	Sediment	Mercury	0.02	mg/kg	J
21-11015	MD21-99-0004	5.6–6.4	Sediment	BHC[alpha-]	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	BHC[beta-]	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	BHC[delta-]	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	BHC[gamma-]	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Heptachlor	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aldrin	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Heptachlor epoxide	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Endosulfan I	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dieldrin	0.0038	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0004	5.6–6.4	Sediment	DDE[4,4'-]	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Endrin	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Endosulfan II	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	DDD[4,4'-]	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Endosulfan sulfate	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	DDT[4,4'-]	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Methoxychlor[4,4'-]	0.019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Endrin ketone	0.0038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Endrin aldehyde	0.00038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlordane[alpha-]	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlordane[gamma-]	0.0019	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Toxaphene (technical grade)	0.19	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1016	0.038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1221	0.076	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1232	0.038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1242	0.038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1248	0.038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1254	0.038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aroclor-1260	0.038	mg/kg	UJ
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Aniline	0.76	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Phenol	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlorophenol[2-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Hexachloroethane	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitrobenzene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Isophorone	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitrophenol[2-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzoic acid	3.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chloro-3-methylphenol[4-]	0.76	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Diethylphthalate	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitroaniline[4-]	0.76	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Azobenzene	0.76	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzidine[3,3'-]	0.76	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Di-n-octylphthalate	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorodifluoromethane	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chloromethane	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Vinyl chloride	0.011	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bromomethane	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chloroethane	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichlorofluoromethane	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloroethene[1,1-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Iodomethane	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Carbon disulfide	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Acetone	0.0062	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Methylene chloride	0.0025	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloroethane[1,1-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloropropane[2,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Butanone[2-]	0.023	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bromochloromethane	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chloroform	0.00038	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichloroethane[1,1,1-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Carbon tetrachloride	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloropropene[1,1-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloroethane[1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichloroethene	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloropropane[1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dibromomethane	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bromodichloromethane	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloropropene[trans-1,3-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Methyl-2-pentanone[4-]	0.023	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloropropene[cis-1,3-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichloroethane[1,1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Tetrachloroethene	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichloropropane[1,3-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlorodibromomethane	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Hexanone[2-]	0.023	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dibromoethane[1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlorobenzene	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Tetrachloroethane[1,1,1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Styrene	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bromoform	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Isopropylbenzene	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Bromobenzene	0.0057	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichloropropane[1,2,3-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Tetrachloroethane[1,1,2,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Propylbenzene[1-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlorotoluene[2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Chlorotoluene[4-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trimethylbenzene[1,3,5-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Butylbenzene[tert-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trimethylbenzene[1,2,4-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Butylbenzene[sec-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzene[1,3-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzene[1,4-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Isopropyltoluene[4-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dichlorobenzene[1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Butylbenzene[n-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0057	mg/kg	U
21-11015	MD21-99-0004	5.6–6.4	Sediment	Gross gamma radiation	38.22	pCi/g	None
21-11015	MD21-99-0004	5.6–6.4	Sediment	Gross beta radiation	37.36	pCi/g	None
21-01329	AAA0615	0–0.5	Sediment	Uranium	4.7	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Americium-241	0.052	pCi/g	None
21-01329	AAA0615	0–0.5	Sediment	Plutonium-238	0.008	pCi/g	None
21-01329	AAA0615	0–0.5	Sediment	Plutonium-239	0.753	pCi/g	None
21-01329	AAA0615	0–0.5	Sediment	Thallium	0.21	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Selenium	0.32	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Lead	17.9	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Acenaphthylene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Azobenzene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bromophenyl-phenylether[4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dinitro-2-methylphenol[4,6-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichlorophenol[2,4,5-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitroaniline[4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Benzyl alcohol	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Methylphenol[4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chloroaniline[4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Indeno(1,2,3-cd)pyrene	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01329	AAA0615	0–0.5	Sediment	Benzo(g,h,i)perylene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dibenzofuran	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dimethyl phthalate	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dinitrotoluene[2,4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorophenol[2,4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Di-n-butylphthalate	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Diethylphthalate	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Isophorone	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Hexachlorocyclopentadiene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Hexachloroethane	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Benzoic acid	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chlorophenol[2-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Methylphenol[2-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Benzidine	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzidine[3,3'-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chloronaphthalene[2-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitrophenol[2-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitroaniline[3-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitrobenzene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitroaniline[2-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichlorophenol[2,4,6-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Pentachlorophenol	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Hexachlorobutadiene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitrosodiphenylamine[N-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Butylbenzylphthalate	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitrosodimethylamine[N-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Aniline	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitroso-di-n-propylamine[N-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dinitrotoluene[2,6-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chloro-3-methylphenol[4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dinitrophenol[2,4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichlorobenzene[1,2,4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Hexachlorobenzene	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Di-n-octylphthalate	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bis(2-ethylhexyl)phthalate	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bis(2-chloroethoxy)methane	0.33	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01329	AAA0615	0–0.5	Sediment	Bis(2-chloroethyl)ether	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Phenol	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dimethylphenol[2,4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nitrophenol[4-]	0.33	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloroethene[cis-1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Butanone[2-]	0.02	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloroethene[trans-1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bromomethane	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichloroethane[1,1,1-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chloroform	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Acetone	0.02	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloropropane[2,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Hexanone[2-]	0.02	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloropropene[1,1-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Carbon tetrachloride	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzene[1,3-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloropropane[1,3-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Butylbenzene[sec-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Tetrachloroethene	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chlorodibromomethane	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chlorobenzene	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bromobenzene	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trimethylbenzene[1,3,5-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Methyl-2-pentanone[4-]	0.02	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Vinyl acetate	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloroethane[1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dibromoethane[1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Carbon disulfide	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Methylene chloride	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Vinyl chloride	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chloroethane	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bromochloromethane	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dibromomethane	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Iodomethane	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chloromethane	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichloropropane[1,2,3-]	0.005	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01329	AAA0615	0–0.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trimethylbenzene[1,2,4-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzene[1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chlorotoluene[2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichloroethene	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichloroethane[1,1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Isopropyltoluene[4-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Isopropylbenzene	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Butylbenzene[tert-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloropropane[1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorodifluoromethane	0.01	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Trichlorofluoromethane	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloroethene[1,1-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloroethane[1,1-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bromodichloromethane	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Bromoform	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloropropene[trans-1,3-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Propylbenzene[1-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Butylbenzene[n-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichlorobenzene[1,4-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Chlorotoluene[4-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Dichloropropene[cis-1,3-]	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Styrene	0.005	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Calcium	2210	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Zinc	41.5	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Cobalt	5.4	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Silver	0.63	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Aluminum	10000	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Barium	95.1	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Arsenic	2.5	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Chromium (total)	6.6	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Iron	9390	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Manganese	300	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Sodium	97.3	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Molybdenum	2.3	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-01329	AAA0615	0–0.5	Sediment	Vanadium	15.4	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Antimony	4.9	mg/kg	U
21-01329	AAA0615	0–0.5	Sediment	Nickel	4.9	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Magnesium	1510	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Potassium	1270	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Copper	5	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Cadmium	1.2	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Beryllium	0.64	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Strontium	19.2	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Lithium	7.9	mg/kg	None
21-01329	AAA0615	0–0.5	Sediment	Tritium	1400	pCi/L	None
21-11017	MD21-99-0009	7.5–8	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Diethylphthalate	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitroaniline[4-]	0.76	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Azobenzene	0.76	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzidine[3,3'-]	0.76	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Di-n-octylphthalate	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0009	7.5–8	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Aniline	0.76	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Phenol	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chlorophenol[2-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Hexachloroethane	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitrobenzene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Isophorone	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Nitrophenol[2-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Benzoic acid	3.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chloro-3-methylphenol[4-]	0.76	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Styrene	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bromoform	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Isopropylbenzene	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bromobenzene	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichloropropane[1,2,3-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Tetrachloroethane[1,1,2,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Propylbenzene[1-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chlorotoluene[2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chlorotoluene[4-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trimethylbenzene[1,3,5-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Butylbenzene[tert-]	0.0069	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0009	7.5–8	Sediment	Trimethylbenzene[1,2,4-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Butylbenzene[sec-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Isopropyltoluene[4-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Butylbenzene[n-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dibromo-3-chloropropane[1,2-]	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichlorodifluoromethane	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chloromethane	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Vinyl chloride	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bromomethane	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chloroethane	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichlorofluoromethane	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloroethene[1,1-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Iodomethane	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Carbon disulfide	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Acetone	0.028	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Methylene chloride	0.0033	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloroethene[trans-1,2-]	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloroethane[1,1-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloropropane[2,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloroethene[cis-1,2-]	0.014	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Butanone[2-]	0.028	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bromochloromethane	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chloroform	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichloroethane[1,1,1-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Carbon tetrachloride	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloropropene[1,1-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloroethane[1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichloroethene	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloropropane[1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dibromomethane	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Bromodichloromethane	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloropropene[trans-1,3-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Methyl-2-pentanone[4-]	0.028	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloropropene[cis-1,3-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Trichloroethane[1,1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Tetrachloroethene	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dichloropropane[1,3-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chlorodibromomethane	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Hexanone[2-]	0.028	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Dibromoethane[1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Chlorobenzene	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Tetrachloroethane[1,1,1,2-]	0.0069	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Aluminum	12300	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Arsenic	1.9	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Barium	45.5	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Beryllium	0.72	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Cadmium	0.03	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Calcium	1370	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Chromium (total)	6.4	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Cobalt	2.2	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Copper	4.2	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Iron	8210	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Lead	5.8	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Magnesium	1460	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Manganese	96.5	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Nickel	4.6	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Potassium	1290	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Selenium	0.65	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Silver	0.17	mg/kg	J
21-11017	MD21-99-0009	7.5–8	Sediment	Sodium	483	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Vanadium	10.1	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Zinc	21.4	mg/kg	None
21-11017	MD21-99-0009	7.5–8	Sediment	Antimony	0.09	mg/kg	U
21-11017	MD21-99-0009	7.5–8	Sediment	Thallium	0.19	mg/kg	J
21-11017	MD21-99-0009	7.5–8	Sediment	Mercury	0.01	mg/kg	J
21-11017	MD21-99-0009	7.5–8	Sediment	Thorium-228	1.7	pCi/g	J
21-11017	MD21-99-0009	7.5–8	Sediment	Thorium-230	1.23	pCi/g	U
21-11017	MD21-99-0009	7.5–8	Sediment	Thorium-232	1.24	pCi/g	J
21-11017	MD21-99-0009	7.5–8	Sediment	Uranium-234	1.37	pCi/g	None
21-11017	MD21-99-0009	7.5–8	Sediment	Uranium-235	0.0528	pCi/g	U
21-11017	MD21-99-0009	7.5–8	Sediment	Uranium-238	1.45	pCi/g	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0009	7.5–8	Sediment	Strontium-90	0.0354	pCi/g	U
21-11017	MD21-99-0009	7.5–8	Sediment	Gross alpha radiation	2.09	pCi/g	U
21-11017	MD21-99-0009	7.5–8	Sediment	Gross beta radiation	2.67	pCi/g	U
21-11017	MD21-99-0010	7.5–8	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Isophorone	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Benzoic acid	3.7	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Diethylphthalate	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0010	7.5–8	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitroaniline[4-]	0.74	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Azobenzene	0.74	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bis(2-ethylhexyl)phthalate	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Aniline	0.74	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Phenol	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bromodichloromethane	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloropropene[trans-1,3-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Methyl-2-pentanone[4-]	0.029	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloropropene[cis-1,3-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichloroethane[1,1,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Tetrachloroethene	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloropropane[1,3-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chlorodibromomethane	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Hexanone[2-]	0.029	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dibromoethane[1,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chlorobenzene	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Tetrachloroethane[1,1,1,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Styrene	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bromoform	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Isopropylbenzene	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bromobenzene	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichloropropane[1,2,3-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Tetrachloroethane[1,1,2,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Propylbenzene[1-]	0.0073	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0010	7.5–8	Sediment	Chlorotoluene[2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chlorotoluene[4-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trimethylbenzene[1,3,5-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Butylbenzene[tert-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trimethylbenzene[1,2,4-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Butylbenzene[sec-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Isopropyltoluene[4-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Butylbenzene[n-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dibromo-3-chloropropane[1,2-]	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichlorodifluoromethane	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chloromethane	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Vinyl chloride	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bromomethane	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chloroethane	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichlorofluoromethane	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloroethene[1,1-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Iodomethane	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Carbon disulfide	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Acetone	0.029	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Methylene chloride	0.0032	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloroethene[trans-1,2-]	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloroethane[1,1-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloropropane[2,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloroethene[cis-1,2-]	0.015	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Butanone[2-]	0.029	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Bromochloromethane	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Chloroform	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichloroethane[1,1,1-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Carbon tetrachloride	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloropropene[1,1-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloroethane[1,2-]	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Trichloroethene	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Dichloropropane[1,2-]	0.0073	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11017	MD21-99-0010	7.5–8	Sediment	Dibromomethane	0.0073	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Aluminum	10600	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Arsenic	1.9	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Barium	76.3	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Beryllium	0.61	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Cadmium	0.05	mg/kg	J
21-11017	MD21-99-0010	7.5–8	Sediment	Calcium	1260	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Chromium (total)	5.2	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Cobalt	2	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Copper	3.9	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Iron	7270	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Lead	5.7	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Magnesium	1270	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Manganese	127	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Nickel	4.8	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Potassium	1170	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Selenium	0.72	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Silver	0.12	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Sodium	476	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Vanadium	8.1	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Zinc	20.2	mg/kg	None
21-11017	MD21-99-0010	7.5–8	Sediment	Antimony	0.07	mg/kg	U
21-11017	MD21-99-0010	7.5–8	Sediment	Thallium	0.17	mg/kg	J
21-11017	MD21-99-0010	7.5–8	Sediment	Mercury	0.01	mg/kg	J
21-11017	MD21-99-0010	7.5–8	Sediment	Gross alpha radiation	2.13	pCi/g	U
21-11017	MD21-99-0010	7.5–8	Sediment	Gross beta radiation	3.05	pCi/g	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Diethylphthalate	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitroaniline[4-]	0.74	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Azobenzene	0.74	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Pentachlorophenol	1.8	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11018	MD21-99-0011	7.5–8	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bis(2-ethylhexyl)phthalate	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Aniline	0.74	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Phenol	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Isophorone	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Benzoic acid	3.7	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dimethyl phthalate	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11018	MD21-99-0011	7.5–8	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloroethane[1,1-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloropropane[2,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Butanone[2-]	0.025	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bromochloromethane	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chloroform	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichloroethane[1,1,1-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Carbon tetrachloride	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloropropene[1,1-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloroethane[1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichloroethene	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloropropane[1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dibromomethane	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bromodichloromethane	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloropropene[trans-1,3-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Methyl-2-pentanone[4-]	0.025	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloropropene[cis-1,3-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichloroethane[1,1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Tetrachloroethene	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloropropane[1,3-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chlorodibromomethane	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Hexanone[2-]	0.025	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dibromoethane[1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chlorobenzene	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Tetrachloroethane[1,1,1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Styrene	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bromoform	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Isopropylbenzene	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bromobenzene	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichloropropane[1,2,3-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Tetrachloroethane[1,1,2,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Propylbenzene[1-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chlorotoluene[2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chlorotoluene[4-]	0.0062	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11018	MD21-99-0011	7.5–8	Sediment	Trimethylbenzene[1,3,5-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Butylbenzene[tert-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trimethylbenzene[1,2,4-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Butylbenzene[sec-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Isopropyltoluene[4-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Butylbenzene[n-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichlorodifluoromethane	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chloromethane	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Vinyl chloride	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Bromomethane	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Chloroethane	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Trichlorofluoromethane	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloroethene[1,1-]	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Iodomethane	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Carbon disulfide	0.0062	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Acetone	0.025	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Methylene chloride	0.0032	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Vanadium	16.5	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Zinc	31.9	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Aluminum	15900	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Arsenic	3.2	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Barium	258	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Beryllium	0.93	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Cadmium	0.1	mg/kg	J
21-11018	MD21-99-0011	7.5–8	Sediment	Calcium	3920	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Chromium (total)	9.4	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Cobalt	3.9	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Copper	6.7	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Iron	12000	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Lead	9.2	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Magnesium	2450	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11018	MD21-99-0011	7.5–8	Sediment	Manganese	184	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Nickel	7.7	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Potassium	1900	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Selenium	0.63	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Silver	0.13	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Sodium	502	mg/kg	None
21-11018	MD21-99-0011	7.5–8	Sediment	Antimony	0.09	mg/kg	U
21-11018	MD21-99-0011	7.5–8	Sediment	Thallium	0.21	mg/kg	J
21-11018	MD21-99-0011	7.5–8	Sediment	Mercury	0.02	mg/kg	J
21-11018	MD21-99-0011	7.5–8	Sediment	Gross alpha radiation	1.17	pCi/g	U
21-11018	MD21-99-0011	7.5–8	Sediment	Gross beta radiation	4.89	pCi/g	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzyl alcohol	1.5	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitrophenol[2-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Benzoic acid	3.7	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chloroaniline[4-]	1.5	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Hexachlorobutadiene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dimethyl phthalate	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Acenaphthylene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dibenzofuran	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Diethylphthalate	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitroaniline[4-]	0.74	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Azobenzene	0.74	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Hexachlorobenzene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Di-n-butylphthalate	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Butylbenzylphthalate	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Di-n-octylphthalate	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Aniline	0.74	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Phenol	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chlorophenol[2-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Methylphenol[2-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Methylphenol[4-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Hexachloroethane	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nitrobenzene	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Isophorone	0.37	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chlorotoluene[2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chlorotoluene[4-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.01	mg/kg	J+
21-11019	MD21-99-0012	14–14.5	Qbt 3	Butylbenzene[tert-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.0058	mg/kg	J+
21-11019	MD21-99-0012	14–14.5	Qbt 3	Butylbenzene[sec-]	0.0015	mg/kg	J
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzene[1,3-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzene[1,4-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Isopropyltoluene[4-]	0.0042	mg/kg	J+
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorobenzene[1,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Butylbenzene[n-]	0.0056	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichlorodifluoromethane	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chloromethane	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Vinyl chloride	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bromomethane	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chloroethane	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichlorofluoromethane	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloroethene[1,1-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Iodomethane	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Carbon disulfide	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Acetone	0.0089	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Methylene chloride	0.003	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloroethane[1,1-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloropropane[2,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Butanone[2-]	0.022	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bromochloromethane	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chloroform	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichloroethane[1,1,1-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Carbon tetrachloride	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloropropene[1,1-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloroethane[1,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichloroethene	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloropropane[1,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dibromomethane	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bromodichloromethane	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloropropene[trans-1,3-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Methyl-2-pentanone[4-]	0.022	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloropropene[cis-1,3-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichloroethane[1,1,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Tetrachloroethene	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dichloropropane[1,3-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chlorodibromomethane	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Hexanone[2-]	0.022	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Dibromoethane[1,2-]	0.0056	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chlorobenzene	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Styrene	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bromoform	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Isopropylbenzene	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Bromobenzene	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Trichloropropane[1,2,3-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Propylbenzene[1-]	0.0056	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Aluminum	12100	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Arsenic	3.5	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Barium	123	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Beryllium	0.72	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Cadmium	0.05	mg/kg	J
21-11019	MD21-99-0012	14–14.5	Qbt 3	Calcium	2430	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Chromium (total)	7.9	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Cobalt	4	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Copper	6.8	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Iron	11000	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Lead	12.6	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Magnesium	2140	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Manganese	380	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Nickel	6.4	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Potassium	1600	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Selenium	0.71	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Silver	0.13	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Sodium	231	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Vanadium	14.4	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Zinc	33.2	mg/kg	None
21-11019	MD21-99-0012	14–14.5	Qbt 3	Antimony	0.14	mg/kg	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Thallium	0.25	mg/kg	J
21-11019	MD21-99-0012	14–14.5	Qbt 3	Mercury	0.2	mg/kg	J
21-11019	MD21-99-0012	14–14.5	Qbt 3	Gross alpha radiation	1.11	pCi/g	U
21-11019	MD21-99-0012	14–14.5	Qbt 3	Gross beta radiation	5.05	pCi/g	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Azobenzene	0.73	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bromophenyl-phenylether[4-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11020	MD21-99-0013	13–13.5	Qbt 3	Hexachlorobenzene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Di-n-butylphthalate	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Butylbenzylphthalate	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.73	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Di-n-octylphthalate	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Aniline	0.73	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Phenol	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chlorophenol[2-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Methylphenol[2-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Methylphenol[4-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Hexachloroethane	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitrobenzene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Isophorone	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitrophenol[2-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Benzoic acid	3.7	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Hexachlorobutadiene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chloro-3-methylphenol[4-]	0.73	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chloronaphthalene[2-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dimethyl phthalate	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Acenaphthylene	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dibenzofuran	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Diethylphthalate	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nitroaniline[4-]	0.73	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chlorodibromomethane	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Hexanone[2-]	0.024	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dibromoethane[1,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chlorobenzene	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Styrene	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bromoform	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Isopropylbenzene	0.00029	mg/kg	J+
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bromobenzene	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichloropropane[1,2,3-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Propylbenzene[1-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chlorotoluene[2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chlorotoluene[4-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.022	mg/kg	J+
21-11020	MD21-99-0013	13–13.5	Qbt 3	Butylbenzene[tert-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.01	mg/kg	J+
21-11020	MD21-99-0013	13–13.5	Qbt 3	Butylbenzene[sec-]	0.0033	mg/kg	J+
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzene[1,3-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzene[1,4-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Isopropyltoluene[4-]	0.0098	mg/kg	J+
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorobenzene[1,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Butylbenzene[n-]	0.021	mg/kg	J+
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0061	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichlorodifluoromethane	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chloromethane	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Vinyl chloride	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bromomethane	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chloroethane	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichlorofluoromethane	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloroethene[1,1-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Iodomethane	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Carbon disulfide	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Acetone	0.014	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Methylene chloride	0.0029	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloroethane[1,1-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloropropane[2,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Butanone[2-]	0.024	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bromochloromethane	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chloroform	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichloroethane[1,1,1-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Carbon tetrachloride	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloropropene[1,1-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloroethane[1,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichloroethene	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloropropane[1,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dibromomethane	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Bromodichloromethane	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloropropene[trans-1,3-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloropropene[cis-1,3-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Trichloroethane[1,1,2-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Tetrachloroethene	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Dichloropropane[1,3-]	0.0061	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Aluminum	8120	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Arsenic	3	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Barium	77.5	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Beryllium	0.58	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Cadmium	0.03	mg/kg	J
21-11020	MD21-99-0013	13–13.5	Qbt 3	Calcium	1620	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11020	MD21-99-0013	13–13.5	Qbt 3	Chromium (total)	4.9	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Cobalt	2.7	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Copper	5	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Iron	8910	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Lead	11.8	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Magnesium	1350	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Manganese	342	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Nickel	4.2	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Potassium	1100	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Selenium	0.68	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Silver	0.12	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Sodium	202	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Vanadium	8.8	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Zinc	30.4	mg/kg	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Antimony	0.08	mg/kg	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Thallium	0.19	mg/kg	J
21-11020	MD21-99-0013	13–13.5	Qbt 3	Mercury	0.02	mg/kg	J
21-11020	MD21-99-0013	13–13.5	Qbt 3	Thorium-228	1.55	pCi/g	J
21-11020	MD21-99-0013	13–13.5	Qbt 3	Thorium-230	0.595	pCi/g	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Thorium-232	1.29	pCi/g	J
21-11020	MD21-99-0013	13–13.5	Qbt 3	Uranium-234	1.02	pCi/g	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Uranium-235	0.015	pCi/g	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Uranium-238	1	pCi/g	None
21-11020	MD21-99-0013	13–13.5	Qbt 3	Strontium-90	-0.0185	pCi/g	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Gross alpha radiation	1.39	pCi/g	U
21-11020	MD21-99-0013	13–13.5	Qbt 3	Gross beta radiation	2.47	pCi/g	U
21-11021	MD21-99-0014	4–5	Sediment	Chloroaniline[4-]	1.6	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Hexachlorobutadiene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chloro-3-methylphenol[4-]	0.8	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Hexachlorocyclopentadiene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichlorophenol[2,4,6-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichlorophenol[2,4,5-]	2	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chloronaphthalene[2-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitroaniline[2-]	2	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dimethyl phthalate	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Acenaphthylene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitroaniline[3-]	2	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dinitrophenol[2,4-]	2	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11021	MD21-99-0014	4–5	Sediment	Nitrophenol[4-]	2	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dibenzofuran	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dinitrotoluene[2,4-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dinitrotoluene[2,6-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Diethylphthalate	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chlorophenyl-phenyl[4-] ether	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitroaniline[4-]	0.8	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dinitro-2-methylphenol[4,6-]	2	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitrosodiphenylamine[N-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Azobenzene	0.8	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bromophenyl-phenylether[4-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Hexachlorobenzene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Pentachlorophenol	2	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Di-n-butylphthalate	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Butylbenzylphthalate	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzidine[3,3'-]	0.8	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bis(2-ethylhexyl)phthalate	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Di-n-octylphthalate	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Indeno(1,2,3-cd)pyrene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Benzo(g,h,i)perylene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Benzyl alcohol	1.6	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitrosodimethylamine[N-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Aniline	0.8	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Phenol	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bis(2-chloroethyl)ether	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chlorophenol[2-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzene[1,3-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzene[1,4-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzene[1,2-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Methylphenol[2-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Methylphenol[4-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitroso-di-n-propylamine[N-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Hexachloroethane	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitrobenzene	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Isophorone	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Nitrophenol[2-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dimethylphenol[2,4-]	0.4	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11021	MD21-99-0014	4–5	Sediment	Benzoic acid	4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bis(2-chloroethoxy)methane	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorophenol[2,4-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichlorobenzene[1,2,4-]	0.4	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloropropene[1,1-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloroethane[1,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichloroethene	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloropropane[1,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dibromomethane	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bromodichloromethane	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloropropene[trans-1,3-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloropropene[cis-1,3-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichloroethane[1,1,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Tetrachloroethene	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloropropane[1,3-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chlorodibromomethane	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Hexanone[2-]	0.024	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dibromoethane[1,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chlorobenzene	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Tetrachloroethane[1,1,1,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Styrene	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bromoform	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Isopropylbenzene	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bromobenzene	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichloropropane[1,2,3-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Tetrachloroethane[1,1,2,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Propylbenzene[1-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chlorotoluene[2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chlorotoluene[4-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trimethylbenzene[1,3,5-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Butylbenzene[tert-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trimethylbenzene[1,2,4-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Butylbenzene[sec-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzene[1,3-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzene[1,4-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Isopropyltoluene[4-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorobenzene[1,2-]	0.0061	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11021	MD21-99-0014	4–5	Sediment	Butylbenzene[n-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichlorodifluoromethane	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chloromethane	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Vinyl chloride	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bromomethane	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chloroethane	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichlorofluoromethane	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloroethene[1,1-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Iodomethane	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Carbon disulfide	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Acetone	0.024	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Methylene chloride	0.0025	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloroethane[1,1-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloropropane[2,2-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Butanone[2-]	0.024	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Bromochloromethane	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Chloroform	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Trichloroethane[1,1,1-]	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Carbon tetrachloride	0.0061	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Silver	0.2	mg/kg	J
21-11021	MD21-99-0014	4–5	Sediment	Sodium	841	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Vanadium	38.9	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Zinc	62.8	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Aluminum	40800	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Arsenic	7.5	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Barium	72.5	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Beryllium	2.3	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Cadmium	0.04	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Calcium	5060	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Chromium (total)	25.9	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Cobalt	9	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Copper	16.1	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Iron	29200	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11021	MD21-99-0014	4–5	Sediment	Lead	18.3	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Magnesium	7030	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Manganese	220	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Nickel	16.4	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Potassium	5540	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Selenium	1.4	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Antimony	0.22	mg/kg	U
21-11021	MD21-99-0014	4–5	Sediment	Thallium	0.35	mg/kg	None
21-11021	MD21-99-0014	4–5	Sediment	Mercury	0.07	mg/kg	J
21-11021	MD21-99-0014	4–5	Sediment	Gross alpha radiation	1.14	pCi/g	U
21-11021	MD21-99-0014	4–5	Sediment	Gross beta radiation	1.99	pCi/g	U
21-11022	MD21-99-0015	4–5	Sediment	Di-n-butylphthalate	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Butylbenzylphthalate	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzidine[3,3'-]	0.78	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bis(2-ethylhexyl)phthalate	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Di-n-octylphthalate	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Indeno(1,2,3-cd)pyrene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Benzo(g,h,i)perylene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitrosodimethylamine[N-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Aniline	0.78	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Phenol	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bis(2-chloroethyl)ether	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chlorophenol[2-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzene[1,3-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzene[1,4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzene[1,2-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Methylphenol[2-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Methylphenol[4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitroso-di-n-propylamine[N-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Hexachloroethane	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitrobenzene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Isophorone	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitrophenol[2-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dimethylphenol[2,4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Benzoic acid	3.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bis(2-chloroethoxy)methane	0.39	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11022	MD21-99-0015	4–5	Sediment	Dichlorophenol[2,4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichlorobenzene[1,2,4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Hexachlorobutadiene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chloro-3-methylphenol[4-]	0.78	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Hexachlorocyclopentadiene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichlorophenol[2,4,6-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chloronaphthalene[2-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dimethyl phthalate	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Acenaphthylene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dibenzofuran	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dinitrotoluene[2,4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dinitrotoluene[2,6-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Diethylphthalate	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chlorophenyl-phenyl[4-] ether	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitroaniline[4-]	0.78	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Nitrosodiphenylamine[N-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Azobenzene	0.78	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bromophenyl-phenylether[4-]	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Hexachlorobenzene	0.39	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Isopropyltoluene[4-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzene[1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Butylbenzene[n-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloroethene[1,1-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Iodomethane	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Carbon disulfide	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Acetone	0.021	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Methylene chloride	0.0026	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11022	MD21-99-0015	4–5	Sediment	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloroethane[1,1-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloropropane[2,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Butanone[2-]	0.021	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bromochloromethane	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chloroform	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichloroethane[1,1,1-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Carbon tetrachloride	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloropropene[1,1-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloroethane[1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichloroethene	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloropropane[1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dibromomethane	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bromodichloromethane	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloropropene[trans-1,3-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Methyl-2-pentanone[4-]	0.021	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloropropene[cis-1,3-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichloroethane[1,1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Tetrachloroethene	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichloropropane[1,3-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chlorodibromomethane	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Hexanone[2-]	0.021	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dibromoethane[1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chlorobenzene	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Tetrachloroethane[1,1,1,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Styrene	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bromoform	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Isopropylbenzene	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bromobenzene	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichloropropane[1,2,3-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Tetrachloroethane[1,1,2,2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Propylbenzene[1-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chlorotoluene[2-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chlorotoluene[4-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trimethylbenzene[1,3,5-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Butylbenzene[tert-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trimethylbenzene[1,2,4-]	0.0053	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11022	MD21-99-0015	4–5	Sediment	Butylbenzene[sec-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzene[1,3-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorobenzene[1,4-]	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Dichlorodifluoromethane	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chloromethane	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Vinyl chloride	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Bromomethane	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Chloroethane	0.011	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Trichlorofluoromethane	0.0053	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Aluminum	23100	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Arsenic	5	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Barium	887	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Beryllium	1.2	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Cadmium	0.21	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Calcium	12600	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Chromium (total)	15.1	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Cobalt	6.2	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Copper	10.6	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Iron	17000	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Lead	15.4	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Magnesium	4440	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Manganese	310	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Nickel	10.7	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Potassium	2930	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Selenium	1.1	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Silver	0.14	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Sodium	339	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Vanadium	25.8	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Zinc	43.3	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Antimony	0.25	mg/kg	U
21-11022	MD21-99-0015	4–5	Sediment	Thallium	0.32	mg/kg	None
21-11022	MD21-99-0015	4–5	Sediment	Mercury	0.04	mg/kg	J
21-11022	MD21-99-0015	4–5	Sediment	Gross alpha radiation	2	pCi/g	U
21-11022	MD21-99-0015	4–5	Sediment	Gross beta radiation	3.15	pCi/g	U
21-11023	MD21-99-0016	4–5	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitroaniline[3-]	1.8	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11023	MD21-99-0016	4–5	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Diethylphthalate	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitroaniline[4-]	0.75	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Azobenzene	0.75	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzidine[3,3'-]	0.75	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Di-n-octylphthalate	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Aniline	0.75	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Phenol	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chlorophenol[2-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Hexachloroethane	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitrobenzene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Isophorone	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Nitrophenol[2-]	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11023	MD21-99-0016	4–5	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Benzoic acid	3.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chloro-3-methylphenol[4-]	0.75	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bromoform	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Isopropylbenzene	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bromobenzene	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichloropropane[1,2,3-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Tetrachloroethane[1,1,2,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Propylbenzene[1-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chlorotoluene[2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chlorotoluene[4-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trimethylbenzene[1,3,5-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Butylbenzene[tert-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trimethylbenzene[1,2,4-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Butylbenzene[sec-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzene[1,3-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzene[1,4-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Isopropyltoluene[4-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorobenzene[1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Butylbenzene[n-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichlorodifluoromethane	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chloromethane	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Vinyl chloride	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bromomethane	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chloroethane	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichlorofluoromethane	0.0057	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11023	MD21-99-0016	4–5	Sediment	Dichloroethene[1,1-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Iodomethane	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Carbon disulfide	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Acetone	0.0038	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Methylene chloride	0.0025	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloroethane[1,1-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloropropane[2,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Butanone[2-]	0.023	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bromochloromethane	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chloroform	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichloroethane[1,1,1-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Carbon tetrachloride	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloropropene[1,1-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloroethane[1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichloroethene	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloropropane[1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dibromomethane	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Bromodichloromethane	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloropropene[trans-1,3-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Methyl-2-pentanone[4-]	0.023	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloropropene[cis-1,3-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Trichloroethane[1,1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Tetrachloroethene	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dichloropropane[1,3-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chlorodibromomethane	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Hexanone[2-]	0.023	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Dibromoethane[1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Chlorobenzene	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Tetrachloroethane[1,1,1,2-]	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Styrene	0.0057	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Aluminum	18900	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Arsenic	3.2	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Barium	273	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Beryllium	1.1	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Cadmium	0.07	mg/kg	J
21-11023	MD21-99-0016	4–5	Sediment	Calcium	2860	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11023	MD21-99-0016	4–5	Sediment	Chromium (total)	10.8	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Cobalt	3.5	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Copper	10.6	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Iron	13400	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Lead	10.1	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Magnesium	3100	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Manganese	128	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Nickel	7.8	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Potassium	2240	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Selenium	1.2	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Silver	0.18	mg/kg	J
21-11023	MD21-99-0016	4–5	Sediment	Sodium	564	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Vanadium	17.6	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Zinc	35.4	mg/kg	None
21-11023	MD21-99-0016	4–5	Sediment	Antimony	0.11	mg/kg	U
21-11023	MD21-99-0016	4–5	Sediment	Thallium	0.22	mg/kg	J
21-11023	MD21-99-0016	4–5	Sediment	Mercury	0.02	mg/kg	J
21-11023	MD21-99-0016	4–5	Sediment	Gross alpha radiation	1.75	pCi/g	U
21-11023	MD21-99-0016	4–5	Sediment	Gross beta radiation	3.93	pCi/g	U
21-11024	MD21-99-0017	4–5	Sediment	Di-n-octylphthalate	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Indeno(1,2,3-cd)pyrene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Benzo(g,h,i)perylene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzene[1,2-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Methylphenol[2-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Methylphenol[4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitroso-di-n-propylamine[N-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Hexachloroethane	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitrobenzene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Isophorone	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitrophenol[2-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dimethylphenol[2,4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Benzoic acid	3.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bis(2-chloroethoxy)methane	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorophenol[2,4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichlorobenzene[1,2,4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chloroaniline[4-]	1.5	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11024	MD21-99-0017	4–5	Sediment	Hexachlorobutadiene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chloro-3-methylphenol[4-]	0.79	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Hexachlorocyclopentadiene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichlorophenol[2,4,6-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chloronaphthalene[2-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dimethyl phthalate	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Acenaphthylene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dibenzofuran	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dinitrotoluene[2,4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dinitrotoluene[2,6-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Diethylphthalate	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chlorophenyl-phenyl[4-] ether	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitroaniline[4-]	0.79	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitrosodiphenylamine[N-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Azobenzene	0.79	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bromophenyl-phenylether[4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Hexachlorobenzene	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Di-n-butylphthalate	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Butylbenzylphthalate	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzidine[3,3'-]	0.79	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bis(2-ethylhexyl)phthalate	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nitrosodimethylamine[N-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Aniline	0.79	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Phenol	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bis(2-chloroethyl)ether	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chlorophenol[2-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzene[1,3-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzene[1,4-]	0.39	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloropropene[cis-1,3-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichloroethane[1,1,2-]	0.006	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11024	MD21-99-0017	4–5	Sediment	Tetrachloroethene	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloropropane[1,3-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chlorodibromomethane	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Hexanone[2-]	0.024	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dibromoethane[1,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chlorobenzene	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Tetrachloroethane[1,1,1,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Styrene	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bromoform	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Isopropylbenzene	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bromobenzene	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichloropropane[1,2,3-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Tetrachloroethane[1,1,2,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Propylbenzene[1-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chlorotoluene[2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chlorotoluene[4-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trimethylbenzene[1,3,5-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Butylbenzene[tert-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trimethylbenzene[1,2,4-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Butylbenzene[sec-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzene[1,3-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzene[1,4-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Isopropyltoluene[4-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorobenzene[1,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Butylbenzene[n-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichlorodifluoromethane	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chloromethane	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Vinyl chloride	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bromomethane	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chloroethane	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichlorofluoromethane	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloroethene[1,1-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Iodomethane	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Carbon disulfide	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Acetone	0.024	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11024	MD21-99-0017	4–5	Sediment	Methylene chloride	0.0022	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloroethane[1,1-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloropropane[2,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Butanone[2-]	0.024	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bromochloromethane	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Chloroform	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichloroethane[1,1,1-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Carbon tetrachloride	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloropropene[1,1-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloroethane[1,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Trichloroethene	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloropropane[1,2-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dibromomethane	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Bromodichloromethane	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Dichloropropene[trans-1,3-]	0.006	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Nickel	18.1	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Potassium	3910	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Selenium	1.2	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Silver	0.14	mg/kg	U
21-11024	MD21-99-0017	4–5	Sediment	Sodium	592	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Vanadium	35.9	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Zinc	54.2	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Aluminum	27300	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Arsenic	7	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Barium	354	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Beryllium	1.7	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Cadmium	0.09	mg/kg	J
21-11024	MD21-99-0017	4–5	Sediment	Calcium	6830	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Chromium (total)	19.1	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Cobalt	10.2	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Copper	14.6	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Iron	24200	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Lead	19.4	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Magnesium	5420	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Manganese	494	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Antimony	0.17	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11024	MD21-99-0017	4–5	Sediment	Thallium	0.33	mg/kg	None
21-11024	MD21-99-0017	4–5	Sediment	Mercury	0.03	mg/kg	J
21-11024	MD21-99-0017	4–5	Sediment	Gross alpha radiation	1.39	pCi/g	U
21-11024	MD21-99-0017	4–5	Sediment	Gross beta radiation	3.07	pCi/g	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Diethylphthalate	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitroaniline[4-]	0.76	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Azobenzene	0.76	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzidine[3,3'-]	0.76	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Di-n-octylphthalate	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Aniline	0.76	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Phenol	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chlorophenol[2-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Hexachloroethane	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitrobenzene	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11025	MD21-99-0018	7–7.5	Sediment	Isophorone	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitrophenol[2-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Benzoic acid	3.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chloro-3-methylphenol[4-]	0.76	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloroethene[cis-1,2-]	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Butanone[2-]	0.03	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bromochloromethane	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chloroform	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichloroethane[1,1,1-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Carbon tetrachloride	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloropropene[1,1-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloroethane[1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichloroethene	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloropropane[1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dibromomethane	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bromodichloromethane	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloropropene[trans-1,3-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Methyl-2-pentanone[4-]	0.03	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloropropene[cis-1,3-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichloroethane[1,1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Tetrachloroethene	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloropropane[1,3-]	0.0075	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11025	MD21-99-0018	7–7.5	Sediment	Chlorodibromomethane	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Hexanone[2-]	0.03	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dibromoethane[1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chlorobenzene	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Styrene	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bromoform	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Isopropylbenzene	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bromobenzene	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichloropropane[1,2,3-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Propylbenzene[1-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chlorotoluene[2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chlorotoluene[4-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trimethylbenzene[1,3,5-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Butylbenzene[tert-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trimethylbenzene[1,2,4-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Butylbenzene[sec-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzene[1,3-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzene[1,4-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Isopropyltoluene[4-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorobenzene[1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Butylbenzene[n-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichlorodifluoromethane	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chloromethane	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Vinyl chloride	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Bromomethane	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Chloroethane	0.015	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Trichlorofluoromethane	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloroethene[1,1-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Iodomethane	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Carbon disulfide	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Acetone	0.03	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Methylene chloride	0.0037	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloroethene[trans-1,2-]	0.015	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloroethane[1,1-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Dichloropropane[2,2-]	0.0075	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Aluminum	15900	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Arsenic	4.4	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Barium	114	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Beryllium	0.8	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Cadmium	0.05	mg/kg	J
21-11025	MD21-99-0018	7–7.5	Sediment	Calcium	3800	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Chromium (total)	8.9	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Cobalt	3.2	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Copper	6	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Iron	11800	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Lead	9.1	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Magnesium	2610	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Manganese	222	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Nickel	6.4	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Potassium	1890	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Selenium	0.61	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Silver	0.19	mg/kg	J
21-11025	MD21-99-0018	7–7.5	Sediment	Sodium	396	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Vanadium	14.1	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Zinc	31.4	mg/kg	None
21-11025	MD21-99-0018	7–7.5	Sediment	Antimony	0.12	mg/kg	U
21-11025	MD21-99-0018	7–7.5	Sediment	Thallium	0.17	mg/kg	J
21-11025	MD21-99-0018	7–7.5	Sediment	Mercury	0.02	mg/kg	J
21-11025	MD21-99-0018	7–7.5	Sediment	Gross alpha radiation	1.81	pCi/g	U
21-11025	MD21-99-0018	7–7.5	Sediment	Gross beta radiation	3.8	pCi/g	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzo(g,h,i)perylene	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzyl alcohol	1.4	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitrophenol[2-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dimethylphenol[2,4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Benzoic acid	3.6	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bis(2-chloroethoxy)methane	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorophenol[2,4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Hexachlorobutadiene	0.36	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chloro-3-methylphenol[4-]	0.72	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Hexachlorocyclopentadiene	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichlorophenol[2,4,6-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chloronaphthalene[2-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dimethyl phthalate	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Acenaphthylene	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dibenzofuran	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dinitrotoluene[2,4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dinitrotoluene[2,6-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Diethylphthalate	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitroaniline[4-]	0.72	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitrosodiphenylamine[N-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Azobenzene	0.72	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bromophenyl-phenylether[4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Hexachlorobenzene	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Pentachlorophenol	1.7	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Di-n-butylphthalate	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Butylbenzylphthalate	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.72	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Di-n-octylphthalate	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitrosodimethylamine[N-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Aniline	0.72	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Phenol	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bis(2-chloroethyl)ether	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chlorophenol[2-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzene[1,3-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzene[1,4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzene[1,2-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Methylphenol[2-]	0.36	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0019	10–10.5	Qbt 3	Methylphenol[4-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Hexachloroethane	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nitrobenzene	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Isophorone	0.36	mg/kg	UJ
21-11026	MD21-99-0019	10–10.5	Qbt 3	Butylbenzene[tert-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Butylbenzene[sec-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzene[1,3-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzene[1,4-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Isopropyltoluene[4-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorobenzene[1,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Butylbenzene[n-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichlorodifluoromethane	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chloromethane	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Vinyl chloride	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bromomethane	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chloroethane	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichlorofluoromethane	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloroethene[1,1-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Iodomethane	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Carbon disulfide	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Acetone	0.0057	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Methylene chloride	0.003	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloroethane[1,1-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloropropane[2,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Butanone[2-]	0.024	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bromochloromethane	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chloroform	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichloroethane[1,1,1-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Carbon tetrachloride	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloropropene[1,1-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloroethane[1,2-]	0.006	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichloroethene	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloropropane[1,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dibromomethane	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bromodichloromethane	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloropropene[trans-1,3-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloropropene[cis-1,3-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichloroethane[1,1,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Tetrachloroethene	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dichloropropane[1,3-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chlorodibromomethane	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Hexanone[2-]	0.024	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Dibromoethane[1,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chlorobenzene	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Styrene	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bromoform	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Isopropylbenzene	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Bromobenzene	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trichloropropane[1,2,3-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Propylbenzene[1-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chlorotoluene[2-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chlorotoluene[4-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.006	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Aluminum	6790	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Arsenic	2.5	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Barium	31.2	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Beryllium	0.5	mg/kg	J
21-11026	MD21-99-0019	10–10.5	Qbt 3	Cadmium	0.03	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Calcium	845	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Chromium (total)	3.7	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Cobalt	1.5	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Copper	2.5	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Iron	7000	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Lead	5.2	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Magnesium	879	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Manganese	154	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0019	10–10.5	Qbt 3	Nickel	2.6	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Potassium	757	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Selenium	0.6	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Silver	0.13	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Sodium	207	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Vanadium	5.5	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Zinc	20.4	mg/kg	None
21-11026	MD21-99-0019	10–10.5	Qbt 3	Antimony	0.06	mg/kg	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Thallium	0.12	mg/kg	J
21-11026	MD21-99-0019	10–10.5	Qbt 3	Mercury	0.01	mg/kg	J
21-11026	MD21-99-0019	10–10.5	Qbt 3	Gross alpha radiation	1.53	pCi/g	U
21-11026	MD21-99-0019	10–10.5	Qbt 3	Gross beta radiation	6.31	pCi/g	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitroaniline[4-]	0.71	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitrosodiphenylamine[N-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Azobenzene	0.71	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bromophenyl-phenylether[4-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Hexachlorobenzene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Pentachlorophenol	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Di-n-butylphthalate	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Butylbenzylphthalate	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.71	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Di-n-octylphthalate	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzo(g,h,i)perylene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzyl alcohol	1.4	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitrosodimethylamine[N-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Aniline	0.71	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Phenol	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bis(2-chloroethyl)ether	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chlorophenol[2-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzene[1,3-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzene[1,4-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzene[1,2-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Methylphenol[2-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Methylphenol[4-]	0.35	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Hexachloroethane	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitrobenzene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Isophorone	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitrophenol[2-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dimethylphenol[2,4-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Benzoic acid	3.5	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bis(2-chloroethoxy)methane	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorophenol[2,4-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Hexachlorobutadiene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chloro-3-methylphenol[4-]	0.71	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Hexachlorocyclopentadiene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichlorophenol[2,4,6-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chloronaphthalene[2-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dimethyl phthalate	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Acenaphthylene	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dibenzofuran	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dinitrotoluene[2,4-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dinitrotoluene[2,6-]	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Diethylphthalate	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.35	mg/kg	UJ
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chlorobenzene	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Styrene	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bromoform	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Isopropylbenzene	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bromobenzene	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichloropropane[1,2,3-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Propylbenzene[1-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chlorotoluene[2-]	0.0059	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chlorotoluene[4-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Butylbenzene[tert-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Butylbenzene[sec-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzene[1,3-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzene[1,4-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Isopropyltoluene[4-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorobenzene[1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Butylbenzene[n-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichlorodifluoromethane	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chloromethane	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Vinyl chloride	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bromomethane	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chloroethane	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichlorofluoromethane	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloroethene[1,1-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Iodomethane	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Carbon disulfide	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Acetone	0.0051	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Methylene chloride	0.0028	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloroethane[1,1-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloropropane[2,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Butanone[2-]	0.024	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bromochloromethane	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chloroform	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichloroethane[1,1,1-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Carbon tetrachloride	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloropropene[1,1-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloroethane[1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichloroethene	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloropropane[1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dibromomethane	0.0059	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11026	MD21-99-0020	10–10.5	Qbt 3	Bromodichloromethane	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloropropene[trans-1,3-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloropropene[cis-1,3-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Trichloroethane[1,1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Tetrachloroethene	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dichloropropane[1,3-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chlorodibromomethane	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Hexanone[2-]	0.024	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Dibromoethane[1,2-]	0.0059	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Lead	5.2	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Magnesium	662	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Manganese	161	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Nickel	1.9	mg/kg	J
21-11026	MD21-99-0020	10–10.5	Qbt 3	Potassium	656	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Selenium	0.58	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Silver	0.12	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Sodium	181	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Vanadium	4.4	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Zinc	18.3	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Aluminum	5300	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Arsenic	3.2	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Barium	45.1	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Beryllium	0.5	mg/kg	J
21-11026	MD21-99-0020	10–10.5	Qbt 3	Cadmium	0.03	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Calcium	581	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Chromium (total)	2.8	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Cobalt	1.2	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Copper	1.9	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Iron	6490	mg/kg	None
21-11026	MD21-99-0020	10–10.5	Qbt 3	Antimony	0.06	mg/kg	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Thallium	0.12	mg/kg	J
21-11026	MD21-99-0020	10–10.5	Qbt 3	Mercury	0.02	mg/kg	J
21-11026	MD21-99-0020	10–10.5	Qbt 3	Gross alpha radiation	1.87	pCi/g	U
21-11026	MD21-99-0020	10–10.5	Qbt 3	Gross beta radiation	5	pCi/g	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Di-n-butylphthalate	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Butylbenzylphthalate	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzidine[3,3'-]	3	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bis(2-ethylhexyl)phthalate	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Di-n-octylphthalate	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Indeno(1,2,3-cd)pyrene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzo(g,h,i)perylene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzyl alcohol	6	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitrosodimethylamine[N-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Aniline	3	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Phenol	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bis(2-chloroethyl)ether	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chlorophenol[2-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzene[1,3-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzene[1,4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzene[1,2-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Methylphenol[2-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Methylphenol[4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitroso-di-n-propylamine[N-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Hexachloroethane	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitrobenzene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Isophorone	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitrophenol[2-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dimethylphenol[2,4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Benzoic acid	15	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bis(2-chloroethoxy)methane	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorophenol[2,4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichlorobenzene[1,2,4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chloroaniline[4-]	6	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Hexachlorobutadiene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chloro-3-methylphenol[4-]	3	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Hexachlorocyclopentadiene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichlorophenol[2,4,6-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichlorophenol[2,4,5-]	7.4	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chloronaphthalene[2-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitroaniline[2-]	7.4	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dimethyl phthalate	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Acenaphthylene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitroaniline[3-]	7.4	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dinitrophenol[2,4-]	7.4	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitrophenol[4-]	7.4	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dibenzofuran	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dinitrotoluene[2,4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dinitrotoluene[2,6-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Diethylphthalate	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitroaniline[4-]	3	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	7.4	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nitrosodiphenylamine[N-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Azobenzene	3	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bromophenyl-phenylether[4-]	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Hexachlorobenzene	1.5	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Pentachlorophenol	7.4	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloroethane[1,1-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloropropane[2,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Butanone[2-]	0.023	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bromochloromethane	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chloroform	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichloroethane[1,1,1-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Carbon tetrachloride	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloropropene[1,1-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloroethane[1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichloroethene	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloropropane[1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dibromomethane	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bromodichloromethane	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloropropene[trans-1,3-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Methyl-2-pentanone[4-]	0.023	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloropropene[cis-1,3-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichloroethane[1,1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Tetrachloroethene	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloropropane[1,3-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chlorodibromomethane	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Hexanone[2-]	0.023	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dibromoethane[1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chlorobenzene	0.0057	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11027	MD21-99-0021	4–4.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Styrene	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bromoform	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Isopropylbenzene	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bromobenzene	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichloropropane[1,2,3-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Propylbenzene[1-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chlorotoluene[2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chlorotoluene[4-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Butylbenzene[tert-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Butylbenzene[sec-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzene[1,3-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzene[1,4-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Isopropyltoluene[4-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorobenzene[1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Butylbenzene[n-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichlorodifluoromethane	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chloromethane	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Vinyl chloride	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Bromomethane	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chloroethane	0.011	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Trichlorofluoromethane	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Dichloroethene[1,1-]	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Iodomethane	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Carbon disulfide	0.0057	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Acetone	0.0041	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Methylene chloride	0.002	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Aluminum	14000	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Arsenic	4.1	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Barium	127	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Beryllium	0.82	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Cadmium	0.04	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11027	MD21-99-0021	4–4.5	Qbt 3	Calcium	2820	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Chromium (total)	9.8	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Cobalt	4.3	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Copper	6.5	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Iron	13000	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Lead	14.2	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Magnesium	2290	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Manganese	246	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Nickel	6.7	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Potassium	1610	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Selenium	0.66	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Silver	0.14	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Sodium	188	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Vanadium	18.6	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Zinc	29.2	mg/kg	None
21-11027	MD21-99-0021	4–4.5	Qbt 3	Antimony	0.17	mg/kg	U
21-11027	MD21-99-0021	4–4.5	Qbt 3	Thallium	0.23	mg/kg	J
21-11027	MD21-99-0021	4–4.5	Qbt 3	Mercury	0.02	mg/kg	J
21-11028	MD21-99-0022	4.5–5	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitroaniline[2-]	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dimethyl phthalate	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Acenaphthylene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitroaniline[3-]	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitrophenol[4-]	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dibenzofuran	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Diethylphthalate	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitroaniline[4-]	0.75	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Azobenzene	0.75	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Hexachlorobenzene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Pentachlorophenol	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Di-n-butylphthalate	0.38	mg/kg	UJ

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11028	MD21-99-0022	4.5–5	Sediment	Butylbenzylphthalate	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzidine[3,3'-]	0.75	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Di-n-octylphthalate	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzyl alcohol	1.5	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Aniline	0.75	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Phenol	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Chlorophenol[2-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Methylphenol[2-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Methylphenol[4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Hexachloroethane	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitrobenzene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Isophorone	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Nitrophenol[2-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Benzoic acid	3.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Chloroaniline[4-]	1.5	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Hexachlorobutadiene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Chloro-3-methylphenol[4-]	0.75	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	UJ
21-11028	MD21-99-0022	4.5–5	Sediment	Propylbenzene[1-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chlorotoluene[2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chlorotoluene[4-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trimethylbenzene[1,3,5-]	0.0057	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11028	MD21-99-0022	4.5–5	Sediment	Butylbenzene[tert-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trimethylbenzene[1,2,4-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Butylbenzene[sec-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzene[1,3-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzene[1,4-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Isopropyltoluene[4-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorobenzene[1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Butylbenzene[n-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichlorodifluoromethane	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chloromethane	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Vinyl chloride	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Bromomethane	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chloroethane	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trichlorofluoromethane	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloroethene[1,1-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Iodomethane	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Carbon disulfide	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Acetone	0.023	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Methylene chloride	0.0016	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloroethane[1,1-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloropropane[2,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Butanone[2-]	0.023	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Bromochloromethane	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chloroform	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trichloroethane[1,1,1-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Carbon tetrachloride	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloropropene[1,1-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloroethane[1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trichloroethene	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloropropane[1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dibromomethane	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Bromodichloromethane	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloropropene[trans-1,3-]	0.0057	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11028	MD21-99-0022	4.5–5	Sediment	Methyl-2-pentanone[4-]	0.023	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloropropene[cis-1,3-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trichloroethane[1,1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Tetrachloroethene	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dichloropropane[1,3-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chlorodibromomethane	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Hexanone[2-]	0.023	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Dibromoethane[1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Chlorobenzene	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Tetrachloroethane[1,1,1,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Styrene	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Bromoform	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Isopropylbenzene	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Bromobenzene	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Trichloropropane[1,2,3-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Tetrachloroethane[1,1,2,2-]	0.0057	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Aluminum	12900	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Arsenic	2.6	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Barium	75.6	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Beryllium	0.7	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Cadmium	0.03	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Calcium	1650	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Chromium (total)	7.1	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Cobalt	3.1	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Copper	4.6	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Iron	9700	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Lead	7.4	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Magnesium	1690	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Manganese	189	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Nickel	6.2	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Potassium	1410	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Selenium	0.64	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Silver	0.19	mg/kg	J
21-11028	MD21-99-0022	4.5–5	Sediment	Sodium	291	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Vanadium	12.1	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Zinc	25.6	mg/kg	None
21-11028	MD21-99-0022	4.5–5	Sediment	Antimony	0.08	mg/kg	U
21-11028	MD21-99-0022	4.5–5	Sediment	Thallium	0.18	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11028	MD21-99-0022	4.5–5	Sediment	Mercury	0.02	mg/kg	J
21-11028	MD21-99-0022	4.5–5	Sediment	Thorium-228	1.38	pCi/g	None
21-11028	MD21-99-0022	4.5–5	Sediment	Thorium-230	1.04	pCi/g	None
21-11028	MD21-99-0022	4.5–5	Sediment	Thorium-232	1.36	pCi/g	None
21-11028	MD21-99-0022	4.5–5	Sediment	Strontium-90	0.0239	pCi/g	U
21-11028	MD21-99-0022	4.5–5	Sediment	Uranium-234	1.2	pCi/g	None
21-11028	MD21-99-0022	4.5–5	Sediment	Uranium-235	0.0512	pCi/g	U
21-11028	MD21-99-0022	4.5–5	Sediment	Uranium-238	1.5	pCi/g	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Aluminum	1500	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Arsenic	3.5	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Barium	21	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Beryllium	0.56	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Cadmium	0.1	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Calcium	160	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chromium (total)	2.2	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Cobalt	0.29	mg/kg	J
21-11036	MD21-99-0030	7.5–8	Qbt 3	Copper	0.28	mg/kg	J
21-11036	MD21-99-0030	7.5–8	Qbt 3	Iron	5100	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Lead	3.3	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Magnesium	130	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Manganese	170	mg/kg	R
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nickel	1.9	mg/kg	J
21-11036	MD21-99-0030	7.5–8	Qbt 3	Potassium	220	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Selenium	1	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Silver	1	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Sodium	64	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Vanadium	2.6	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Zinc	13	mg/kg	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Antimony	0.83	mg/kg	UJ
21-11036	MD21-99-0030	7.5–8	Qbt 3	Thallium	0.09	mg/kg	J
21-11036	MD21-99-0030	7.5–8	Qbt 3	Mercury	0.1	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dibenzofuran	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dinitrotoluene[2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dinitrotoluene[2,6-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Diethylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.34	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitroaniline[4-]	0.69	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitrosodiphenylamine[N-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Azobenzene	0.69	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bromophenyl-phenylether[4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Hexachlorobenzene	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Di-n-butylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Butylbenzylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bis(2-ethylhexyl)phthalate	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Di-n-octylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Indeno(1,2,3-cd)pyrene	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzo(g,h,i)perylene	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitrosodimethylamine[N-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Aniline	0.69	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Phenol	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bis(2-chloroethyl)ether	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chlorophenol[2-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzene[1,3-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzene[1,4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzene[1,2-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Methylphenol[2-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Methylphenol[4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitroso-di-n-propylamine[N-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Hexachloroethane	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitrobenzene	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Isophorone	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitrophenol[2-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dimethylphenol[2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Benzoic acid	3.4	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bis(2-chloroethoxy)methane	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorophenol[2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichlorobenzene[1,2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Hexachlorobutadiene	0.34	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chloro-3-methylphenol[4-]	0.69	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Hexachlorocyclopentadiene	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichlorophenol[2,4,6-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chloronaphthalene[2-]	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dimethyl phthalate	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Acenaphthylene	0.34	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trimethylbenzene[1,2,4-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Butylbenzene[sec-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzene[1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzene[1,4-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Isopropyltoluene[4-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorobenzene[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Butylbenzene[n-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichlorodifluoromethane	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chloromethane	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Vinyl chloride	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bromomethane	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chloroethane	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichlorofluoromethane	0.00092	mg/kg	J+
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloroethene[1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Iodomethane	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Carbon disulfide	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Acetone	0.024	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Methylene chloride	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloroethane[1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloropropane[2,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Butanone[2-]	0.0063	mg/kg	J+
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bromochloromethane	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chloroform	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichloroethane[1,1,1-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0030	7.5–8	Qbt 3	Carbon tetrachloride	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloropropene[1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloroethane[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichloroethene	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloropropane[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dibromomethane	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bromodichloromethane	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloropropene[trans-1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Methyl-2-pentanone[4-]	0.025	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloropropene[cis-1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichloroethane[1,1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Tetrachloroethene	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dichloropropane[1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chlorodibromomethane	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Hexanone[2-]	0.025	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Dibromoethane[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chlorobenzene	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Styrene	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bromoform	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Isopropylbenzene	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Bromobenzene	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trichloropropane[1,2,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Propylbenzene[1-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chlorotoluene[2-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Chlorotoluene[4-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Trimethylbenzene[1,3,5-]	0.0054	mg/kg	J+
21-11036	MD21-99-0030	7.5–8	Qbt 3	Butylbenzene[tert-]	0.0063	mg/kg	U
21-11036	MD21-99-0030	7.5–8	Qbt 3	Gross gamma radiation	13.49	pCi/g	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Gross alpha radiation	3.18	pCi/g	None
21-11036	MD21-99-0030	7.5–8	Qbt 3	Gross beta radiation	1.68	pCi/g	None
21-11036	MD21-99-0031	23–24	Qbt 3	Aluminum	190	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Arsenic	1.7	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Barium	5.7	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Beryllium	0.16	mg/kg	J
21-11036	MD21-99-0031	23–24	Qbt 3	Cadmium	0.1	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Calcium	280	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0031	23–24	Qbt 3	Chromium (total)	2.2	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Cobalt	0.35	mg/kg	J
21-11036	MD21-99-0031	23–24	Qbt 3	Copper	0.58	mg/kg	J
21-11036	MD21-99-0031	23–24	Qbt 3	Iron	2700	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Lead	2.3	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Magnesium	73	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Manganese	190	mg/kg	R
21-11036	MD21-99-0031	23–24	Qbt 3	Nickel	0.98	mg/kg	J
21-11036	MD21-99-0031	23–24	Qbt 3	Potassium	89	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Selenium	1	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Silver	1	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Sodium	71	mg/kg	
21-11036	MD21-99-0031	23–24	Qbt 3	Vanadium	0.85	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Zinc	14	mg/kg	None
21-11036	MD21-99-0031	23–24	Qbt 3	Antimony	0.83	mg/kg	UJ
21-11036	MD21-99-0031	23–24	Qbt 3	Thallium	0.26	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Mercury	0.1	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Indeno(1,2,3-cd)pyrene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzo(g,h,i)perylene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitrobenzene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Isophorone	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitrophenol[2-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dimethylphenol[2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Benzoic acid	3.4	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bis(2-chloroethoxy)methane	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorophenol[2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichlorobenzene[1,2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Hexachlorobutadiene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chloro-3-methylphenol[4-]	0.69	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Hexachlorocyclopentadiene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichlorophenol[2,4,6-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chloronaphthalene[2-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dimethyl phthalate	0.34	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0031	23–24	Qbt 3	Acenaphthylene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dibenzofuran	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dinitrotoluene[2,4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dinitrotoluene[2,6-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Diethylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitroaniline[4-]	0.69	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitrosodiphenylamine[N-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Azobenzene	0.69	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bromophenyl-phenylether[4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Hexachlorobenzene	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Di-n-butylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Butylbenzylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bis(2-ethylhexyl)phthalate	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Di-n-octylphthalate	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitrosodimethylamine[N-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Aniline	0.69	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Phenol	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bis(2-chloroethyl)ether	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chlorophenol[2-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzene[1,3-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzene[1,4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzene[1,2-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Methylphenol[2-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Methylphenol[4-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Nitroso-di-n-propylamine[N-]	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Hexachloroethane	0.34	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Styrene	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bromoform	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Isopropylbenzene	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bromobenzene	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichloropropane[1,2,3-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0031	23–24	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Propylbenzene[1-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chlorotoluene[2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chlorotoluene[4-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trimethylbenzene[1,3,5-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Butylbenzene[tert-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trimethylbenzene[1,2,4-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Butylbenzene[sec-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzene[1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzene[1,4-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Isopropyltoluene[4-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorobenzene[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Butylbenzene[n-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichlorodifluoromethane	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chloromethane	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Vinyl chloride	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bromomethane	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chloroethane	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichlorofluoromethane	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloroethene[1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Iodomethane	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Carbon disulfide	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Acetone	0.0073	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Methylene chloride	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloroethane[1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloropropane[2,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Butanone[2-]	0.025	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bromochloromethane	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chloroform	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichloroethane[1,1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Carbon tetrachloride	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloropropene[1,1-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloroethane[1,2-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11036	MD21-99-0031	23–24	Qbt 3	Trichloroethene	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloropropane[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dibromomethane	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Bromodichloromethane	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloropropene[trans-1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Methyl-2-pentanone[4-]	0.025	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloropropene[cis-1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Trichloroethane[1,1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Tetrachloroethene	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dichloropropane[1,3-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chlorodibromomethane	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Hexanone[2-]	0.025	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Dibromoethane[1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Chlorobenzene	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0063	mg/kg	U
21-11036	MD21-99-0031	23–24	Qbt 3	Gross gamma radiation	19.67	pCi/g	None
21-11036	MD21-99-0031	23–24	Qbt 3	Gross alpha radiation	1.84	pCi/g	None
21-11036	MD21-99-0031	23–24	Qbt 3	Gross beta radiation	0.6	pCi/g	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Potassium	1200	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Selenium	1.1	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Silver	1.1	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Sodium	390	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Vanadium	11	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Zinc	24	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Aluminum	12000	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Arsenic	2	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Barium	22	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Beryllium	0.66	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Cadmium	0.06	mg/kg	J
21-11037	MD21-99-0034	7.5–8.5	Sediment	Calcium	1400	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chromium (total)	5.9	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Cobalt	1.2	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Copper	3.8	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Iron	7600	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Lead	5.1	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Magnesium	1500	mg/kg	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Manganese	110	mg/kg	R
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nickel	5.3	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0034	7.5–8.5	Sediment	Antimony	0.06	mg/kg	J-
21-11037	MD21-99-0034	7.5–8.5	Sediment	Thallium	0.16	mg/kg	J
21-11037	MD21-99-0034	7.5–8.5	Sediment	Mercury	0.02	mg/kg	J
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitroaniline[4-]	0.73	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Azobenzene	0.73	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzidine[3,3'-]	0.73	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bis(2-ethylhexyl)phthalate	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzyl alcohol	1.4	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Aniline	0.73	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Phenol	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Isophorone	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Benzoic acid	3.7	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chloroaniline[4-]	1.4	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chloro-3-methylphenol[4-]	0.73	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Diethylphthalate	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Butanone[2-]	0.027	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bromochloromethane	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chloroform	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichloroethane[1,1,1-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Carbon tetrachloride	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloropropene[1,1-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloroethane[1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichloroethene	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloropropane[1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dibromomethane	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bromodichloromethane	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloropropene[trans-1,3-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Methyl-2-pentanone[4-]	0.027	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloropropene[cis-1,3-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichloroethane[1,1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Tetrachloroethene	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloropropane[1,3-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chlorodibromomethane	0.0067	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0034	7.5–8.5	Sediment	Hexanone[2-]	0.027	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dibromoethane[1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chlorobenzene	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Tetrachloroethane[1,1,1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Styrene	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bromoform	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Isopropylbenzene	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bromobenzene	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichloropropane[1,2,3-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Tetrachloroethane[1,1,2,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Propylbenzene[1-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chlorotoluene[2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chlorotoluene[4-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trimethylbenzene[1,3,5-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Butylbenzene[tert-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trimethylbenzene[1,2,4-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Butylbenzene[sec-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzene[1,3-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzene[1,4-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Isopropyltoluene[4-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorobenzene[1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Butylbenzene[n-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichlorodifluoromethane	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chloromethane	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Vinyl chloride	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Bromomethane	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Chloroethane	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Trichlorofluoromethane	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloroethene[1,1-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Iodomethane	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Carbon disulfide	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Acetone	0.0061	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Methylene chloride	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloroethane[1,1-]	0.0067	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0034	7.5–8.5	Sediment	Dichloropropane[2,2-]	0.0067	mg/kg	U
21-11037	MD21-99-0034	7.5–8.5	Sediment	Gross gamma radiation	13.99	pCi/g	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Gross alpha radiation	2.84	pCi/g	None
21-11037	MD21-99-0034	7.5–8.5	Sediment	Gross beta radiation	1.97	pCi/g	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Aluminum	230	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Arsenic	1.4	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Barium	8.3	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Beryllium	0.18	mg/kg	J
21-11037	MD21-99-0035	24–24.5	Qbt 3	Cadmium	0.11	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Calcium	270	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chromium (total)	2.6	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Cobalt	0.35	mg/kg	J
21-11037	MD21-99-0035	24–24.5	Qbt 3	Copper	1.3	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Iron	2100	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Lead	3.7	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Magnesium	110	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Manganese	230	mg/kg	R
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nickel	1.5	mg/kg	J
21-11037	MD21-99-0035	24–24.5	Qbt 3	Potassium	120	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Selenium	1.1	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Silver	1.1	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Sodium	82	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Vanadium	1	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Zinc	35	mg/kg	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Antimony	0.84	mg/kg	UJ
21-11037	MD21-99-0035	24–24.5	Qbt 3	Thallium	0.26	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Mercury	0.11	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Hexachlorobutadiene	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chloro-3-methylphenol[4-]	0.69	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Hexachlorocyclopentadiene	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichlorophenol[2,4,6-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chloronaphthalene[2-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dimethyl phthalate	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Acenaphthylene	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dibenzofuran	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dinitrotoluene[2,4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dinitrotoluene[2,6-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Diethylphthalate	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitroaniline[4-]	0.69	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitrosodiphenylamine[N-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Azobenzene	0.69	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bromophenyl-phenylether[4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Hexachlorobenzene	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Di-n-butylphthalate	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Butylbenzylphthalate	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Di-n-octylphthalate	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzo(g,h,i)perylene	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitrosodimethylamine[N-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Aniline	0.69	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Phenol	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bis(2-chloroethyl)ether	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chlorophenol[2-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzene[1,3-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzene[1,4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzene[1,2-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Methylphenol[2-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Methylphenol[4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Hexachloroethane	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitrobenzene	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Isophorone	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0035	24–24.5	Qbt 3	Nitrophenol[2-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dimethylphenol[2,4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Benzoic acid	3.5	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bis(2-chloroethoxy)methane	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorophenol[2,4-]	0.35	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Butylbenzene[sec-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzene[1,3-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzene[1,4-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Isopropyltoluene[4-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorobenzene[1,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Butylbenzene[n-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chloromethane	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Vinyl chloride	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bromomethane	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chloroethane	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichlorofluoromethane	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloroethene[1,1-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Iodomethane	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Carbon disulfide	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Acetone	0.0074	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Methylene chloride	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloroethane[1,1-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloropropane[2,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Butanone[2-]	0.025	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bromochloromethane	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chloroform	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichloroethane[1,1,1-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Carbon tetrachloride	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloropropene[1,1-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloroethane[1,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichloroethene	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloropropane[1,2-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dibromomethane	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bromodichloromethane	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloropropene[trans-1,3-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Methyl-2-pentanone[4-]	0.025	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloropropene[cis-1,3-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichloroethane[1,1,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Tetrachloroethene	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichloropropane[1,3-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chlorodibromomethane	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Hexanone[2-]	0.025	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dibromoethane[1,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chlorobenzene	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Styrene	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bromoform	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Isopropylbenzene	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Bromobenzene	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trichloropropane[1,2,3-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Propylbenzene[1-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chlorotoluene[2-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Chlorotoluene[4-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Butylbenzene[tert-]	0.0063	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Dichlorodifluoromethane	0.013	mg/kg	U
21-11037	MD21-99-0035	24–24.5	Qbt 3	Gross gamma radiation	13.32	pCi/g	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Gross alpha radiation	1.86	pCi/g	None
21-11037	MD21-99-0035	24–24.5	Qbt 3	Gross beta radiation	0.98	pCi/g	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorophenol[2,4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Hexachlorobutadiene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chloro-3-methylphenol[4-]	0.73	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Hexachlorocyclopentadiene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichlorophenol[2,4,6-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chloronaphthalene[2-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dimethyl phthalate	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Acenaphthylene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dibenzofuran	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dinitrotoluene[2,4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dinitrotoluene[2,6-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Diethylphthalate	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitroaniline[4-]	0.73	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitrosodiphenylamine[N-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Azobenzene	0.73	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bromophenyl-phenylether[4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Hexachlorobenzene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Di-n-butylphthalate	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Butylbenzylphthalate	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.73	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Di-n-octylphthalate	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzo(g,h,i)perylene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitrosodimethylamine[N-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Aniline	0.73	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Phenol	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bis(2-chloroethyl)ether	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chlorophenol[2-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzene[1,3-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzene[1,4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzene[1,2-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Methylphenol[2-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Methylphenol[4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Hexachloroethane	0.36	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitrobenzene	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Isophorone	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nitrophenol[2-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dimethylphenol[2,4-]	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Benzoic acid	3.6	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bis(2-chloroethoxy)methane	0.36	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzene[1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Butylbenzene[n-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloroethene[1,1-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Iodomethane	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Carbon disulfide	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Acetone	0.0059	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Methylene chloride	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloroethene[trans-1,2-]	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloroethane[1,1-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloropropane[2,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloroethene[cis-1,2-]	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Butanone[2-]	0.022	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bromochloromethane	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chloroform	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichloroethane[1,1,1-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Carbon tetrachloride	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloropropene[1,1-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloroethane[1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichloroethene	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloropropane[1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dibromomethane	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bromodichloromethane	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloropropene[trans-1,3-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Methyl-2-pentanone[4-]	0.022	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloropropene[cis-1,3-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichloroethane[1,1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Tetrachloroethene	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichloropropane[1,3-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chlorodibromomethane	0.0055	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0038	26–26.5	Qbt 3	Hexanone[2-]	0.022	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dibromoethane[1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chlorobenzene	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Styrene	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bromoform	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Isopropylbenzene	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bromobenzene	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichloropropane[1,2,3-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Propylbenzene[1-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chlorotoluene[2-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chlorotoluene[4-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trimethylbenzene[1,3,5-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Butylbenzene[tert-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trimethylbenzene[1,2,4-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Butylbenzene[sec-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzene[1,3-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorobenzene[1,4-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Isopropyltoluene[4-]	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Dichlorodifluoromethane	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chloromethane	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Vinyl chloride	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Bromomethane	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chloroethane	0.011	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Trichlorofluoromethane	0.0055	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Aluminum	6500	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Arsenic	2.1	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Barium	51.6	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Beryllium	0.53	mg/kg	J
21-11038	MD21-99-0038	26–26.5	Qbt 3	Cadmium	0.05	mg/kg	J
21-11038	MD21-99-0038	26–26.5	Qbt 3	Calcium	855	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Chromium (total)	6.2	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Cobalt	0.98	mg/kg	J
21-11038	MD21-99-0038	26–26.5	Qbt 3	Copper	3.4	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Iron	5620	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Lead	4.8	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Magnesium	765	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0038	26–26.5	Qbt 3	Manganese	176	mg/kg	R
21-11038	MD21-99-0038	26–26.5	Qbt 3	Nickel	3.3	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Potassium	746	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Selenium	0.63	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Silver	0.13	mg/kg	U
21-11038	MD21-99-0038	26–26.5	Qbt 3	Sodium	315	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Vanadium	6.1	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Zinc	23.2	mg/kg	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Antimony	0.05	mg/kg	UJ
21-11038	MD21-99-0038	26–26.5	Qbt 3	Thallium	0.14	mg/kg	J
21-11038	MD21-99-0038	26–26.5	Qbt 3	Mercury	0.01	mg/kg	J
21-11038	MD21-99-0038	26–26.5	Qbt 3	Gross alpha radiation	8.08	pCi/g	None
21-11038	MD21-99-0038	26–26.5	Qbt 3	Gross beta radiation	5.05	pCi/g	None
21-11038	MD21-99-0039	18.5–19	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzidine[3,3'-]	0.76	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bis(2-ethylhexyl)phthalate	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Di-n-octylphthalate	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Aniline	0.76	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Phenol	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chlorophenol[2-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Hexachloroethane	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitrobenzene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Isophorone	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0039	18.5–19	Sediment	Nitrophenol[2-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Benzoic acid	3.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chloro-3-methylphenol[4-]	0.76	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Diethylphthalate	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitroaniline[4-]	0.76	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Azobenzene	0.76	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bromobenzene	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichloropropane[1,2,3-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Tetrachloroethane[1,1,2,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Propylbenzene[1-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chlorotoluene[2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chlorotoluene[4-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trimethylbenzene[1,3,5-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Butylbenzene[tert-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trimethylbenzene[1,2,4-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0039	18.5–19	Sediment	Butylbenzene[sec-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzene[1,3-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzene[1,4-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Isopropyltoluene[4-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorobenzene[1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Butylbenzene[n-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichlorodifluoromethane	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chloromethane	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Vinyl chloride	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bromomethane	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chloroethane	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichlorofluoromethane	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloroethene[1,1-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Iodomethane	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Carbon disulfide	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Acetone	0.0036	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Methylene chloride	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloroethane[1,1-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloropropane[2,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Butanone[2-]	0.025	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bromochloromethane	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chloroform	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichloroethane[1,1,1-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Carbon tetrachloride	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloropropene[1,1-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloroethane[1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Trichloroethene	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloropropane[1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dibromomethane	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bromodichloromethane	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloropropene[trans-1,3-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Methyl-2-pentanone[4-]	0.025	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloropropene[cis-1,3-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0039	18.5–19	Sediment	Trichloroethane[1,1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Tetrachloroethene	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dichloropropane[1,3-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chlorodibromomethane	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Hexanone[2-]	0.025	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Dibromoethane[1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Chlorobenzene	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Tetrachloroethane[1,1,1,2-]	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Styrene	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Bromoform	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Isopropylbenzene	0.0063	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Aluminum	12100	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Arsenic	1.7	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Barium	32.5	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Beryllium	0.79	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Cadmium	0.07	mg/kg	J
21-11038	MD21-99-0039	18.5–19	Sediment	Calcium	1350	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Chromium (total)	5.5	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Cobalt	1.1	mg/kg	J
21-11038	MD21-99-0039	18.5–19	Sediment	Copper	4.6	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Iron	5660	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Lead	5	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Magnesium	1540	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Manganese	109	mg/kg	R
21-11038	MD21-99-0039	18.5–19	Sediment	Nickel	5.5	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Potassium	1360	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Selenium	0.65	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Silver	0.14	mg/kg	U
21-11038	MD21-99-0039	18.5–19	Sediment	Sodium	370	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Vanadium	7.9	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Zinc	17.9	mg/kg	None
21-11038	MD21-99-0039	18.5–19	Sediment	Antimony	0.06	mg/kg	UJ
21-11038	MD21-99-0039	18.5–19	Sediment	Thallium	0.14	mg/kg	J
21-11038	MD21-99-0039	18.5–19	Sediment	Mercury	0.02	mg/kg	J
21-11038	MD21-99-0039	18.5–19	Sediment	Gross alpha radiation	6.71	pCi/g	None
21-11038	MD21-99-0039	18.5–19	Sediment	Gross beta radiation	5.08	pCi/g	None
21-11038	MD21-99-0040	7.5–8	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0040	7.5–8	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Diethylphthalate	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitroaniline[4-]	0.73	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Azobenzene	0.73	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzidine[3,3'-]	0.73	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bis(2-ethylhexyl)phthalate	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzyl alcohol	1.4	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Aniline	0.73	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Phenol	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Methylphenol[2-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0040	7.5–8	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Isophorone	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Benzoic acid	3.7	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chloroaniline[4-]	1.4	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chloro-3-methylphenol[4-]	0.73	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichloroethane[1,1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Tetrachloroethene	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloropropane[1,3-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chlorodibromomethane	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Hexanone[2-]	0.027	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dibromoethane[1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chlorobenzene	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Tetrachloroethane[1,1,1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Styrene	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bromoform	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Isopropylbenzene	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bromobenzene	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichloropropane[1,2,3-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Tetrachloroethane[1,1,2,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Propylbenzene[1-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chlorotoluene[2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chlorotoluene[4-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trimethylbenzene[1,3,5-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Butylbenzene[tert-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trimethylbenzene[1,2,4-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Butylbenzene[sec-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzene[1,3-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzene[1,4-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Isopropyltoluene[4-]	0.0067	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorobenzene[1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Butylbenzene[n-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichlorodifluoromethane	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chloromethane	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Vinyl chloride	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bromomethane	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chloroethane	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichlorofluoromethane	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloroethene[1,1-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Iodomethane	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Carbon disulfide	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Acetone	0.0041	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Methylene chloride	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloroethane[1,1-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloropropane[2,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Butanone[2-]	0.027	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bromochloromethane	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Chloroform	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichloroethane[1,1,1-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Carbon tetrachloride	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloropropene[1,1-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloroethane[1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Trichloroethene	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloropropane[1,2-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dibromomethane	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Bromodichloromethane	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloropropene[trans-1,3-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Methyl-2-pentanone[4-]	0.027	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Dichloropropene[cis-1,3-]	0.0067	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Potassium	907	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Selenium	0.61	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Silver	0.13	mg/kg	U
21-11038	MD21-99-0040	7.5–8	Sediment	Sodium	228	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11038	MD21-99-0040	7.5–8	Sediment	Vanadium	7.4	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Zinc	15.8	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Aluminum	9700	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Arsenic	1.6	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Barium	118	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Beryllium	0.48	mg/kg	J
21-11038	MD21-99-0040	7.5–8	Sediment	Cadmium	0.06	mg/kg	J
21-11038	MD21-99-0040	7.5–8	Sediment	Calcium	1660	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Chromium (total)	4.3	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Cobalt	1.1	mg/kg	J
21-11038	MD21-99-0040	7.5–8	Sediment	Copper	2.7	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Iron	5380	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Lead	4.2	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Magnesium	1030	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Manganese	84.6	mg/kg	R
21-11038	MD21-99-0040	7.5–8	Sediment	Nickel	3.9	mg/kg	None
21-11038	MD21-99-0040	7.5–8	Sediment	Antimony	0.05	mg/kg	UJ
21-11038	MD21-99-0040	7.5–8	Sediment	Thallium	0.09	mg/kg	J
21-11038	MD21-99-0040	7.5–8	Sediment	Mercury	0.03	mg/kg	J
21-11038	MD21-99-0040	7.5–8	Sediment	Gross alpha radiation	1.08	pCi/g	U
21-11038	MD21-99-0040	7.5–8	Sediment	Gross beta radiation	4.68	pCi/g	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Butylbenzylphthalate	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bis(2-ethylhexyl)phthalate	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Di-n-octylphthalate	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Indeno(1,2,3-cd)pyrene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzo(g,h,i)perylene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bis(2-chloroethyl)ether	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chlorophenol[2-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzene[1,3-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzene[1,4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzene[1,2-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Methylphenol[2-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Methylphenol[4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitroso-di-n-propylamine[N-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Hexachloroethane	0.34	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitrobenzene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Isophorone	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitrophenol[2-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dimethylphenol[2,4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Benzoic acid	3.4	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bis(2-chloroethoxy)methane	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorophenol[2,4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichlorobenzene[1,2,4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Hexachlorobutadiene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chloro-3-methylphenol[4-]	0.69	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Hexachlorocyclopentadiene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichlorophenol[2,4,6-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chloronaphthalene[2-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dimethyl phthalate	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Acenaphthylene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dibenzofuran	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dinitrotoluene[2,4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dinitrotoluene[2,6-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Diethylphthalate	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitroaniline[4-]	0.69	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitrosodiphenylamine[N-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Azobenzene	0.69	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bromophenyl-phenylether[4-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Hexachlorobenzene	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Di-n-butylphthalate	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nitrosodimethylamine[N-]	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Aniline	0.69	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Phenol	0.34	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichloroethane[1,1,1-]	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11039	MD21-99-0041	22.5–23	Qbt 3	Carbon tetrachloride	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloropropene[1,1-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloroethane[1,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichloroethene	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloropropane[1,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dibromomethane	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bromodichloromethane	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloropropene[trans-1,3-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Methyl-2-pentanone[4-]	0.025	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloropropene[cis-1,3-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichloroethane[1,1,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Tetrachloroethene	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloropropane[1,3-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chlorodibromomethane	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Hexanone[2-]	0.025	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dibromoethane[1,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chlorobenzene	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Styrene	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bromoform	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Isopropylbenzene	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bromobenzene	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichloropropane[1,2,3-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Propylbenzene[1-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chlorotoluene[2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chlorotoluene[4-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trimethylbenzene[1,3,5-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Butylbenzene[tert-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trimethylbenzene[1,2,4-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Butylbenzene[sec-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzene[1,3-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzene[1,4-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Isopropyltoluene[4-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorobenzene[1,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Butylbenzene[n-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichloro-1,2,2-	0.0063	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
				trifluoroethane[1,1,2-]			
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichlorodifluoromethane	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chloromethane	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Vinyl chloride	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bromomethane	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chloroethane	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Trichlorofluoromethane	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloroethene[1,1-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Iodomethane	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Carbon disulfide	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Acetone	0.0045	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Methylene chloride	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloroethane[1,1-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloropropane[2,2-]	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Butanone[2-]	0.025	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Bromochloromethane	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chloroform	0.0063	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Aluminum	189	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Arsenic	1.5	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Barium	8.5	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Beryllium	0.19	mg/kg	J
21-11039	MD21-99-0041	22.5–23	Qbt 3	Cadmium	0.03	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Calcium	283	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Chromium (total)	4.2	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Cobalt	0.32	mg/kg	J
21-11039	MD21-99-0041	22.5–23	Qbt 3	Copper	0.71	mg/kg	J
21-11039	MD21-99-0041	22.5–23	Qbt 3	Iron	2330	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Lead	3.6	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Magnesium	91.3	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Manganese	213	mg/kg	R
21-11039	MD21-99-0041	22.5–23	Qbt 3	Nickel	2	mg/kg	J
21-11039	MD21-99-0041	22.5–23	Qbt 3	Potassium	104	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Selenium	0.55	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Silver	0.12	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Sodium	91.6	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Vanadium	1	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11039	MD21-99-0041	22.5–23	Qbt 3	Zinc	25.2	mg/kg	None
21-11039	MD21-99-0041	22.5–23	Qbt 3	Antimony	0.05	mg/kg	UJ
21-11039	MD21-99-0041	22.5–23	Qbt 3	Thallium	0.03	mg/kg	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Mercury	0.01	mg/kg	J
21-11039	MD21-99-0041	22.5–23	Qbt 3	Gross alpha radiation	1.24	pCi/g	U
21-11039	MD21-99-0041	22.5–23	Qbt 3	Gross beta radiation	5.67	pCi/g	None
21-11039	MD21-99-0042	6.5–7	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dibenzofuran	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dinitrotoluene[2,4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dinitrotoluene[2,6-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Diethylphthalate	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chlorophenyl-phenyl[4-] ether	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitroaniline[4-]	0.73	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitrosodiphenylamine[N-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Azobenzene	0.73	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bromophenyl-phenylether[4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Hexachlorobenzene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Di-n-butylphthalate	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Butylbenzylphthalate	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzidine[3,3'-]	0.73	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bis(2-ethylhexyl)phthalate	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Di-n-octylphthalate	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Indeno(1,2,3-cd)pyrene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzo(g,h,i)perylene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzyl alcohol	1.4	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitrosodimethylamine[N-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Aniline	0.73	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Phenol	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bis(2-chloroethyl)ether	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chlorophenol[2-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzene[1,3-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzene[1,4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzene[1,2-]	0.36	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11039	MD21-99-0042	6.5–7	Sediment	Methylphenol[2-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Methylphenol[4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitroso-di-n-propylamine[N-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Hexachloroethane	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitrobenzene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Isophorone	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitrophenol[2-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dimethylphenol[2,4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Benzoic acid	3.6	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bis(2-chloroethoxy)methane	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorophenol[2,4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichlorobenzene[1,2,4-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chloroaniline[4-]	1.4	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Hexachlorobutadiene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chloro-3-methylphenol[4-]	0.73	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Hexachlorocyclopentadiene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichlorophenol[2,4,6-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chloronaphthalene[2-]	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dimethyl phthalate	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Acenaphthylene	0.36	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzene[1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Butylbenzene[n-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dibromo-3-chloropropane[1,2-]	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichlorofluoromethane	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloroethene[1,1-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Iodomethane	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Carbon disulfide	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Acetone	0.0039	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Methylene chloride	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloroethene[trans-1,2-]	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloroethane[1,1-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloropropane[2,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloroethene[cis-1,2-]	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Butanone[2-]	0.024	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11039	MD21-99-0042	6.5–7	Sediment	Bromochloromethane	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chloroform	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichloroethane[1,1,1-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Carbon tetrachloride	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloropropene[1,1-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloroethane[1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichloroethene	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloropropane[1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dibromomethane	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bromodichloromethane	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloropropene[trans-1,3-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Methyl-2-pentanone[4-]	0.024	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloropropene[cis-1,3-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichloroethane[1,1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Tetrachloroethene	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichloropropane[1,3-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chlorodibromomethane	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Hexanone[2-]	0.024	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dibromoethane[1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chlorobenzene	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Tetrachloroethane[1,1,1,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Styrene	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bromoform	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Isopropylbenzene	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bromobenzene	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trichloropropane[1,2,3-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Tetrachloroethane[1,1,2,2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Propylbenzene[1-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chlorotoluene[2-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chlorotoluene[4-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trimethylbenzene[1,3,5-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Butylbenzene[tert-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Trimethylbenzene[1,2,4-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Butylbenzene[sec-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzene[1,3-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorobenzene[1,4-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Isopropyltoluene[4-]	0.006	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Dichlorodifluoromethane	0.012	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11039	MD21-99-0042	6.5–7	Sediment	Chloromethane	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Vinyl chloride	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Bromomethane	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Chloroethane	0.012	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Aluminum	14600	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Arsenic	3.3	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Barium	216	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Beryllium	0.96	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Cadmium	0.09	mg/kg	J
21-11039	MD21-99-0042	6.5–7	Sediment	Calcium	2100	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Chromium (total)	8	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Cobalt	1.7	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Copper	4.3	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Iron	10100	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Lead	6.4	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Magnesium	2390	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Manganese	125	mg/kg	R
21-11039	MD21-99-0042	6.5–7	Sediment	Nickel	6.2	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Potassium	1670	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Selenium	0.61	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Silver	0.13	mg/kg	U
21-11039	MD21-99-0042	6.5–7	Sediment	Sodium	398	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Vanadium	13.7	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Zinc	28.3	mg/kg	None
21-11039	MD21-99-0042	6.5–7	Sediment	Antimony	0.1	mg/kg	J-
21-11039	MD21-99-0042	6.5–7	Sediment	Thallium	0.19	mg/kg	J
21-11039	MD21-99-0042	6.5–7	Sediment	Mercury	0.02	mg/kg	J
21-11039	MD21-99-0042	6.5–7	Sediment	Gross alpha radiation	1.26	pCi/g	U
21-11039	MD21-99-0042	6.5–7	Sediment	Gross beta radiation	4.54	pCi/g	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzo(g,h,i)perylene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Hexachloroethane	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitrobenzene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Isophorone	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitrophenol[2-]	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dimethylphenol[2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Benzoic acid	3.5	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bis(2-chloroethoxy)methane	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorophenol[2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Hexachlorobutadiene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chloro-3-methylphenol[4-]	0.69	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Hexachlorocyclopentadiene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichlorophenol[2,4,6-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chloronaphthalene[2-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dimethyl phthalate	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Acenaphthylene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dibenzofuran	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dinitrotoluene[2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dinitrotoluene[2,6-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Diethylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitroaniline[4-]	0.69	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitrosodiphenylamine[N-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Azobenzene	0.69	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bromophenyl-phenylether[4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Hexachlorobenzene	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Di-n-butylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Butylbenzylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Di-n-octylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nitrosodimethylamine[N-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Aniline	0.69	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Phenol	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bis(2-chloroethyl)ether	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chlorophenol[2-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzene[1,3-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzene[1,4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzene[1,2-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Methylphenol[2-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Methylphenol[4-]	0.35	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bromobenzene	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichloropropane[1,2,3-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Tetrachloroethane[1,1,2,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Propylbenzene[1-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chlorotoluene[2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chlorotoluene[4-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trimethylbenzene[1,3,5-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Butylbenzene[tert-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trimethylbenzene[1,2,4-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Butylbenzene[sec-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzene[1,3-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzene[1,4-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Isopropyltoluene[4-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorobenzene[1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Butylbenzene[n-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dibromo-3-chloropropane[1,2-]	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichlorodifluoromethane	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chloromethane	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Vinyl chloride	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bromomethane	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chloroethane	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichlorofluoromethane	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloroethene[1,1-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Iodomethane	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Carbon disulfide	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Acetone	0.0051	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Methylene chloride	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloroethene[trans-1,2-]	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloroethane[1,1-]	0.0068	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloropropane[2,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloroethene[cis-1,2-]	0.014	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Butanone[2-]	0.027	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bromochloromethane	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chloroform	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichloroethane[1,1,1-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Carbon tetrachloride	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloropropene[1,1-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloroethane[1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichloroethene	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloropropane[1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dibromomethane	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bromodichloromethane	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloropropene[trans-1,3-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Methyl-2-pentanone[4-]	0.027	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloropropene[cis-1,3-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Trichloroethane[1,1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Tetrachloroethene	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dichloropropane[1,3-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chlorodibromomethane	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Hexanone[2-]	0.027	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Dibromoethane[1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chlorobenzene	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Tetrachloroethane[1,1,1,2-]	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Styrene	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Bromoform	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Isopropylbenzene	0.0068	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Magnesium	160	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Manganese	237	mg/kg	R
21-11040	MD21-99-0043	18.5–19	Qbt 3	Nickel	1.5	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Potassium	144	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Selenium	0.59	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Silver	0.13	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Sodium	94.4	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Vanadium	1.5	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Zinc	17.1	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Aluminum	774	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Arsenic	1.8	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0043	18.5–19	Qbt 3	Barium	9.6	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Beryllium	0.27	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Cadmium	0.03	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Calcium	347	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Chromium (total)	1	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Cobalt	0.46	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Copper	0.65	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Iron	3250	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Lead	2.7	mg/kg	None
21-11040	MD21-99-0043	18.5–19	Qbt 3	Antimony	0.07	mg/kg	J-
21-11040	MD21-99-0043	18.5–19	Qbt 3	Thallium	0.03	mg/kg	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Mercury	0.01	mg/kg	J
21-11040	MD21-99-0043	18.5–19	Qbt 3	Gross alpha radiation	1.57	pCi/g	U
21-11040	MD21-99-0043	18.5–19	Qbt 3	Gross beta radiation	5.31	pCi/g	None
21-11040	MD21-99-0044	12.5–13	Sediment	Diethylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chlorophenyl-phenyl[4-] ether	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitroaniline[4-]	0.71	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitrosodiphenylamine[N-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Azobenzene	0.71	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bromophenyl-phenylether[4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Hexachlorobenzene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Pentachlorophenol	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Di-n-butylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Butylbenzylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzidine[3,3'-]	0.71	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bis(2-ethylhexyl)phthalate	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Di-n-octylphthalate	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzo(g,h,i)perylene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzyl alcohol	1.4	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitrosodimethylamine[N-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Aniline	0.71	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Phenol	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bis(2-chloroethyl)ether	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chlorophenol[2-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzene[1,3-]	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzene[1,4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzene[1,2-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Methylphenol[2-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Methylphenol[4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Hexachloroethane	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitrobenzene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Isophorone	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitrophenol[2-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dimethylphenol[2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Benzoic acid	3.5	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bis(2-chloroethoxy)methane	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorophenol[2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chloroaniline[4-]	1.4	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Hexachlorobutadiene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chloro-3-methylphenol[4-]	0.71	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Hexachlorocyclopentadiene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichlorophenol[2,4,6-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chloronaphthalene[2-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitroaniline[2-]	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dimethyl phthalate	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Acenaphthylene	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitroaniline[3-]	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Nitrophenol[4-]	1.7	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dibenzofuran	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dinitrotoluene[2,4-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dinitrotoluene[2,6-]	0.35	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorodifluoromethane	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chloromethane	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Vinyl chloride	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bromomethane	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chloroethane	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichlorofluoromethane	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloroethene[1,1-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Iodomethane	0.0065	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0044	12.5–13	Sediment	Carbon disulfide	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Acetone	0.0042	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Methylene chloride	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloroethene[trans-1,2-]	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloroethane[1,1-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloropropane[2,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloroethene[cis-1,2-]	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Butanone[2-]	0.026	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bromochloromethane	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chloroform	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichloroethane[1,1,1-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Carbon tetrachloride	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloropropene[1,1-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloroethane[1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichloroethene	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloropropane[1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dibromomethane	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bromodichloromethane	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloropropene[trans-1,3-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Methyl-2-pentanone[4-]	0.026	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloropropene[cis-1,3-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichloroethane[1,1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Tetrachloroethene	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichloropropane[1,3-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chlorodibromomethane	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Hexanone[2-]	0.026	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dibromoethane[1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chlorobenzene	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Tetrachloroethane[1,1,1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Styrene	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bromoform	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Isopropylbenzene	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Bromobenzene	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichloropropane[1,2,3-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Tetrachloroethane[1,1,2,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Propylbenzene[1-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chlorotoluene[2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Chlorotoluene[4-]	0.0065	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11040	MD21-99-0044	12.5–13	Sediment	Trimethylbenzene[1,3,5-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Butylbenzene[tert-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trimethylbenzene[1,2,4-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Butylbenzene[sec-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzene[1,3-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzene[1,4-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Isopropyltoluene[4-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dichlorobenzene[1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Butylbenzene[n-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Dibromo-3-chloropropane[1,2-]	0.013	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.0065	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Aluminum	6130	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Arsenic	4.7	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Barium	184	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Beryllium	0.55	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Cadmium	0.09	mg/kg	J
21-11040	MD21-99-0044	12.5–13	Sediment	Calcium	978	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Chromium (total)	3.2	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Cobalt	0.68	mg/kg	J
21-11040	MD21-99-0044	12.5–13	Sediment	Copper	2.3	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Iron	4840	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Lead	5.1	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Magnesium	990	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Manganese	149	mg/kg	R
21-11040	MD21-99-0044	12.5–13	Sediment	Nickel	3.6	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Potassium	750	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Selenium	0.59	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Silver	0.12	mg/kg	U
21-11040	MD21-99-0044	12.5–13	Sediment	Sodium	269	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Vanadium	5.4	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Zinc	19.8	mg/kg	None
21-11040	MD21-99-0044	12.5–13	Sediment	Antimony	0.05	mg/kg	UJ
21-11040	MD21-99-0044	12.5–13	Sediment	Thallium	0.15	mg/kg	J
21-11040	MD21-99-0044	12.5–13	Sediment	Mercury	0.01	mg/kg	J
21-11040	MD21-99-0044	12.5–13	Sediment	Gross alpha radiation	9.73	pCi/g	None
21-11040	MD21-99-0044	12.5–13	Sediment	Gross beta radiation	4.89	pCi/g	None
21-11057	MD21-99-0093	8.5–9	Sediment	Aluminum	8760	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11057	MD21-99-0093	8.5–9	Sediment	Calcium	1550	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Chromium (total)	5.9	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Copper	4.6	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Iron	8810	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Lead	4.9	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Magnesium	1440	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Zinc	23.3	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Mercury	0.01	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1016	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1221	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1232	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1242	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1248	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1254	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1260	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Diethylphthalate	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitroaniline[4-]	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Azobenzene	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Di-n-butylphthalate	0.05	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dichlorobenzidine[3,3'-]	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Bis(2-ethylhexyl)phthalate	0.09	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11057	MD21-99-0093	8.5–9	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzyl alcohol	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aniline	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Phenol	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Isophorone	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Benzoic acid	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Chloroaniline[4-]	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Chloro-3-methylphenol[4-]	0.75	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Ruthenium-106	0.22	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Americium-241	0.3	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Cobalt-60	0.059	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Cesium-134	-0.009	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Cesium-137	-0.016	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Sodium-22	-0.096	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Strontium-90	0.7	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Thorium-228	2.01	pCi/g	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11057	MD21-99-0093	8.5–9	Sediment	Thorium-230	1.75	pCi/g	None
21-11057	MD21-99-0093	8.5–9	Sediment	Thorium-232	2	pCi/g	None
21-11057	MD21-99-0093	8.5–9	Sediment	Uranium-234	1.35	pCi/g	None
21-11057	MD21-99-0093	8.5–9	Sediment	Uranium-235	0.032	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Uranium-238	1.4	pCi/g	None
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1262	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Aroclor-1268	0.037	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Europium-152	0.04	pCi/g	U
21-11057	MD21-99-0093	8.5–9	Sediment	Antimony	0.34	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Arsenic	1.8	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Barium	15.5	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Beryllium	0.87	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Cadmium	0.15	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Cobalt	1.9	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Manganese	135	mg/kg	None
21-11057	MD21-99-0093	8.5–9	Sediment	Nickel	5.7	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Potassium	878	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Selenium	0.25	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Silver	0.03	mg/kg	U
21-11057	MD21-99-0093	8.5–9	Sediment	Sodium	343	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Thallium	0.15	mg/kg	J
21-11057	MD21-99-0093	8.5–9	Sediment	Vanadium	9.6	mg/kg	J
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aluminum	25800	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Antimony	1.2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Arsenic	4.3	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Barium	373	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Beryllium	1.9	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Calcium	5470	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chromium (total)	15.4	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Copper	11.6	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Iron	22000	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Lead	11.5	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Magnesium	4830	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nickel	10.7	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Vanadium	25.5	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Zinc	47.4	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Mercury	0.03	mg/kg	J
21-11058	MD21-99-0099	8.5–10	Qbt 3	Trichlorophenol[2,4,6-]	0.41	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0099	8.5–10	Qbt 3	Trichlorophenol[2,4,5-]	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chloronaphthalene[2-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitroaniline[2-]	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dimethyl phthalate	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Acenaphthylene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitroaniline[3-]	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dinitrophenol[2,4-]	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitrophenol[4-]	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dibenzofuran	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dinitrotoluene[2,4-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dinitrotoluene[2,6-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Diethylphthalate	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitroaniline[4-]	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dinitro-2-methylphenol[4,6-]	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitrosodiphenylamine[N-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Azobenzene	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Bromophenyl-phenylether[4-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Hexachlorobenzene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Pentachlorophenol	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Di-n-butylphthalate	0.043	mg/kg	J
21-11058	MD21-99-0099	8.5–10	Qbt 3	Butylbenzylphthalate	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dichlorobenzidine[3,3'-]	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Bis(2-ethylhexyl)phthalate	0.067	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Di-n-octylphthalate	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Indeno(1,2,3-cd)pyrene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzo(g,h,i)perylene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzyl alcohol	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aniline	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Phenol	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Bis(2-chloroethyl)ether	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chlorophenol[2-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dichlorobenzene[1,3-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dichlorobenzene[1,4-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dichlorobenzene[1,2-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Methylphenol[2-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Methylphenol[4-]	0.41	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitroso-di-n-propylamine[N-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Hexachloroethane	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitrobenzene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Isophorone	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Nitrophenol[2-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dimethylphenol[2,4-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Benzoic acid	2	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Bis(2-chloroethoxy)methane	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Dichlorophenol[2,4-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Trichlorobenzene[1,2,4-]	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chloroaniline[4-]	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Hexachlorobutadiene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Chloro-3-methylphenol[4-]	0.82	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Hexachlorocyclopentadiene	0.41	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Ruthenium-106	-0.24	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Americium-241	0.1	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Cobalt-60	-0.03	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Cesium-134	-0.046	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Cesium-137	0.02	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Sodium-22	-0.04	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Strontium-90	1.07	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Thorium-228	2.03	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Thorium-230	1.91	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Thorium-232	2.02	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Uranium-234	1.43	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Uranium-235	0.124	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Uranium-238	1.68	pCi/g	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1016	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1221	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1232	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1242	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1248	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1254	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1260	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1262	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Aroclor-1268	0.041	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Europium-152	-0.02	pCi/g	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Cadmium	0.31	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0099	8.5–10	Qbt 3	Cobalt	2.8	mg/kg	J
21-11058	MD21-99-0099	8.5–10	Qbt 3	Manganese	105	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Potassium	3100	mg/kg	None
21-11058	MD21-99-0099	8.5–10	Qbt 3	Selenium	0.65	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Silver	0.03	mg/kg	U
21-11058	MD21-99-0099	8.5–10	Qbt 3	Sodium	865	mg/kg	J
21-11058	MD21-99-0099	8.5–10	Qbt 3	Thallium	1.2	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Calcium	2080	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chromium (total)	3.5	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Iron	10300	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Lead	5.1	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Selenium	0.69	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Zinc	28.9	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aluminum	4090	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Mercury	0.01	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1016	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1221	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1232	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1242	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1248	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1254	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1260	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.72	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.068	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Di-n-octylphthalate	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzo(g,h,i)perylene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzyl alcohol	0.72	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dichlorobenzene[1,3-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dichlorobenzene[1,4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dichlorobenzene[1,2-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Methylphenol[2-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Methylphenol[4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Hexachloroethane	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitrobenzene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Isophorone	0.36	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitrophenol[2-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dimethylphenol[2,4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Benzoic acid	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Bis(2-chloroethoxy)methane	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dichlorophenol[2,4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chloroaniline[4-]	0.14	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Hexachlorobutadiene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chloro-3-methylphenol[4-]	0.72	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Hexachlorocyclopentadiene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Trichlorophenol[2,4,6-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chloronaphthalene[2-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dimethyl phthalate	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Acenaphthylene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dibenzofuran	0.24	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dinitrotoluene[2,4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dinitrotoluene[2,6-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Diethylphthalate	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitroaniline[4-]	0.72	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nitrosodiphenylamine[N-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Azobenzene	0.72	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Bromophenyl-phenylether[4-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Hexachlorobenzene	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Di-n-butylphthalate	0.038	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Butylbenzylphthalate	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aniline	0.72	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Phenol	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Bis(2-chloroethyl)ether	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Chlorophenol[2-]	0.36	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Ruthenium-106	0.1	pCi/g	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Americium-241	0	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Cobalt-60	0.031	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Cesium-134	0.022	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Cesium-137	0.032	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Sodium-22	-0.033	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Strontium-90	0.24	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Thorium-228	1.047	pCi/g	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Thorium-230	0.999	pCi/g	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Thorium-232	1.21	pCi/g	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Uranium-234	0.834	pCi/g	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Uranium-235	0.051	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Uranium-238	0.712	pCi/g	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1262	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Aroclor-1268	0.036	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Europium-152	0.07	pCi/g	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Copper	2.8	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Cobalt	0.95	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Magnesium	799	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Manganese	198	mg/kg	None
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Nickel	2.3	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Potassium	662	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Silver	0.03	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Sodium	264	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Thallium	0.57	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Vanadium	5.4	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Antimony	0.26	mg/kg	U
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Arsenic	1.1	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Barium	43.5	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Beryllium	0.34	mg/kg	J
21-11058	MD21-99-0100	16.5–17.5	Qbt 3	Cadmium	0.11	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aluminum	5210	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Calcium	1230	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chromium (total)	5	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Iron	11900	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Lead	8.8	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Zinc	42	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Mercury	0.01	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1016	0.037	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1221	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1232	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1242	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1248	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1254	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1260	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aniline	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Phenol	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chlorophenol[2-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Methylphenol[2-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Methylphenol[4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Hexachloroethane	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitrobenzene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Isophorone	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitrophenol[2-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzoic acid	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chloroaniline[4-]	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Hexachlorobutadiene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dimethyl phthalate	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Acenaphthylene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dibenzofuran	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Diethylphthalate	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitroaniline[4-]	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nitrosodiphenylamine[N-]	0.69	mg/kg	
21-11058	MD21-99-0101	17.5–20	Qbt 3	Azobenzene	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Hexachlorobenzene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Di-n-butylphthalate	0.038	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Butylbenzylphthalate	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Bis(2-ethylhexyl)phthalate	0.08	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Di-n-octylphthalate	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Benzyl alcohol	0.74	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Americium-241	-0.05	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Cobalt-60	0.024	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Cesium-134	0.011	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Cesium-137	-0.023	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Sodium-22	0.04	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Ruthenium-106	0.13	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Strontium-90	0.88	pCi/g	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Thorium-228	2.29	pCi/g	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Thorium-230	1.88	pCi/g	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Thorium-232	2.27	pCi/g	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Uranium-234	0.949	pCi/g	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Uranium-235	0.011	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Uranium-238	1.04	pCi/g	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1262	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Aroclor-1268	0.037	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Europium-152	0.1	pCi/g	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Antimony	0.43	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0101	17.5–20	Qbt 3	Arsenic	1.7	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Barium	27.5	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Beryllium	0.55	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Cadmium	0.18	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Cobalt	1.3	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Copper	3.8	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Magnesium	963	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Manganese	240	mg/kg	None
21-11058	MD21-99-0101	17.5–20	Qbt 3	Nickel	4.8	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Potassium	639	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Selenium	0.35	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Silver	0.03	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Sodium	131	mg/kg	J
21-11058	MD21-99-0101	17.5–20	Qbt 3	Thallium	0.24	mg/kg	U
21-11058	MD21-99-0101	17.5–20	Qbt 3	Vanadium	6	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Zinc	19.8	mg/kg	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aluminum	270	mg/kg	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Iron	4950	mg/kg	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Lead	1.9	mg/kg	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Mercury	0.01	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1260	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1016	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1221	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1232	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1242	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1248	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1254	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzo(g,h,i)perylene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzyl alcohol	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Hexachloroethane	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitrobenzene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Isophorone	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitrophenol[2-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dimethylphenol[2,4-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Benzoic acid	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Bis(2-chloroethoxy)methane	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dichlorophenol[2,4-]	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0103	39.5–40	Qbt 3	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chloroaniline[4-]	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Hexachlorobutadiene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chloro-3-methylphenol[4-]	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Hexachlorocyclopentadiene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Trichlorophenol[2,4,6-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chloronaphthalene[2-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dimethyl phthalate	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Acenaphthylene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dibenzofuran	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dinitrotoluene[2,4-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dinitrotoluene[2,6-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Diethylphthalate	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitroaniline[4-]	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitrosodiphenylamine[N-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Azobenzene	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Bromophenyl-phenylether[4-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Hexachlorobenzene	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Di-n-butylphthalate	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Butylbenzylphthalate	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dichlorobenzidine[3,3'-]	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Bis(2-ethylhexyl)phthalate	0.076	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Di-n-octylphthalate	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aniline	0.69	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Phenol	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Bis(2-chloroethyl)ether	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chlorophenol[2-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dichlorobenzene[1,3-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dichlorobenzene[1,4-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Dichlorobenzene[1,2-]	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11058	MD21-99-0103	39.5–40	Qbt 3	Methylphenol[2-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Methylphenol[4-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Americium-241	-0.16	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Cobalt-60	0.004	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Cesium-134	-0.018	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Cesium-137	-0.016	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Sodium-22	0.017	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Ruthenium-106	-0.05	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Strontium-90	0.26	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Thorium-228	1.39	pCi/g	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Thorium-230	0.934	pCi/g	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Thorium-232	1.27	pCi/g	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Uranium-234	0.781	pCi/g	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Uranium-235	0.032	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Uranium-238	0.687	pCi/g	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1262	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Aroclor-1268	0.035	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Europium-152	-0.05	pCi/g	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Sodium	101	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Thallium	0.12	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Vanadium	1.1	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Antimony	0.21	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Arsenic	0.95	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Barium	5.3	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Beryllium	0.12	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Cadmium	0.08	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Calcium	230	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Chromium (total)	1.9	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Cobalt	0.44	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Copper	0.52	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Magnesium	66.6	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Manganese	242	mg/kg	None
21-11058	MD21-99-0103	39.5–40	Qbt 3	Nickel	1.1	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Potassium	125	mg/kg	J
21-11058	MD21-99-0103	39.5–40	Qbt 3	Selenium	0.17	mg/kg	U
21-11058	MD21-99-0103	39.5–40	Qbt 3	Silver	0.03	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0105	14–15	Sediment	Aluminum	4130	mg/kg	None
21-11059	MD21-99-0105	14–15	Sediment	Iron	3850	mg/kg	None
21-11059	MD21-99-0105	14–15	Sediment	Lead	1.8	mg/kg	None
21-11059	MD21-99-0105	14–15	Sediment	Zinc	9.9	mg/kg	None
21-11059	MD21-99-0105	14–15	Sediment	Mercury	0.01	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1016	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1221	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1232	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1242	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1248	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1254	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1260	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitroaniline[4-]	0.74	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Azobenzene	0.74	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Bis(2-ethylhexyl)phthalate	0.077	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aniline	0.74	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Phenol	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Methylphenol[4-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0105	14–15	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Isophorone	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Benzoic acid	3.7	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Diethylphthalate	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Americium-241	-0.08	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Cobalt-60	0.03	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Cesium-134	0.005	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Cesium-137	0.036	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Sodium-22	-0.06	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Ruthenium-106	0.26	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Strontium-90	0.27	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Thorium-228	1.95	pCi/g	None
21-11059	MD21-99-0105	14–15	Sediment	Thorium-230	1.67	pCi/g	None
21-11059	MD21-99-0105	14–15	Sediment	Thorium-232	1.85	pCi/g	None
21-11059	MD21-99-0105	14–15	Sediment	Uranium-234	1.93	pCi/g	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0105	14–15	Sediment	Uranium-235	0.056	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Uranium-238	1.82	pCi/g	None
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1262	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Aroclor-1268	0.037	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Carbazole	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Europium-152	0.16	pCi/g	U
21-11059	MD21-99-0105	14–15	Sediment	Antimony	0.2	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Arsenic	0.66	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Barium	28	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Beryllium	0.31	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Cadmium	0.06	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Calcium	558	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Chromium (total)	2.2	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Cobalt	0.84	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Copper	1.3	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Magnesium	468	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Manganese	44	mg/kg	None
21-11059	MD21-99-0105	14–15	Sediment	Nickel	2	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Potassium	489	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Selenium	0.12	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Silver	0.03	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Sodium	249	mg/kg	J
21-11059	MD21-99-0105	14–15	Sediment	Thallium	0.12	mg/kg	U
21-11059	MD21-99-0105	14–15	Sediment	Vanadium	4	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Aluminum	4770	mg/kg	None
21-11059	MD21-99-0106	19.5–20	Sediment	Iron	3410	mg/kg	None
21-11059	MD21-99-0106	19.5–20	Sediment	Lead	2.5	mg/kg	None
21-11059	MD21-99-0106	19.5–20	Sediment	Zinc	8.8	mg/kg	None
21-11059	MD21-99-0106	19.5–20	Sediment	Mercury	0.01	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1016	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1221	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1232	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1242	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1248	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1254	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1260	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0106	19.5–20	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Chloro-3-methylphenol[4-]	0.75	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Diethylphthalate	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitroaniline[4-]	0.75	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Azobenzene	0.75	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dichlorobenzidine[3,3'-]	0.75	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Bis(2-ethylhexyl)phthalate	0.11	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Di-n-octylphthalate	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aniline	0.75	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Phenol	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Chlorophenol[2-]	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0106	19.5–20	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Hexachloroethane	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitrobenzene	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Isophorone	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitrophenol[2-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Benzoic acid	3.8	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Cobalt-60	0.04	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Cesium-134	-0.004	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Cesium-137	0.015	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Sodium-22	-0.05	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Ruthenium-106	-0.21	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Americium-241	-0.03	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Strontium-90	0.2	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Thorium-228	1.77	pCi/g	None
21-11059	MD21-99-0106	19.5–20	Sediment	Thorium-230	1.68	pCi/g	None
21-11059	MD21-99-0106	19.5–20	Sediment	Thorium-232	1.78	pCi/g	None
21-11059	MD21-99-0106	19.5–20	Sediment	Uranium-234	1.65	pCi/g	None
21-11059	MD21-99-0106	19.5–20	Sediment	Uranium-235	0.112	pCi/g	None
21-11059	MD21-99-0106	19.5–20	Sediment	Uranium-238	1.62	pCi/g	None
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1262	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Aroclor-1268	0.037	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Carbazole	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Europium-152	-0.07	pCi/g	U
21-11059	MD21-99-0106	19.5–20	Sediment	Antimony	0.31	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Arsenic	0.8	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Barium	20.2	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Beryllium	0.38	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Cadmium	0.06	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Calcium	576	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0106	19.5–20	Sediment	Chromium (total)	2.2	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Cobalt	0.77	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Copper	1.5	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Magnesium	488	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Manganese	42.8	mg/kg	None
21-11059	MD21-99-0106	19.5–20	Sediment	Nickel	2.2	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Potassium	494	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Selenium	0.12	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Silver	0.03	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Sodium	252	mg/kg	J
21-11059	MD21-99-0106	19.5–20	Sediment	Thallium	0.12	mg/kg	U
21-11059	MD21-99-0106	19.5–20	Sediment	Vanadium	3.7	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Iron	8620	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Lead	6.2	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Zinc	23.3	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Aluminum	4790	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Arsenic	3	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Barium	59.2	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Chromium (total)	5.3	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Mercury	0.01	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1016	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1221	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1232	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1242	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1248	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1254	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1260	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Hexachlorobenzene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Pentachlorophenol	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Di-n-butylphthalate	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Butylbenzylphthalate	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dichlorobenzidine[3,3'-]	0.72	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Bis(2-ethylhexyl)phthalate	0.11	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Di-n-octylphthalate	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Indeno(1,2,3-cd)pyrene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzo(g,h,i)perylene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzyl alcohol	0.72	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aniline	0.72	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0107	29–30	Qbt 3	Phenol	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Bis(2-chloroethyl)ether	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Chlorophenol[2-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dichlorobenzene[1,3-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dichlorobenzene[1,4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dichlorobenzene[1,2-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Methylphenol[2-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Methylphenol[4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitroso-di-n-propylamine[N-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Hexachloroethane	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitrobenzene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Isophorone	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitrophenol[2-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dimethylphenol[2,4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Benzoic acid	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Bis(2-chloroethoxy)methane	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dichlorophenol[2,4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Trichlorobenzene[1,2,4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Chloroaniline[4-]	0.72	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Hexachlorobutadiene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Chloro-3-methylphenol[4-]	0.72	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Hexachlorocyclopentadiene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Trichlorophenol[2,4,6-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Chloronaphthalene[2-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitroaniline[2-]	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dimethyl phthalate	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Acenaphthylene	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitroaniline[3-]	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitrophenol[4-]	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dibenzofuran	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dinitrotoluene[2,4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Dinitrotoluene[2,6-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Diethylphthalate	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitroaniline[4-]	0.72	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11059	MD21-99-0107	29–30	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Nitrosodiphenylamine[N-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Azobenzene	0.72	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Bromophenyl-phenylether[4-]	0.36	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Cobalt-60	0.083	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Cesium-134	-0.028	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Cesium-137	-0.041	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Sodium-22	0	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Ruthenium-106	0.12	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Americium-241	-0.06	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Strontium-90	0.35	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Thorium-228	1.33	pCi/g	None
21-11059	MD21-99-0107	29–30	Qbt 3	Thorium-230	0.923	pCi/g	None
21-11059	MD21-99-0107	29–30	Qbt 3	Thorium-232	1.47	pCi/g	None
21-11059	MD21-99-0107	29–30	Qbt 3	Uranium-234	0.746	pCi/g	None
21-11059	MD21-99-0107	29–30	Qbt 3	Uranium-235	0.049	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Uranium-238	0.73	pCi/g	None
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1262	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Aroclor-1268	0.036	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Europium-152	-0.04	pCi/g	U
21-11059	MD21-99-0107	29–30	Qbt 3	Cobalt	1.3	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Copper	3	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Magnesium	610	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Manganese	219	mg/kg	None
21-11059	MD21-99-0107	29–30	Qbt 3	Nickel	3.6	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Potassium	475	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Selenium	0.17	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Silver	0.03	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Sodium	107	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Thallium	0.12	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Vanadium	8.6	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Antimony	0.28	mg/kg	U
21-11059	MD21-99-0107	29–30	Qbt 3	Beryllium	0.53	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Cadmium	0.12	mg/kg	J
21-11059	MD21-99-0107	29–30	Qbt 3	Calcium	808	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Aluminum	4410	mg/kg	None
21-11060	MD21-99-0111	17–17.5	Sediment	Barium	69.1	mg/kg	None
21-11060	MD21-99-0111	17–17.5	Sediment	Chromium (total)	3.1	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0111	17–17.5	Sediment	Iron	3540	mg/kg	None
21-11060	MD21-99-0111	17–17.5	Sediment	Lead	2.1	mg/kg	None
21-11060	MD21-99-0111	17–17.5	Sediment	Zinc	8.6	mg/kg	None
21-11060	MD21-99-0111	17–17.5	Sediment	Mercury	0.01	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1016	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1221	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1232	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1242	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1248	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1254	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1260	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Hexachlorocyclopentadiene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Trichlorophenol[2,4,6-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Chloronaphthalene[2-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dimethyl phthalate	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Acenaphthylene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dibenzofuran	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dinitrotoluene[2,4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dinitrotoluene[2,6-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Diethylphthalate	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Chlorophenyl-phenyl[4-] ether	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitroaniline[4-]	0.73	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitrosodiphenylamine[N-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Azobenzene	0.73	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Bromophenyl-phenylether[4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Hexachlorobenzene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Di-n-butylphthalate	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Butylbenzylphthalate	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dichlorobenzidine[3,3'-]	0.73	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Bis(2-ethylhexyl)phthalate	0.13	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Di-n-octylphthalate	0.36	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0111	17–17.5	Sediment	Indeno(1,2,3-cd)pyrene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzo(g,h,i)perylene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aniline	0.73	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Phenol	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Bis(2-chloroethyl)ether	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Chlorophenol[2-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dichlorobenzene[1,3-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dichlorobenzene[1,4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dichlorobenzene[1,2-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Methylphenol[2-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Methylphenol[4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitroso-di-n-propylamine[N-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Hexachloroethane	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitrobenzene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Isophorone	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitrophenol[2-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dimethylphenol[2,4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Benzoic acid	3.6	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Bis(2-chloroethoxy)methane	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Dichlorophenol[2,4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Trichlorobenzene[1,2,4-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Hexachlorobutadiene	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Chloro-3-methylphenol[4-]	0.73	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Sodium-22	0.08	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Ruthenium-106	0.1	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Americium-241	-0.12	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Cobalt-60	0.03	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Cesium-134	-0.023	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Cesium-137	0.021	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Strontium-90	0.23	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Thorium-228	1.86	pCi/g	None
21-11060	MD21-99-0111	17–17.5	Sediment	Thorium-230	1.45	pCi/g	None
21-11060	MD21-99-0111	17–17.5	Sediment	Thorium-232	1.59	pCi/g	None
21-11060	MD21-99-0111	17–17.5	Sediment	Uranium-234	1.49	pCi/g	None
21-11060	MD21-99-0111	17–17.5	Sediment	Uranium-235	0.057	pCi/g	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0111	17–17.5	Sediment	Uranium-238	1.66	pCi/g	None
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1262	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Aroclor-1268	0.036	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Nitrosodimethylamine[N-]	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Carbazole	0.36	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Europium-152	0.03	pCi/g	U
21-11060	MD21-99-0111	17–17.5	Sediment	Antimony	0.38	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Arsenic	0.83	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Beryllium	0.34	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Cadmium	0.06	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Calcium	690	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Cobalt	0.75	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Copper	1.6	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Magnesium	549	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Manganese	36.6	mg/kg	None
21-11060	MD21-99-0111	17–17.5	Sediment	Nickel	2.6	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Potassium	521	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Selenium	0.19	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Silver	0.03	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Sodium	220	mg/kg	J
21-11060	MD21-99-0111	17–17.5	Sediment	Thallium	0.12	mg/kg	U
21-11060	MD21-99-0111	17–17.5	Sediment	Vanadium	4	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Zinc	12.2	mg/kg	None
21-11060	MD21-99-0112	19.5–20	Sediment	Aluminum	6020	mg/kg	None
21-11060	MD21-99-0112	19.5–20	Sediment	Chromium (total)	3.1	mg/kg	None
21-11060	MD21-99-0112	19.5–20	Sediment	Iron	4480	mg/kg	None
21-11060	MD21-99-0112	19.5–20	Sediment	Lead	2.9	mg/kg	None
21-11060	MD21-99-0112	19.5–20	Sediment	Mercury	0.01	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1016	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1221	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1232	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1242	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1248	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1254	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1260	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Bis(2-ethylhexyl)phthalate	0.16	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0112	19.5–20	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Isophorone	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Benzoic acid	3.7	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Diethylphthalate	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0112	19.5–20	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitroaniline[4-]	0.74	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Azobenzene	0.74	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aniline	0.74	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Phenol	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Ruthenium-106	-0.13	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Americium-241	-0.02	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Cobalt-60	-0.01	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Cesium-134	-0.002	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Cesium-137	0.027	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Sodium-22	0.045	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Strontium-90	0.23	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Thorium-228	1.87	pCi/g	None
21-11060	MD21-99-0112	19.5–20	Sediment	Thorium-230	1.79	pCi/g	None
21-11060	MD21-99-0112	19.5–20	Sediment	Thorium-232	1.95	pCi/g	None
21-11060	MD21-99-0112	19.5–20	Sediment	Uranium-234	1.57	pCi/g	None
21-11060	MD21-99-0112	19.5–20	Sediment	Uranium-235	0.058	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Uranium-238	1.65	pCi/g	None
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1262	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Aroclor-1268	0.037	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Carbazole	0.37	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Europium-152	0.12	pCi/g	U
21-11060	MD21-99-0112	19.5–20	Sediment	Vanadium	5	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Antimony	0.2	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Arsenic	0.99	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Barium	22.9	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Beryllium	0.54	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Cadmium	0.08	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Calcium	905	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Cobalt	0.92	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0112	19.5–20	Sediment	Copper	2.5	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Magnesium	773	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Manganese	50.7	mg/kg	None
21-11060	MD21-99-0112	19.5–20	Sediment	Nickel	3.4	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Potassium	661	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Selenium	0.23	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Silver	0.03	mg/kg	U
21-11060	MD21-99-0112	19.5–20	Sediment	Sodium	253	mg/kg	J
21-11060	MD21-99-0112	19.5–20	Sediment	Thallium	0.12	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1016	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1221	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1232	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1242	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1248	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1254	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1260	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dichlorobenzidine[3,3'-]	0.75	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Bis(2-ethylhexyl)phthalate	0.16	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Di-n-octylphthalate	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzyl alcohol	1.5	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Carbazole	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dichlorobenzene[1,2-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Methylphenol[2-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Methylphenol[4-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Hexachloroethane	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitrobenzene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Isophorone	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitrophenol[2-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Benzoic acid	3.7	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dichlorophenol[2,4-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0113	27.5–30	Qbt 3	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chloroaniline[4-]	1.5	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Hexachlorobutadiene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chloro-3-methylphenol[4-]	0.75	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitroaniline[2-]	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dimethyl phthalate	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Acenaphthylene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitroaniline[3-]	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitrophenol[4-]	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dibenzofuran	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Diethylphthalate	0.063	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitroaniline[4-]	0.75	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Azobenzene	0.75	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Hexachlorobenzene	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Pentachlorophenol	1.9	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Di-n-butylphthalate	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Butylbenzylphthalate	0.1	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aniline	0.75	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Phenol	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chlorophenol[2-]	0.37	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aluminum	1800	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Antimony	2.7	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Arsenic	2.6	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Barium	17.4	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Beryllium	0.46	mg/kg	J

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11060	MD21-99-0113	27.5–30	Qbt 3	Cadmium	0.38	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Calcium	364	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Chromium (total)	1.8	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Cobalt	0.69	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Copper	1.7	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Iron	5030	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Lead	3.2	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Magnesium	159	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Nickel	2.3	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Potassium	236	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Selenium	0.39	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Silver	0.46	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Sodium	111	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Thallium	1.2	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Vanadium	4.8	mg/kg	J
21-11060	MD21-99-0113	27.5–30	Qbt 3	Zinc	16.8	mg/kg	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Mercury	0.05	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1262	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Aroclor-1268	0.038	mg/kg	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Uranium-234	1.66	pCi/g	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Uranium-235	0	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Uranium-238	1.75	pCi/g	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Americium-241	0.09	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Cobalt-60	0.01	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Cesium-134	-0.01	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Cesium-137	0	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Europium-152	0	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Sodium-22	-0.03	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Ruthenium-106	0.43	pCi/g	U
21-11060	MD21-99-0113	27.5–30	Qbt 3	Strontium-90	0.92	pCi/g	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Thorium-228	1.94	pCi/g	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Thorium-230	1.15	pCi/g	None
21-11060	MD21-99-0113	27.5–30	Qbt 3	Thorium-232	1.64	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Aluminum	5380	mg/kg	None
21-11061	MD21-99-0117	14–15	Sediment	Chromium (total)	4.3	mg/kg	None
21-11061	MD21-99-0117	14–15	Sediment	Iron	5320	mg/kg	None
21-11061	MD21-99-0117	14–15	Sediment	Lead	2.3	mg/kg	None
21-11061	MD21-99-0117	14–15	Sediment	Zinc	14.1	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0117	14–15	Sediment	Mercury	0.01	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1016	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1221	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1232	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1242	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1248	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1254	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1260	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitroaniline[3-]	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dinitrophenol[2,4-]	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitrophenol[4-]	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dibenzofuran	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dinitrotoluene[2,4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dinitrotoluene[2,6-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Diethylphthalate	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Chlorophenyl-phenyl[4-] ether	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitroaniline[4-]	0.74	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dinitro-2-methylphenol[4,6-]	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitrosodiphenylamine[N-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Azobenzene	0.74	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Bromophenyl-phenylether[4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Hexachlorobenzene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Pentachlorophenol	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Di-n-butylphthalate	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Butylbenzylphthalate	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dichlorobenzidine[3,3'-]	0.74	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Bis(2-ethylhexyl)phthalate	0.11	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Di-n-octylphthalate	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Indeno(1,2,3-cd)pyrene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Benzo(g,h,i)perylene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aniline	0.74	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Phenol	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Bis(2-chloroethyl)ether	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Chlorophenol[2-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dichlorobenzene[1,3-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dichlorobenzene[1,4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dichlorobenzene[1,2-]	0.37	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0117	14–15	Sediment	Methylphenol[2-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Methylphenol[4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitroso-di-n-propylamine[N-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Hexachloroethane	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitrobenzene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Isophorone	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitrophenol[2-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dimethylphenol[2,4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Benzoic acid	3.7	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Bis(2-chloroethoxy)methane	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dichlorophenol[2,4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Trichlorobenzene[1,2,4-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Hexachlorobutadiene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Chloro-3-methylphenol[4-]	0.74	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Hexachlorocyclopentadiene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Trichlorophenol[2,4,6-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Trichlorophenol[2,4,5-]	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Chloronaphthalene[2-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitroaniline[2-]	1.8	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Dimethyl phthalate	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Acenaphthylene	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Ruthenium-106	0.39	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Americium-241	0.07	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Cobalt-60	0.06	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Cesium-134	0.02	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Cesium-137	0.023	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Sodium-22	0.02	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Strontium-90	0.15	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Thorium-228	2.03	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Thorium-230	1.59	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Thorium-232	1.89	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Uranium-234	1.6	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Uranium-235	0.13	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Uranium-238	1.62	pCi/g	None
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1262	0.037	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Aroclor-1268	0.037	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0117	14–15	Sediment	Carbazole	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Nitrosodimethylamine[N-]	0.37	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Europium-152	0.05	pCi/g	U
21-11061	MD21-99-0117	14–15	Sediment	Antimony	0.3	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Arsenic	1	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Barium	12.7	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Beryllium	0.44	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Cadmium	0.08	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Calcium	742	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Cobalt	1.1	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Copper	1.9	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Magnesium	682	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Manganese	61	mg/kg	None
21-11061	MD21-99-0117	14–15	Sediment	Nickel	3.5	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Potassium	606	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Selenium	0.12	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Silver	0.03	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Sodium	272	mg/kg	J
21-11061	MD21-99-0117	14–15	Sediment	Thallium	0.12	mg/kg	U
21-11061	MD21-99-0117	14–15	Sediment	Vanadium	5.1	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Aluminum	5470	mg/kg	None
21-11061	MD21-99-0118	19–20	Sediment	Chromium (total)	3	mg/kg	None
21-11061	MD21-99-0118	19–20	Sediment	Iron	3790	mg/kg	None
21-11061	MD21-99-0118	19–20	Sediment	Lead	2.4	mg/kg	None
21-11061	MD21-99-0118	19–20	Sediment	Zinc	9.7	mg/kg	None
21-11061	MD21-99-0118	19–20	Sediment	Mercury	0.01	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1016	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1221	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1232	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1242	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1248	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1254	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1260	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Indeno(1,2,3-cd)pyrene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Benzo(g,h,i)perylene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Benzyl alcohol	1.5	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitroso-di-n-propylamine[N-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Hexachloroethane	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0118	19–20	Sediment	Nitrobenzene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Isophorone	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitrophenol[2-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dimethylphenol[2,4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Benzoic acid	3.8	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Bis(2-chloroethoxy)methane	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dichlorophenol[2,4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Trichlorobenzene[1,2,4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Chloroaniline[4-]	1.5	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Hexachlorobutadiene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Chloro-3-methylphenol[4-]	0.76	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Hexachlorocyclopentadiene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Trichlorophenol[2,4,6-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Trichlorophenol[2,4,5-]	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Chloronaphthalene[2-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitroaniline[2-]	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dimethyl phthalate	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Acenaphthylene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitroaniline[3-]	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dinitrophenol[2,4-]	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitrophenol[4-]	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dibenzofuran	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dinitrotoluene[2,4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dinitrotoluene[2,6-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Diethylphthalate	0.12	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Chlorophenyl-phenyl[4-] ether	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitroaniline[4-]	0.76	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dinitro-2-methylphenol[4,6-]	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitrosodiphenylamine[N-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Azobenzene	0.76	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Bromophenyl-phenylether[4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Hexachlorobenzene	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Pentachlorophenol	1.9	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Di-n-butylphthalate	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Butylbenzylphthalate	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dichlorobenzidine[3,3'-]	0.76	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Bis(2-ethylhexyl)phthalate	0.22	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Di-n-octylphthalate	0.38	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0118	19–20	Sediment	Aniline	0.76	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Phenol	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Bis(2-chloroethyl)ether	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Chlorophenol[2-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dichlorobenzene[1,3-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dichlorobenzene[1,4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Dichlorobenzene[1,2-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Methylphenol[2-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Oxybis(1-chloropropane)[2,2'-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Methylphenol[4-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Ruthenium-106	0.74	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Americium-241	-0.03	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Cobalt-60	0.03	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Cesium-134	-0.028	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Cesium-137	0.081	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Sodium-22	-0.05	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Strontium-90	0.31	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Thorium-228	1.81	pCi/g	None
21-11061	MD21-99-0118	19–20	Sediment	Thorium-230	1.64	pCi/g	None
21-11061	MD21-99-0118	19–20	Sediment	Thorium-232	1.76	pCi/g	None
21-11061	MD21-99-0118	19–20	Sediment	Uranium-234	1.57	pCi/g	None
21-11061	MD21-99-0118	19–20	Sediment	Uranium-235	0.093	pCi/g	None
21-11061	MD21-99-0118	19–20	Sediment	Uranium-238	1.63	pCi/g	None
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1262	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Aroclor-1268	0.037	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Carbazole	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Nitrosodimethylamine[N-]	0.38	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Europium-152	0.09	pCi/g	U
21-11061	MD21-99-0118	19–20	Sediment	Antimony	0.24	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Arsenic	0.91	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Barium	44.9	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Beryllium	0.45	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Cadmium	0.06	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Calcium	751	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Cobalt	0.76	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Copper	2	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Magnesium	659	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Manganese	33.4	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0118	19–20	Sediment	Nickel	2.7	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Potassium	612	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Selenium	0.12	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Silver	0.03	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Sodium	276	mg/kg	J
21-11061	MD21-99-0118	19–20	Sediment	Thallium	0.12	mg/kg	U
21-11061	MD21-99-0118	19–20	Sediment	Vanadium	4.4	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1016	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1221	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1232	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1242	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1248	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1254	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1260	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Di-n-butylphthalate	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Butylbenzylphthalate	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dichlorobenzidine[3,3'-]	0.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Bis(2-ethylhexyl)phthalate	0.15	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Di-n-octylphthalate	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Indeno(1,2,3-cd)pyrene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzo(g,h,i)perylene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzyl alcohol	1.4	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Carbazole	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aniline	0.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Phenol	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Bis(2-chloroethyl)ether	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chlorophenol[2-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dichlorobenzene[1,3-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dichlorobenzene[1,4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dichlorobenzene[1,2-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Methylphenol[2-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Oxybis(1-chloropropane)[2,2'-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Methylphenol[4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitroso-di-n-propylamine[N-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Hexachloroethane	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitrobenzene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Isophorone	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitrophenol[2-]	0.35	mg/kg	U

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dimethylphenol[2,4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Benzoic acid	3.5	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Bis(2-chloroethoxy)methane	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dichlorophenol[2,4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Trichlorobenzene[1,2,4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chloroaniline[4-]	1.4	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Hexachlorobutadiene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chloro-3-methylphenol[4-]	0.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Hexachlorocyclopentadiene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Trichlorophenol[2,4,6-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Trichlorophenol[2,4,5-]	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chloronaphthalene[2-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitroaniline[2-]	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dimethyl phthalate	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Acenaphthylene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitroaniline[3-]	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dinitrophenol[2,4-]	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitrophenol[4-]	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dibenzofuran	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dinitrotoluene[2,4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dinitrotoluene[2,6-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Diethylphthalate	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chlorophenyl-phenyl[4-] ether	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitroaniline[4-]	0.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Dinitro-2-methylphenol[4,6-]	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitrosodiphenylamine[N-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Azobenzene	0.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Bromophenyl-phenylether[4-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Hexachlorobenzene	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Pentachlorophenol	1.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nitrosodimethylamine[N-]	0.35	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aluminum	5900	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Antimony	2.7	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Arsenic	1.9	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Barium	40.3	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Beryllium	0.51	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Cadmium	0.38	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Calcium	722	mg/kg	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Chromium (total)	2.9	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Cobalt	0.86	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Copper	1.9	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Iron	5300	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Lead	2.8	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Magnesium	535	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Nickel	4	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Potassium	559	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Selenium	0.39	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Silver	0.46	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Sodium	150	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Thallium	1	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Vanadium	4.4	mg/kg	J
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Zinc	17.6	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Mercury	0.05	mg/kg	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Manganese	234	mg/kg	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1262	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Aroclor-1268	0.036	mg/kg	UJ
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Uranium-234	1.16	pCi/g	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Uranium-235	0.08	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Uranium-238	1.31	pCi/g	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Americium-241	-0.13	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Cobalt-60	0.01	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Cesium-134	0.03	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Cesium-137	-0.04	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Europium-152	0.46	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Sodium-22	0.02	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Ruthenium-106	0.11	pCi/g	U
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Strontium-90	1.07	pCi/g	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Thorium-228	1.33	pCi/g	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Thorium-230	1.13	pCi/g	None
21-11061	MD21-99-0119	26.5–27.5	Qbt 3	Thorium-232	1.23	pCi/g	None
21-11098	MD21-99-0210	0–0.333	Sediment	Plutonium-238	0.00659	pCi/g	U
21-11098	MD21-99-0210	0–0.333	Sediment	Americium-241	0.051	pCi/g	U
21-11098	MD21-99-0210	0–0.333	Sediment	Plutonium-239	0.474	pCi/g	None
21-11099	MD21-99-0211	0–0.333	Sediment	Plutonium-238	0.0155	pCi/g	U
21-11099	MD21-99-0211	0–0.333	Sediment	Americium-241	0.0733	pCi/g	U
21-11099	MD21-99-0211	0–0.333	Sediment	Plutonium-239	0.594	pCi/g	None

Table F-3.0-1 (continued)

Location ID	Sample ID	Depth (ft)	Sample Medium	Analyte	Result	Units	Report Qualifier
21-11100	MD21-99-0212	0–0.333	Sediment	Plutonium-238	0.012	pCi/g	U
21-11100	MD21-99-0212	0–0.333	Sediment	Americium-241	0.0513	pCi/g	U
21-11100	MD21-99-0212	0–0.333	Sediment	Plutonium-239	0.658	pCi/g	None
21-11101	MD21-99-0213	0–0.333	Sediment	Plutonium-238	0.0177	pCi/g	U
21-11101	MD21-99-0213	0–0.333	Sediment	Americium-241	0.168	pCi/g	U
21-11101	MD21-99-0213	0–0.333	Sediment	Plutonium-239	0.295	pCi/g	None
21-11102	MD21-99-0214	0–0.333	Sediment	Plutonium-238	0.0204	pCi/g	U
21-11102	MD21-99-0214	0–0.333	Sediment	Americium-241	0.0617	pCi/g	U
21-11102	MD21-99-0214	0–0.333	Sediment	Plutonium-239	3.3	pCi/g	None
21-11103	MD21-99-0215	0–0.333	Sediment	Plutonium-238	0.0443	pCi/g	U
21-11103	MD21-99-0215	0–0.333	Sediment	Americium-241	0.266	pCi/g	None
21-11103	MD21-99-0215	0–0.333	Sediment	Plutonium-239	8.45	pCi/g	None
21-11104	MD21-99-0216	0–0.333	Sediment	Plutonium-238	0.0346	pCi/g	U
21-11104	MD21-99-0216	0–0.333	Sediment	Americium-241	0.105	pCi/g	U
21-11104	MD21-99-0216	0–0.333	Sediment	Plutonium-239	1.72	pCi/g	None
21-01330	AAA0616	0–0.5	Sediment	Strontium-90	0	pCi/g	U
21-01331	AAA0617	0–0.5	Sediment	Strontium-90	0.2	pCi/g	U

F-4.0 REFERENCES

LANL (Los Alamos National Laboratory), July 1993. "Health and Environmental Chemistry: Analytical Techniques, Data Management, and Quality Assurance," Los Alamos National Laboratory report LA-10300-M, Volume I, Los Alamos, New Mexico. (LANL 1993, 31793)

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

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

| ANN | Accept | Customer ID | Transfer ID | Product Group | Product Group | Product ID | Begin | End | Duration | Service | Service | Service Class | Service Class | Destination | Destination | Destination Country | Destination Country | Destination Zone | Destination Zone | Destination Zone Type | Destination Zone Type | Destination Zone Type

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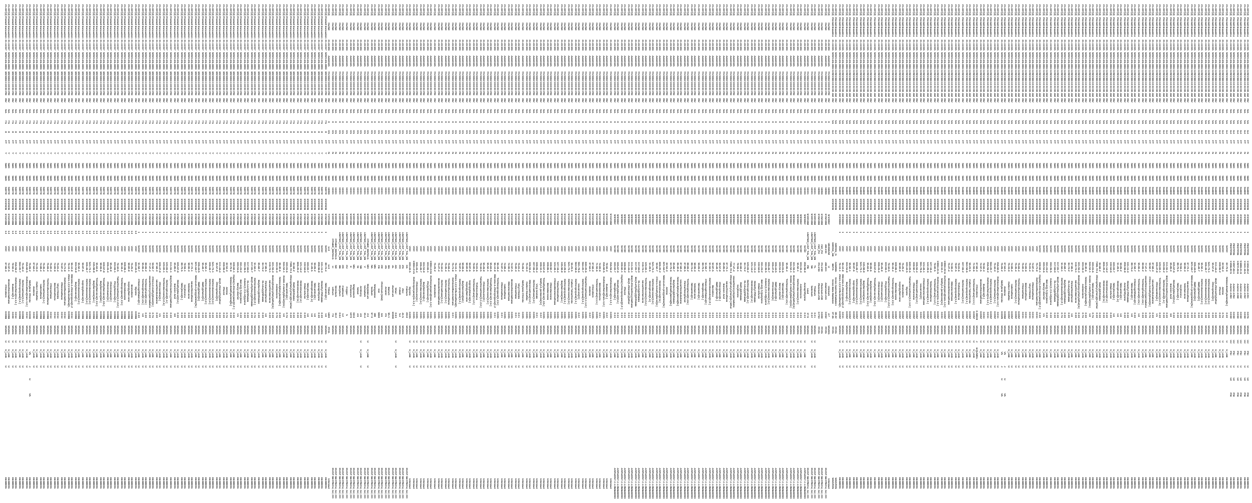

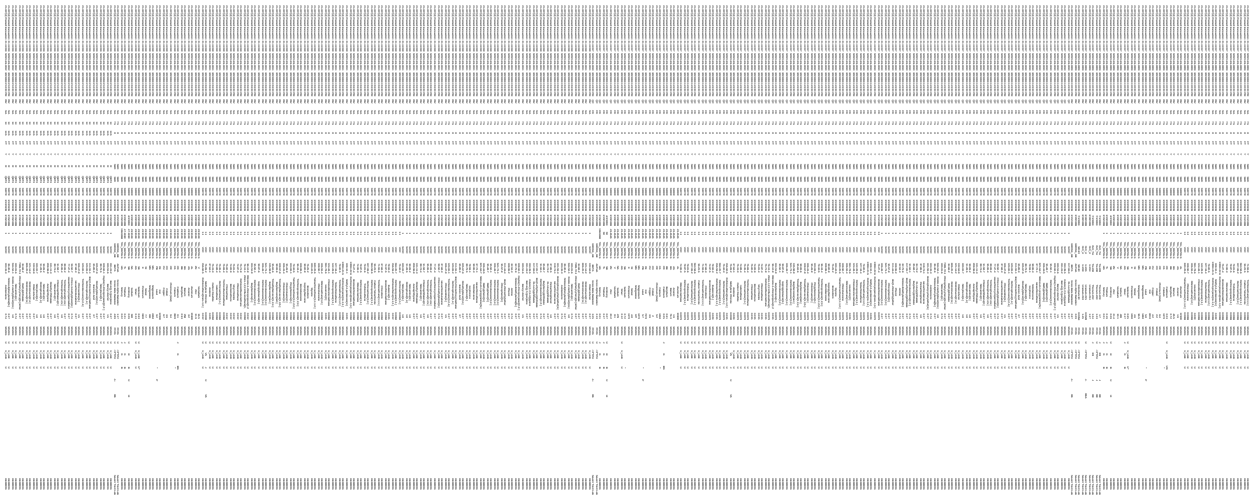

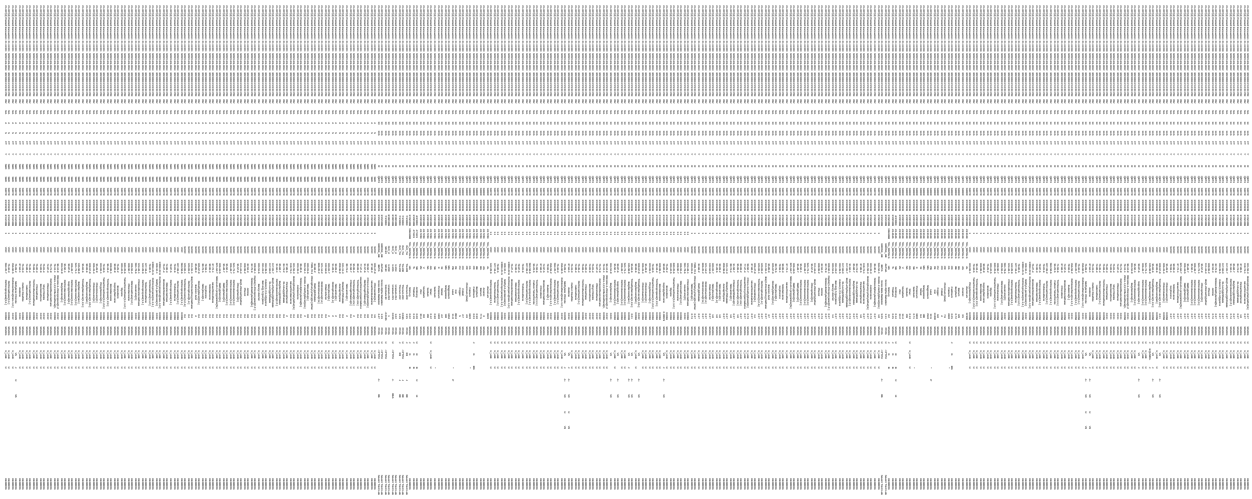

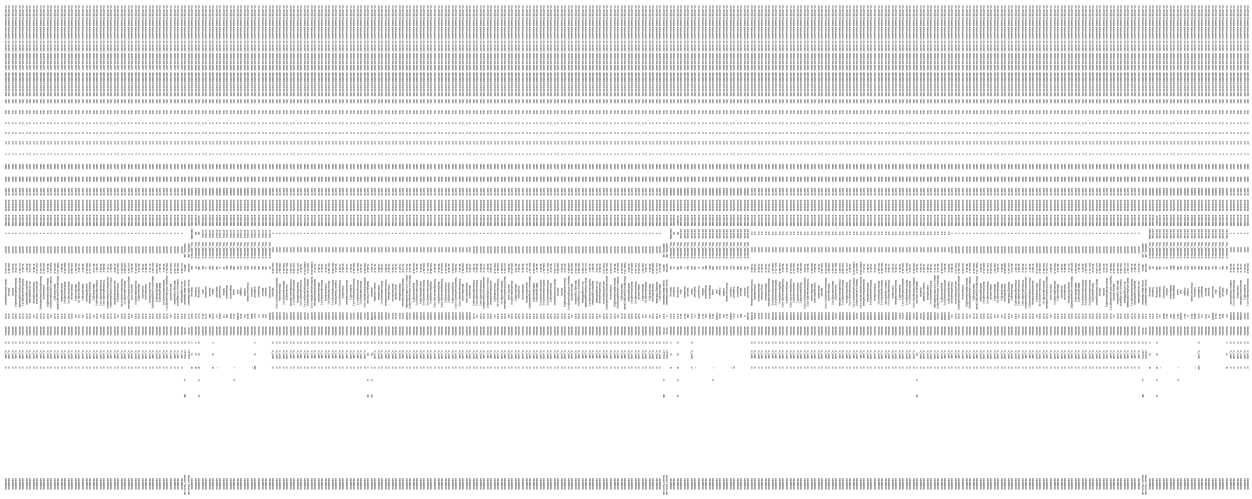

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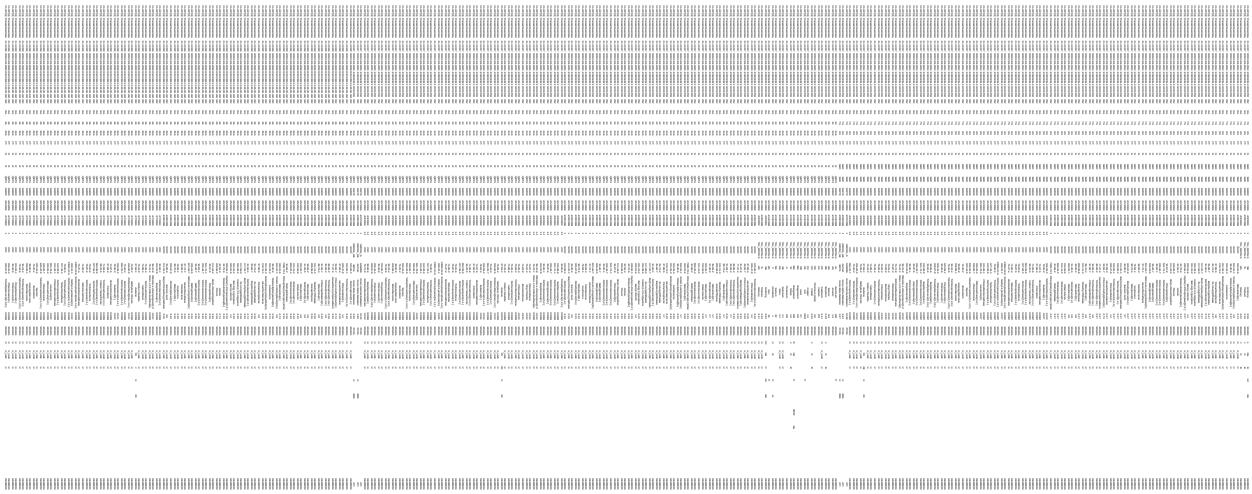

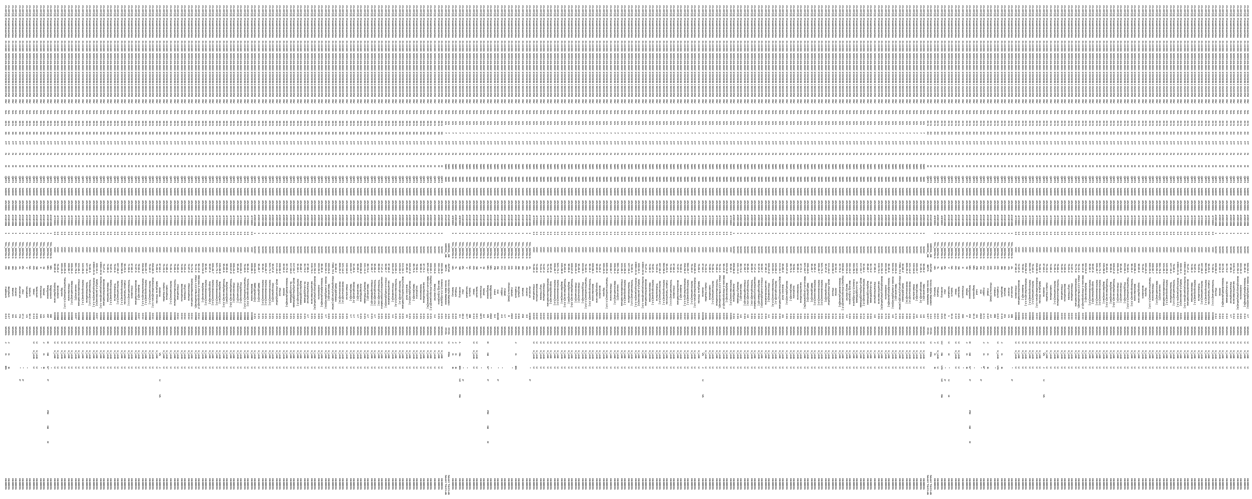

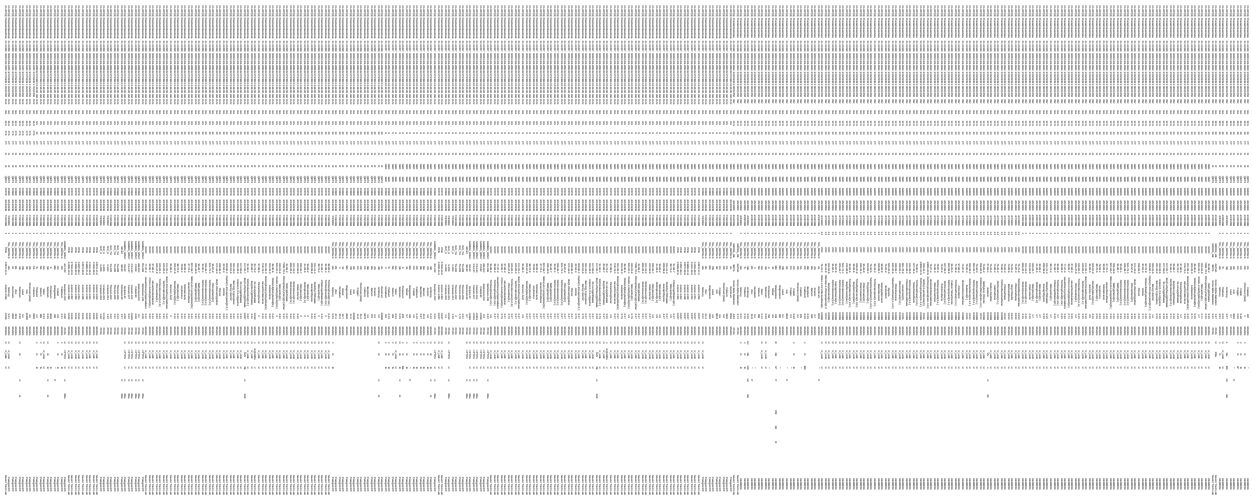

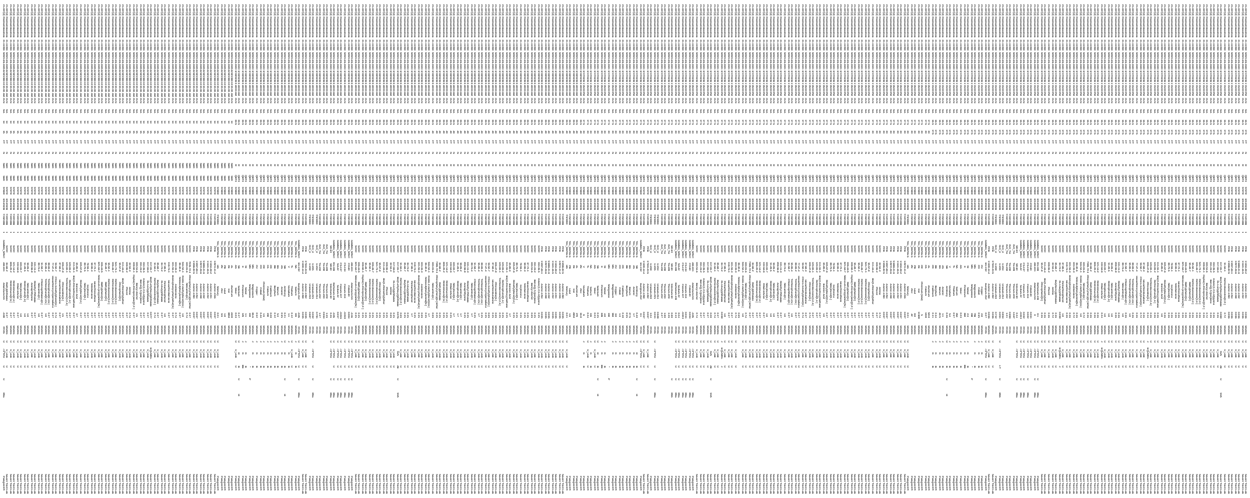

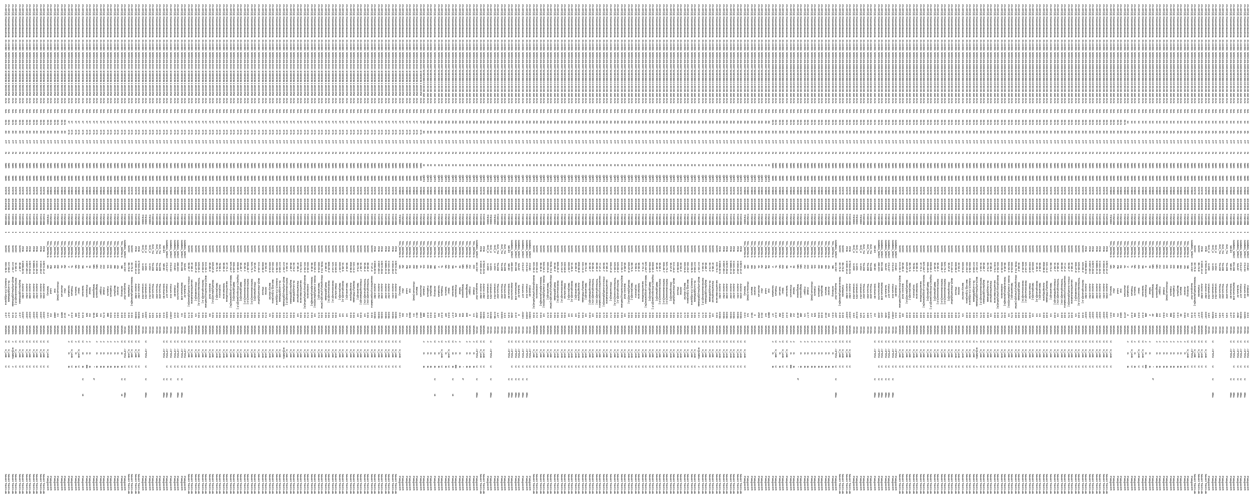

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Appendix G

Ecological Scoping Checklist,
Fate and Transport, and Tier 1 Report

APPENDIX G ECOLOGICAL SCOPING CHECKLIST, FATE AND TRANSPORT, AND TIER 1 REPORT

G-1.0 ECOLOGICAL SCOPING CHECKLIST

Part A—Scoping Meeting Documentation

Site ID	**Potential Release Site 21-027(d)-99, In Situ Vitrification Test Site at Technical Area 21**	
Form of Site Releases (solid, liquid, vapor) Describe all relevant known or suspected *mechanisms* of release (spills, dumping, material disposal, outfall, explosive testing) and describe potential *areas* of release. Reference locations on a map, as appropriate.	The release at the site was diesel fuel from a tank that used to be located at the site. It is not clear whether the release was from a spill or a leak from the tank. The contamination was confined to the subsurface soil. Sampling in the outfall did not indicate the presence of diesel fuel.	
List of Primary Impacted Media Indicate all that apply.	Surface soil Surface water/sediment Subsurface Groundwater Other	Not applicable Not applicable Yes (mesa-top subsurface) Not applicable Not applicable
Facility for Information Management, Analysis, and Display (FIMAD) Vegetation Class Based on Arcview Vegetation Coverage Indicate all that apply.	Water Bare ground/unvegetated [mesa top]) Spruce/fir/aspen/mixed conifer Ponderosa pine Piñon juniper/juniper savannah Grassland/shrubland Developed	Not applicable Yes (bare ground with no vegetation Yes (fir in the outfall area) Yes (outfall area) Yes (juniper in outfall area) Not applicable Not applicable
Is threatened and endangered (T&E) species habitat present? If applicable, list species known or suspected that use the site for breeding or foraging.	The site is on the border of the core habitat for the Mexican spotted owl. This site is within an area that the owl may be assumed to forage with a moderate-to-low frequency. This site is within an area where the potential for foraging for the peregrine falcon is low.	
Provide a list of neighboring/ contiguous/ upgradient sites; include a brief summary of chemicals of potential concern (COPCs) and the form of releases for relevant sites and reference a map, as appropriate. Use this information to evaluate the need to aggregate sites for screening.	Material Disposal Area (MDA) V, Potential Release Site [PRS 21-018(a)], is located immediately south of PRS 21-027(d)-99. MDA B (PRS 21-015) is immediately to the west. Surface disposal sites, PRSs 21-013(b,g) are also south of MDA V and drain into the canyon approximately 200 ft to the south. The releases from the MDAs would be organic, inorganic, and radionuclides in the subsurface. Potential releases from 21-013(b,g) would be surface runoff. PRS 21-023(c) is adjacent to and east of the outfall. This PRS was a septic tank outfall. PRS 21-009, a former waste treatment laboratory, decommissioned in 1965, was located to the west and south. That building was contaminated with plutonium dust and perchloric acid in the hoods.	

Site ID	Potential Release Site 21-027(d)-99, In Situ Vitrification Test Site at Technical Area 21
Surface Water Erosion Potential Information Summarize information from Standard Operating Procedure 2.01, Rev. 0, "Surface Water Site Assessments," including the runoff subscore (maximum of 46), terminal point of surface water transport, slope, and surface water run-on sources.	**PRS 21-027(d)** Site-setting score: 23.5 Surface water runoff score: 14.5 (9.5 for the terminal point of surface water transport) Surface water run-on score: 7.0 (for natural drainages onto site) Total score: 45.0 **Area of Concern C-21-028** Site-setting score: 15.3 Surface water runoff score: 0 Surface water run-on score: 0 Total score: 15.3
Other Scoping Meeting Notes	

Part B—Site Visit Documentation

Site ID	PRS 21-027(d)-99, In Situ Vitrification Site at TA-21
Date of Site Visit	March 13, 2002
Site Visit Conducted by	Linda Causey and Thomas Benson

Receptor Information

Estimate Cover	Relative vegetative cover (high, medium, low, none) = Low (outfall), None (mesa top) Relative wetland cover (high, medium, low, none) = None (mesa top and outfall) Relative structures/asphalt cover (high, medium, low, none) = None (mesa top and outfall)
Field Notes on the FIMAD Vegetation Class to Assist in Ground-Truthing the Arcview Information	A site visit confirmed that little vegetation is present on the mesa-top portion. In the outfall area, there is ponderosa pine forest with fir, juniper, and Gambel oak. There is an understory of grasses and forbs (e.g., western wheat grass, Canada bluegrass, bottlebrush squirreltail, cheat grass, sand dropseed, summer cypress, prickly lettuce, and horseweed.)
Field Notes on T&E Habitat (if applicable) Consider the need for a site visit by a T&E subject matter expert to support the use of the site by T&E receptors.	The mesa-top portion does not present any foraging or nesting habitat for T&E species. The outfall area provides the potential nesting and foraging habitat.
Are ecological receptors present at the site? (yes/no/uncertain) Describe the general types of receptors present at the site (terrestrial and aquatic) and make notes on the quality of habitat present at the site.	No. The mesa-top portion is a dirt and gravel parking lot and is not suitable for foraging or nesting of terrestrial receptors. Yes. The outfall portion is undisturbed canyon slope. Ecological receptors are plants, small mammals, and birds. Larger mammals, such as deer, would be restricted to the small portion of the outfall that is not vertical. Because so much of the outfall is exposed tuff, earthworms are not expected to be present in abundance. No aquatic habitat is present on or near the site.

Contaminant Transport Information

Surface Water Transport Field notes should summarize the erosion potential, including a discussion of the terminal point of surface water transport, if applicable.	No evidence of erosion was observed on the mesa top. The area is relatively flat (approximately a 1% to 2% slope) and was covered with gravel and a straw mulch. An asphalt drainage channel is located around the perimeter of MDA V to direct surface runoff away from the PRS. Surface water runoff eventually would go into the canyon located approximately 200 ft south of the site. The outfall area becomes steeper closer to the edge of the canyon wall, where the drop off approaches 90 degrees as it goes into BV Canyon.
Are there any off-site transport pathways (surface water, air, or groundwater)? (yes/no/uncertain) Provide explanation	No. The release from the fuel tank was in the subsurface beneath a dirt parking lot and is unlikely to migrate. Groundwater is approximately 1200 ft below the site and is unlikely to be affected because there is no hydraulic head to promote downward movement. Also, most of the contaminated soil was either removed or treated during the nontraditional in situ vitrification (NTISV) technology cold demonstration.
Is an interim action (IA) needed to limit off-site transport? (yes/no/uncertain) Provide explanation/ recommendation for IA to project lead.	No. The release is subsurface and is unlikely to move. Analytical data from the November 19, 1999, samples in the outfall that were analyzed for total petroleum hydrocarbons (TPH) (diesel range) indicate that there has been no transport of TPH to the outfall area.

Ecological Effects Information

Physical Disturbance Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.	The mesa-top portion of the site has been physically disturbed. The area was cleared of buildings, made into a parking lot, and subsequently was the site of the NTISV cold demonstration. It is now a flat dirt and gravel parking lot devoid of vegetation. No evidence of erosion was observed in the area. The outfall portion of the site does not appear to have been disturbed.
Are there obvious ecological effects? (yes/no/uncertain) Provide an explanation and apparent cause (e.g., contamination, physical disturbance, other).	No. The mesa-top portion of the site had been cleared, so no ecological impacts from site use were observed. The outfall portion of the site is undisturbed and appears the same as the surrounding area.
IA needed to limit apparent ecological effects? (yes/no/uncertain) Provide explanation and recommendations for IA to mitigate apparent exposure pathways to project lead.	No. The release was subsurface and is unlikely to move because most was removed or treated during the NTISV cold demonstration. Analytical data from the November 19, 1999, samples in the outfall that were analyzed for TPH (diesel range) indicate that there has been no transport of TPH to the outfall area.

Exposure/Transport Pathways

None

Adequacy of Site Characterization

Do existing or proposed data provide information on the nature, rate, and extent of contamination? (yes/no/uncertain) Provide explanation (consider if the maximum value was captured by existing sample data).	Yes. The nature and extent of contamination was defined during the voluntary corrective measure activities. There is one area of contamination remaining in the subsurface southeast of the NTISV cold demonstration treatment area at a depth greater than 15 ft below ground surface.
Do existing or proposed data for the site address potential transport pathways of site contamination? (yes/no/uncertain) Provide explanation (consider if other sites should be aggregated to characterize potential ecological risk).	There are not potential transport pathways for contamination migration.

Additional Field Notes

Provide additional field notes on the site setting and potential ecological receptors.

Signatures and certifications

Checklist completed by

Name (printed): Linda Causey

Name (signature): Linda Causey

Organization: PMC Environmental

Phone number: (505) 662-1365

Date completed: May 30, 2002

Verification:

Name (printed): Rich Mirenda

Name (signature): Richard Mirenda

Organization: Los Alamos National Laboratory

Phone number: (505) 665-6953

G-2.0 CHEMICAL FATE AND TRANSPORT INFORMATION

This section presents specific chemical properties that affect the fate and transfer of the TPH-related chemicals (diesel range) identified in Section 2.3.5. The identified COPCs are acenaphthene, benzene, 2-methylnaphthalene, naphthalene, phenanthrene, and TPH (diesel range). Information on the fate and transport of organic chemicals in the soil presented here is from Ney (1995, 58210).

Chemical properties of organic chemicals, such as water solubility, adsorption coefficient, and vapor pressure, help determine the fate and transport of such chemicals. Water solubility is perhaps the most important chemical characteristic used to assess chemical mobility, stability or breakdown, accumulation, bioaccumulation, and sorption. Soil sorption, chemical sorption, or bound chemicals in soil may be expressed as the extent to which an organic chemical partitions between a solid phase and a liquid phase. This value is known as the adsorption coefficient (Koc). Volatilization of a chemical into the air is an important migration pathway. The vapor pressure of a chemical provides an indication of whether or not a chemical will volatilize into the air.

The higher the water solubility of a chemical, the more likely it is to be mobile and less likely it is to be accumulative, bioaccumulative, volatile, and persistent. A highly soluble chemical (greater than 1000 ppm or mg/L) is prone to biodegradation and metabolism, which may detoxify the parent chemical. The lower the water solubility of a chemical (less than 10 ppm or mg/L), the more likely it is that it will be immobilized by way of adsorption and thus is less mobile, more accumulative or bioaccumulative, more persistent in the environment, less prone to biodegradation, and more likely to be metabolized in plants and animals. A chemical with a low vapor pressure (less than 0.000001 torr) is less likely to volatilize into the air. A chemical with high vapor pressure (greater than 0.01 torr) is more likely to volatilize into the air. Chemicals with a high Koc of greater than 10,000 will adsorb to soil organic carbon. Chemicals with a low Koc of 1000 will not adsorb to soil organic carbon. Table G-1.0-1 presents information based on research that has been done on the COPCs. Because there are different concerns for different chemicals, research will tend to focus in those areas of concern. Therefore, not all information is available for each COPC, resulting in not readily available (NRA) in parts of the table.

Table G-1.0-1
Chemical Properties of COPCs

Chemical	Water Solubility (mg/L)	Vapor Pressure (torr)	Koc SUB?
Acenaphthene	3.47*	0.02 (at 20°C)*	NRA
Benzene	1780*	95.2*	83*
2-Methylnaphthlene	25.4*	NRA	8500*
Naphthalene	866*	NRA	1300*
Phenanthrene	1.29*	6.8×10^{-4}*	23,000*

* Ney 1995, 58210.

The water solubility of acenaphthene and phenanthrene is less than 10 mg/L, indicating that they will be immobilized by way of adsorption, be less mobile, more accumulative or bioaccumulative, persistent in the environment, at least slightly prone to biodegradation, and may be metabolized in plants and animals. Benzene, 2-methylnaphthlene, and naphthalene have water solubilities of greater than 10 mg/L, indicating that they may leach from the soil and run off in surface water.

The vapor pressures presented for benzene, acenaphthene, and phenanthrene indicate that these chemicals volatilize into the air, with benzene having the greatest tendency and phenanthrene having the least tendency. Vapor pressures for naphthalene and 2-methylnaphthlene are NRA. The low vapor pressure of phenanthrene indicates that it is less likely to volatilize into the air.

With the exception of benzene, the Koc of all the other chemicals (except for acenaphthene, which is NRA) indicates that these chemicals do not adsorb to soil organic carbon.

G-3.0 TIER 1 TABLES FOR THE RISK-BASED DECISION MAKING FOR PETROLEUM RELEASES AT UNDERGROUND STORAGE TANK SITES IN NEW MEXICO

A tier 1 report was prepared and is attached at the end of this appendix.

G-4.0 REFERENCE

The following list includes all references cited in this appendix. Parenthetical information following each reference provides the author, publication date, and the ER record identification (ER ID) number. This information also is included in the citations in the text. ER ID numbers are assigned by the Laboratory's ER Project to track records associated with the Project. These numbers can be used to locate copies of the actual documents at the ER Project's Records Processing Facility and, where applicable, with the ER Project reference library titled "Reference Set for Material Disposal Areas, Technical Area 21."

Copies of the reference library are maintained at the New Mexico Environment Department Hazardous Waste Bureau; the Department of Energy Los Alamos Area Office; United States Environmental Protection Agency, Region 6; and the ER Project MDAs Focus Area. This library is a living collection of documents that was developed to ensure that the administrative authority has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the administrative authority are not included.

Ney, R., 1995. *Fate and Transport of Organic Chemicals in the Environment, A Practical Guide*, Second Edition, Government Institutes, Rockville, MD. (Ney 1995, 58210)

RISK-BASED DECISION MAKING SOFTWARE
FOR PETROLEUM RELEASES AT UNDERGROUND STORAGE TANK
SITES IN NEW MEXICO
TIER 1 REPORT FORMS

Considerable care was exercised in developing this software. However NMED or RAM Group, Inc. makes no warranty regarding the accuracy of this software and shall not be held liable for any damages resulting from its use.

CONTINUE *Version 1.0, March 2000* EXIT

Developed for:
The State of New Mexcio
Environment Department
Underground Storage Tank Bureau
by:
Risk Assessment & Management Group, Inc.

TITLE PAGE

NEW MEXICO RBDM

PRINT

COVER PAGE

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1 EXECUTIVE SUMMARY

2 SITE CONCEPTUAL EXPOSURE SCENARIO

3 JUSTIFICATION FOR PATHWAYS SELECTED (CURRENT AND FUTURE CONDITIONS)

ON-SITE RECEPTORS	OFF-SITE RECEPTORS
RESIDENTIAL EXPOSURES	RESIDENTIAL EXPOSURES
COMMERCIAL WORKER	COMMERCIAL WORKER
CONSTRUCTION WORKER	CONSTRUCTION WORKER

4 TIER 1 COMPARISON (CURRENT AND FUTURE CONDITIONS)

ON-SITE RECEPTORS	OFF-SITE RECEPTORS
RESIDENT (CHILD AND ADULT)	RESIDENT (CHILD AND ADULT)
COMMERCIAL WORKER	COMMERCIAL WORKER
CONSTRUCTION WORKER	CONSTRUCTION WORKER

5 TIER 1 GROUNDWATER PROTECTION WITH NO WAIVER PETITION

6 TIER 1 GROUNDWATER PROTECTION WITH WAIVER PETITION

7 TIER 1 APPLICABLE TARGET LEVELS FOR VARIOUS MEDIA

8 TIER 1 RECOMMENDATIONS AND CONCLUSIONS

9 REFERENCES AND PROTOCOLS

Tier 1 Report Forms

Risk-Based Decision Making For Petroleum Releases At Underground Storage Tank Sites In New Mexico

SITE NAME:	*PRS 21-027(d)-99*
SITE LOCATION:	*Technical Area 21*
SITE ID:	*PRS 21-027(d)-99*
FACILITY ID:	*Los Alamos National Laboratory*
SUBMITTAL DATE:	*May 20, 2002*
PREPARED BY:	*J. Jones*
REVIEWED BY:	*P. Bertino*

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☐ *Check the box against the item, if the item is included.*

TIER 1 REPORT FORMS

Form No.	Description	
1.	Executive summary.	☑
2.	Site conceptual exposure scenario.	☑
3.	Justification for pathways complete and incomplete.	
	Residential (child and adult).	☑
	Commercial worker.	☑
	Construction worker.	☑
4.	Comparison of Tier 1 RBSLs with representative site concentrations.	
	On-site receptors.	
	Resident (child and adult).	☑
	Commercial worker.	☑
	Construction worker.	☑
	Off-site receptors.	
	Resident (child and adult).	☑
	Commercial worker.	☑
	Construction worker.	☑
5.	Tier 1 groundwater protection - no petition for variance to WQCC standards required.	☐
6.	Tier 1 groundwater protection - petition for variance to WQCC standards required.	☐
7.	Tier 1 applicable target levels for various media.	☑
8.	Tier 1 conclusions and recommendations.	☑
9.	References and protocol.	☑

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All maps submitted to NMED must include a bar scale, legend, north arrow, location of all known soil borings and monitoring wells, and date of map, where appropriate.

☐ *Check the box against the item, if the item is included.*

Map No.	Description	MAPS

Maps 1-6 are part of 14 Day Report and maps 7-10 are part of Investigation Report. Update and resubmit as appropriate.

Note: Maps may be combined, as appropriate.

1. Topographic map. ☑
2. Site map with UST system location(s), including tank ID number(s). ☑
3. Site map with utility locations. ☐
4. Land use map (radius of 1,000 feet). ☐
5. Receptor survey map: with detailed land use in the vicinity of the site (at least 1,000 feet in the downgradient direction and one property deep on all other sides including across the street). ☐
6. Area map with water use well locations: within one mile radius of the site (the wells on the map must be labeled). Maps must also indicate the location of surface water drains including but not limited to streams, lakes and well head protection areas, within a 500 foot radius of the site. ☑
7. NAPL thickness contour map. ☐
8. Area geologic map. ☑
9. Groundwater gradient map: contoured map with the predominant flow direction from the most recent gauging event (add additional maps if the flow direction fluctuates). ☐
10. Soil and groundwater concentration contour maps showing boring and well locations and concentrations in each: for benzene, MTBE, total BTEX, and Total PAHs from the most recent sampling event. ☑
11. Map identifying the location of data points used to calculate representative soil concentrations protective of groundwater. ☐
12. Map Identifying POE(s) and POC(s): for both current and future conditions. ☐

ADDITIONAL MAPS:

Topographic map - VCM Report, Figures 2.1-1 and 2.1-2.

Site map with aboveground tank location - VCM Report, Figure 2.1-2.

Area map with water well locations-VCM Report, Appendix B, Figures B-4.2-1 and B-4.2-2.

Area geologic map - VCM Report, Appendix B, Figure B-3.1-1.

Soil concentration maps - VCM Report, Figures 2.3-5, 2.3-6, and 2.3-7.

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☐ *Check the box against the item, if the item is included.*

Attachment No. Description **ATTACHMENTS**

Aattachments 1and 2 are part of 14 Day Report and attchments 3-7 are part of Investigation Report. Update and resubmit as appropriate.

1. Most recent UST system test results. ☐
2. Vapor screening results for utilities. ☐
3. Estimation of NAPL present: Estimated thickness vs measured thickness of NAPL. Include calculation brief for estimated thickness. ☐
4. Monitoring well construction diagram. ☐
5. Representative soil boring logs: cross-section(s) showing the stratigraphy of the site and the extent of contamination. ☑
6. Historical groundwater monitoring data for all the monitoring wells. Include any data collected from temporary wells or borings. ☐
7. Contaminant concentration and depth to groundwater vs. time graphs for wells with four or more sampling events. ☐
8. Description of the logic used in the selection of data for calculation of representative site concentrations, for on-site and off-site media. Provide raw data selected and representative concentrations. ☐
9. Justification for the selection of POE(s), POC(s), and groundwater standards (MCLs vs. WQCC standards). ☐

ADDITIONAL ATTACHMENTS:

Laboratory analytical report(s) not previously submitted to the department.

Analytical Data - VCM Report, Appendices C, D, E, and F

Borehole Logs - VCM Report, Appendix H.

Cross Section - VCM Report, Figure 2.3-3.

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 1

SITE ID: PRS 21-027(d)-99	**FACILITY ID: Los Alamos National Laboratory**
SUBMITTAL DATE: 20-May-02	**PREPARED BY: J. Jones**

EXECUTIVE SUMMARY

Facility name:	*Los Alamos National Laboratory*
Facility address:	*P. O. Box 1663* *Los Alamos, NM 87545*
Status of UST system:	☐ Active ☑ Inactive
Ground surface condition:	*dirt parking lot*
Estimated volume and type of product(s) released:	*Unknown volume of diesel was released prior to 1960, when tank was decommissioned.*
Has any vapor impacts been identified?	☑ No ☐ On-site ☐ Off-site
If yes (check all that apply):	☐ Utility corridor ☐ Subsurface structures ☐ Above surface structures
Is soil contaminated?	☐ No ☑ On-site ☐ Off-site
Is there any contaminant-saturated soil?	☑ No ☐ On-site ☐ Off-site
Is groundwater contaminated?	☑ No ☐ On-site ☐ Off-site
Has the source of release been identified?	☑ Yes ☐ No *Aboveground storage tank*
Has NAPL ever been detected?	☐ Yes ☑ No
Was NAPL removed?	☐ Yes ☑ No
Was NAPL detected in the most recent sampling event?	☐ Yes ☑ No
Has surface water been contaminated by the release?	☐ Yes ☑ No ☐ Uknown ☐ Suspected
Shallowest depth to groundwater (ft bgs.):	
Average depth to groundwater (ft bgs.):	*1000 ft below ground surface*
Has a drinking water supply well been contaminated by this release?	☐ Yes ☑ No ☐ Unknown ☐ Suspected
If yes	☐ Drinking ☐ Irrigation ☐ Other

RECOMMENDATIONS

- ☑ No further action under tier 1
- ☐ Compliance monitoring
- ☐ Remediate to tier 1 RBSLs and WQCC standards to achieve no further action
- ☐ Perform interim remedial action and then re-evaluate
- ☐ Perform tier 2 evaluation
- ☐ Petition WQCC for approval of alternative groundwater standards

ADDITIONAL NOTES

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 2 - SCES
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

SITE CONCEPTUAL EXPOSURE SCENARIO

CONTAMINATED MEDIA	PATHWAYS/TRANSPORT MECHANISMS	EXPOSURE ROUTES	POTENTIAL RECEPTORS																			
			CURRENT LAND USE								FUTURE LAND USE											
			ON-SITE				OFF-SITE				ON-SITE				OFF-SITE			
			Residents-Child	Residents - Adult	Commercial Workers	Construction Workers	Residents-Child	Residents - Adult	Commercial Workers	Construction Workers	Residents-Child	Residents - Adult	Commercial Workers	Construction Workers	Residents-Child	Residents - Adult	Commercial Workers	Construction Workers
Air Vapors		Inhalation (Indoors)	NC	NC	NC	NA	NC	NC	NC	NA	C	C	C	NA	NC	NC	NC	NA
		Inhalation (Outdoors)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Surficial Soil	Wind Erosion/Dispersion/ Volatilization/Vapor Migration	Inhalation (vapors & particulates) and Dermal Contact and Ingestion	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Subsurface Soils	Volatilization/Vapor Migration	Inhalation (Indoors)	NC	NC	NC	NA	NC	NC	NC	NA	C	C	C	NA	NC	NC	NC	NA
		Inhalation (Outdoors)	NA	NA	NA	C	NA	NA	NA	NC	NA	NA	NA	C	NA	NA	NA	NC
		Dermal Contact and Ingestion	NA	NA	NA	C	NA	NA	NA	NC	NA	NA	NA	C	NA	NA	NA	NC
Groundwater	Volatilization/Vapor Migration	Inhalation (Indoors)	NC	NC	NC	NA	NC	NC	NC	NA	NC	NC	NC	NA	NC	NC	NC	NA
		Inhalation (Outdoors)	NA	NA	NA	NC	NA	NA	NA	NC	NA	NA	NA	NC	NA	NA	NA	NC
	Drinking Water	Ingestion	NC	NC	NC	NA	NC	NC	NC	NA	NC	NC	NC	NA	NC	NC	NC	NA

	YES	NO
Contaminant-saturated soil present?	☐	☑
Nonaqueous phase liquid present?	☐	☑
Utilities Threatened ?	☐	☑
Surface Waters within a 500 foot radius?	☐	☑
Ecological Receptors?	☐	☑
Leaching to groundwater?	☐	☑

C Indicates potentially completed pathways

NA Not applicable as per the NMED policy

For construction worker, no distinction is made between the surficial and subsurface soils.

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 3 - RESIDENT
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

JUSTIFICATION OF PATHWAYS - ON-SITE RESIDENT (CHILD AND ADULT)

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Ingestion, outdoor inhalation of vapors and particulate matter, and dermal contact	*NC*	*No TPH-related chemicals were detected in the surface soils.*	*NC*	*No TPH-related chemicals were detected in the surface soils.*
SUBSURFACE SOIL				
Indoor inhalation of vapors (only when depth to contamination is less than 15 ft bgs)	*NC*	*There are no residents on or near the site.*	*C*	*Potential future on-site residents could be exposed to vapors from subsurface soil.*
GROUNDWATER				
Indoor inhalation of vapors (only when depth to groundwater is less than 15 ft bgs)	*NC*	*There are no residents on or near the site.*	*NC*	*Groundwater is greater than 15 ft bgs*
Ingestion (only when groundwater is used, from an impacted on-site well, for drinking)	*NC*	*There are no residents on or near the site. Drinking water is not provided by on-site wells.*	*NC*	*Drinking water is not provided by on-site wells; no impacts to off-site wells. Depth to groundwater is 1200 ft bgs.*

JUSTIFICATION OF PATHWAYS - OFF-SITE RESIDENT (CHILD AND ADULT)

SURFICIAL SOIL				
Ingestion, Outdoor Inhalation of Vapors and Particulate Matter, and Dermal Contact	*NC*	*No TPH-related chemicals were detected in the surface soils.*	*NC*	*No TPH-related chemicals were detected in the surface soils.*
SUBSURFACE SOIL				
Indoor inhalation of vapors (only when depth to contamination is less than 15 ft bgs)	*NC*	*There are no residents on or near the site.*	*NC*	*Potential future off-site residents would not be exposed to vapors from subsurface soil.*
GROUNDWATER				
Indoor inhalation of vapors (only when depth to groundwater is less than 15 ft bgs)	*NC*	*There are no residents on or near the site.*	*NC*	*Groundwater is greater than 15 ft bgs*
Ingestion (only when groundwater is used, from an impacted off-site well, for drinking)	*NC*	*There are no residents on or near the site. Drinking water is not provided by on-site wells.*	*NC*	*Drinking water is not provided by on-site wells; no impacts tooff-sitewells. Depth to groundwater is 1200 ft bgs.*

NOTE:

* C : Complete Pathway, NC : Not Complete

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 3 - COMMERCIAL WORKER
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

JUSTIFICATION OF PATHWAYS - ON-SITE COMMERCIAL WORKER

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SURFICIAL SOIL				
Ingestion, outdoor inhalation of vapors and particulate matter, and dermal contact	*NC*	*No TPH-related chemicals were detected in the surface soils.*	*NC*	*No TPH-related chemicals were detected in the surface soils.*
SUBSURFACE SOIL				
Indoor inhalation of vapors (only when depth to contamination is less than 15 ft bgs)	*NC*	*There are no commercial establishments on or near the site.*	*C*	*Commercial worker could be exposed to subsurface soil while working indoors if contamination is less than 15 ft bgs*
GROUNDWATER				
Indoor inhalation of vapors (only when depth to groundwater is less than 15 ft bgs)	*NC*	*Groundwater is greater than 15 ft bgs*	*NC*	*Groundwater is greater than 15 ft bgs*
Ingestion (only when groundwater is used, from an impacted on-site well, for drinking)	*NC*	*Drinking water is provided by municiple water, not on-site wells. Depth to groundwater is 1200 ft bgs.*	*NC*	*Drinking water is provided by municiple water, not on-site wells. Depth to groundwater is 1200 ft bgs.*

JUSTIFICATION OF PATHWAYS - OFF-SITE COMMERCIAL WORKER

SURFICIAL SOIL				
Ingestion, Outdoor Inhalation of Vapors and Particulate Matter, and Dermal Contact	*NC*	*No TPH-related chemicals were detected in the surface soils.*	*NC*	*No TPH-related chemicals were detected in the surface soils.*
SUBSURFACE SOIL				
Indoor inhalation of vapors (only when depth to contamination is less than 15 ft bgs)	*NC*	*There are no off-site commerical establishments nearby.*	*NC*	*Off-site Commercial Workers would not be exposed to subsurface soil*
GROUNDWATER				
Indoor inhalation of vapors (only when depth to groundwater is less than 15 ft bgs)	*NC*	*Groundwater is greater than 15 ft bgs*	*NC*	*Groundwater is greater than 15 ft bgs*
Ingestion (only when groundwater is used, from an impacted off-site well, for drinking)	*NC*	*Drinking water is provided by municiple water; no impacts to off-site wells. Depth to groundwater is 1200 ft bgs.*	*NC*	*Drinking water is provided by municiple water; no impacts to off-site wells. Depth to groundwater is 1200 ft bgs.*

NOTE:

* **C** : Complete Pathway, **NC** : Not Complete

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 3-CONSTRUCTION WORKER
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

JUSTIFICATION OF PATHWAYS - ON-SITE CONSTRUCTION WORKER

ROUTES OF EXPOSURE	CURRENT CONDITIONS		FUTURE CONDITIONS	
	C/ NC*	JUSTIFICATION	C/ NC*	JUSTIFICATION
SOIL WITHIN THE TYPICAL CONSTRUCTION DEPTH				
Ingestion, outdoor inhalation of vapors and particulate matter, and dermal contact	*C*	*A construction worker may be exposed to contaminated soil within the typical construction depth.*	*C*	*A construction worker may be exposed to contaminated soil within the typical construction depth.*
GROUNDWATER				
Outdoor inhalation of vapors	*NC*	*Groundwater is greater than 15 ft bgs*	*NC*	*Groundwater is greater than 15 ft bgs*

JUSTIFICATION OF PATHWAYS - OFF-SITE CONSTRUCTION WORKER

SOIL WITHIN THE TYPICAL CONSTRUCTION DEPTH				
Ingestion, Outdoor Inhalation of Vapors and Particulate Matter, and Dermal Contact	*NC*	*An off-site construction worker could be exposed to vapors and particulate matter from on-site soil*	*NC*	*An off-site construction worker could be exposed to vapors and particulate matter from on-site soil*
GROUNDWATER				
Outdoor inhalation of vapors	*NC*	*Groundwater is greater than 15 ft bgs*	*NC*	*Groundwater is greater than 15 ft bgs*

NOTE:

* C : Complete Pathway, NC : Not Complete
No distinction is made between surficial soil and subsurface soil for a construction worker within the zone of construction since subsurface soil may be brought to the surface during construction/excavation activities.

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NEW MEXICO RBDM	TIER 1 REPORT	FORM 4 - RESIDENT
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

COMPARISON OF TIER 1 RBSLs WITH REPRESENTATIVE CONCENTRATIONS - ON-SITE RESIDENT (CHILD AND ADULT)

CONTAMINANTS OF CONCERN	SURFICIAL SOIL			SUB-SURFACE SOIL			GROUNDWATER					
	Ingestion, inhalation, and dermal contact		NC	Indoor inhalation of vapors		C	Indoor inhalation of vapors		NC	Ingestion		NC
	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [µg/L]	RBSLs [µg/L]	E/Exceeds or NE/Not Exceeds	Concentration at the tap [µg/L]	MCL [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS												
Benzene				0.0012	2.07E-02	NE						
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene				0.2	2.57E+03 >RES	NE						
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes				2.06	3.45E+01 >RES	NE						
Phenanthrene				0.41	4.63E+03 >RES	NE						
Pyrene												
METALS												
Lead												

NOTE:

Enter the representative concentration and indicate.

N/A: Not applicable

>RES: Calculated RBSLs exceeded residual soil saturation level.

>SOL: Calculated RBSLs exceeded pure component water solubility.

This comparative evaluation is performed automatically after the user has completed Report Form No.3 and entered the representative concentration on this form for complete pathways.

Representative concentration is:

Soil: ***The maximum concentration detected.***

Groundwater: ***Groundwater was not sampled because of depth (1200 ft bgs).***

Page 1 of _____

NEW MEXICO RBDM	TIER 1 REPORT	FORM 4 - RESIDENT
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

COMPARISON OF TIER 1 RBSLs WITH REPRESENTATIVE CONCENTRATIONS - OFF-SITE RESIDENT (CHILD AND ADULT)

CONTAMINANTS OF CONCERN	SURFICIAL SOIL			SUB-SURFACE SOIL			GROUNDWATER					
	Ingestion, inhalation,and dermal contact		NC	Indoor inhalation of vapors		NC	Indoor inhalation of vapors		NC	Ingestion		NC
	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [µg/L]	RBSLs [µg/L]	E/Exceeds or NE/Not Exceeds	Concentration at the tap [µg/L]	MCL [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS												
Benzene												
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene												
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes												
Phenanthrene												
Pyrene												
METALS												
Lead												

NOTE:

Enter the representative concentration and indicate.

N/A: Not applicable

>RES: Calculated RBSLs exceeded residual soil saturation level.

>SOL: Calculated RBSLs exceeded pure component water solubility.

This comparative evaluation is performed automatically after the user has completed Report Form No.3 and entered the representative concentration on this form for complete pathways.

Representative concentration is:

Soil:

Groundwater:

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NEW MEXICO RBDM	TIER 1 REPORT	FORM 4 - COMMERCIAL WORKER
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

COMPARISON OF TIER 1 RBSLs WITH REPRESENTATIVE CONCENTRATIONS - ON-SITE COMMERCIAL WORKER

CONTAMINANTS OF CONCERN	SURFICIAL SOIL			SUB-SURFACE SOIL			GROUNDWATER					
	Ingestion, Inhalation,and Dermal Contact		NC	Indoor inhalation of vapors		C	Indoor inhalation of vapors		NC	Ingestion		NC
	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [µg/L]	RBSLs [µg/L]	E/Exceeds or NE/Not Exceeds	Concentration at the tap [µg/L]	MCL [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS												
Benzene				0.0012	1.28E-01	NE						
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene				0.2	2.81E+04 >RES	NE						
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes				2.06	3.76E+02 >RES	NE						
Phenanthrene				0.41	5.04E+04 >RES	NE						
Pyrene												
METALS												
Lead												

NOTE:

Enter the representative concentration and indicate.

Representative concentration is:

Soil: ***The maximum concentratio detected.***

Groundwater: ***Groundwater was not sampled because of depth (1200 ft bgs).***

N/A: Not applicable

>RES: Calculated RBSLs exceeded residual soil saturation level.

>SOL: Calculated RBSLs exceeded pure component water solubility.

This comparative evaluation is performed automatically after the user has completed Report Form No.3 and entered the representative concentration on this form for complete pathways.

NEW MEXICO RBDM	TIER 1 REPORT	FORM 4 - COMMERCIAL WORKER
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

COMPARISON OF TIER 1 RBSLs WITH REPRESENTATIVE CONCENTRATIONS - OFF-SITE COMMERCIAL WORKER

CONTAMINANTS OF CONCERN	SURFICIAL SOIL			SUB-SURFACE SOIL			GROUNDWATER					
	Ingestion, inhalation,and dermal contact		NC	Indoor inhalation of vapors		NC	Indoor inhalation of vapors		NC	Ingestion		NC
	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [µg/L]	RBSLs [µg/L]	E/Exceeds or NE/Not Exceeds	Concentration at the tap [µg/L]	MCL [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS												
Benzene												
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene												
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes												
Phenanthrene												
Pyrene												
METALS												
Lead												

NOTE:

Enter the representative concentration and indicate.

Representative concentration is:

Soil:

Groundwater:

Page 4 of _____

N/A: Not applicable

>RES: Calculated RBSLs exceeded residual soil saturation level.

>SOL: Calculated RBSLs exceeded pure component water solubility.

This comparative evaluation is performed automatically after the user has completed Report Form No.3 and entered the representative concentration on this form for complete pathways.

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 4 - CONSTRUCTION WORKER
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

COMPARISON OF TIER 1 RBSLs WITH REPRESENTATIVE CONCENTRATIONS - ON-SITE CONSTRUCTION WORKER

CONTAMINANTS OF CONCERN	SOIL WITHIN THE TYPICAL CONSTRUCTION ZONE				GROUNDWATER		
	Ingestion, inhalation, and dermal contact			C	Outdoor inhalation of vapors		NC
	Representative concentration [mg/kg]	RBSLs [mg/kg]		E/Exceeds or NE/Not Exceeds	Representative concentration [µg/L]	RBSLs [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS							
Benzene							
Toluene							
Ethylbenzene							
Xylenes (Total)							
Ethylene Dibromide (EDB)							
1,2-Dichloroethane (EDC)							
MTBE							
POLYCYCLIC AROMATIC HYDROCARBONS							
Acenaphthene							
Anthracene							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(b)fluoranthene							
Benzo(k)fluoranthene							
Chrysene							
Dibenz(a-h)anthracene							
Fluoranthene							
Fluorene							
Total Naphthalenes	1.2	3.23E+03	>RES	NE			
Phenanthrene	0.41	7.90E+03	>RES	NE			
Pyrene							
METALS							
Lead							

NOTE:

Enter the representative concentration and indicate.

N/A: Not applicable

>RES: Calculated RBSLs exceeded residual soil saturation level.

>SOL: Calculated RBSLs exceeded pure component water solubility.

This comparative evaluation is performed automatically after the user has completed Report Form No.3 and entered the representative concentration on this form for complete pathways.

Representative concentration is:

Soil:	*The maximum concentration detected.*
Groundwater:	*Groundwater was not sampled because of depth (1200 ft bgs).*

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NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 4 - CONSTRUCTION WORKER
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

COMPARISON OF TIER 1 RBSLs WITH REPRESENTATIVE CONCENTRATIONS - OFF-SITE CONSTRUCTION WORKER

CONTAMINANTS OF CONCERN	SOIL WITHIN THE TYPICAL CONSTRUCTION ZONE			GROUNDWATER		
	Ingestion, inhalation,and dermal contact		NC	Outdoor inhalation of vapors		NC
	Representative concentration [mg/kg]	RBSLs [mg/kg]	E/Exceeds or NE/Not Exceeds	Representative concentration [µg/L]	RBSLs [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS						
Benzene						
Toluene						
Ethylbenzene						
Xylenes (Total)						
Ethylene Dibromide (EDB)						
1,2-Dichloroethane (EDC)						
MTBE						
POLYCYCLIC AROMATIC HYDROCARBONS						
Acenaphthene						
Anthracene						
Benzo(a)anthracene						
Benzo(a)pyrene						
Benzo(b)fluoranthene						
Benzo(k)fluoranthene						
Chrysene						
Dibenz(a-h)anthracene						
Fluoranthene						
Fluorene						
Total Naphthalenes						
Phenanthrene						
Pyrene						
METALS						
Lead						

NOTE:

Enter the representative concentration and indicate.

Representative concentration is:

Soil:

Groundwater:

Page 6 of _____

N/A: Not applicable

>RES: Calculated RBSLs exceeded residual soil saturation level.

>SOL: Calculated RBSLs exceeded pure component water solubility.

This comparative evaluation is performed automatically after the user has completed Report Form No.3 and entered the representative concentration on this form for complete pathways.

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 5
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 GROUNDWATER PROTECTION - NO PETITION FOR VARIANCE TO WQCC STANDARDS REQUIRED

	COMPARISON FOR SOURCE SOIL			COMPARISON FOR GROUNDWATER											
				MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10		
CONTAMINANTS OF CONCERN	Source rep. conc.* [mg/kg]	RBSLs** [mg/kg]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	WQCC std. or RBSL [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS															
Benzene															
Toluene															
Ethylbenzene															
Xylenes (Total)															
Ethylene Dibromide (EDB)															
1,2-Dichloroethane (EDC)															
MTBE															
POLYCYCLIC AROMATIC HYDROCARBONS															
Acenaphthene															
Anthracene															
Benzo(a)anthracene															
Benzo(a)pyrene															
Benzo(b)fluoranthene															
Benzo(k)fluoranthene															
Chrysene															
Dibenz(a-h)anthracene															
Fluoranthene															
Fluorene															
Total Naphthalenes															
Phenanthrene															
Pyrene															
METALS															
Lead															

NOTE:

* Source representative concentration is: _____

** Back-calculated from WQCC groundwater standards for distance to POE=0 (from Table 4-15 of the Guidance Document)

\# The representative concentrations in each monitoriing well should be the maximum for the most recent 8 consecutive quarters, unless otherwise approved.

N/A: Not applicable

This comparative evaluation is performed automatically after the user has input representative concentrations and target levels for soil and representative concentrations for groundwater.

Page 1 of _____

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 5
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 GROUNDWATER PROTECTION - NO PETITION FOR VARIANCE TO WQCC STANDARDS REQUIRED

	COMPARISON FOR GROUNDWATER														
	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23		
CONTAMINANTS OF CONCERN	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	Recent# 8 qrtr max. [µg/L]	WQCC std. or RBSL [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS															
Benzene															
Toluene															
Ethylbenzene															
Xylenes (Total)															
Ethylene Dibromide (EDB)															
1,2-Dichloroethane (EDC)															
MTBE															
POLYCYCLIC AROMATIC HYDROCARBONS															
Acenaphthene															
Anthracene															
Benzo(a)anthracene															
Benzo(a)pyrene															
Benzo(b)fluoranthene															
Benzo(k)fluoranthene															
Chrysene															
Dibenz(a-h)anthracene															
Fluoranthene															
Fluorene															
Total Naphthalenes															
Phenanthrene															
Pyrene															
METALS															
Lead															

NOTE:

N/A: Not applicable

The representative concentrations in each monitoriing well should be the maximum for the most recent 8 consecutive quarters, unless otherwise approved.

This comparative evaluation is performed automatically after the user has input the representative concentrations.

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NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 6
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 GROUNDWATER PROTECTION - PETITION FOR VARIANCE TO WQCC STANDARDS REQUIRED

				Distance from source to Point of Exposure (POE) =								
	COMPARISON FOR SOURCE SOIL			COMPARISON FOR COMPLIANCE WELLS								
COMPLIANCE WELL NUMBER	N/A											
DISTANCE FROM SOURCE	N/A											
RECENT TREND	N/A											
CONTAMINANTS OF CONCERN	Source rep. conc.* [mg/kg]	RBSLs** [mg/kg]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS												
Benzene												
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene												
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes												
Phenanthrene												
Pyrene												
METALS												
Lead												

NOTE:

* Source representative concentration is: _____

** Back-calculated from WQCC standards using tier 1 default parameters.

The representative concentrations in each compliance well should be the maximum for the most recent 8 consecutive quarters, unless otherwise approved.

N/A: Not applicable

This comparative evaluation is performed automatically after the user has input the representative concentrations and the target levels.

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 6
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 GROUNDWATER PROTECTION - PETITION FOR VARIANCE TO WQCC STANDARDS REQUIRED

	Distance to Point of Exposure (POE) =											
	COMPARISON FOR COMPLIANCE WELLS											
COMPLIANCE WELL NUMBER												
DISTANCE FROM SOURCE												
RECENT TREND												
CONTAMINANTS OF CONCERN	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds	Recent# 8 qrtr max. [µg/L]	RBSLs** [µg/L]	E/Exceeds or NE/Not Exceeds
ORGANICS												
Benzene												
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene												
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes												
Phenanthrene												
Pyrene												
METALS												
Lead												

NOTE:

** Back-calculated from WQCC standards using tier 1 default parameters.

The representative concentrations in each compliance well should be the maximum for the most recent 8 consecutive quarters, unless otherwise approved.

N/A: Not applicable

This comparative evaluation is performed automatically after the user has input the representative concentrations and the target levels.

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NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 7
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 APPLICABLE TARGET LEVELS FOR VARIOUS MEDIA

NOTE: The RBSLs listed in this table, for each route of exposure, are the lowest of the RBSLs for all the receptors for that particular route of exposure.
The applicable target levels for each medium would be the lowest of the RBSLs listed in this table.

CONTAMINANTS OF CONCERN	SURFICIAL SOIL		SUBSURFACE SOIL		GROUNDWATER						GROUNDWATER PROTECTION	
	Ingestion, inhalation, and dermal contact		Indoor inhalation		Indoor inhalation		Outdoor inhalation		Ingestion	Resource protection	Soil concentrations protective of groundwater - no petition required	Soil concentrations protective of groundwater - petition required
	[mg/kg]		[mg/kg]		[µg/L]		[µg/L]		[µg/L]	[µg/L]	[mg/kg]	[mg/kg]
	ON-SITE	OFF-SITE	ON-SITE	OFF-SITE	ON-SITE	OFF-SITE	ON-SITE	OFF-SITE				
ORGANICS												
Benzene			2.07E-02									
Toluene												
Ethylbenzene												
Xylenes (Total)												
Ethylene Dibromide (EDB)												
1,2-Dichloroethane (EDC)												
MTBE												
POLYCYCLIC AROMATIC HYDROCARBONS												
Acenaphthene			2.57E+03									
Anthracene												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Chrysene												
Dibenz(a-h)anthracene												
Fluoranthene												
Fluorene												
Total Naphthalenes	3.23E+03		3.45E+01									
Phenanthrene	7.90E+03		4.63E+03									
Pyrene												
METALS												
Lead												

N/A: Not applicable

NEW MEXICO RBDM	TIER 1 REPORT
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones

ADDITIONAL NOTES

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NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 8
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 CONCLUSIONS AND RECOMMENDATIONS

1.	*Has the site been adequately investigated and characterized?*
	Yes, nature and extent of the hydrocarbon contamination has been defined.
2.	*Has NAPL been removed?*
	Not applicable. No NAPL was found at the site.
3.	*Is the groundwater plume stable or shrinking, based on the concentration trend plots?*
	Not applicable. Groundwater was not affected by the release.
4.	*Are on-site soil and groundwater concentrations protective of current and reasonable future on-site receptors?*
	On-site maximum hydrocarbon soil contamination detected at this site are listed on Form 4 and are protective of current (industrial) and reasonable future (industrial and residential) on-site receptors. Groundwater was not affected by the release.
5.	*Are off-site soil and groundwater concentrations protective of current and reasonable future off-site receptors?*
	Not applicable. Off-site soil and groundwater were not affected by the release.
6.	*Are soil concentrations protective of groundwater?*
	Yes, residual hydrocarbon concentrations in subsurface soil at the site are protective of groundwater. Groundwater is at a depth of approximately 1200 ft, while the deepest hydrocarbon contamination observed was 3300 mg/kg TPH at a depth of 20 ft in a single postmelt borehole (21-11036).
7.	*Are groundwater concentrations below the applicable standards?*
	Not applicable. Groundwater was not affected by this release.

Page 1 of _____

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 8
SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory	
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones	

TIER 1 CONCLUSIONS AND RECOMMENDATIONS

8.	*Is a waiver petition for alternative groundwater protection standards recommended?*
	No, because groundwater was not impacted by this release.
9.	*Is compliance monitoring of groundwater recommended?*
	No, groundwater was not affected by this release nor is there any possibility of it being impacted in the future.
10.	*Is an interim remediation and tier 1 re-evaluation recommended?*
	What could be considered as an interim remediation was conducted at the site in the form of a contaminated soil excavation during the construction of the simulated absorption bed for the NTISV cold demonstration. This was followed by thermal treatment of some residual hydrocarbon contamination within and immediately adjacent to the treatment area during the NTISV cold demonstration.
11.	*Is remediation to tier 1 target levels recommended?*
	No, tier 1 target levels were achieved as a result of the excavation and subsequent thermal treatment of the subsurface hydrocarbon contaminated soils.
12.	*Is site recommended for NFA status?*
	Yes, PRS 21-027(d)-99 is recommended for NFA because the site was characterized and remediated in accordance with applicable state and federal regulations. The available data indicates residual diesel contaminants do not pose an unacceptable level of risk under current and projected future land use.
13.	*Is a Tier 2 evaluation recommended? If yes, list the receptors, routes of exposure, and the COCs to be evaluated.*
	No
14.	*Other relevant information*

NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 9

SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones

REFERENCES AND PROTOCOLS

	See references in the VCM completion report.

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NEW MEXICO RBDM	TIER 1 REPORT	FORM NO. 9

SITE ID: PRS 21-027(d)-99	FACILITY ID: Los Alamos National Laboratory
SUBMITTAL DATE: 20-May-02	PREPARED BY: J. Jones

REFERENCES AND PROTOCOLS

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Select All

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Main Menu

TIER 1 REPORT FORMS

- [x] COVER PAGE
- [x] TABLE OF CONTENTS
- [x] 1 EXECUTIVE SUMMARY
- [x] 2 SITE CONCEPTUAL EXPOSURE SCENARIO

3 JUSTIFICATION FOR COMPLETE PATHWAYS (CURRENT AND FUTURE CONDITIONS)

ON-SITE RECEPTORS	OFF-SITE RECEPTORS
[x] RESIDENTIAL EXPOSURES	[x] RESIDENTTIAL EXPOSURES
[x] COMMERCIAL WORKER	[x] COMMERCIAL WORKER
[x] CONSTRUCTION WORKER	[x] CONSTRUCTION WORKER

4 TIER 1 COMPARISON (CURRENT AND FUTURE CONDITIONS)

ON-SITE RECEPTORS	OFF-SITE RECEPTORS
[x] RESIDENT (CHILD AND ADULT)	[ ] RESIDENT (CHILD AND ADULT)
[x] COMMERCIAL WORKER	[ ] COMMERCIAL WORKER
[x] CONSTRUCTION WORKER	[ ] CONSTRUCTION WORKER

- [ ] 5 TIER 1 GROUNDWATER PROTECTION WITH NO WAIVER PETITION
- [ ] 6 TIER 1 GROUNDWATER PROTECTION WITH WAIVER PETITION
- [ ] 7 APPLICABLE TARGET LEVELS
- [x] 8 TIER 1 RECOMMENDATIONS AND CONCLUSIONS
- [ ] 9 REFERENCES AND PROTOCOLS

NEW MEXICO ENVIRONMENT DEPARTMENT
UNDERGROUND STORAGE TANK BUREAU
RBDM COMPUTATIONAL SOFTWARE

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CONTINUE

EXIT

Version 1.0
March, 2000

Developed for the NMED by:

RISK ASSESSMENT AND MANAGEMENT GROUP, INC.

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NMED RISK-BASED DECISION MAKING

☑ TIER 1 RISK-BASED SCREENING LEVELS

☐ TIER 2 SITE-SPECIFIC TARGET LEVELS

INPUT	PRINT	OUTPUT	EXIT
Click Here	SITE CONCEPTUAL EXPOSURE SCENARIO (Select receptors and ROE)	Click Here	RESIDENTIAL-CHILD
Click Here	CONTAMINANTS OF CONCERN	Click Here	RESIDENTIAL-ADULT
Click Here	PHYSICAL AND CHEMICAL PROPERTIES	Click Here	RESIDENTIAL-SUMMARY
Click Here	TOXICOLOGICAL PROPERTIES	Click Here	COMMERCIAL WORKER
Click Here	EXPOSURE FACTORS	Click Here	CONSTRUCTION WORKER
Click Here	FATE AND TRANSPORT PARAMETERS	Click Here	GROUNDWATER PROTECTION WITHOUT CHEMICAL DEGRADATION
Click Here	GROUNDWATER RESOURCE PROTECTION	Click Here	GROUNDWATER PROTECTION WITH CHEMICAL DEGRADATION

COMPLETE PATHWAY(S) AND ROUTE(S) OF EXPOSURE

Source and Route of Exposure	Resident		Commercial Worker	Construction Worker
	Child	Adult		
Surficial Soil				
Outdoor Inhalation (vapors and particulates), Ingestion, and Dermal Contact	☐	☐	☐	☐
Subsurface Soil				
Indoor Inhalation of Vapor Emission	☑	☑	☑	☐
Outdoor Inhalation of Vapor Emission	☐	☐	☐	☐
Groundwater				
Indoor Inhalation of Vapor Emission	☐	☐	☐	☐
Outdoor Inhalation of Vapor Emission	☐	☐	☐	☐

Groundwater Protection: Estimation of groundwater target levels at POC and source, and soil target levels protective of groundwater is based on one of the following two options:

Option 1: Target concentrations at POE are set equal to MCLs or equivalent	☐	If neither of the options is selected, groundwater protection standards will be calculated based on MCLs as default standards.
Option 2: Target concentrations at POE are set equal to WQCC Standards or equivalent	☐	

Equivalent target concentrations for COCs without MCLs and/or WQCC standards are estimated assuming adult water ingestion rate of 2L/day and a target risk of 1×10^{-5} or a target hazard quotient of 1.

CONTAMINANTS OF CONCERN, HALF-LIFE AND UNSATURATED ZONE DAF

CONTAMINANTS OF CONCERN	Half-Life [days]	Unsaturated Zone DAF [--]
ORGANICS		
☑ Benzene	1825	1
☑ Toluene	1825	1
☑ Ethylbenzene	1825	1
☑ Xylenes (mixed)	1825	1
☐ 1,2-Dibromoethane (EDB)	1825	1
☐ 1,2-Dichloroethane (EDC)	1825	1
☐ Methyl-tert-butyl-ether (MTBE)	10000000	1
☑ Acenaphthene	1825	1
☑ Anthracene	1825	1
☑ Benzo(a)anthracene	1825	1
☑ Benzo(a)pyrene	1825	1
☑ Benzo(b)fluoranthene	1825	1
☑ Benzo(k)fluoranthene	1825	1
☑ Chrysene	1825	1
☑ Dibenz(a,h)anthracene	1825	1
☑ Fluoranthene	1825	1
☑ Fluorene	1825	1
☑ Naphthalene	1825	1
☑ Phenanthrene	1825	1
☑ Pyrene	1825	1
METALS		
☐ Lead	1	1

PHYSICAL AND CHEMICAL PROPERTIES OF CONTAMINANTS OF CONCERN

CONTAMINANTS OF CONCERN	Water Solubility (μg/L)	Henry's Law Constant (L-water/L-air)	Org. Carbon Ads. Coef. Koc (mL/g)	Soil-Water Partition Coeff. Kd (mL-water /g-soil)		Diffusion Coefficient	
				Vadose zone	Saturated zone	in air (cm^2/s)	in water (cm^2/s)
ORGANICS							
Benzene	1.75E+06	2.20E-01	8.30E+01	1.66E-01	1.66E-01	9.30E-02	1.10E-05
Toluene	5.35E+05	2.60E-01	1.35E+02	2.70E-01	2.70E-01	8.50E-02	9.40E-06
Ethylbenzene	1.52E+05	3.20E-01	1.29E+03	2.58E+00	2.58E+00	7.60E-02	8.50E-06
Xylenes (mixed)	1.98E+05	2.90E-01	2.40E+02	4.80E-01	4.80E-01	7.20E-02	8.50E-06
1,2-Dibromoethane (EDB)	3.40E+06	1.33E-02	2.80E+01	5.60E-02	5.60E-02	7.30E-02	6.35E-06
1,2-Dichloroethane (EDC)	8.52E+06	4.01E-02	3.80E+01	7.60E-02	7.60E-02	1.04E-01	9.90E-06
Methyl-tert-butyl-ether (MTBE)	4.80E+07	4.16E-02	1.20E+01	2.40E-02	2.40E-02	1.02E-01	1.05E-05
Acenaphthene	4.24E+03	6.36E-03	4.90E+03	9.80E+00	9.80E+00	4.21E-02	7.69E-06
Anthracene	4.34E+01	2.67E-03	2.35E+04	4.70E+01	4.70E+01	3.24E-02	7.74E-06
Benzo(a)anthracene	9.40E+00	1.37E-04	3.58E+05	7.16E+02	7.16E+02	5.10E-02	9.00E-06
Benzo(a)pyrene	1.20E+00	5.80E-08	3.89E+05	7.78E+02	7.78E+02	5.00E-02	5.80E-06
Benzo(b)fluoranthene	1.50E+00	4.55E-03	1.23E+06	2.46E+03	2.46E+03	2.26E-02	5.56E-06
Benzo(k)fluoranthene	8.00E-01	3.40E-05	1.23E+06	2.46E+03	2.46E+03	2.26E-02	5.56E-06
Chrysene	1.60E+00	3.88E-03	3.98E+05	7.96E+02	7.96E+02	2.48E-02	6.21E-06
Dibenz(a,h)anthracene	2.49E+00	6.03E-07	1.79E+06	3.58E+03	3.58E+03	2.02E-02	5.18E-06
Fluoranthene	2.06E+02	6.60E-04	4.91E+04	9.82E+01	9.82E+01	3.02E-02	6.35E-06
Fluorene	1.98E+03	2.61E-03	7.71E+03	1.54E+01	1.54E+01	3.63E-02	7.88E-06
Naphthalene	3.10E+04	4.90E-02	1.29E+03	2.58E+00	2.58E+00	7.20E-02	9.40E-06
Phenanthrene	1.00E+03	6.61E-03	1.41E+04	2.82E+01	2.82E+01	3.24E-02	7.74E-06
Pyrene	1.35E+02	4.51E-04	6.80E+04	1.36E+02	1.36E+02	2.72E-02	7.24E-06
METALS							
Lead	N/A	N/A	N/A	1.22E+02	1.22E+02	N/A	N/A

Note: N/A : Not applicable
Soil-water partition coefficient (Kd) is calculated from fractionl organic carbon (foc) and organic carbon adsorption coefficient (Koc).

TOXICOLOGICAL PROPERTIES OF CONTAMINANTS OF CONCERN

CONTAMINANTS OF CONCERN	Slope Factor		Reference Dose		Oral RA Factor (RAFo)	Dermal RA Factor (RAFd)
	Oral (SFo) [kg-day/mg]	Inh. (SFi) [kg-day/mg]	Oral (RfDo) (mg/kg-day)	Inh. (RfDi) (mg/kg-day)		
ORGANICS						
Benzene	0.029	0.029	NA	0.0017	1	0.5
Toluene	NA	NA	0.2	0.11	1	0.5
Ethylbenzene	NA	NA	0.1	0.29	1	0.5
Xylenes (mixed)	NA	NA	2	0.086	1	0.5
1,2-Dibromoethane (EDB)	85	0.77	NA	NA	1	0.5
1,2-Dichloroethane (EDC)	0.091	0.091	0.03	0.0014	1	0.5
Methyl-tert-butyl-ether (MTBE)	NA	NA	0.005	0.86	1	0.5
Acenaphthene	NA	NA	0.06	0.06	1	0.05
Anthracene	NA	NA	0.3	0.3	1	0.05
Benzo(a)anthracene	0.73	0.61	NA	NA	1	0.05
Benzo(a)pyrene	7.3	6.1	NA	NA	1	0.05
Benzo(b)fluoranthene	0.73	0.61	NA	NA	1	0.05
Benzo(k)fluoranthene	0.73	0.61	NA	NA	1	0.05
Chrysene	0.0073	0.0061	NA	NA	1	0.05
Dibenz(a,h)anthracene	7.3	3.1	NA	NA	1	0.05
Fluoranthene	NA	NA	0.04	0.04	1	0.05
Fluorene	NA	NA	0.04	0.04	1	0.05
Naphthalene	NA	NA	0.04	0.04	1	0.05
Phenanthrene	NA	NA	0.03	0.03	1	0.05
Pyrene	NA	NA	0.03	0.03	1	0.05
METALS						
Lead	NA	NA	NA	NA	1	0.001

EXPOSURE FACTORS

(Page 1 of 2)

Parameter	Symbol	Unit	Tier 1 Values	Values Used	Source
Averaging time for carcinogen	ATc	year	70	70	Tier 1
Averaging time for non-carcinogen	ATnc	year	=ED	=ED	Tier 1
Body weight:					
Resident child	BW	kg	15	15	Tier 1
Resident adult	BW	kg	70	70	Tier 1
Commercial worker	BW	kg	70	70	Tier 1
Construction worker	BW	kg	70	70	Tier 1
Exposure duration:					
Resident child	ED	year	6	6	Tier 1
Resident adult	ED	year	30	30	Tier 1
Commercial worker	ED	year	25	25	Tier 1
Construction worker	ED	year	1	1	Tier 1
Exposure frequency:					
Resident child	EF	day/year	350	350	Tier 1
Resident adult	EF	day/year	350	350	Tier 1
Commercial worker	EF	day/year	250	250	Tier 1
Construction worker	EF	day/year	250	250	Tier 1
Soil ingestion rate:					
Resident child	IRs	mg/day	200	200	Tier 1
Resident adult	IRs	mg/day	100	100	Tier 1
Commercial worker	IRs	mg/day	50	50	Tier 1
Construction worker	IRs	mg/day	100	100	Tier 1
Groundwater ingestion rate:					
Resident adult	IRw	L/day	2	2	Tier 1
Indoor inhalation rate:					
Resident child	IRai	m^3/hr	0.417	0.417	Tier 1
Resident adult	IRai	m^3/hr	0.633	0.633	Tier 1
Commercial worker	IRai	m^3/hr	1.5	1.5	Tier 1
Exposure time for indoor inhalation:					
Resident child	ETin	hr/day	24	24	Tier 1
Resident adult	ETin	hr/day	24	24	Tier 1
Commercial worker	ETin	hr/day	10	10	Tier 1

EXPOSURE FACTORS

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Parameter	Symbol	Unit	Tier 1 Values	Values Used	Source
Outdoor inhalation rate:					
Resident child	IRao	m^3/hr	1	1	Tier 1
Resident adult	IRao	m^3/hr	1	1	Tier 1
Commercial worker	IRao	m^3/hr	2	2	Tier 1
Construction worker	IRao	m^3/hr	2	2	Tier 1
Exposure time for outdoor inhalation:					
Resident child	ETout	hr/day	10	10	Tier 1
Resident adult	ETout	hr/day	10	10	Tier 1
Commercial worker	ETout	hr/day	10	10	Tier 1
Construction worker	ETout	hr/day	10	10	Tier 1
Outdoor Inhalation Rate:					
Resident Child	IRa	m^3/day	20	10	Site-Specific Value
Resident Adult	IRa	m^3/day	20	10	Site-Specific Value
Commercial Worker	IRa	m^3/day	20	20	Tier 1
Construction Worker	IRa	m^3/day	20	20	Tier 1
Skin surface area:					
Resident child	SA	cm^2/day	2500	2500	Tier 1
Resident adult	SA	cm^2/day	5000	5000	Tier 1
Commercial worker	SA	cm^2/day	5000	5000	Tier 1
Construction worker	SA	cm^2/day	5000	5000	Tier 1
Soil to skin adherence factor:					
Resident child	M	mg/cm^2	0.5	0.5	Tier 1
Resident adult	M	mg/cm^2	0.5	0.5	Tier 1
Commercial worker	M	mg/cm^3	0.5	0.5	Tier 1
Construction worker	M	mg/cm^2	0.5	0.5	Tier 1
Target hazard quotient	THQ	--	1	1	Tier 1

FATE AND TRANSPORT PARAMETERS

Parameter	Symbol	Unit	Tier 1 Values	Values Used	Source
Soil parameters:					
Length of soil source area parallel to wind direction	W_a	cm	1524	1524	Tier 1
Depth to contaminants in subsurface soil	L_s	cm	30.48	30.48	Tier 1
Lower depth of surficial soil zone	d	cm	30.48	30.48	Tier 1
Dry soil bulk density	ρ_s	g/cm^3	1.58	1.58	Tier 1
Fractional organic carbon content in the vadose zone	foc	g-C/g-soil	0.002	0.002	Tier 1
Total soil porosity in the vadose zone	θ_T	cm^3/cm^3-soil	0.25	0.25	Tier 1
Volumetric water content in vadose zone	θ_{ws}	cm^3/cm^3	0.024	0.024	Tier 1
Volumetric air content in vadose zone	θ_{as}	cm^3/cm^3	0.226	0.226	Tier 1
Groundwater parameters:					
Depth to groundwater	Lgw	cm	300	300	Tier 1
Width of groundwater source perpendicular to GW flow direction	Y	cm	1524	1524	Tier 1
Length of groundwater source parallel to GW flow direction	W	cm	1524	1524	Tier 1
Fractional organic carbon content in the saturated zone	foc_s	g-C/g-soil	0.002	0.002	Tier 1
Total soil porosity in the saturated zone	θ_{TS}	cm^3/cm^3-soil	0.25	0.25	Tier 1
Hydraulic conductivity in the saturated zone	K	cm/year	315360	315360	Tier 1
Hydraulic gradient	i	--	0.005	0.005	Tier 1
Groundwater Darcy velocity	Ugw	cm/year	1577	1577	Tier 1
Groundwater mixing zone thickness	δ_{gw}	cm	305	305	Tier 1
Infiltration rate	I	cm/year	41	41	Tier 1
Ambient air parameters:					
Breathing zone height	δ_a	cm	200	200	Tier 1
Wind speed within the breathing zone	Ua	cm/s	225	225	Tier 1
Enclosed space parameters:					
Enclosed space air exchange rate:					Tier 1
Residential	N	1/day	12	12	Tier 1
Commercial	N	1/day	20	20	Tier 1
Height of enclosed space:					
Residential	h	cm	200	200	Tier 1
Commercial	h	cm	300	300	Tier 1
Fraction of cracks in foundation/walls through which diffusion occurs					
Residential	f	cm^2/cm^2	0.01	0.01	Tier 1
Commercial	f	cm^2/cm^2	0.01	0.01	Tier 1
Particulate emission rate:					
Residential and commercial	Pe	g/cm^2sec	6.90E-14	6.90E-14	Tier 1
Construction worker	Pe	g/cm^2sec	6.90E-09	6.90E-09	Tier 1
Averaging time for vapor flux:					
Resident child	τ	sec	1.89E+08	1.89E+08	Tier 1
Resident adult	τ	sec	9.46E+08	9.46E+08	Tier 1
Commercial worker	τ	sec	7.88E+08	7.88E+08	Tier 1
Construction worker	τ	sec	3.15E+07	3.15E+07	Tier 1

GROUNDWATER RESOURCE PROTECTION

Parameter	Symbol	Unit	Tier 1 Values	Values Used	Source
SITE PARAMETERS:					
Distance to the point of exposure from the downgradient edge of the source	X_{poe}	ft	variable	2.9	
Longitudinal dispersivity	$\alpha_{x,poe}$	ft	variable	0.29	
Transverse dispersivity	$\alpha_{y,poe}$	ft	variable	0.1	
Vertical dispersivity	$\alpha_{z,poe}$	ft	variable	0.0145	
Distance to the point of compliance from the downgradient edge of the Source	X_{poc}	ft	variable	2.9	
Longitudinal dispersivity	$\alpha_{x,poc}$	ft	variable	0.29	
Transverse dispersivity	$\alpha_{y,poc}$	ft	variable	0.1	
Vertical dispersivity	$\alpha_{z,poc}$	ft	variable	0.0145	

Additional input parameters required to calculate the allowable soil concentrations protective of groundwater, whose values are input on other screens include:

Source dimensions

Width of source area perpendicular to GW flow direction (Y)
Length of source area parallel to GW flow direction (W)
Groundwater mixing zone thickness (δ_{gw})

Soil and groundwater properties

Dry soil bulk density (ρ_s)
Total soil porosity in the vadose zone (θ_T) and saturated zone (θ_{TS})
Hydraulic conductivity in the saturated zone (K)
Hydraulic gradient (i)
Fractional organic carbon contents in the vadose zone (foc) and saturated zone (foc_s)

Chemical specific properties

Organic carbon adsorption co-efficient (Koc)

RISK-BASED SCREENING LEVELS FOR A RESIDENT CHILD

CONTAMINANTS OF CONCERN	AIR INHALATION		SURFICIAL SOIL	SUB-SURFACE SOIL		GROUNDWATER
	Indoor [μg/m^3-air]	Outdoor [μg/m^3-air]	Surficial soil: ingestion, inhalation (vapor emissions and particulates), and dermal contact [mg/kg]	Indoor inhalation of vapor emissions [mg/kg]		Indoor inhalation of vapor emissions [μg/L]
ORGANICS						
Benzene	2.66E+00	2.66E+00	NC	2.07E-02		NC
Toluene	1.72E+02	1.72E+02	NC	1.88E+00		NC
Ethylbenzene	4.53E+02	4.54E+02	NC	3.69E+01	>RES	NC
Xylenes (mixed)	1.34E+02	1.35E+02	NC	2.59E+00		NC
1,2-Dibromoethane (EDB)	--	--	NC	--		NC
1,2-Dichloroethane (EDC)	--	--	NC	--		NC
Methyl-tert-butyl-ether (MTBE)	--	--	NC	--		NC
Acenaphthene	9.38E+01	9.39E+01	NC	2.57E+03	>RES	NC
Anthracene	4.69E+02	4.69E+02	NC	1.91E+05	>RES	NC
Benzo(a)anthracene	2.99E-01	2.99E-01	NC	2.29E+04	>RES	NC
Benzo(a)pyrene	2.99E-02	2.99E-02	NC	2.80E+06	>RES	NC
Benzo(b)fluoranthene	2.99E-01	2.99E-01	NC	5.36E+03	>RES	NC
Benzo(k)fluoranthene	2.99E-01	2.99E-01	NC	7.14E+05	>RES	NC
Chrysene	2.99E+01	2.99E+01	NC	1.85E+05	>RES	NC
Dibenz(a,h)anthracene	5.88E-02	5.89E-02	NC	1.04E+07	>RES	NC
Fluoranthene	6.25E+01	6.26E+01	NC	2.31E+05	>RES	NC
Fluorene	6.25E+01	6.26E+01	NC	7.63E+03	>RES	NC
Naphthalene	6.25E+01	6.26E+01	NC	3.45E+01	>RES	NC
Phenanthrene	4.69E+01	4.69E+01	NC	4.63E+03	>RES	NC
Pyrene	4.69E+01	4.69E+01	NC	3.89E+05	>RES	NC
METALS						
Lead	N/A	N/A	NC	N/A		N/A

N/A: Not Applicable
NC: Pathway is not comp
--: Not a COC
>RES: Calculated target level is greater than saturated soil concentration
>SOL: Calculated target level is greater than pure component solubility

RISK-BASED SCREENING LEVELS FOR A RESIDENT ADULT

CONTAMINANTS OF CONCERN	AIR INHALATION		SURFICIAL SOIL	SUB-SURFACE SOIL		GROUNDWATER
	Indoor [μg/m^3-air]	Outdoor [μg/m^3-air]	Surficial soil: ingestion, inhalation (vapor emissions and particulates), and dermal contact [mg/kg]	Indoor inhalation of vapor emissions [mg/kg]		Indoor inhalation of vapor emissions [μg/L]
ORGANICS						
Benzene	3.87E+00	5.87E+00	NC	3.01E-02		NC
Toluene	5.29E+02	8.03E+02	NC	5.77E+00		NC
Ethylbenzene	1.39E+03	2.12E+03	NC	1.13E+02	>RES	NC
Xylenes (mixed)	4.13E+02	6.28E+02	NC	7.95E+00		NC
1,2-Dibromoethane (EDB)	--	--	NC	--		NC
1,2-Dichloroethane (EDC)	--	--	NC	--		NC
Methyl-tert-butyl-ether (MTBE)	--	--	NC	--		NC
Acenaphthene	2.88E+02	4.38E+02	NC	7.92E+03	>RES	NC
Anthracene	1.44E+03	2.19E+03	NC	5.87E+05	>RES	NC
Benzo(a)anthracene	1.84E-01	2.79E-01	NC	1.41E+04	>RES	NC
Benzo(a)pyrene	1.84E-02	2.79E-02	NC	1.72E+06	>RES	NC
Benzo(b)fluoranthene	1.84E-01	2.79E-01	NC	3.29E+03	>RES	NC
Benzo(k)fluoranthene	1.84E-01	2.79E-01	NC	4.39E+05	>RES	NC
Chrysene	1.84E+01	2.79E+01	NC	1.14E+05	>RES	NC
Dibenz(a,h)anthracene	3.62E-02	5.49E-02	NC	6.40E+06	>RES	NC
Fluoranthene	1.92E+02	2.92E+02	NC	7.09E+05	>RES	NC
Fluorene	1.92E+02	2.92E+02	NC	2.35E+04	>RES	NC
Naphthalene	1.92E+02	2.92E+02	NC	1.06E+02	>RES	NC
Phenanthrene	1.44E+02	2.19E+02	NC	1.42E+04	>RES	NC
Pyrene	1.44E+02	2.19E+02	NC	1.20E+06	>RES	NC
METALS						
Lead	N/A	N/A	NC	N/A		N/A

N/A: Not Applicable
NC: Pathway is not complete
--: Not a COC
>RES: Calculated target level is greater than saturated soil concentration
>SOL: Calculated target level is greater than pure component solubility

RISK-BASED SCREENING LEVELS FOR RESIDENTIAL SCENARIO (LOWER OF THE TARGET LEVELS FOR CHILD AND ADULT)

CONTAMINANTS OF CONCERN	AIR INHALATION		SURFICIAL SOIL	SUB-SURFACE SOIL		GROUNDWATER
	Indoor [μg/m^3-air]	Outdoor [μg/m^3-air]	Surficial soil: ingestion, inhalation (vapor emissions and particulates), and dermal contact [mg/kg]	Indoor inhalation of vapor emissions [mg/kg]		Indoor inhalation of vapor emissions [μg/L]
ORGANICS						
Benzene	2.66E+00	2.66E+00	NC	2.07E-02		NC
Toluene	1.72E+02	1.72E+02	NC	1.88E+00		NC
Ethylbenzene	4.53E+02	4.54E+02	NC	3.69E+01	>RES	NC
Xylenes (mixed)	1.34E+02	1.35E+02	NC	2.59E+00		NC
1,2-Dibromoethane (EDB)	--	--	NC	--		NC
1,2-Dichloroethane (EDC)	--	--	NC	--		NC
Methyl-tert-butyl-ether (MTBE)	--	--	NC	--		NC
Acenaphthene	9.38E+01	9.39E+01	NC	2.57E+03	>RES	NC
Anthracene	4.69E+02	4.69E+02	NC	1.91E+05	>RES	NC
Benzo(a)anthracene	1.84E-01	2.79E-01	NC	1.41E+04	>RES	NC
Benzo(a)pyrene	1.84E-02	2.79E-02	NC	1.72E+06	>RES	NC
Benzo(b)fluoranthene	1.84E-01	2.79E-01	NC	3.29E+03	>RES	NC
Benzo(k)fluoranthene	1.84E-01	2.79E-01	NC	4.39E+05	>RES	NC
Chrysene	1.84E+01	2.79E+01	NC	1.14E+05	>RES	NC
Dibenz(a,h)anthracene	3.62E-02	5.49E-02	NC	6.40E+06	>RES	NC
Fluoranthene	6.25E+01	6.26E+01	NC	2.31E+05	>RES	NC
Fluorene	6.25E+01	6.26E+01	NC	7.63E+03	>RES	NC
Naphthalene	6.25E+01	6.26E+01	NC	3.45E+01	>RES	NC
Phenanthrene	4.69E+01	4.69E+01	NC	4.63E+03	>RES	NC
Pyrene	4.69E+01	4.69E+01	NC	3.89E+05	>RES	NC
METALS						
Lead	N/A	N/A	NC	N/A		N/A

N/A: Not Applicable
NC: Pathway is not complete
--: Not a COC
>RES: Calculated target level is greater than saturated soil concentration
>SOL: Calculated target level is greater than pure component solubility

RISK-BASED SCREENING LEVELS FOR A COMMERCIAL WORKER

CONTAMINANTS OF CONCERN	AIR INHALATION		SURFICIAL SOIL	SUB-SURFACE SOIL		GROUNDWATER
	Indoor [μg/m³-air]	Outdoor [μg/m³-air]	Surficial soil: ingestion, inhalation (vapor emissions and particulates), and dermal contact [mg/kg]	Indoor inhalation of vapor emissions [mg/kg]		Indoor inhalation of vapor emissions [μg/L]
ORGANICS						
Benzene	6.58E+00	4.93E+00	NC	1.28E-01		NC
Toluene	7.49E+02	5.62E+02	NC	2.05E+01		NC
Ethylbenzene	1.98E+03	1.48E+03	NC	4.02E+02	>RES	NC
Xylenes (mixed)	5.86E+02	4.39E+02	NC	2.82E+01		NC
1,2-Dibromoethane (EDB)	--	--	NC	--		NC
1,2-Dichloroethane (EDC)	--	--	NC	--		NC
Methyl-tert-butyl-ether (MTBE)	--	--	NC	--		NC
Acenaphthene	4.09E+02	3.07E+02	NC	2.81E+04	>RES	NC
Anthracene	2.04E+03	1.53E+03	NC	2.08E+06	>RES	NC
Benzo(a)anthracene	3.13E-01	2.35E-01	NC	6.00E+04	>RES	NC
Benzo(a)pyrene	3.13E-02	2.35E-02	NC	7.33E+06	>RES	NC
Benzo(b)fluoranthene	3.13E-01	2.35E-01	NC	1.40E+04	>RES	NC
Benzo(k)fluoranthene	3.13E-01	2.35E-01	NC	1.87E+06	>RES	NC
Chrysene	3.13E+01	2.35E+01	NC	4.84E+05	>RES	NC
Dibenz(a,h)anthracene	6.15E-02	4.62E-02	NC	2.72E+07	>RES	NC
Fluoranthene	2.73E+02	2.04E+02	NC	2.51E+06	>RES	NC
Fluorene	2.73E+02	2.04E+02	NC	8.31E+04	>RES	NC
Naphthalene	2.73E+02	2.04E+02	NC	3.76E+02	>RES	NC
Phenanthrene	2.04E+02	1.53E+02	NC	5.04E+04	>RES	NC
Pyrene	2.04E+02	1.53E+02	NC	4.24E+06	>RES	NC
METALS						
Lead	N/A	N/A	NC	N/A		N/A

N/A: Not Applicable
NC: Pathway is not complete
--: Not a COC
>RES: Calculated target level is greater than saturated soil concentration
>SOL: Calculated target level is greater than pure component solubility

RISK-BASED SCREENING LEVELS FOR A CONSTRUCTION WORKER

CONTAMINANTS OF CONCERN	AIR INHALATION	SOIL WITHIN CONSTRUCTION ZONE	GROUNDWATER
	Outdoor [µg/m^3-air]	Surficial soil: ingestion, inhalation (vapor emissions and particulates), and dermal contact [mg/kg]	Outdoor inhalation of vapor emissions [µg/L]
ORGANICS			
Benzene	8.69E+00	NC	NC
Toluene	5.62E+02	NC	NC
Ethylbenzene	1.48E+03	NC	NC
Xylenes (mixed)	4.39E+02	NC	NC
1,2-Dibromoethane (EDB)	--	NC	NC
1,2-Dichloroethane (EDC)	--	NC	NC
Methyl-tert-butyl-ether (MTBE)	--	NC	NC
Acenaphthene	3.07E+02	NC	NC
Anthracene	1.53E+03	NC	NC
Benzo(a)anthracene	5.86E+00	NC	NC
Benzo(a)pyrene	5.86E-01	NC	NC
Benzo(b)fluoranthene	5.86E+00	NC	NC
Benzo(k)fluoranthene	5.86E+00	NC	NC
Chrysene	5.86E+02	NC	NC
Dibenz(a,h)anthracene	1.15E+00	NC	NC
Fluoranthene	2.04E+02	NC	NC
Fluorene	2.04E+02	NC	NC
Naphthalene	2.04E+02	NC	NC
Phenanthrene	1.53E+02	NC	NC
Pyrene	1.53E+02	NC	NC
METALS			
Lead	N/A	NC	N/A

N/A: Not Applicable
NC: Pathway is not complete
--: Not a COC

>RES: Calculated target level is greater than saturated soil concentration
>SOL: Calculated target level is greater than pure component solubility

GROUNDWATER RESOURCE PROTECTION - WITHOUT DECAY

CONTAMINANTS OF CONCERN	Target Groundwater Conc.at POE [µg/L]	User Specified Unsaturated Zone DAF [--]	Saturated Zone DAF at POC [--]	Saturated Zone DAF at POE [--]	Soil Conc. Protective of Groundwater [mg/kg]		Allowable Groundwater Conc. at POC [µg/L]		Allowable Groundwater Conc. at Source [µg/L]	
ORGANICS										
Benzene	5.00E+00	1	1.00E+00	1.00E+00	9.25E-03		5.00E+00		5.00E+00	
Toluene	1.00E+03	1	1.00E+00	1.00E+00	2.80E+00		1.00E+03		1.00E+03	
Ethylbenzene	7.00E+02	1	1.00E+00	1.00E+00	1.61E+01		7.00E+02		7.00E+02	
Xylenes (mixed)	1.00E+04	1	1.00E+00	1.00E+00	4.67E+01	>RES	1.00E+04		1.00E+04	
1,2-Dibromoethane (EDB)	--	1	1.00E+00	1.00E+00	--		--		--	
1,2-Dichloroethane (EDC)	--	1	1.00E+00	1.00E+00	--		--		--	
Methyl-tert-butyl-ether (MTBE)	--	1	1.00E+00	1.00E+00	--		--		--	
Acenaphthene	2.19E+03	1	1.00E+00	1.00E+00	1.87E+02	>RES	2.19E+03		2.19E+03	
Anthracene	4.34E+01	1	1.00E+00	1.00E+00	1.77E+01	>RES	4.34E+01		4.34E+01	
Benzo(a)anthracene	1.17E+00	1	1.00E+00	1.00E+00	7.26E+00	>RES	1.17E+00		1.17E+00	
Benzo(a)pyrene	2.00E-01	1	1.00E+00	1.00E+00	1.35E+00	>RES	2.00E-01		2.00E-01	
Benzo(b)fluoranthene	1.17E+00	1	1.00E+00	1.00E+00	2.50E+01	>RES	1.17E+00		1.17E+00	
Benzo(k)fluoranthene	8.00E-01	1	1	1.00E+00	1.71E+01	>RES	8.00E-01		8.00E-01	
Chrysene	1.60E+00	1	1.00E+00	1.00E+00	1.11E+01	>RES	1.60E+00		1.60E+00	
Dibenz(a,h)anthracene	1.17E-01	1	1.00E+00	1.00E+00	3.63E+00	>RES	1.17E-01		1.17E-01	
Fluoranthene	2.06E+02	1	1.00E+00	1.00E+00	1.76E+02	>RES	2.06E+02		2.06E+02	
Fluorene	1.46E+03	1	1.00E+00	1.00E+00	1.96E+02	>RES	1.46E+03		1.46E+03	
Naphthalene	3.00E+01	1	1.00E+00	1.00E+00	6.79E-01		3.00E+01		3.00E+01	
Phenanthrene	1.10E+03	1	1.00E+00	1.00E+00	2.70E+02	>RES	1.10E+03	>SOL	1.10E+03	>SOL
Pyrene	1.10E+03	1	1.00E+00	1.00E+00	1.30E+03	>RES	1.10E+03	>SOL	1.10E+03	>SOL
METALS										
Lead	--	1	1.00E+00	1.00E+00	--		--		--	

NC: Pathway is not complete

'--: Not a COC

>RES: Calculated target level is greater than saturated soil concentration

>SOL: Calculated target level is greater than pure component solubility

Soil concentrations are presented on a dry weight basis.

Half life and unsaturated zone DAF are user specified inputs. Enter the values in COC table (sheet tab "COC").

GROUNDWATER RESOURCE PROTECTION - WITH DECAY

CONTAMINANTS OF CONCERN	Target Groundwater Conc.at POE [µg/L]	Half-Life [days]	Saturated Zone Retardation Factor [--]	Unsaturated Zone DAF [--]	Saturated Zone DAF at POC [--]	Saturated Zone DAF at POE [--]	Soil Conc. Protective of Groundwater [mg/kg]	Allowable Groundwater Conc. at POC [µg/L]	Allowable Groundwater Conc. at Source [µg/L]
ORGANICS									
Benzene	5.00E+00	1.83E+03	2.05E+00	1	1.00E+00	1.00E+00	9.25E-03	5.00E+00	5.00E+00
Toluene	1.00E+03	1.83E+03	2.71E+00	1	1.00E+00	1.00E+00	2.80E+00	1.00E+03	1.00E+03
Ethylbenzene	7.00E+02	1.83E+03	1.73E+01	1	1.00E+00	1.00E+00	1.61E+01	7.00E+02	7.00E+02
Xylenes (mixed)	1.00E+04	1.83E+03	4.03E+00	1	1.00E+00	1.00E+00	4.67E+01 >RES	1.00E+04	1.00E+04
1,2-Dibromoethane (EDB)	--	1.83E+03	1.35E+00	1	1.00E+00	1.00E+00	--	--	--
1,2-Dichloroethane (EDC)	--	1.83E+03	1.48E+00	1	1.00E+00	1.00E+00	--	--	--
Methyl-tert-butyl-ether (MTBE)	--	1.00E+07	1.15E+00	1	1.00E+00	1.00E+00	--	--	--
Acenaphthene	2.19E+03	1.83E+03	6.29E+01	1	1.00E+00	1.00E+00	1.87E+02 >RES	2.19E+03	2.19E+03
Anthracene	4.34E+01	1.83E+03	2.98E+02	1	1.00E+00	1.00E+00	1.77E+01 >RES	4.34E+01	4.34E+01
Benzo(a)anthracene	1.17E+00	1.83E+03	4.53E+03	1	1.00E+00	1.00E+00	7.26E+00 >RES	1.17E+00	1.17E+00
Benzo(a)pyrene	2.00E-01	1.83E+03	4.92E+03	1	1.00E+00	1.00E+00	1.35E+00 >RES	2.00E-01	2.00E-01
Benzo(b)fluoranthene	1.17E+00	1.83E+03	1.55E+04	1	1.00E+00	1.00E+00	2.50E+01 >RES	1.17E+00	1.17E+00
Benzo(k)fluoranthene	8.00E-01	1.83E+03	1.55E+04	1	1.00E+00	1.00E+00	1.71E+01 >RES	8.00E-01	8.00E-01
Chrysene	1.60E+00	1.83E+03	5.03E+03	1	1.00E+00	1.00E+00	1.11E+01 >RES	1.60E+00	1.60E+00
Dibenz(a,h)anthracene	1.17E-01	1.83E+03	2.26E+04	1	1.00E+00	1.00E+00	3.63E+00 >RES	1.17E-01	1.17E-01
Fluoranthene	2.06E+02	1.83E+03	6.22E+02	1	1.00E+00	1.00E+00	1.76E+02 >RES	2.06E+02	2.06E+02
Fluorene	1.46E+03	1.83E+03	9.85E+01	1	1.00E+00	1.00E+00	1.96E+02 >RES	1.46E+03	1.46E+03
Naphthalene	3.00E+01	1.83E+03	1.73E+01	1	1.00E+00	1.00E+00	6.79E-01	3.00E+01	3.00E+01
Phenanthrene	1.10E+03	1.83E+03	1.79E+02	1	1.00E+00	1.00E+00	2.70E+02 >RES	1.10E+03 >SOL	1.10E+03 >SOL
Pyrene	1.10E+03	1.83E+03	8.61E+02	1	1.00E+00	1.00E+00	1.30E+03 >RES	1.10E+03 >SOL	1.10E+03 >SOL
METALS									
Lead									

NC: Pathway is not complete

'--: Not a COC

Soil concentrations are presented on a dry weight basis.

Half life and unsaturated zone DAF are user specified inputs. Enter the values in COC table (sheet tab "COC").

SELECT ALL

UNSELECT ALL

PRINT

MAIN

SELECT INPUT DATA AND OUTPUT TO PRINT

INPUT	OUTPUT
☐ SITE CONCEPTUAL EXPOSURE SCENARIO (Select receptors and ROE)	☐ RESIDENTIAL - CHILD
☐ CONTAMINANTS OF CONCERN	☐ RESIDENTIAL - ADULT
☐ PHYSICAL AND CHEMICAL PROPERTIES	☐ RESIDENTIAL - SUMMARY
☐ TOXICOLOGICAL PROPERTIES	☐ COMMERCIAL WORKER
☐ EXPOSURE FACTORS	☐ CONSTRUCTION WORKER
☐ FATE AND TRANSPORT PARAMETERS	☐ WITHOUT DECAY
☐ GROUNDWATER RESOURCE PROTECTION	☐ WITH DECAY

Appendix H

Borehole Logs

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11036	TA: 21	Page 1 of 1
Total Depth: 25 ft (bgs)	Start Date: 3/30/99	End Date: 3/30/99
Drilling Equip./Method: CME 750/HSA	Sampling Equip./Method: Core barrel/continuous core	
Drilling Company: Stewart Bros. Driller: S. Johnson	Borehole Orientation: Vertical Site Geologist: J. Crocker	

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Brown, silty, fine- to medium-grained sand with a trace (~1%) of clay; dry, firm, nonplastic; no bedding observed (fill material)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
5	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Reddish-brown, medium- to coarse-grained silty sand; no bedding observed; pebbles of quartzite and rare (<1%) pumice fragments; moist (paleochannel sediments)		
	2.5/2.5	MD21-99-0030 (7.5–8.0)	Alpha = NDA B/G = NDA PID = 6.9 ppm HS = 42.8 ppm	TUFF: Gray, nonwelded, moderately indurated tuff; prominant phenocrysts of quartz and sanidine; slightly moist (Qbt 3)		7.5–12.5 ft, hydrocarbon odors but no staining
10	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
15	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
20	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5	MD21-99-0031 (23.5–24.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm HS = 0.0			
25						TD = 25 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.
HS = head space.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11037 | TA: 21 | Page 1 of 1

Total Depth: 25 ft (bgs) | Start Date: 3/30/99 | End Date: 3/30/99

Drilling Equip/Method: CME 750/HSA | Sampling Equip/Method: Core barrel/continuous core

Drilling Company: Stewart Bros. | Borehole Orientation: Vertical

Driller: S. Johnson | Site Geologist: J. Crocker

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Medium brown, silty, coarse-grained sand; 10% silt; 2% rounded pebbles to 1.0 cm; dry, firm, nonplastic; no bedding observed; no stains or odors (fill material)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
5	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Reddish brown, medium- to coarse-grained sand; fairly well sorted with ~2% silt; no bedding observed; soft; loose; very slightly moist (paleochannel sediments)		
	2.5/2.5	MD21-99-0034 (7.5–8.5)	Alpha = NDA B/G = NDA PID = 0.0 ppm HS = 0.0	TUFF: Gray, nonwelded, moderately indurated tuff; prominant phenocrysts of quartz; no staining or odors (Qbt 3)		
10	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
15	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			15-ft moderate angle fracture, no stains or odors associated with the fracture
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
20	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			Fracture at 15 ft bgs; 1–2 mm (basically closed)
	2.5/2.5	MD21-99-0035 (24.0–24.5)	Alpha = NDA B/G = NDA PID = 0.0 ppm HS = 0.0			
25						TD = 25.0 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.
HS = head space.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11038 | TA: 21 | Page 1 of 1

Total Depth: 30 ft (bgs) | Start Date: 3/31/99 | End Date: 3/31/99

Drilling Equip./Method: CME 750/HSA | Sampling Equip./Method: Core barrel/continuous core

Drilling Company: Stewart Bros. | Borehole Orientation: Vertical
Driller: S. Johnson | Site Geologist: J. Crocker

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND AND SILT: Brown, silty, medium- to coarse-grained sand; firm, moist, and slightly plastic (fill material)		
	2.0/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND AND SILT: Brown, silty, fine sand; soft, moist, and slightly plastic; minor clay (<5%); no bedding; no staining or odors (fill material)		
5	2.0/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND: Well-sorted medium- to coarse-grained sand; rounded grains; moist, soft, and loose; no stains or odors; no bedding features (paleochannel sediments)		
	2.5/2.5	MD21-99-0040 (7.5–8.0)	Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
10	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
15	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND AND SILT: Well-sorted medium- to coarse-grained sand; rounded grains; grades from silty medium to fine-grained sand; moist, soft, and loose; no stains or odors; cross beds present at top of interval (paleochannel sediments)		
	2.5/2.5	MD21-99-0039 (18.5–19.0)	Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
20	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND AND SILT: Coarse silty sand, grades to silty sand with cobbles of rhyolite or dacite, cobbles >3 in. are subrounded (paleochannel sediments)		
	1.5/1.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
25	0.0/2.0		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	TUFF: Gray tuff, nonwelded, moderately indurated to very well indurated from 24.0 ft to 26.0 ft, prominent phenocrysts of quartz and sanidine (Qbt 3)		24 ft, trip out to change drill bits for drilling through cobbles
	4.0/4.0	MD21-99-0038 (26.0–26.5)	Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
30						TD = 30 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.
HS = head space.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11039 | TA: 21 | Page 1 of 1

Total Depth: 25 ft (bgs) | Start Date: 3/31/99 | End Date: 3/31/99

Drilling Equip./Method: CME 750/HSA | Sampling Equip./Method: Core barrel/continuous core

Drilling Company: Stewart Bros. | Borehole Orientation: Vertical

Driller: S. Johnson | Site Geologist: J. Crocker

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAYEY SAND: Brown, moist, clayey, very fine sand grading to hard, slightly moist, clayey silt; no bedding; slightly plastic (fill material)		
	2.0/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
5	2.0/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
	2.5/2.5	MD21-99-0042 (6.5–7.0)	Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	TUFF: Pinkish gray, weathered tuff; nonwelded and poorly indurated with prominant phenocrysts of quartz and sanidine (Qbt 3)		
10	4.0/4.0		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
15	3.5/3.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	TUFF: Gray, well indurated, poorly welded tuff; much harder than tuff above; pumice to 1 cm are unaltered; large phenocrysts of quartz and sanidine (Qbt 3)		Much harder at 14 ft
	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
20	5.0/5.0		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
		MD21-99-0041 (22.5–23.0)				
25						TD = 25 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.
HS = head space.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11040 | TA: 21 | Page 1 of 1

Total Depth: 25 ft (bgs) | Start Date: 3/31/99 | End Date: 3/31/99

Drilling Equip./Method: CME 750/HSA | Sampling Equip./Method: Core barrel/continuous core

Drilling Company: Stewart Bros. | Borehole Orientation: Vertical

Driller: S. Johnson | Site Geologist: J. Crocker

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	CLAY AND SILT: Brown clayey silt, firm, slightly plastic; slightly moist, no bedding observed (fill material)		
	2.5/2.5					
5	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND: Brown, coarse-grained sand; rounded grains; slightly moist; soft; loose; no bedding observed (paleochannel sediment)		
	2.5/2.5			SAND AND SILT: Brown, coarse-grained silty sand with abundant rounded, white, unaltered pumice to 2.0 cm; cross bedded; ~2% clay nodules (paleochannel sediment)		
10	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm	SAND AND SILT: White, coarse-grained, pumiceous sand; grain supported with a silty matrix; no bedding; slightly moist, soft, and loose (paleochannel sediment)		
	2.5/2.5	MD21-99-0044 (12.5–13.0)		TUFF: Gray tuff, nonwelded, poorly to moderately indurated to very well indurated tuff; pumice to 2 cm are rounded and unaltered; prominant phenocrysts of quartz and sanidine (Qbt 3)		
15	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
	2.5/2.5	MD21-99-0043 (18.5–19.0)				17.0 ft, vertical fracture with minor silt fracture fill, 1–2 mm width, no odor noted
20	2.5/2.5		Alpha = NDA B/G = NDA PID/HS = 0.0 ppm			
	2.5/2.5		HS = 0.0 ppm			
25						TD = 25 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.
HS = head space.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11057 | TA: 21 | Page 1 of 1

Total Depth: 10 ft (bgs) | Start Date: 6/17/99 | End Date: 6/17/99

Drilling Equip./Method: CME 750/HSA | Sampling Equip./Method: Core barrel/continuous core

Drilling Company: Stewart Bros. | Borehole Orientation: Vertical

Driller: S. Johnson | Site Geologist: J. Crocker

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.0/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Silty sand and gravel; brown, moist, soft, and loose; gravel to 3.0 cm are angular; <10% clay; no bedding (fill material)		
	2.0/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
5	2.4/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAY AND SILT: Clayey silt, light brown with <5% very fine sand, no bedding observed, firm and slightly plastic (fill material)		Fill/paleochannel contact at 5 ft
	2.5/2.5	MD21-99-0093 8.5–9.0 ft	Alpha = NDA B/G= NDA PID = 0.0 ppm	SAND AND SILT: Sandy silt grading to silty fine to medium-grained sand with rounded pebbles; soft, loose, and moist; pebbles are subrounded; planar bedding at base (paleochannel sediment)		Paleochannel/tuff contact at 9 ft
10				TUFF: Gray, moist, nonwelded, variably indurated; pumice are dark gray and up to 3 cm in diameter; no fractures (Qbt 3)		TD = 10 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11058	TA: 21	Page 1 of 1
Total Depth: 40 ft (bgs)	Start Date: 6/17/99	End Date: 6/18/99
Drilling Equip./Method: CME 750/HSA	Sampling Equip./Method: Core barrel/continuous core	
Drilling Company: Stewart Bros. Driller: S. Johnson	Borehole Orientation: Vertical Site Geologist: J. Crocker	

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.0/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAY AND SILT: Brown, clayey silt with crushed tuff fragments to 3.0 cm; moist, soft, and loose (fill material)		No hydrocarbon odors from 0–5 ft
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAY AND SILT: Clayey silt; no bedding observed; 5–7% clay; firm, slightly plastic, slightly moist; <5% rounded pebbles ~.5 cm; grades to sandy silt from 4.0 to 5.0 ft. with 2.0-mm rounded pumice (fill material)		
5	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			Hydrocarbon odors at 5 ft, core is hot to touch because of NTISV cold demonstration
	2.5/2.5		Alpha = NDA B/G = NDA PID = 40 ppm	SAND AND SILT: Coarse silty sand; poorly sorted: 20% silt, 75% coarse rounded sand, and 5% clay; faint cross beds; soft, moist, and loose (paleochannel sediment)		Very high-angle contact with tuff at 8.5 ft
10	2.5/2.5	MD21-99-0099 (8.5–10.0)	Alpha = NDA B/G = NDA PID = 20 ppm	TUFF: Pinkish gray to gray, nonwelded, moderately indurated tuff; large quartz phenocrysts present; large white pumice to 10 cm are unaltered; vertical fracture in core begins at 15 ft and continues without break to 31.5 ft (Qbt 3)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 29 ppm			
15	2.5/2.5		Alpha = NDA B/G = NDA PID = 23 ppm			Vertical fracture from 15–31.5 ft, silt filled
	2.5/2.5	MD21-99-0100 (16.5–17.5) MD21-99-0101 (17.5–20.0)	Alpha = NDA B/G = NDA PID = 8.5 ppm			
20	2.5/2.5		Alpha = NDA B/G = NDA PID = 6.5 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 4.6 ppm			
25	2.5/2.5		Alpha = NDA B/G = NDA PID = 3.1 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 3.9 ppm			
30	2.5/2.5		Alpha = NDA B/G = NDA PID = 3.9 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	TUFF: Gray, nonwelded, moderately indurated tuff; unfractured and does not show any of the pinkish coloration of the tuff above; large quartz phenocrysts and white pumice as above (Qbt 3)		No hydrocarbon odors at 32.5 ft
35	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
40		MD21-99-0103 (39.5–40.0)				TD = 40.0 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11059	TA: 21	Page 1 of 1
Total Depth: 30 ft (bgs)	Start Date: 6/18/99	End Date: 6/19/99
Drilling Equip./Method: CME 750/HSA	Sampling Equip./Method: Core barrel/continuous core	
Drilling Company: Stewart Bros. Driller: S. Johnson	Borehole Orientation: Vertical Site Geologist: J. Crocker	

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAY AND SILT: Brown, clayey silt with crushed tuff fragments to 3.0 cm; moist, soft, and loose (fill material)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Coarse silty sand; brown, dry, and firm; nonplastic; no bedding observed; ~3% rounded pebbles; ~12% silt (paleochannel sediments)		
5	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND: Coarse, well-sorted sand; 3% silt in matrix; rounded grains; bedding is fine, thin, and planar where observed; soft, loose, and nonplastic (paleochannel sediments)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
10	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			10–12.5 ft, well-developed cross beds
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
15	2.5/2.5	MD21-99-0105 (14.0–15.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
20	2.5/2.5	MD21-99-0106 (19.5–20.5)	Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND: Very coarse sand with <10% silty fine sand matrix; matrix supported; very coarse grains are rounded; soft, loose, and nonplastic; no bedding (paleochannel sediments)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
25	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	GRAVEL AND SAND: Gravelly, cobbley sand; poorly sorted; soft, loose, and slightly moist; cross bedded in the sandier intervals; gravel and cobbles are rounded (paleochannel sediments)		29–30 ft, moderate angle, clay-filled fracture
	2.5/2.5	MD21-99-0107 (29.0–30.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm	TUFF: Strongly weathered gray tuff; nonwelded and disaggregated; gray pumice to 2.0 cm; large quartz phenocrysts present (Qbt 3)		
30						TD = 30 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11060	TA: 21	Page 1 of 1
Total Depth: 30 ft (bgs)	Start Date: 6/18/99	End Date: 6/18/99
Drilling Equip./Method: CME 750/HSA	Sampling Equip./Method: Core barrel/continuous core	
Drilling Company: Stewart Bros. Driller: S. Johnson	Borehole Orientation: Vertical Site Geologist: J. Crocker	

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAY AND SILT: Fill is clay and silt with tuff fragments to 2.0 in.; soft, loose, and moist (fill material)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Coarse-grained silty sand; brown and dry; thin cross beds; rare (<5%) rounded pebbles; ~12% silt; firm, dry, and nonplastic (paleochannel sediments)		
5	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
10	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			Core sample for entire borehole was very hot to touch because of NTISV cold demonstration
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
15	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5	MD21-99-0111 (17.0–17.5)	Alpha = NDA B/G = NDA PID = 0.0 ppm			
20	2.5/2.5	MD21-99-0112 (19.5–20.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Very coarse-grained silty sand (~20% silt) with rounded pebbles (<10%) to 1.0 cm, no bedding (paleochannel sediments)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	GRAVEL AND SAND: Coarse silty sand and dacite cobbles, no bedding, loose and dry (paleochannel sediments)		
25	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5	MD21-99-0113 (27.5–30.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm			
30				TUFF: Gray tuff, nonwelded; moderately indurated; large quartz phenocrysts (Qbt 3)		TD = 30 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.

LOS ALAMOS NATIONAL LABORATORY
Environmental Restoration Project
PRS 21-027(d)-99
Borehole Log

Borehole ID: 21-11061	TA: 21	Page 1 of 1
Total Depth: 27.5 ft (bgs)	Start Date: 6/18/99	End Date: 6/18/99
Drilling Equip./Method: CME 750/HSA	Sampling Equip./Method: Core barrel/continuous core	
Drilling Company: Stewart Bros. Driller: S. Johnson	Borehole Orientation: Vertical Site Geologist: J. Crocker	

Depth (ft)	Core Run (amt. recovered/ amt. attempted) (ft)	Anaytical Sample Number (Depth interval) (ft)	Field-Screening Results	Lithology	Graphic Log	Notes
0	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	CLAY AND SILT: Fill is clay and silt, brown, 10% pebbles and tuff fragments to 1.0 cm, soft and loose with no bedding (fill material)		
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
5	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	SAND AND SILT: Coarse sand with rounded grains, ~10% silt; soft, loose, and moist; no bedding observed between 4 ft and 7.5 ft; grades to very coarse sand starting at 7.5 ft; very coarse sand is cross bedded; soft, loose, and moist; very coarse sand grades to pebbly, gravelly sand from 17.5 ft (paleochannel sediments)		Entire 4–22.5-ft interval is gradational, cross beds
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
10	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm			
15	2.5/2.5	MD21-99-0117 (14.0–15.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	GRAVEL AND SAND: Brown, gravelly, very coarse sand; silty matrix (~15% silt); soft to firm with no bedding observed; pebbles/gravel to 1.5 cm are subrounded to rounded (paleochannel sediments)		
20	2.5/2.5	MD21-99-0118 (19.0–20.0)	Alpha = NDA B/G = NDA PID = 0.0 ppm			
	2.5/2.5		Alpha = NDA B/G = NDA PID = 0.0 ppm	GRAVEL AND SAND: Same as above except the bottom of the run is in dacite cobbles (paleochannel sediments)		First cobbles at 22.5 ft
25	2.5/2.5	MD21-99-0119 (25.0–27.5)	Alpha = NDA B/G = NDA PID = 0.0 ppm	TUFF: Gray, nonwelded, moderately indurated tuff; gray pumice to 2.0 cm; large quartz phenocrysts (Qbt 3)		Bottom of paleochannel (25 ft) TD = 27.5 ft (bgs)

NDA = nondetectable activity.
B/G = beta/gamma.
PID = photoionization detector.
ppm = parts per million.

Appendix I

Response to Request for Supplemental Information for the RFI Report for Potential Release Site (PRS) 21-027(d)-99

APPENDIX I

Response to Request for Supplemental Information for the RFI Report for Potential Release Site (PRS) 21-027(d)-99 Los Alamos National Laboratory, EPA ID#NM0890010515 HWB-LANL-01-001

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. The comments are divided into general and specific categories, as presented in the letter. Los Alamos National Laboratory's responses follow each NMED comment.

GENERAL COMMENTS

NMED Comment

1. *Please include the available data from baseline sampling activities as well data from other sampling activities associated with this voluntary corrective measure (VCM). In addition, please include the area background data set for this area (TA-21?) in this plan.*

LANL Response

1. LANL (the Laboratory) agreed to provide the requested information in the VCM completion report. Data from the baseline (e.g., pre-melt) sampling activities is presented in Section 2.3.2. The analytical data for all VCM activities is presented in Section 2.3.5 and Appendixes C, D, E, and F of the VCM completion reporteport. Note that the Laboratory only compared data collected during the VCM to the the Laboratory-wide background levels and not against the TA-21 background/baseline data. The background data set for TA-21 was originally presented to EPA Region 6 in January 1994 in a report entitled "Phase Report 1B, TA-21 Operale Unit RCRA Facility Investigation, Operable Unit-Wide Soil, Deposition Layer and Filter Building Investigation," (Environmental Restoration Project 1994, 26073). A copy of this report is available upon request.

NMED Comment

2. *Please include a key with the appropriate figures (e.g., Figure 4-3, page 13).*

LANL Response

2. The figures referred to in this comment were originally provided by Geosafe, Inc. and labeled by the Laboratory. The Laboratory did not plan on including these figures in the VCM completion report and NMED concurred (Canepa and Taylor 1999, 64851). The Laboratory has ensured that all figures provided in the VCM Report are adequately labeled, where necessary, and include a complete key.

NMED Comment

3. *Please include a map illustrating the sample locations associated with the vitrified clay pipe.*

LANL Response

3. The map illustrating the vitrified clay pipe (VCP) uncovered and removed during the excavation of the simulated absorption bed and the sample locations beneath the VCP is provided in Figure 2.3-1 of the VCM completion report.

NMED Comment

4. *Please include a map illustrating the tentative location of samples to be acquired for cleanup verification of the hydrocarbon contamination (post-NTISV).*

LANL Response

4. The postmelt cleanup verification borehole and outfall sample locations are provided in Figure 2.3-4 of the VCM completion report.

NMED Comment

5. *Instead of listing clean-up criteria for TPH, BTEX, etc (Section 3.0, page 7), LANL should discuss the approach to performing a site/area-specific screening and/or risk assessment for the area due to the additional, possibly area-wide, contamination (gross beta) found at depth. LANL should also discuss when the site/area-specific screening and/or risk assessment will be performed. LANL is reminded that HRMB only accepts draft LANL-wide background for screening and risk assessment activities.*

LANL Response

5. The Laboratory agreed to discuss the approach to performing a site/area-specific screening and/or risk assessment and to present the results in the VCM completion reporteport. During a subsequent meeting John Young, NMED-HRMB, on June 6, 2000, Mr. Young stated that the Laboratory should apply the approach for Risk-Based Evaluation of Petroleum Releases described in Section 4.0 of the New Mexico Underground Storage Tank (UST) Bureau Guidelines for Corrective Action for determining risk at consolidated PRS 21-027(d)-99 (Environmental Restoration Project 2000, 72709). Residual petroleum hydrocarbon levels remaining at the site were compared to target cleanup concentrations established in the UST corrective action guidelines for the appropriate conceptual model. Mr. Young also concurred with the current and assumed future industrial land use of the site, as long as the Laboratory cited residential land use risk calculations in the report. The revised site conceptual model is discussed in Section 2.3.6 and the site assessments are discussed in Section 2.4. The screening assessment calculations are provided in Appendix G of the VCM Report. Inorganic and radionuclide contaminants of potential concern (COPCs) detected at the site will be presented and addressed during future investigations and risk screening assessments for PRS 21-018(a)-99 (MDA V), which overlaps the location of PRS 21-027(d)-99 (Environmental Restoration Project 2000, 72709). As stated in our response to General Comment #1 above, when assessed, this data will only be compared to the Laboratory-wide background levels.

NMED Comment

6. *LANL is reminded that before No Further Action can be proposed at this site, the outfall area (former PRS 21-027(d)) to Los Alamos Canyon must be characterized. Chemicals of potential concern associated with 21-027(d) include but are not limited to amercium-241, plutonium-239, tritium, cadmium, and uranium.*

LANL Response

6. The Laboratory agreed to supplement the 1992 Phase I RFI characterization of the outfall area known as former SWMU 21-027(d). On October 7, 1999, Laboratory ER Project personnel and NMED-HRMB staff identified six additional surface soil and/or sediment sample locations in the outfall drainage and a single background sample location north of the drainage (Canepa and Taylor 1999, 64709). The analytical suite agreed upon for these samples during the October 7, 1999 site visit included TPH (diesel range), amercium-241, and plutonium-239. Sample locations and detected TPH results are provided on Figure 2.3-7 in the VCM completion report. Inorganic and radionuclide contaminants of potential concern (COPCs) detected at the site will be presented and addressed during future investigation and risk screening assessment for PRS 21-018(a)-99 (MDA V), which overlaps the location of PRS 21-027(d)-99 (Environmental Restoration Project 2000, 72709).

SPECIFIC COMMENTS

NMED Comment

7. *§ 4.1 Rationale and Objectives, page 8, Fourth and Fifth Bullets*

   - *"demonstrate the ability of NTISV to process COPCs to values below the stipulated cleanup levels;*
   - *confirm that any COPCs remaining are below cleanup levels; and"*

   See general comment 5.

LANL Response

7. The Laboratory addressed this comment as part of the discussion addressing General Comment #5 above. The revised site conceptual model is discussed in Section 2.3.6 and the site assessments are discussed in Section 2.4 of the VCM completion report. The site screening assessment is presented in Section 2.4 and the UST Bureau Tier 1 Report are provided in Appendix G of the VCM completion report.

   An evaluation on the effect of NTISV on COPCs is presented in Section 2.3.7 of the VCM completion report.

NMED Comment

8. *§ 4.3 Table 4-1 Baseline Samples, Cold Test Pit Samples, VCP Trench Samples, and Borehole Samples, page 10*

   Under the column title, Analytical Methods, the proposed cold test pit location samples include metals analyses. Please add metals to the Analytical Methods Column.

LANL Response

8. As indicated in the Record of Communication (Canepa and Taylor 1999, 64851), the Laboratory agreed that although metals were not included in the Analytical Methods column for the baseline samples from the proposed simulated absorption bed location in the VCM Plan, the baseline samples were analyzed for metals. Table 2.3.1 in the VCM completion report lists the requested analyses, including metals for the baseline samples collected from the simulated absorption bed. The analytical

data for metals for the excavation of the simulated absorption bed is not evaluated in the VCM completion report but it is included in Appendices E and F of the report. This data will be assessed as part of futurte investigations of PRS 21-018(a)-99 (MDA V).

NMED Comment

9. *§ 4.3 NTISV Activities, page 14, Second Paragraph*

   "To evaluate the product quality of the cold demonstration, two nonhazardous, nonradioactive surrogates will be added to the cobble layer of the pit"

   LANL should replace the "two nonhazardous" with "two non-RCRA regulated." Because cesium and cerium are not considered hazardous according to RCRA, does not preclude that these materials are not hazardous.

LANL Response

9. The Laboratory agrees with the requested language; however, the cesium and cerium surrogates added to the simulated absorption bed prior to the cold test are not discussed in the VCM completion report. Details of the NTISV cold demonstration can be found in the "Cold Demonstration of Non-Traditional In Situ Vitrification at Los Alamos National Laboratory" (MSE-TA 1999, 64804) previously provided to NMED under separate cover. Additional copies of the report are available upon request.

NMED Comment

10. *§ 4.3.2.2.2 Predemonstration Sampling, page 23,First Paragraph*

    This section mentions the use of x-ray fluorescence (XRF) for whole rock analyses. Please clarify if this is an energy dispersive or wavelength dispersive method.

LANL Response

10. Pages 31 through 34 of the final report "Geophysical Verification and Monitoring Results for the NonTraditional In Situ Vitrification Cold Demonstration at the Los Alamos National Laboratory" (MSE-TA 1999, 64804) provide information on the analytical technique, XRF, used for whole rock analyses. The pre-demonstration samples were analyzed via inductively-coupled plasma (ICP)-atomic emission spectroscopy (AES). In plasma emission spectroscopy, a sample solution was introduced into the core of an inductively-coupled argon plasma (ICP) at a temperature of approximately 8000°C. At this temperature all elements become thermally excited and emit light at their characteristic wavelengths. This light is collected by the spectrometer and passes through a diffraction grating which serves to resolve the light into a spectrum of its constituent wavelengths. Within the spectrometer, this diffracted light is then collected by wavelength and amplified to yield an intensity measurement which can be converted to an elemental concentration by comparison with calibration standards.

NMED Comment

11. § 5.0 Waste Management, page 33, Table 5-1

All waste associated with the off-gas treatment system has the potential to be low-level waste because components are radioactively contaminated. The components were received from Oak Ridge National Laboratory."

Please clarify if the components of the off-gas treatment system have been decontaminated and if the contamination is a residual of the decontamination procedure. If not, provide the rationale for not decontaminating the off-gas treatment system. In addition, please discuss the range of radioactive contaminants that may be associated with the off-gas treatment system.

LANL Response

11. The only portions of the off-gas treatment system that were contaminated with low levels of radioactivity were the two HEPA filter housings received from Oak Ridge National Laboratory. These two HEPA filter housings were decontaminated prior to conducting the NTISV cold demonstration at PRS 21-027(d)-99 in April 1999. The other components of the off-gas treatment system were shipped to the Laboratory directly from from Geosafe's Washington office and were not contaminated.

    After decontamination of the two HEPA filter housings, it was anticipated that the NTISV cold demosnstration would not emit radionuclides to the off-gas treatment system. However, all waste streams from the off-gas treatment system were sampled and analyzed for a full analytical suite including radionuclides to ensure the waste was properly characterized prior to disposal.

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