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# Phase II Investigation Report for Delta Prime Site Aggregate Area at Technical Area 21

Los Alamos
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Prepared by the Environmental Programs Directorate

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April 2010

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## EXECUTIVE SUMMARY

This investigation report presents the Phase II investigation activities at 19 solid waste management units (SWMUs), 1 area of concern (AOC), and 6 consolidated units that are part of the Delta Prime (DP) Site Aggregate Area, located in Technical Area 21 (TA-21) at Los Alamos National Laboratory (the Laboratory). The Phase II investigations were conducted in accordance with the New Mexico Environment Department- (NMED-) approved work plan for the DP Site Aggregate Area. The report also includes the investigation results for three other sites: AOC C-21-027, a former cooling tower and outfall; a diesel spill from a 50,000 gal. aboveground tank (structure 21-57) located next to building 357; and the polychlorinated biphenyl (PCB) remediation at Consolidated Unit 21-003-99 and SWMU 21-024(c) (the PCB site). These three investigations were conducted in accordance with other NMED-approved work plans.

The objectives of this Phase II investigation were to define the nature and extent of contamination and to determine whether the sites pose potential unacceptable risk or dose to human health or the environment. The investigation of AOC C-21-027 was conducted to determine if the AOC was contaminated. The remediation activities at the PCB site removed all material contaminated with 1 mg/kg or greater of total PCBs within 10 ft below ground surface (bgs). This investigation report also presents additional site characterization of the diesel spill from diesel tank 21-57, conducted to assess current site conditions and to compare the results of this investigation with those from previous investigations.

The Phase II investigation activities included collecting 226 surface and subsurface soil and tuff samples from 175 locations to define extent. Data from the Phase II investigation were combined with data from the Phase I investigation that met current laboratory data-quality requirements. The investigation of AOC C-21-027 resulted in the collection of 25 surface and subsurface samples. Two boreholes completed to a depth of 200 ft bgs in the area of diesel tank 21-57 defined the extent of diesel contamination. At the PCB site, over 100 preexcavation and 300 postexcavation samples were collected and analyzed for PCBs. Approximately 1400 $yd^3$ of PCB-contaminated material was removed and disposed of off-site.

The sampling data presented in this report and summarized in the table below indicate the extent of contamination has been defined for 15 sites and has not been defined at 11 sites. The 11 sites at which extent was not defined will be addressed in a letter work plan to be submitted to NMED 90 days after the Phase II investigation report is approved.

Human health and ecological risk-screening assessments were conducted for 21 of the 26 sites presented in this report. Additional sampling is necessary to define extent at 6 of these 21 sites; however, samples will be collected from approximately 20 ft bgs and do not affect the risk-screening assessment results presented in this report.

Seventeen of the 21 sites evaluated have been determined to pose no potential unacceptable risk or dose to human health under the industrial, construction worker, and/or residential scenarios or to the environment. Corrective actions are complete for 13 of the 17 sites, while 4 sites need additional sampling to define extent. Four sites within the DP Site Aggregate Area were determined to pose potential unacceptable risk or dose to human health under the industrial, residential, and/or construction worker risk scenarios, and one site also poses potential risk to ecological receptors. Limited soil removal and confirmation sampling will be conducted at these sites.

A future Phase III investigation report will present the risk-screening assessments for the five sites for which risk-screening assessments were not performed, the results of the extent sampling for the six sites for which risk-screening assessments have been performed, and the results of the confirmatory sampling at the four sites requiring limited soil removal.

**Summary of Field Characterization Activities and Risk-Screening Results**

| Site | Nature and Extent Defined? | Extent Sampling Required? | Risk-Screening Assessments Performed? | Meets Acceptable Potential Hazard, Risk, or Dose Level? | Corrective Actions Complete? | Remediation Necessary? |
|---|---|---|---|---|---|---|
| AOC 21-002(b) | Yes | No | Yes | Yes | Yes | No |
| Consolidated Unit 21-003-99 | No | Yes | No | High potential | No | No |
| Consolidated Unit 21-006(c)-99 | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-009 | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-012(b) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-013(c) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-022(f) | Yes | No | Yes | Yes | Yes | No |
| Consolidated Unit 21-022(h)-99 | No | Yes | Yes | No | No | Yes, limited soil removal |
| Consolidated Unit 21-023(a)-99 | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-024(a) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(b) | Yes | No | Yes | No | No | Yes, limited soil removal |
| SWMU 21-024(c) | No | Yes | No | High potential | No | No |
| SWMU 21-024(d) | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-024(e) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(g) | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-024(h) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(i) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(j) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(k) | No | Yes | No | High potential | No | No |
| Consolidated Unit 21-024(l)-99 | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(n) | No | Yes | No | High potential | No | No |
| SWMU 21-024(o) | Yes | No | Yes | Yes | Yes | No |
| Consolidated Unit 21-026(a)-99 | No | Yes | Yes | No | No | Yes, limited soil removal |
| SWMU 21-027(a) | Yes | No | Yes | No | No | Yes, limited soil removal |
| SWMU 21-027(c) | Yes | No | Yes | Yes | Yes | No |
| AOC C-21-027 | No | Yes | No | Unknown | No | Unknown |
| **Total Sites** | **15** | **11** | **21** | **17** | **13** | **4** |

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# 1.0 INTRODUCTION

Los Alamos National Laboratory (LANL or the Laboratory) is a multidisciplinary research facility owned by the U.S. Department of Energy (DOE) and managed by Los Alamos National Security, LLC. The Laboratory is located in north-central New Mexico, approximately 60 mi northeast of Albuquerque and 20 mi northwest of Santa Fe. The Laboratory site covers 40 $mi^2$ of the Pajarito Plateau, which consists of a series of fingerlike mesas that are separated by deep canyons containing perennial and intermittent streams running from west to east. Mesa tops range in elevation from approximately 6200 ft to 7800 ft.

The Laboratory's Environmental Programs (EP) Directorate is participating in a national effort by DOE to clean up sites and facilities formerly involved in weapons research and development. The goal of EP is to ensure past operations do not threaten human or environmental health and safety in and around Los Alamos County, New Mexico. To achieve this goal, EP is currently investigating sites potentially contaminated by past Laboratory operations. These sites are designated as either solid waste management units (SWMUs), areas of concern (AOCs), or consolidated units.

This investigation report addresses SWMUs, AOCs, and consolidated units within the Delta Prime (DP) Site Aggregate Area at the Laboratory. These sites are potentially contaminated with hazardous chemicals and radionuclides. Corrective actions at the Laboratory are subject to the Compliance Order on Consent (the Consent Order). Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to the New Mexico Environment Department (NMED) in accordance with DOE policy.

## 1.1 General Site Information

The DP Site Aggregate Area is located in Technical Area 21 (TA-21) at the Laboratory (Figure 1.1-1) and consists of the sites listed in Tables 1.1-1, 1.1-2, and 1.1-3. Table 1.1-1 lists the sites addressed in this report, a brief description, and the site status. The site status refers to the investigations, remediations, and/or reporting that have been completed at the site to date. Table 1.1-2 lists the remaining sites included in the DP Site Aggregate Area that have not been approved for no further action, a brief description, and the site status. Table 1.1-3 lists sites included in the DP Site Aggregate Area that have been approved for no further action. Historical details of previous investigations and data for the 26 sites addressed in this report are provided in the investigation work plan (LANL 2004, 087461; NMED 2005, 089314) and the approved Phase I investigation report (LANL 2008, 104989; NMED 2009, 104978). The polychlorinated biphenyl (PCB) site remediation activities were previously reported in the self-implementing and risk-based PCB reports for SWMU 21-024(c) and Consolidated Unit 21-003-99 (LANL 2009, 107679; LANL 2010, 108598). AOC C-21-027 was added to this Phase II report from the investigation outlined in the DP Site Aggregate Area supplemental investigation work plan (LANL 2006, 092079). The supplemental work plan addressed remaining sites within DP Site Aggregate area that were not addressed in the DP Site Aggregate Area investigation work plan (LANL 2004, 087461; NMED 2005, 089314). The investigation of the diesel spill site, which was not addressed in the Phase I report, is included in this Phase II report as Appendix E. This site is in the vicinity of the DP Aggregate Sites and was investigated concurrently with the Phase II investigation.

## 1.2 Investigation Overview

The objectives of the investigation were to (1) collect samples to address data needs identified in the Phase I investigation report (LANL 2008, 102760; NMED 2008, 102290) and resulting Phase II work plan (LANL 2008, 104989; NMED 2009, 104978); and (2) determine whether contamination at any of the sites

poses a potential unacceptable risk or dose to human health or the environment. This report presents details and results of the Phase II investigation activities and presents recommendations for each site.

### 1.3 Document Organization

This report is organized in nine sections, including this introduction, with multiple supporting appendixes. Sections 2 through 6 present the scope of activities, results of the field activities performed during this investigation, regulatory criteria, site contamination, and results of the human health and ecological risk assessments (except for the investigation of the diesel tank 21-57 spill presented in Appendix E). Section 7 presents the conclusions of the nature and extent of contamination and screening risk assessments for each site. Section 8 presents recommendations based on applicable data and the risk-screening assessments. Section 9 includes a list of references cited and the map data sources used in all figures and plates.

Appendixes include acronyms, a metric conversion table, and definitions of the data qualifiers used in this report (Appendix A); field methods (Appendix B); photographs of investigation activities conducted at the site (Appendix C); investigation-derived waste (IDW) management (Appendix D); the diesel tank 21-57 spill site investigation (Appendix E; the diesel tank 21-57 spill site investigation is not discussed as part of the Phase II investigation); analytical program (Appendix F); analytical results and reports (Appendix G on DVD); and risk-screening assessments (Appendix H).

## 2.0 TA-21 BACKGROUND

### 2.1 Background of TA-21

Background information for TA-21 and the sites addressed in this Phase II investigation report are presented in section 2 of the Phase I investigation report (LANL 2008, 102760; NMED 2008, 102290) and section 2.6 of the DP Site Aggregate Area supplemental work plan (AOC C-21-027) (LANL 2006, 092079).

## 3.0 SCOPE OF ACTIVITIES

This section presents an overview of preliminary activities and the field activities performed during the implementation of the DP Site Aggregate Area Phase II investigation work plan. The field investigation results and observations obtained are presented in detail in sections 4 through 8 and in the appendixes. The scope of activities for the Phase II DP Site Aggregate Area investigation included geodetic surveys; field screening; surface and subsurface sampling; borehole drilling, sampling, and abandonment; health and safety monitoring; and waste management activities.

### 3.1 Field Activities

The following sections describe the field activities conducted during the Phase II investigation, including surface surveys, field screening, surface and subsurface sampling, borehole drilling and sampling, and borehole abandonment. Details regarding the field methods and procedures used to perform these field activities are presented in Appendix B. Photographs of the field activities are presented in Appendix C. Further details regarding the PCB site remediation activities were previously reported in the self-implementing and risk-based PCB reports for SWMU 21-024(c) and Consolidated Unit 21-003-99 (LANL 2009, 107679; LANL 2010, 108598).

### 3.1.1 Geodetic Survey

A geodetic survey was conducted during the Phase II investigation to identify surface and subsurface sampling locations. The planned sampling locations for the Phase II investigation were determined based on the results from the Phase I sampling locations. An initial geodetic survey was performed to establish and mark the planned locations in the field. Geodetic surveys were conducted at the completion of the sampling campaign to establish the spatial coordinates for all sampling locations. Geodetic surveys were conducted in accordance with Standard Operating Procedure (SOP) 5028, Coordinating and Evaluating Geodetic Surveys, using a Trimble 5700 differential global positioning system. The surveyed coordinates for all sampling locations are presented in Table 3.1-1. All coordinates are expressed as State Plane Coordinate System 83, New Mexico Central, U.S.

### 3.1.2 Field Screening

Soil and tuff samples, cuttings, and excavated material were screened for gross-alpha and gross-beta radiation. Screening was performed by radiological control technicians (RCTs) using an Eberline E600 with either a 380AB or SHP360 probe (or equivalent) and an ESP-1 rate meter with a 210 probe (or equivalent) in accordance with SOP-10.07, Field Monitoring for Surface and Volume Radioactivity Levels. The probe was held less than 1 in. away from the medium. Measurements were made by conducting a quick scan to find the location with the highest initial reading and then collecting a 1-min reading at that location to determine gross-alpha and gross-beta radiation levels. Soil and core was sampled and logged only after radiological field-screening measurements were established so appropriate precautions could be taken before the sample was collected. Field personnel collected and recorded background measurements for gross-alpha and gross-beta radiation daily in SCLs.

At AOC C-21-027, organic vapor monitoring of surface and subsurface samples was performed using a MiniRae 2000, Model PGM-7600 photoionization detector (PID) with an 11.7-electron-volt (eV) bulb. In addition, headspace vapor screening for volatile organic compounds (VOCs) was performed on recovered surface and subsurface media in accordance with SOP-06.33, Headspace Vapor Screening with a Photoionization Detector. Samples were placed in a glass container and covered with aluminum foil. The container was sealed, shaken gently, and allowed to equilibrate for 5 min. The sample was screened by inserting the PID probe into the container and measuring and recording any detected vapors. Organic vapor monitoring was not required at the Phase II sites addressed in the Phase II work plan (LANL 2008, 104989; NMED 2009, 104978).

All samples were submitted to American Radiation Services, Inc., in White Rock, New Mexico, for gross-alpha, gross-beta, and gross-gamma analyses before shipment by the Laboratory's Sample Management Office (SMO) to ensure compliance with U.S. Department of Transportation (DOT) requirements.

Field-screening results were recorded on corresponding SCLs (Appendix G). Field-radiation screening-results are presented in Table 3.1-2, and organic vapor field-screening results are presented in Table 3.1-3.

### 3.1.3 Surface and Subsurface Soil Investigation

Samples were collected according to the approved Phase II investigation work plan (LANL 2008, 104989; NMED 2009, 104978). Table 3.1-4 lists the proposed sampling locations in the work plan, crosswalked to actual location identifiers.

Surface samples were collected using the spade-and-scoop method in accordance with SOP-06.09, Spade and Scoop Method for Collection of Soil Samples, or with a hand auger in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. Subsurface samples were collected using the hand-auger method in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. The material from each sample was placed in stainless-steel bowls before putting in the appropriate sample containers.

All surface and subsurface samples were placed in appropriate sample containers and submitted for the laboratory analyses specified by the work plan. Standard quality assurance/quality control (QA/QC) samples (field duplicates, field trip blanks, and rinsate blanks) were also collected in accordance with SOP-01.05, Field Quality Control Samples.

All sample collection activities were coordinated with the SMO. Upon collection, samples remained in the controlled custody of the field team at all times until they were delivered to the SMO. Sample custody was then relinquished to the SMO to deliver to a preapproved off-site analytical laboratory (SCL/chain-of-custody [COC] forms on DVD in Appendix G).

### 3.1.4 Borehole Drilling and Subsurface Sampling

At locations where the required sample depths could not be reached by hand augers, a drill rig with a hollow-stem auger (HSA) was used to collect subsurface samples. Samples were collected using stainless-steel core barrel samplers. The samples were extracted from the core barrels and collected using stainless-steel spoons.

Samples were collected at depth intervals based on criteria established in the approved work plan (LANL 2008, 104989; NMED 2009, 104978). All sampled core material was placed in the appropriate sampling containers, labeled, documented, and preserved (as appropriate) for transport to the SMO. Samples were submitted for laboratory analyses specified by the work plan.

### 3.1.5 Borehole Abandonment

Boreholes were abandoned in accordance with SOP-5034, Monitoring Well and Borehole Abandonment. All boreholes were abandoned within 24 h of completion with bentonite grout by filling upward from the bottom via tremie pipe to within 2 ft of the surface. After 24 to 48 h, the backfilled level was checked for settling and additional grout was added as necessary. The remainder of each boring was filled with Portland type I/II cement to surface grade.

## 3.2 Health and Safety Measures

All Phase II investigation activities were conducted in accordance with a site-specific health and safety plan and an integrated work document.

## 3.3 Waste Management

All IDW generated during the DP Site Aggregate Area Phase II investigation was managed in accordance with the IDW management plan in the approved work plan (LANL 2004, 087461; NMED 2005, 089314) and the approved project waste characterization strategy form (WCSF), which is included in Appendix D. The SOP applicable to the characterization and management of IDW is EP-ERSS-SOP-5022, Characterization and Management of Environmental Project (ER) Project Waste. The SOP incorporates

the requirements of all applicable U.S. Environmental Protection Agency (EPA) and NMED regulations and DOE orders.

The waste streams associated with the investigation included soil, drill cuttings, contact waste, debris, PCB-remediation waste, and municipal solid waste. Each waste stream was containerized and managed in storage areas appropriate to the type of waste. Management of IDW is discussed in Appendix D.

### 3.4 Deviations

Deviations from the scope of activities as defined in the approved work plans (LANL 2008, 104989; NMED 2009, 104978; LANL 2006, 092079) occurred during the implementation of the work. The deviations did not adversely affect the completion or results of the investigation. Specific deviations are as follows.

- At Consolidated Unit 21-003-99 and SWMU 21-024(c), samples from location 5 were not collected as directed by the Phase II work plan (LANL 2008, 104989). This area was excavated during the PCB site remediation activities. At location 21-25763, cobalt was analyzed for instead of copper. Mercury was inadvertently analyzed for at this location.
- At SWMU 21-024(g), boreholes at locations 2 and 9 could not be advanced past 11.5 ft because of auger refusal; therefore, samples were collected at 11.5 ft below ground surface (bgs) rather than at 15 ft bgs as prescribed in the work plan.
- At Consolidated Unit 21-024(l)-99, samples from location 2 were inadvertently analyzed for cesium-137 and strontium-90 in the 0–0.5 ft depth interval. The 7- to 8-ft sample was inadvertently analyzed for americium-241, strontium-90, and isotopic plutonium.
- AOC C-21-027 investigation was added to the Phase II investigation activities. This site was previously addressed in the DP Site Aggregate Area supplemental work plan (LANL 2006, 092079). This site is collocated with SWMU 21-027(a) and could be addressed at the same time as Phase II investigation activities.
- At AOC C-21-027, samples from location 5 were not collected as directed by the DP Site Aggregate Area supplemental work plan (LANL 2006, 092079) because samples had already been collected from this area as part of activities at adjoining SWMU 21-027(a) and Consolidated Unit 21-006(c)-99 (locations 21-600866 and 21-605256).
- At AOC C-21-027, dioxin and furans were only analyzed for in samples from location 4 because this area was previously sampled as part of SWMU 21-027(a) extent sampling (location 21-605279).

## 4.0 FIELD INVESTIGATION RESULTS

### 4.1 Current Site Conditions

Current site conditions are described in section 4.0 of the Phase I investigation report (LANL 2008, 102760; NMED 2008, 102290). In 2009, SWMU 21-024(c) and Consolidated Unit 21-003-99 were remediated, and best management practices are currently in place. The data from these two sites are combined because their sampling locations overlap, and these areas were treated as one site during remediation.

AOC C-21-027 has not been previously addressed; however, it is located between SWMU 21-027(a) and Consolidated Unit 21-006(c)-99. The surface conditions for these sites are discussed in sections 4.3.1 and 4.3.12 of the Phase I investigation report (LANL 2008, 102760; NMED 2008, 102290), which are the same as that of AOC C-21-027.

### 4.1.1 Surface and Subsurface Conditions

The DP Site Aggregate Area surface and subsurface conditions are described in section 4.0 of the Phase I investigation report (LANL 2008, 102760; NMED 2008, 102290) and are not presented here.

## 4.2 Surface Surveys and Sampling

The following sections describe the results of the surface and subsurface sampling.

### 4.2.1 Field Screening for Radioactivity

Field screening of surface and subsurface material for radioactivity was performed throughout sampling activities, as described in section 3.1.2. The field-screening results for radioactivity are provided in Table 3.1-2. In summary, field-screening results did not indicate that elevated radioactivity was encountered at the areas sampled. No additional samples were collected based on field-screening results for radioactivity at any of the sites.

### 4.2.2 Field Screening for Organic Vapors

Field screening of surface and subsurface material for organic vapors was performed throughout sampling activities at AOC C-21-027, as described in section 3.1.2. The field-screening results for organic vapors are provided in Table 3.1-3. In summary, field-screening results did not indicate elevated concentrations of organic vapors were detected at the areas sampled. No additional samples were collected based on field-screening results for organic vapors.

### 4.2.3 Surface and Subsurface Sampling

Surface and subsurface samples were collected at various sampling locations following the approved Phase II work plan (LANL 2008, 104989; NMED 2009, 104978). Samples were also collected at AOC C-21-027 using the DP Site Aggregate Area supplemental work plan as a guide (LANL 2006, 092079). Sections 3.1.3 through 3.1.5 describe the methods used to collect samples.

Samples were collected from 175 locations during the Phase II investigation. Surface and subsurface sampling activities included sampling soil and tuff using spade-and-scoop, hand-auger, or drill-rig methods.

A summary of the samples collected as part of the Phase II investigation and the requested analyses are presented in Tables 4.2-1 through 4.2-25. Samples with identification numbers “XX21-09-” or “XX21-10-” or request numbers starting with numbers “09” or “10” were collected during the Phase II investigation. In most cases, samples were analyzed for a selected subset of analytes according to the objectives listed in the Phase II work plan. Plate 1 shows the Phase I and Phase II sampling locations.

At AOC 21-002(b), Phase II work plan locations 1 through 9 (LANL 2008, 104989, Table 2 and Figure 2) were sampled in May 2009. Six surface samples and three subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-1). Based on the results from the Phase II

sampling, an additional surface sample was collected in December 2009 at location 21-609834 to define lateral extent of isotopic plutonium.

At Consolidated Unit 21-003-99 and SWMU 21-024(c), Phase II work plan locations 1 through 4 and 6 through 12 (LANL 2008, 104989, Table 3 and Figure 3) were sampled in June, July, and November 2009. Five surface and eight subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-2). Samples from location 5 were not collected because the area was excavated during PCB remediation activities. Based on the results from the Phase II sampling, an additional deeper sample was collected in December 2009 at location 21-25719 from 9 to 10 ft to define the vertical extent of chromium.

At Consolidated Unit 21-006(c)-99, Phase II work plan locations 1 through 9 (LANL 2008, 104989, Table 14 and Figure 14) were sampled in May and June 2009. Three surface samples and 10 subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-3). Based on the results from the Phase II sampling, an additional sample was collected in September 2009 10 ft south of location 6 to define the lateral extent of isotopic plutonium at the 3 to 4 ft depth interval. In December 2009, an additional sample was collected 20 ft north of location 7 to define the lateral extent of isotopic plutonium at the 3 to 4 ft depth interval.

At SWMU 21-009, Phase II work plan locations 1 through 6 (LANL 2008, 104989, Table 4 and Figure 4) were sampled in May 2009. Three surface samples and five subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-4).

At SWMU 21-012(b), Phase II work plan locations 1 through 10 (LANL 2008, 104989, Table 5 and Figure 5) were sampled in May and June 2009. Two surface samples and 10 subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-5).

At SWMU 21-013(c), Phase II work plan locations 1 through 11 (LANL 2008, 104989, Table 6 and Figure 6) were sampled in May 2009. Eight surface samples and five subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-6).

At SWMU 21-022(f), Phase II work plan locations 1 and 2 (LANL 2008, 104989, Table 15 and Figure 15) were collected in June 2009. Two subsurface locations were sampled and analyzed as prescribed in the Phase II work plan (Table 4.2-7).

At Consolidated Unit 21-022(h)-99, Phase II work plan locations 1 through 4 (LANL 2008, 104989, Table 16 and Figure 16) were sampled in May, June, and July 2009. Two surface samples and five subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-8). Based on the results from the Phase II sampling, an additional deeper sample was collected in December 2009 at location 2 to define the vertical extent of barium at 9 to 10 ft. One surface sample was also collected in December 2009 20 ft west of location 3 to define the lateral extent of nitrate.

At Consolidated Unit 21-023(a)-99, Phase II work plan locations 1 through 5 (LANL 2008, 104989, Table 17 and Figure 17) were sampled in May and June 2009. Five subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-9). Based on the results from the Phase II sampling, an additional deeper sample was collected in August 2009 at location 5 to define the vertical extent of isotopic plutonium and semivolatile organic compounds (SVOCs) at 19 to 20 ft.

At SWMU 21-024(a), Phase II work plan locations 1 through 4 (LANL 2008, 104989, Table 7 and Figure 7) were sampled in June and August 2009. Four subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-10). Based on the results from the Phase II sampling,

an additional deeper sample was collected in September 2009 at location 3 from 9 to 10 ft to define the vertical extent of isotopic plutonium.

At SWMU 21-024(b), Phase II work plan location 1 (LANL 2008, 104989, Table 18 and Figure 18) was sampled in June 2009. One surface sample was collected and analyzed as prescribed in the Phase II work plan (Table 4.2-11).

At SWMU 21-024(d), Phase II work plan locations 1 through 6 (LANL 2008, 104989, Table 19 and Figure 19) were sampled in May, June, and July 2009. One surface sample and seven subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-12). Based on the results from the Phase II sampling, an additional deeper sample was collected in September 2009 at location 3 to define vertical extent of lead at 9 to 10 ft.

At SWMU 21-024(e), Phase II work plan locations 1 through 3 (LANL 2008, 104989, Table 8 and Figure 8) were sampled in May 2009. Four subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-13).

At SWMU 21-024(g), Phase II work plan locations 1 through 10 (LANL 2008, 104989, Table 9 and Figure 9) were sampled in May 2009. Four surface samples and seven subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-14). At locations 2 and 9, boreholes could not be advanced past 11.5 ft because of auger refusal. Therefore, samples were collected from 11.5 ft rather than the 15-ft depth prescribed in the Phase II work plan.

At SWMU 21-024(h), Phase II work plan locations 1 through 8 (LANL 2008, 104989, Table 20 and Figure 20) were sampled in June 2009. Three surface samples and seven subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-15). Based on the results from the Phase II sampling, deeper samples were collected in September 2009 at locations 1 and 8 to define the vertical extent of isotopic plutonium at 9 to 10 ft.

At SWMU 21-024(i), Phase II work plan locations 1 and 2 (LANL 2008, 104989, Table 21 and Figure 21) were sampled in May 2009. Two subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-16).

At SWMU 21-024(j), Phase II work plan location 1 (LANL 2008, 104989, Table 22 and Figure 22) was sampled in June 2009. This subsurface sample was collected and analyzed as prescribed in the Phase II work plan (Table 4.2-17).

At SWMU 21-024(k), Phase II work plan locations 1 through 4 (LANL 2008, 104989, Table 23 and Figure 23) were sampled in May and June 2009. Four subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-18). The vertical extent of barium, calcium, and strontium was not defined at location 21-600859 because a drill rig could not be sited in this location, given the steepness of the canyon. As a result, deeper samples were not collected at this location. Three sampling locations sited under the inlet piping near DP East buildings were not sampled during Phase I or II investigation activities (LANL 2005, 090225, Figure 1.2-25) because structures are still present, thus preventing access and sample collection.

At Consolidated Unit 21-024(l)-99, Phase II work plan locations 1 through 15 (LANL 2008, 104989, Table 10 and Figure 10) were sampled in May 2009. Six surface samples and 13 subsurface samples were collected and analyzed as prescribed in the Phase II investigation work plan (Table 4.2-19).

At SWMU 21-024(n), Phase II work plan locations 1 through 13 (LANL 2008, 104989, Table 24 and Figure 24) were sampled in June 2009. Four surface samples and 10 subsurface samples were collected

and analyzed as prescribed in the Phase II work plan (Table 4.2-20). Based on the results from the Phase II sampling, an additional surface sample was collected in September 2009 10 ft downslope of location 6 to define the lateral extent of isotopic plutonium. In December 2009, an additional surface sample was collected to define the extent of isotopic plutonium downslope of the sample collected in September 2009.

At SWMU 21-024(o), Phase II work plan locations 1 and 2 (LANL 2008, 104989, Table 11 and Figure 11) were sampled in May 2009. Two surface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-21).

At Consolidated Unit 21-026(a)-99, Phase II work plan locations 1 through 9 (LANL 2008, 104989, Table 12 and Figure 12) were sampled in May and June 2009. One surface sample and 10 subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-22). Based on the results from the Phase II sampling, an additional deeper sample was collected in August 2009 at location 5 to define vertical extent of calcium at 19 to 20 ft.

At SWMU 21-027(a), Phase II work plan locations 1 through 6 (LANL 2008, 104989, Table 25 and Figure 25) were sampled in May and June 2009. Two surface samples and four subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-23). Based on the results from the Phase II sampling, an additional surface sample was collected in September 2009 at 10 ft southeast of location 3 to define the lateral extent of calcium.

At SWMU 21-027(c), Phase II work plan locations 1 through 6 (LANL 2008, 104989, Table 13 and Figure 13) were sampled in June 2009. Three surface samples and three subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-24). Based on the results from the Phase II sampling, additional samples were collected in September 2009: one deeper sample was collected from 7 to 8 ft at location 4 to define the vertical extent of lead and one surface sample was collected 10 ft southeast of location 3 to define the lateral extent of lead.

At AOC C-21-027, DP Site Aggregate Area supplemental work plan locations 1 through 4 and borehole 1 (BH-1) through BH-4 (LANL 2006, 092079, Table 2.6-1 and Figure 2.6-1) were sampled in September, October, and December 2009. Thirteen surface and 12 subsurface samples were collected and analyzed as prescribed in the supplemental work plan (Table 4.2-25). No piping or evidence of piping was found during investigation activities. Therefore, samples for BH-4 and location 2 were collected at the northern end of the bench, at locations estimated using historical piping information (LANL 2006, 092079). Samples from location 5 were not collected because samples had been collected from this area as part of adjoining SWMU 21-027(a) and Consolidated Unit 21-006(c)-99 (locations 21-600866 and 21-605256) Phase II activities. Dioxin and furans were analyzed for only at location 4 because this area had been sampled as part of SWMU 21-027(a) (location 21-605279) Phase II activities. All other samples were collected as prescribed in the supplemental work plan (LANL 2006, 092079). The extended suite sample was collected from BH-4 at the 2- to 3-ft depth interval. Based on the results, additional sampling for dioxin/furans was required (NMED 2009, 108882). The following samples were also collected for extent determinations in December 2009:

- one sample 10 ft east of location 21-605340 (BH-4) for isotopic plutonium in the surface
- one sample 10 ft east of BH-3 for isotopic plutonium in the surface
- one sample from various depths at BH-2, BH-3, location 1, location 3, and location 4 for dioxins/furans
- one deeper (5 to 6 ft bgs) sample at location 21-605340 (BH-4) for americium-241, isotopic plutonium, and dioxin furans

## 5.0 REGULATORY CRITERIA

This section describes the criteria used for evaluating potential risk, hazard, or dose to ecological and human receptors. Regulatory criteria identified by medium in the Consent Order include cleanup standards, risk-based screening levels, and risk-based cleanup goals. The applicable soil screening levels (SSLs) for inorganic and organic chemicals of potential concern (COPCs) and screening action levels (SALs) for radionuclide COPCs at DP Site Aggregate Area sites are presented in the section 6 data tables.

The objectives of the current investigation are to complete the characterization of the nature and extent of contamination from historical operations, to perform human health and ecological risk-screening assessments, and to identify any further actions needed at each site. For each consolidated unit, SWMU, and AOC, the regulatory criteria and the data gathered during the investigations are used to identify COPCs and their distribution in the environment and the resulting potential human and ecological risks or doses (Appendix H).

All analytical results from samples collected during the Phase II investigation as well as relevant historical investigations were reviewed for quality (Appendix F), and all data found to be validated to current standards for data usability were regarded as “qualified data.” Only qualified data are included in the final data set used to characterize the nature and extent and evaluate potential risk/dose associated with the DP Site Aggregate Area consolidated units, SWMUs, or AOCs. Risk-screening evaluations are based on applicable exposure scenarios, as discussed below; thus, only qualified data obtained from samples collected from 0–1 ft, 0–5 ft, and 0–10 ft bgs are used in the human health or ecological risk-screening evaluations.

### 5.1 Current and Future Land Use

The specific screening levels used in the risk evaluation and corrective action decision process at a site depend on the current and reasonably foreseeable future land use. The current and reasonably foreseeable future land use for a site determines the receptors and exposure scenarios that are used to select screening and cleanup levels. The land use within and surrounding the DP Site Aggregate Area is currently industrial and is expected to remain industrial for the reasonably foreseeable future. A construction worker scenario is also evaluated because construction activities may be possible in the future. The residential scenario is evaluated per the Consent Order.

### 5.2 Screening Levels

Human health and ecological risk-screening evaluations were conducted for the solid media at the DP Site Aggregate Area. The human health screening assessment (Appendix H) was performed on inorganic and organic COPCs using NMED SSLs (NMED 2009, 108070) for the industrial, construction worker, and residential scenarios. Radionuclides were assessed using the Laboratory SALs (LANL 2005, 088493). When an NMED SSL was not available for a COPC, EPA regional screening levels (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) were used (adjusted to a risk level of $10^{-5}$ for carcinogens). EPA regional screening levels are not available for construction workers; therefore, when regional screening levels were used for a COPC, the construction worker SSLs were calculated using toxicity values from EPA regional screening tables (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) and equation parameters from NMED (2009, 108070). A surrogate SSL is used for some COPCs based on structural similarity or breakdown products. Section 6 data tables include the applicable SSLs for inorganic and organic COPCs and SALs for radionuclide COPCs for the DP Site Aggregate Area sites.

The Laboratory's ecological risk-screening guidance (LANL 2004, 087630) and ecological screening levels (ESLs). ESLs were obtained from the ECORISK Database, Version 2.4 (LANL 2009, 107524), as presented in Appendix H. The ESLs are based on similar species and are derived from experimentally determined no-observed-adverse-effect levels (NOAELs), lowest-observed-adverse-effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and toxicity reference values are presented in the ECORISK Database, Version 2.4 (LANL 2009, 107524).

### 5.3 Cleanup Goals

The cleanup goals are a target risk of $10^{-5}$ for carcinogens, a hazard index (HI) of 1 for noncarcinogens, or a dose of 15 mrem/yr for radionuclides. The screening levels described in section 5.2 are based on these cleanup levels. The screening levels will be used as cleanup levels unless determined to be impracticable or unless SSLs do not exist for current and reasonably foreseeable future land use.

## 6.0 SITE CONTAMINATION

The following sections summarize the results of fixed-laboratory analysis for samples collected during the Phase II investigation.

Historical data were revalidated to current data-quality standards for this report. Therefore, analytical results and qualifiers for historical data presented in this investigation report may not be to the same as the analytical results and qualifiers for the historical data presented in the Phase I report (LANL 2008, 102760; NMED 2008, 102290) and used to develop the approved Phase II investigation work plan. As a result, some data previously presented may now be excluded from the current data set because they are no longer valid and are not presented in this report. Appendix F discusses the rejected data, and Table F-1.0-1 presents a crosswalk of the data identified in the approved work plan, the historical data set, and the revalidated data set, where changes were made as a result of revalidation. Table F-1.0-2 presents the data excluded from the Consolidated Unit 21-003-99 and SWMU 21-013(c) data sets presented in the Phase I report (LANL 2008, 102760; NMED 2008, 102290). Locations sampled in the 1990s (Table F-1.0-2) were resampled within 5 ft laterally during the Phase I investigation; therefore, only the valid Phase I data are included in the data sets presented in this Phase II report.

The Phase II work plan addressed COPCs for which extent was not defined during the Phase I investigation report. The inorganic, organic, and radionuclide COPCs identified in the Phase I investigation report, which were carried through to the approved Phase II work plan, are evaluated below to establish their spatial distribution.

Thirty-six QC samples were collected in association with the Phase II samples collected to define extent at the 26 sites addressed in this report. QC samples included 12 field duplicates, 11 field trip blanks, and 13 rinsate samples. At the PCB site, nine preexcavation field duplicate samples were collected with the preexcavation PCB characterization samples. Thirty-eight field-duplicate samples and two rinsate samples were collected with the postexcavation PCB characterization samples. The QC samples were collected at the frequency specified in the investigation work plans submitted to NMED (LANL 2004, 087461; LANL 2006, 092079), the application for PCB risk-based cleanup submitted to the EPA and NMED (LANL 2009, 105184), and the notice of self-implementation of on-site PCB cleanup submitted to the EPA and NMED (LANL 2009, 105182).

## 6.1 Site Contamination at AOC 21-002(b)

The sections below summarize the results of laboratory analyses Phase II for soil and tuff samples at AOC 21-002(b). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Lateral extent of americium-241, plutonium-239, and SVOCs east of location 21-25693
- Vertical extent of barium and selenium between locations 21-25682 and 21-25690
- Vertical extent of barium and selenium at location 21-25696
- Lateral extent of lead and zinc south of location 21-25687
- Lateral extent of lead and zinc west of location 21-25687
- Lateral extent of plutonium-238 north of 21-25685
- Vertical extent of SVOCs at location 21-25679
- Lateral extent of plutonium-239 and selenium northeast of location 21-25692
- Lateral extent of selenium east of location 21-25689

### 6.1.1 Soil and Rock Sampling and Analytical Results

The complete data set for AOC 21-002(b) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-1 provides the samples collected at this site.

The analytical results for inorganic chemicals above background values (BVs) are provided for soil and tuff in Table 6.1-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.1-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.1-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.1-2.

The analytical results for radionuclides detected or detected above BVs or fallout values (FVs) are provided for soil and tuff in Table 6.1-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.1-3.

All analytical results for soil and tuff samples collected at AOC 21-002(b) are provided on DVD in Appendix G.

### 6.1.2 Spatial Distribution of COPCs at AOC 21-002(b)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.1-1 through 6.1-3.

- Lateral extent is defined for americium-241, plutonium-239, and SVOCs east of location 21-25693 by decreasing concentrations/activities at location 21-604519.
- Vertical extent is defined for barium and selenium between locations 21-25682 and 21-25690, respectively, by decreasing concentrations with depth at location 21-604520.
- Vertical extent is defined for barium and selenium at location 21-25696 by decreasing concentrations with depth.

- Lateral extent is defined for lead and zinc south of location 21-25687 by decreasing concentrations at location 21-604521.
- Lateral extent is defined for lead and zinc west of location 21-25687 by decreasing concentrations at location 21-604522.
- Lateral extent is defined for plutonium-238 north of 21-25685 by decreasing activities at location 21-604524.
- Vertical extent is defined for SVOCs at location 21-25679 by decreasing concentrations with depth or concentrations detected below estimated quantitation limits (EQLs).
- Lateral extent is defined for selenium northeast of 21-25692 by decreasing concentrations at location 21-604525. Lateral extent is defined for isotopic plutonium northeast of locations 21-25692 and 21-604525 by decreasing activities at location 21-609834.
- Lateral extent is defined for selenium east of location 21-25689 by decreasing concentrations at location 21-604523.

### 6.1.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2006, 092513). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2006, 092513). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $6 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2006, 092513). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2006, 092513). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2006, 092513). The HI is approximately 0.7, which is below the NMED target HI of 1.0 (NMED 2006, 092513). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.1.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.2 Site Contamination at Consolidated Unit 21-003-99 and SWMU 21-024(c)

- The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-003-99 and SWMU 21-024(c). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:
- Vertical extent of aluminum, barium, and nickel at location 21-25719
- Vertical extent of americium-241, chromium, copper, lead, mercury, plutonium-239, and SVOCs at location 21-25748
- Vertical extent of arsenic, chromium, copper, lead, silver, uranium, and zinc at location 21-25763
- Lateral extent of barium west of location 21-25728
- Lateral extent of cesium-137 and tritium west of location 21-25764
- Lateral and vertical extent of cobalt east of 21-25716

- Vertical extent of cobalt at location 21-25716
- Lateral extent of mercury, zinc, uranium, and isotopic uranium north of location 21-25708
- Lateral extent of nitrate west of location 21-25761
- Lateral extent of nitrate east of location 21-25726
- Vertical extent of trichloroethene at location 21-25750
- Lateral extent of zinc northeast of location 21-25715

### 6.2.1 Soil and Rock Sampling and Analytical Results

The complete data set for Consolidated Unit 21-003-99 and SWMU 21-024(c) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-2 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.2-1. The locations and analytical results of inorganic chemicals detected above BVs are shown on Plate 2.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.2-2. The locations and analytical results of detected organic chemicals are shown in Figures 6.2-1 through 6.2-11.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.2-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown on Plate 3.

As discussed in the initial investigation report (LANL 2008, 102760; NMED 2008, 102290), PCB concentrations were above the Toxic Substances Control Act (TSCA) cleanup level of 1 mg/kg. Therefore, these two sites required remediation, which was performed in 2009. The PCB sample collection and analyses are presented in the risk-based and self-implementing reports submitted to the EPA and NMED in November 2009 (LANL 2009, 107679) and January 2010 (LANL 2010, 108598).

A total of 142 preexcavation samples were collected and analyzed for PCBs (LANL 2009, 107679; LANL 2010, 108598). A total of 368 postexcavation samples were collected and analyzed for PCBs (LANL 2009, 107679; LANL 2010, 108598). PCB concentrations remaining at the site are presented in Table 6.2-2. Additionally, the site has been remediated to less than or equal to 1 mg/kg total PCBs.

All analytical results for soil and tuff samples collected at Consolidated Unit 21-003-99 and SWMU 21-024(c) are provided on DVD in Appendix G. Excavated samples are presented in a separate table on the DVD in Appendix G.

### 6.2.2 Spatial Distribution of COPCs at Consolidated Unit 21-003-99 and SWMU 21-024(c)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.2-1 through 6.2-11 and on Plates 2 and 3.

- Vertical extent is defined for aluminum, barium, and nickel at location 21-25719 by decreasing concentrations with depth.
- Vertical extent is not defined for chromium at location 21-25719; concentrations increased with depth. Chromium was detected above BVs as part of the target analyte list (TAL) metals suite. This sample was analyzed for the entire TAL metals suite, instead of a suite selected based on the sample objectives presented in the Phase II work plan.

- Vertical extent is defined for americium-241, chromium, copper, lead, mercury, plutonium-239, and SVOCs at location 21-25748 by concentrations/activities decreasing with depth.
- Vertical extent is defined for arsenic, chromium, lead, silver, uranium, and zinc at location 21-25763 by decreasing concentrations with depth (bottom two depths had no detections or detections below BVs). At location 21-25763, cobalt was analyzed instead of copper. Therefore, extent is not defined for copper.
- Lateral extent is defined for barium west of location 21-25728 by decreasing concentrations at location 21-605289.
- As part of the PCB remediation, the area where location 5 samples were to be collected was excavated. Therefore, lateral extent is not defined for cesium-137 or tritium west of location 21-25764 west of the outfall area.
- Lateral and vertical extent is defined for cobalt east of 21-25716 by decreasing concentrations at location 21-605292.
- Vertical extent is defined for cobalt at location 21-25716 by decreasing concentrations with depth.
- Lateral extent is defined for mercury, zinc, uranium, and isotopic uranium north of location 21-25708 by decreasing concentrations/activities at location 21-605293.
- Lateral extent is not defined for nitrate west of location 21-25761; concentrations increased at location 21-605294.
- Lateral extent was defined for nitrate east of location 21-25726 by decreasing concentrations at location 21-605295.
- Vertical extent is defined for trichloroethene at location 21-25750 by decreasing concentrations with depth.
- Lateral extent is defined for zinc northeast of location 21-25715 by decreasing concentrations at location 21-605290.
- PCB extent is defined by decreasing concentrations with depth and all contamination above 1 mg/kg total PCBs has been removed from the site from within 10 ft bgs.

### 6.2.3 Summary of Human Health and Ecological Risk-Screening Results

The screening risk assessments for this site will be performed during the Phase III investigation and presented in the Phase III investigation report.

## 6.3 Site Contamination at Consolidated Unit 21-006(c)-99

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-006(c)-99. The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241 at location 21-601211
- Vertical extent of americium-241, isotopic plutonium, and tritium at location 21-601213
- Lateral extent of nitrate and cesium-137 west of location 21-600388
- Lateral extent of nitrate southwest of location 21-600390
- Lateral extent of isotopic plutonium and uranium-238 [for adjoining SWMU 21-027(a)] southeast of location 21-600392

- Lateral extent of americium-241, cesium-137, isotopic plutonium, strontium-90, tritium, and isotopic uranium south of location 21-601199
- Lateral extent of copper, isotopic plutonium, tritium, and isotopic uranium south of location 21-601200
- Lateral extent of isotopic plutonium and isotopic uranium north of location 21-601201
- Vertical extent of VOCs at location 21-600391

### 6.3.1 Soil and Rock Sampling and Analytical Results

The complete data set for Consolidated Unit 21-006(c)-99 includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-3 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.3-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.3-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.3-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.3-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.3-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.3-3.

All analytical results for soil and tuff samples collected at Consolidated Unit 21-006(c)-99 are provided on DVD in Appendix G.

### 6.3.2 Spatial Distribution of COPCs at Consolidated Unit 21-006(c)-99

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.3-1 and 6.3-3.

- Vertical extent is not defined for americium-241 at location 21-601211; its activities increased with depth.
- Vertical extent is defined for americium-241, isotopic plutonium, and tritium at location 21-601213 by decreasing activities with depth.
- Lateral extent is defined for nitrate and cesium-137 west of location 21-600388 by decreasing concentrations/activities at location 21-605256.
- Lateral extent is defined for nitrate southwest of location 21-600390 by decreasing concentrations at location 21-605257.
- Lateral extent is defined for isotopic plutonium and uranium-238 [for adjoining SWMU 21-027(a)] southeast of location 21-600392 by decreasing concentrations at location 21-605258.
- Lateral extent is defined for americium-241, cesium-137, isotopic plutonium, strontium-90, tritium, and isotopic uranium south of location 21-601199 by decreasing or remaining essentially the same with depth. Tritium increased slightly laterally but was detected at trace levels.
- Lateral extent is defined for copper, isotopic plutonium, and tritium south of location 21-601200 by decreasing concentrations at locations 21-605260 and 21-608018. Isotopic uranium was not detected above BVs at this location during Phase I or Phase II sampling.

- Lateral extent is defined for isotopic uranium north of location 21-601201 by decreasing activities at location 21-605261. Lateral extent is defined for isotopic plutonium north of location 21-605261 by decreasing activities at location 21-609835.
- VOCs were not detected at location 21-600391 during Phase I or Phase II sampling.

### 6.3.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.04, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $7 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.08, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene contributes $1.5 \times 10^{-5}$ to the risk. Consolidated Unit 21-006(c)-99 consists of inactive underground seepage pits associated with buildings 21-002 and 21-003 and also includes a drainline and outfall from a seepage pit. The operations associated with these buildings would not have resulted in the release of polycyclic aromatic hydrocarbons (PAHs), such as benzo(a)pyrene. PAHs are found in asphalt and are a product of incomplete combustion from the tailpipes of motor vehicles. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt road upslope from the outfall. Therefore, the slightly elevated cancer risk estimated for the residential scenario at this consolidated unit is not related to release from the site and does not require further investigation or remediation. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 11 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.3.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.4 Site Contamination at SWMU 21-009

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-009. The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241 at location 21-25643
- Lateral extent of americium-241 southeast of location 21-25641
- Vertical extent of nitrate at location 21-25640
- Lateral extent of plutonium-239 and nitrate south of location 21-25640
- Lateral extent of plutonium-239 and nitrate east of location 21-25640
- Vertical extent of nitrate east of location 21-25640
- Vertical extent of americium-241 and plutonium-239 at location 21-25636

### 6.4.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-009 includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-1 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.4-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.4-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.4-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.4-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.4-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.4-3.

All analytical results for soil and tuff samples collected at SWMU 21-009 are provided on DVD in Appendix G.

### 6.4.2 Spatial Distribution of COPCs at SWMU 21-009

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.4-1 and 6.4-3.

- Vertical extent is defined for americium-241 at location 21-25643 by decreasing activities with depth.
- Lateral extent is defined for americium-241 southeast of location 21-25641 by decreasing activities at location 21-604497.
- Vertical extent is defined for nitrate at location 21-25640 by decreasing concentrations with depth.
- Lateral extent is defined for plutonium-239 and nitrate south of location 21-25640 by decreasing activities/concentrations at location 21-604498.
- Lateral extent is defined for plutonium-239 and nitrate east of location 21-25640 by decreasing concentrations/activities at location 21-604499.
- Vertical extent is defined for nitrate east of location 21-25640 by decreasing concentrations with depth at location 21-604499.
- Vertical extent is defined for americium-241 and plutonium-239 at location 21-25636 by decreasing activities with depth.

### 6.4.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $4 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.04 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.4.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.5 Site Contamination at SWMU 21-012(b)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-012(b). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of chromium at location 21-25800
- Lateral extent of chromium east of location 21-25816
- Lateral extent of copper and zinc west of location 21-25808
- Lateral extent of copper, lead, strontium, toluene, and zinc downslope of the outfall area
- Vertical extent of copper, lead, and plutonium-239 at location 21-25783
- Vertical extent of nitrate at location 21-25817
- Vertical extent of plutonium-238 and strontium at location 21-25797
- Vertical extent of plutonium-238 at location 21-25804
- Vertical extent of strontium at location 21-25810
- Lateral extent of zinc east of location 21-25788

### 6.5.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-012(b) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-5 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.5-1. The locations and analytical results of inorganic chemicals detected above BVs are shown on Plate 4.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.5-2. The locations and analytical results of detected organic chemicals are shown on Plate 5.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.5-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown on Plate 6.

All analytical results for soil and tuff samples collected at SWMU 21-012(b) are provided on DVD in Appendix G.

### 6.5.2 Spatial Distribution of COPCs at SWMU 21-012(b)

The spatial distribution of the Phase II extent sampling results is presented below and shown on Plates 4 and 6.

- Vertical extent is defined for chromium at location 21-25800 by decreasing concentrations with depth.
- Lateral extent is defined for chromium east of location 21-25816 by decreasing concentrations at location 21-604526.
- Lateral extent is defined for copper and zinc west of location 21-25808 by decreasing concentrations at location 21-604527.
- Lateral extent is defined for copper, lead, strontium, toluene, and zinc downslope of the outfall area by decreasing concentrations at location 21-604529.
- Vertical extent is defined for copper, lead, and plutonium-239 at location 21-25783 by decreasing concentrations/activities with depth.
- Vertical extent of nitrate is defined at location 21-25817 by decreasing concentrations with depth.
- Vertical extent is defined for plutonium-238 and strontium at location 21-25797 by decreasing concentrations/activities with depth.
- Vertical extent is defined for plutonium-238 at location 21-25804 by decreasing activities with depth.
- Vertical extent is defined for strontium at location 21-25810 by decreasing concentrations with depth.
- Lateral extent is defined for zinc east of location 21-25788 by decreasing concentrations at location 21-604528.

### 6.5.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-9}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $7 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.5.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.6 Site Contamination at SWMU 21-013(c)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-013(c). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241 and plutonium-239 at location 21-25653
- Lateral extent of americium-241 and SVOCs northwest of location 21-25666
- Lateral extent of americium-241 and lateral and vertical extent of perchlorate southwest of location 21-25664
- Lateral extent of americium-241 to the north of SWMU 21-013(c)
- Lateral extent of americium-241 and vertical extent of barium southwest of location 21-25663
- Lateral extent of americium-241 east of location 21-25669
- Lateral extent of plutonium-239 and SVOCs west of location 21-25647
- Vertical extent of selenium at location 21-25651
- Vertical extent of perchlorate at location 21-25664
- Lateral extent of selenium west of location 21-25657
- Lateral extent of selenium southeast of location 21-25661

### 6.6.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-013(c) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-6 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.6-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.6-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.6-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.6-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.6-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.6-3.

All analytical results for soil and tuff samples collected at SWMU 21-013(c) are provided on DVD in Appendix G.

### 6.6.2 Spatial Distribution of COPCs at SWMU 21-013(c)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.6-1 through 6.6-3.

- Vertical extent is defined for americium-241 and plutonium-239 at location 21-25653 by decreasing activities with depth.
- Lateral extent is defined for americium-241 and SVOCs northwest of location 21-25666 by decreasing concentrations/activities or concentrations below the EQLs at location 21-604500.

- Lateral extent is defined for americium-241 and lateral and vertical extent is defined for perchlorate southwest of location 21-25664 by decreasing activities/concentrations laterally and vertically at location 21-604502.
- Lateral extent is defined for americium-241 to the north of SWMU 21-013(c) by decreasing activities at location 21-604504.
- Lateral extent is defined for americium-241 and vertical extent is defined for barium southwest of location 21-25663 by decreasing activities/concentrations laterally and vertically at location 21-604503.
- Lateral extent is defined for americium-241 east of location 21-25669 by decreasing activities at location 21-604505.
- Lateral extent is defined for plutonium-239 and SVOCs west of location 21-25647 by decreasing activities or concentrations below EQLs at location 21-604501.
- Vertical extent is defined for selenium at location 21-25651 by decreasing concentrations with depth.
- Vertical extent is defined for perchlorate at location 21-25664 by decreasing concentrations with depth.
- Lateral extent is defined for selenium west of location 21-25657 by decreasing concentrations at location 21-604506.
- Lateral extent is defined for selenium southeast of location 21-25661 by decreasing concentrations at location 21-604507.

### 6.6.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.6.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.7 Site Contamination at SWMU 21-022(f)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-022(f). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of lead, selenium, and tritium at location 21-603145
- Vertical extent of uranium-235 at location 21-603142

### 6.7.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-022(f) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-7 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.7-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.7-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.7-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.7-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.7-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.7-3.

All analytical results for soil and tuff samples collected at SWMU 21-022(f) are provided on DVD in Appendix G.

### 6.7.2 Spatial Distribution of COPCs at SWMU 21-022(f)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.7-1 and 6.7-3.

- Vertical extent is defined for lead, selenium, and tritium at location 21-603145 by decreasing concentrations/activities with depth.
- Vertical extent is defined for uranium-235 at location 21-603142 by decreasing activities with depth.

### 6.7.3 Summary of Human Health Risk-Screening Results

Risk/dose screening assessments for the industrial scenario were not conducted for SWMU 21-022(f) because samples were not collected in the 0–1-ft depth interval for this subsurface sump and pipeline.

The total excess cancer risk for the construction worker scenario is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 3, which is above the NMED target HI of 1.0 (NMED 2009, 108070). The COPC that caused the HI to be greater than 1.0 is manganese with a hazard quotient (HQ) of 2.4. The manganese exposure point concentration (EPC) and the construction worker SSL are similar to background concentrations and result in an overestimation of risk. Therefore, if manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. The total dose is approximately 0.1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.7.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.8 Site Contamination at Consolidated Unit 21-022(h)-99

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-022(h)-99. The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of barium at location 21-600240
- Lateral and vertical extent of barium and lateral extent of molybdenum west of locations 21-600238 and 21-600240
- Lateral extent of molybdenum, nitrate, and perchlorate west of location 21-600232
- Lateral extent of molybdenum, selenium, americium-241, cesium-137, isotopic plutonium, strontium-90, and tritium at SWMU 21-022(j) south of 21-601063

### 6.8.1 Soil and Rock Sampling and Analytical Results

The complete data set for Consolidated Unit 21-022(h)-99 includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-8 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.8-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.8-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.8-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.8-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.8-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.8-3.

All analytical results for soil and tuff samples collected at Consolidated Unit 21-022(h)-99 are provided on DVD in Appendix G.

### 6.8.2 Spatial Distribution of COPCs at Consolidated Unit 21-022(h)-99

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.8-1 and 6.8-3.

- Vertical extent is defined for barium at location 21-600240 by decreasing concentrations with depth.

- Lateral extent is defined for barium and molybdenum west of locations 21-600238 and 21-600240 by decreasing concentrations at location 21-605282. Vertical extent is not defined for barium at location 21-605282; its concentrations increased with depth.
- Lateral extent is defined for molybdenum, nitrate, and perchlorate west of location 21-600232 by decreasing concentrations or concentrations remaining essentially the same at location 21-605283.
- Lateral extent of americium-241, cesium-137, isotopic plutonium, selenium, strontium-90, and tritium is defined at SWMU 21-022(j) south of 21-601063 by decreasing concentrations/activities at location 21-605284. Molybdenum increases to the south; however, detections are at trace levels at approximately 1 mg/kg. Therefore, the extent is defined for molybdenum.

### 6.8.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene accounts for $2.5 \times 10^{-5}$ of the total risk. The HI is approximately 5, which is above the NMED target HI of 1.0 (NMED 2009, 108070), because of a lead HQ of 4.5. The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $8 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 2, which is above the NMED target HI of 1.0 (NMED 2009, 108070), because of a lead HQ of 2. The total dose is approximately 23 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Isotopic plutonium dose accounts for 22 mrem/yr of the total dose.

The total excess cancer risk for the residential scenario is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene accounts for $1.4 \times 10^{-5}$ of the risk. The HI is approximately 4, which is above the NMED target HI of 1.0 (NMED 2009, 108070), because of a lead HQ of 4. The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Isotopic plutonium accounts for 24 mrem/yr of the total dose.

### 6.8.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.9 Site Contamination at Consolidated Unit 21-023(a)-99

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-023(a)-99. The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241 at location 21-603015
- Vertical extent of americium-241, plutonium-238, and plutonium-239 between locations 21-601116 and 21-601129
- Vertical extent of plutonium-239 at location 21-601130
- Vertical extent of plutonium-239 at location 21-601120
- Vertical extent of plutonium-239 and SVOCs at location 21-601114

### 6.9.1 Soil and Rock Sampling and Analytical Results

The complete data set for Consolidated Unit 21-023(a)-99 includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-9 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.9-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.9-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.9-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.9-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.9-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.9-3.

All analytical results for soil and tuff samples collected at Consolidated Unit 21-023(a)-99 are provided on DVD in Appendix G.

### 6.9.2 Spatial Distribution of COPCs at Consolidated Unit 21-023(a)-99

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.9-2 and 6.9-3.

- Vertical extent is defined for americium-241 at location 21-603015 by decreasing activities with depth.
- Vertical extent is defined for americium-241, plutonium-238, and plutonium-239 at location 21-605271 by decreasing activities with depth.
- Vertical extent is not defined for plutonium-239 at location 21-601130; its activities increased with depth.
- Vertical extent is defined for plutonium-239 at location 21-601120 by decreasing activities with depth.
- Vertical extent is defined for plutonium-239 at location 21-601114 by decreasing activities with depth. Vertical extent is not defined for several PAHs (i.e., benzo[b]fluoranthene, fluoranthene, or pyrene), at location 21-601114 where their concentrations increase with depth.

### 6.9.3 Summary of Human Health Risk-Screening Results

Risk/dose screening assessments for the industrial scenario were not conducted for Consolidated Unit 21-023(a)-99 because samples were not collected in the 0–1-ft depth interval for these subsurface septic systems.

The total excess cancer risk for the construction worker scenario is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $5 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene and arsenic are the primary contributors to the cancer risk at this site. Consolidated Unit 21-023(a)-99 consists of septic tanks and

drainlines that reportedly serviced a janitor's mop sink in building 21-003, received wastewater from the shower room in building 21-003, and received industrial waste and sewage from building 21-003. The operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene. Benzo(a)pyrene is probably from runoff from the road, which is upslope of the site. The arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, the total excess cancer risk is overestimated and if the PAHs, particularly benzo(a)pyrene, and arsenic are not included, the cancer risk is approximately $5 \times 10^{-6}$, which is less than the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.9.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.10 Site Contamination at SWMU 21-024(a)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(a). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of aluminum, barium, and chromium at location 21-27325
- Vertical extent of chromium at location 21-27330
- Vertical extent of cesium-137, copper, and plutonium-239 at location 21-27322
- Vertical extent of toluene and trichloroethene at location 21-27329

### 6.10.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(a) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-10 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.10-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.10-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.10-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.10-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.10-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.10-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(a) are provided on DVD in Appendix G.

### 6.10.2 Spatial Distribution of COPCs at SWMU 21-024(a)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.10-1 through 6.10-3.

- Vertical extent is defined for aluminum, barium, and chromium at location 21-27325 by decreasing concentrations with depth.
- Vertical extent is defined for chromium at location 21-27330 by decreasing concentrations with depth.
- Vertical extent is defined for cesium-137, copper, and plutonium-239 at location 21-27322 by decreasing concentrations/activities with depth.
- Vertical extent is defined for toluene and trichloroethene at location 21-27329 by decreasing concentrations with depth.

### 6.10.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $6 \times 10^{-9}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $3 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.10.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.11 Site Contamination at SWMU 21-024(b)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(b). The data need identified in the Phase II investigation work plan (LANL 2008, 104989) is as follows:

- lateral extent of nitrate west of location 21-600504

### 6.11.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(b) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-11 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.11-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.11-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.11-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.11-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.11-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.11-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(b) are provided on DVD in Appendix G.

### 6.11.2 Spatial Distribution of COPCs at SWMU 21-024(b)

Lateral extent was defined for nitrate west of location 21-600504 by decreasing concentrations at location 21-605285 (Figure 6.11-1).

### 6.11.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $8 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 89 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the total dose are plutonium-239, with a dose of 75 mrem/yr, and americium-241, with a dose of 13 mrem/yr.

The total excess cancer risk for the residential scenario is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic with a risk of $1.2 \times 10^{-5}$ is the main contributor to the cancer risk at this site. The arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, if arsenic is not included, the cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level. The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 98 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 81 mrem/yr, and americium-241, with a dose of 15 mrem/yr.

### 6.11.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.12 Site Contamination at SWMU 21-024(d)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(d). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241, copper, lead, and selenium, SVOCs, and tritium at location 19-601285

- Lateral extent of americium-241, isotopic plutonium, isotopic uranium, tritium cadmium, chromium, copper, cyanide, lead, mercury, nitrate, silver, uranium, zinc, toluene, and trichloroethene west of location 21-27372
- Vertical extent of lead and strontium-90 at location 21-27366
- Vertical extent of plutonium-239 at location 21-601283
- Vertical extent of several SVOCs at location 21-601281
- Vertical extent of Aroclor-1242, Aroclor-1254, and Aroclor-1260 at location 21-27365

### 6.12.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(d) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-12 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.12-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.12-1.

The analytical results for organic chemicals detected are provided for soil and tuff (Table 6.12-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.12-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.12-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.12-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(d) are provided on DVD in Appendix G.

### 6.12.2 Spatial Distribution of COPCs at SWMU 21-024(d)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.12-1 through 6.12-3.

- Vertical extent is defined for copper, lead, and selenium at location 19-601285 by decreasing concentrations with depth. Vertical extent is not defined for americium-241 or tritium at this location; the data were rejected at the deepest depth sampled because the associated matrix spike recovery was less than 10%. SVOCs were also detected and increased slightly with depth; therefore, vertical extent is not defined.
- Lateral extent is defined for americium-241, isotopic plutonium, isotopic uranium, tritium cadmium, chromium, copper, cyanide, lead, mercury, nitrate, silver, uranium, zinc, toluene, and trichloroethene west of 21-27372 by decreasing activities/concentrations at location 21-605286.
- Vertical extent is defined for lead and strontium-90 at location 21-27366 by decreasing concentrations/activities with depth.
- Vertical extent is defined for plutonium-239 at location 21-601283 by decreasing activities with depth.

- Vertical extent is defined for several SVOCs at location 21-601281 by decreasing concentrations with depth.
- Vertical extent is defined for Aroclor-1242, Aroclor-1254, and Aroclor-1260 at location 21-27365 by decreasing concentrations with depth.

### 6.12.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $5 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.07, which is below, the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic risk contributes to approximately half of the total risk at the site and is the main contributor to the cancer risk. The arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, if arsenic is not included, the cancer risk approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.12.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.13 Site Contamination at SWMU 21-024(e)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(e). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of lead at location 21-27265
- Lateral extent of toluene southeast of location 21-27255
- Vertical extent of cesium-137 at location 21-27250

### 6.13.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(e) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-13 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.13-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.13-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.13-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.13-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.13-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.13-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(e) are provided on DVD in Appendix G.

### 6.13.2 Spatial Distribution of COPCs at SWMU 21-024(e)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.13-1 through 6.13-3.

- Vertical extent is defined for lead at location 21-27265 by decreasing concentrations with depth.
- Lateral and vertical extent is defined for toluene southeast of location 21-27255 by decreasing concentrations laterally and with depth at location 21-604508.
- Vertical extent is defined for cesium-137 at location 21-27250 by decreasing activities with depth.

### 6.13.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-6}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $7 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 10 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.13.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.14 Site Contamination at SWMU 21-024(g)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(g). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Lateral extent of americium-241, plutonium-239, and SVOCs north of 21-27598
- Vertical extent of chromium at location 21-27610
- Vertical extent of chromium at location 21-27599
- Vertical extent of chromium northeast of 21-27599
- Lateral extent of chromium downslope of location 21-27618

- Vertical extent of lead, cesium-137, and isotopic uranium at location 21-27614
- Lateral extent of several SVOCs north of location 21-27606
- Lateral extent of several SVOCs east of location 21-27613
- Vertical extent of plutonium-239 at location 21-27606
- Lateral extent of plutonium-239 and americium-241 east of 21-27601

### 6.14.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(g) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-14 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.14-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.14-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.14-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.14-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.14-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.14-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(g) are provided on DVD in Appendix G.

### 6.14.2 Spatial Distribution of COPCs at SWMU 21-024(g)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.14-1 through 6.14-3.

- Lateral extent is defined for americium-241, plutonium-239, and SVOCs north of 21-27598 by decreasing concentrations/activities at location 21-605245.
- Vertical extent is defined for chromium at location 21-27610 by decreasing concentrations with depth.
- Vertical extent is defined for chromium at location 21-27599 by decreasing concentrations with depth.
- Lateral and vertical extent is defined for chromium northeast of 21-27599 by decreasing concentrations with depth at location 21-605246.
- Lateral extent is defined for chromium downslope of location 21-27618 by decreasing concentrations at location 21-605247.
- Vertical extent is defined for lead at location 21-27614 by decreasing concentrations/activities with depth. Cesium-137 was not detected above its FV at this location during Phase I or Phase II sampling. Vertical extent is not defined for isotopic uranium at this location; its activities increase with depth.
- Lateral extent is defined for several SVOCs north of location 21-27606 by decreasing concentrations at location 21-605248.

- Lateral extent is defined for several SVOCs east of location 21-27613 by decreasing concentrations at location 21-605249.
- Vertical extent is defined for plutonium-239 at location 21-27606 by decreasing activities with depth.
- Lateral extent is defined for plutonium-239 and americium-241 east of 21-27601 by decreasing activities at location 21-605250.

### 6.14.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $1 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.14.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.15 Site Contamination at SWMU 21-024(h)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(h). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241, plutonium-239, several SVOCs, and tritium at location 21-600080
- Vertical extent of americium-241 and lead at location 21-600078 and cesium-137 at location 21-600079
- Vertical extent of mercury and selenium at location 21-601098
- Lateral extent of americium-241, plutonium-239, and several SVOCs and vertical extent of tritium northwest of 21-600080
- Lateral extent of plutonium-239 west of location 21-600080
- Lateral extent of plutonium-239 northeast of location 21-600085
- Lateral and vertical extent of plutonium-239 north of location 21-600084
- Vertical extent of plutonium-239 at location 21-600084

### 6.15.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(h) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-15 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.15-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.15-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.15-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.15-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.15-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.15-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(h) are provided on DVD in Appendix G.

### 6.15.2 Spatial Distribution of COPCs at SWMU 21-024(h)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.15-1 through 6.15-3.

- Vertical extent is defined for americium-241, plutonium-239, several SVOCs, and tritium at location 21-600080 by decreasing concentrations/activities with depth.
- Vertical extent is defined for americium-241 and lead at location 21-600078 and cesium-137 at location 21-600079.
- Vertical extent is defined for mercury and selenium at location 21-601098 by decreasing concentrations with depth.
- Lateral extent is defined for americium-241, plutonium-239, several SVOCs, and tritium northwest of 21-600080 by decreasing concentrations/activities at location 21-605241. Tritium activity remains essentially the same with depth at this location.
- Plutonium-239 activity is higher in the surface at location 21-605242 compared with activities at location 21-600080; however, lateral extent is defined in this area by a decreasing trend north of location 21-600077 and by decreasing activities at location 21-605242.
- Lateral extent is defined for plutonium-239 northeast of location 21-600085 by decreasing activities at location 21-605243.
- Plutonium-239 activity is higher in the surface at location 21-605244 as compared to location 21-600084; however, lateral extent is defined in this area by a decreasing trend north of location 21-600083 and by decreasing activities with depth and laterally at location 21-605244.
- Vertical extent is defined for plutonium-239 at location 21-600084 by decreasing activities with depth.

### 6.15.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below

the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$ which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.15.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.16 Site Contamination at SWMU 21-024(i)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(i). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of calcium, selenium, and tritium at location 21-603025
- Vertical extent of tritium at location 21-603022

### 6.16.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(i) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. It also includes the results from sampling completed in the 1990s and early 2000s after site restoration of the outfall area (LANL 2003, 076053). The discussion below focuses on the Phase II sampling. Table 4.2-16 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.16-1. The locations and analytical results of inorganic chemicals detected above BVs are shown on Plate 7.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.16-2. The locations and analytical results of detected organic chemicals are shown in Plate 8.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.16-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Plate 9.

All analytical results for soil and tuff samples collected at SWMU 21-024(i) are provided on DVD in Appendix G.

### 6.16.2 Spatial Distribution of COPCs at SWMU 21-024(i)

The spatial distribution of the Phase II extent sampling results is presented below and shown on Plates 7 and 9.

- Vertical extent is defined for calcium, selenium, and tritium at location 21-603025 by decreasing concentrations/activities with depth.
- Vertical extent is defined for tritium at location 21-603022 by decreasing activities with depth.

### 6.16.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.1, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The dose contributed by background concentrations of isotopic thorium is approximately 14 mrem/yr. Because the EPCs of thorium-228 and thorium-230 are less than background, the dose is comparable to background dose. The dose from the remaining COPCs is approximately 12 mrem/yr, which is less than the target limit of 15 mrem/yr (DOE 2000, 067489). Therefore, SWMU 21-024(i) does not require further investigation or remediation, and no unacceptable dose for the residential scenario exists from site operations.

### 6.16.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.17 Site Contamination at SWMU 21-024(j)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(j). The data need identified in the Phase II investigation work plan (LANL 2008, 104989) is as follows:

- vertical extent of lead and zinc between locations 21-601297 and 21-601299

### 6.17.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(j) includes the results from soil and tuff sampling at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-17 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.17-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.17-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.17-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.17-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.17-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.17-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(j) are provided on DVD in Appendix G.

### 6.17.2 Spatial Distribution of COPCs at SWMU 21-024(j)

Vertical extent is defined for lead and zinc between locations 21-601297 and 21-601299 by decreasing concentrations with depth at location 21-605287 (Figure 6.17-1).

### 6.17.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.17.4 Summary of Ecological Risk-Screening Results

There is no potential risk to ecological receptors at this site.

## 6.18 Site Contamination at SWMU 21-024(k)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(k). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of barium, nickel, and strontium at location 21-600859
- Vertical extent of several SVOCs at location 21-603054
- Vertical extent of several SVOCs at location 21-603042
- Vertical extent of several SVOCs at location 21-603038

### 6.18.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(k) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-18 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.18-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.18-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.18-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.18-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.18-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.18-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(k) are provided on DVD in Appendix G.

### 6.18.2 Spatial Distribution of COPCs at SWMU 21-024(k)

The spatial distribution of the Phase II extent sampling results is presented below and in Figures 6.18-1 and 6.18-2.

- Vertical extent is defined for nickel at the western outfall by concentrations decreasing with depth at location 21-600859. Vertical extent is not defined for barium, calcium, or strontium at this location because the auger hole could not be advanced deeper given the proximity of the sloped mesa edge. Calcium was detected as part of the TAL metals suite. This sample was analyzed for the entire TAL metals suite instead of a suite selected based on the sampling objectives presented in the Phase II investigation work plan.
- Vertical extent is defined for several SVOCs at location 21-603054 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-603042 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-603038 by decreasing concentrations with depth.

### 6.18.3 Summary of Human Health and Ecological Risk-Screening Results

The screening risk assessments for this site will be performed in the Phase III investigation report.

## 6.19 Site Contamination at Consolidated Unit 21-024(l)-99

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-024(l)-99. The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241, plutonium-239, and several SVOCs at location 21-27514
- Lateral extent of americium-241, cesium-137, and plutonium-239 downslope of location 21-27540

- Lateral and vertical extent of americium-241, cesium-137, isotopic plutonium, lead, mercury, and zinc north of location 21-27517
- Vertical extent of americium-241, cesium-137, isotopic plutonium, lead, mercury, and zinc at location at 21-27517
- Lateral extent of americium-241, isotopic plutonium, and selenium downslope and east of location 21-27533
- Vertical extent of cesium-137 at location 21-27540
- Vertical extent of lead at location 21-27522
- Vertical extent of lead and zinc at location 21-27539
- Lateral extent of plutonium-238 northeast of location 21-27537
- Vertical extent of zinc at location 21-27521
- Lateral extent of zinc east of location 21-27525
- Vertical extent of several SVOCs at location 21-27530
- Vertical extent of several SVOCs at location 21-27547
- Lateral extent of several SVOCs east of location 21-27534

### 6.19.1 Soil and Rock Sampling and Analytical Results

The complete data set for Consolidated Unit 21-024(l)-99 includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-19 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.19-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.19-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.19-2. The locations and analytical results of detected organic chemicals are shown on Plate 10.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.19-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.19-2.

All analytical results for soil and tuff samples collected at Consolidated Unit 21-024(l)-99 are provided on DVD in Appendix G.

### 6.19.2 Spatial Distribution of COPCs at Consolidated Unit 21-024(l)-99

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.19-1 and 6.19-2 and on Plate 10.

- Vertical extent is defined for americium-241, plutonium-239, and several SVOCs at location 21-27514 by decreasing activities/concentrations with depth.
- Lateral extent is defined for americium-241 and plutonium-239 downslope of locations 21-27540 and 21-605272 by decreasing activities at location 21-27543. Cesium-137 was not detected above FVs at this location during Phase I or Phase II sampling.

- Lateral extent is defined for americium-241, isotopic plutonium, lead, mercury, and zinc north of location 21-27517 by decreasing concentrations/activities at location 21-605273. Cesium-137 was not detected above FVs at this location during Phase I or Phase II sampling.
- Vertical extent is defined for americium-241, cesium-137, isotopic plutonium, lead, mercury, and zinc at location at 21-27517 by decreasing concentrations/activities with depth.
- Lateral extent is defined for americium-241, isotopic plutonium, and selenium downslope and east of location 21-27533 by decreasing concentrations/activities at locations 21-605274 and 21-605275.
- Cesium-137 was not detected above FVs at location 21-27540 during Phase I or Phase II sampling. Vertical extent is defined for lead at location 21-27522 by decreasing concentrations with depth.
- Vertical extent is defined for lead and zinc at location 21-27539 by decreasing concentrations with depth.
- Lateral extent is defined for plutonium-238 northeast of location 21-27537 by decreasing activities at location 21-605276.
- Vertical extent is defined for zinc at location 21-27521 by decreasing concentrations with depth.
- Lateral extent is defined for zinc east of location 21-27525 by decreasing concentrations at location 21-605277.
- Vertical extent is defined for several SVOCs at location 21-27530 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-27547 by decreasing concentrations with depth.
- Lateral extent is defined for several SVOCs east of location 21-27534 by decreasing concentrations at location 21-605278.

### 6.19.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $4 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the potential cancer risk at this site. Consolidated Unit 21-024(l)-99 consists of an inactive sump, drainline, outfall, and aboveground storage tank associated with building 21-021. Building 21-021 was used as a secure vault to store special fissile material, including uranium and plutonium metal, and the structures were designed to receive liquid waste and effluent from the floor drain(s). The operations associated with this building would not have resulted in the release of PAHs, such as benzo(a)pyrene, which comprise the majority of the carcinogenic COPCs. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt north, east, and west of former building 21-021.

Therefore, the slightly elevated cancer risk for the residential scenario at this consolidated unit is overestimated and is not related to COPCs released from the site. Without benzo(a)pyrene the potential cancer risk for the residential scenario is approximately $6 \times 10^{-6}$, which is below the NMED target risk level. Therefore, no further investigation or remediation is required at this consolidated unit, and no potential unacceptable risk for the residential scenario exists from site operations. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.19.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.20 Site Contamination at SWMU 21-024(n)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(n). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Lateral extent of americium-241 and plutonium-239 downslope of location 21-600674
- Vertical extent of chromium at location 21-600682
- Vertical extent of chromium, uranium-234, and uranium-235 at location 21-600695
- Lateral extent of americium-241, chromium, copper, lead, zinc, uranium-234, and uranium-235 downslope of location 21-600682
- Vertical extent of copper, lead, and several SVOCs at location 21-600684
- Lateral extent of plutonium-239 downslope of location 21-600683
- Vertical extent of plutonium-239 and toluene at location 21-600669
- Vertical extent of zinc at location 21-601305
- Lateral extent of zinc downslope of location 21-600717
- Vertical extent of several SVOCs at location 21-600735
- Vertical extent of several SVOCs at location 21-600689
- Lateral extent of several SVOCs northwest of location 21-600716
- Vertical extent of lead at location 21-601312

### 6.20.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(n) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-20 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.20-1. The locations and analytical results of inorganic chemicals detected above BVs are shown on Plate 11.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.20-2. The locations and analytical results of detected organic chemicals are shown on Plate 12.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.20-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown on Plate 13.

All analytical results for soil and tuff samples collected at SWMU 21-024(n) are provided on DVD in Appendix G.

### 6.20.2 Spatial Distribution of COPCs at SWMU 21-024(n)

The spatial distribution of the Phase II extent sampling results is presented below and shown on Plates 11 through 13.

- Lateral extent is defined for americium-241 and plutonium-239 downslope of location 21-600674 by decreasing activities at location 21-605251.
- Vertical extent is defined for chromium at location 21-600682 by decreasing activities with depth.
- Vertical extent is defined for chromium, uranium-234, and uranium-235 at location 21-600695 by decreasing concentrations/activities with depth.
- Lateral extent is defined for americium-241, chromium, copper, lead, zinc, uranium-234, and uranium-235 downslope of location 21-600682 by decreasing concentrations/activities at location 21-605252. Uranium-238 increased at 21-605252 because it was not detected above BV at 21-600682 during Phase I sampling.
- Vertical extent is defined for copper, lead, and several SVOCs at location 21-600684 by decreasing concentrations with depth.
- Lateral extent is not defined for plutonium-239 downslope of location 21-600683. Three additional samples from locations 21-608021, 21-609833, and 21-605253 were collected downslope of this location; its activities increased laterally.
- Vertical extent is defined for plutonium-239 and toluene at location 21-600669 by decreasing concentrations/activities with depth.
- Vertical extent is defined for zinc at location 21-601305 by decreasing concentrations with depth.
- Lateral extent is defined for zinc downslope of location 21-600717 by decreasing concentrations at location 21-605254.
- Vertical extent is defined for several SVOCs at location 21-600735 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-600689 by concentrations decreasing with depth.
- Lateral extent is defined for several SVOCs northwest of location 21-600716 by decreasing concentrations at location 21-605255.
- Vertical extent is defined for lead at location 21-601312 by decreasing concentrations with depth.

### 6.20.3 Summary of Human Health and Ecological Risk-Screening Results

The screening risk assessments for this site will be performed in the Phase III investigation report.

## 6.21 Site Contamination at SWMU 21-024(o)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-024(o). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Lateral extent of americium-241 east of location 21-27350.
- Lateral extent of plutonium-239 and zinc west of location 21-27348.

### 6.21.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-024(o) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-21 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.21-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.21-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.21-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.21-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.21-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.21-3.

All analytical results for soil and tuff samples collected at SWMU 21-024(o) are provided on DVD in Appendix G.

### 6.21.2 Spatial Distribution of COPCs at SWMU 21-024(o)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.21-1 and 6.21-3.

- Lateral extent is defined for americium-241 east of location 21-27350 by decreasing activities at location 21-605201.
- Lateral extent is defined for zinc west of location 21-27348 by decreasing concentrations at location 21-605202 and for plutonium-239 by decreasing activities at location 21-27349, which is part of adjoining SWMU 21-024(e).

### 6.21.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.21.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.22 Site Contamination at Consolidated Unit 21-026(a)-99

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-026(a)-99. The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241, isotopic plutonium, and silver at location 21-27575
- Vertical extent of plutonium-239 at location 21-27560
- Vertical extent cesium-137 at location 21-27561
- Vertical extent of calcium at location 21-27553
- Lateral extent of calcium north of location 21-27553
- Lateral extent of cesium-137 east of 21-27561
- Lateral extent of cyanide, silver, uranium, isotopic uranium, and several SVOCs north of location 21-27579
- Vertical extent of lead at location 21-27571
- Vertical extent of several SVOCs at location 21-27550

### 6.22.1 Soil and Rock Sampling and Analytical Results

The complete data set for Consolidated Unit 21-026(a)-99 includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-22 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.22-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.22-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.22-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.22-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.22-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.22-3.

All analytical results for soil and tuff samples collected at Consolidated Unit 21-026(a)-99 are provided on DVD in Appendix G.

### 6.22.2 Spatial Distribution of COPCs at Consolidated Unit 21-026(a)-99

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.22-1 through 6.22-3.

- Vertical extent is defined for americium-241, isotopic plutonium, and silver at location 21-27575 by decreasing concentrations/activities with depth.
- Vertical extent is defined for plutonium-239 at location 21-27560 by decreasing activities with depth.
- Vertical extent is defined for cesium-137 at location 21-27561 by decreasing activities with depth.
- Vertical extent is defined for calcium at location 21-27553 by decreasing concentrations with depth.
- Lateral extent is not defined for calcium north of location 21-27553; concentrations at location 21-605238 increase.
- Lateral extent is defined for cesium-137 east of 21-27561 by decreasing activities at location 21-605239.
- Lateral extent is defined for cyanide, silver, uranium, isotopic uranium, and several SVOCs north of location 21-27579 by decreasing concentrations/activities at location 21-605240.
- Vertical extent is defined for lead at location 21-27571 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-27550 by decreasing concentrations with depth.

### 6.22.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070, primarily from benzo(a)pyrene. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070), primarily from dibenz(a,h)anthracene. The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 13 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070), primarily from dibenz(a,h)anthracene. The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 15 mrem/yr, which is equivalent to the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.22.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

### 6.23 Site Contamination at SWMU 21-027(a)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-027(a). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Vertical extent of americium-241, isotopic plutonium, tetrachloroethene, and zinc at location 21-601227
- Vertical extent of americium-241 and plutonium-239 at location 21-601224
- Lateral extent of chromium, copper, lead, mercury, zinc, SVOCs, americium-241, isotopic plutonium, uranium-234, and uranium-235 west of location 21-600863
- Lateral extent of chromium east of location 21-600868
- Vertical extent of dioxin/furans at location 21-601229
- Lateral extent of uranium-238 southwest of location 21-600866
- Vertical extent of tritium at location 21-601226

#### 6.23.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-027(a) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-23 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.23-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.23-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.23-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.23-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.23-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.23-3.

All analytical results for soil and tuff samples collected at SWMU 21-027(a) are provided on DVD in Appendix G.

#### 6.23.2 Spatial Distribution of COPCs at SWMU 21-027(a)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.23-1 through 6.23-3.

- Vertical extent is defined for americium-241, isotopic plutonium, tetrachloroethene, and zinc at location 21-601227 by decreasing concentrations/activities with depth.
- Vertical extent is defined for americium-241 and plutonium-239 at location 21-601224 by decreasing activities with depth.
- Lateral extent is defined for chromium, copper, lead, mercury, zinc, SVOCs, americium-241, isotopic plutonium, uranium-234, and uranium-235 west of location 21-600863 by decreasing concentrations/activities at location 21-605279.

- Lateral extent is defined for chromium east of locations 21-600868 and 21-605280 by decreasing concentrations at location 21-608020.
- Vertical extent is defined for dioxin/furans at locations 21-601229 and 21-601225 by decreasing concentrations with depth.
- Lateral extent is defined for uranium-238 southwest of location 21-600866 by decreasing activities at location 21-605258, which was sampled as part of the Consolidated Unit 21-006(c)-99 Phase II investigation activities.
- Vertical extent is defined for tritium at location 21-601226 by decreasing activities with depth.

### 6.23.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $1 \times 10^{-4}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The 2,3,7,8-TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin) equivalent concentration contributed approximately $1 \times 10^{-4}$ to the total risk. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 12 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 6, which is above the NMED target HI of 1.0 (NMED 2009, 108070). The 2,3,7,8-TCDD equivalent concentration contributes 5 to the HI. The total dose is approximately 46 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 is the greatest contributor to the total dose, at 26 mrem/yr, followed by plutonium-238 with a dose of 13 mrem/yr.

The total excess cancer risk for the residential scenario is approximately $4 \times 10^{-4}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The 2,3,7,8-TCDD equivalent concentration contributes $3.4 \times 10^{-4}$ to the risk. The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 51 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 is the greatest contributor to the total dose at 28 mrem/yr, followed by plutonium-238 with a dose of 14 mrem/yr.

### 6.23.4 Summary of Ecological Risk-Screening Results

There is a potential ecological risk to the deer mouse and the montane shrew at SWMU 21-027(a) from dioxin/furans.

## 6.24 Site Contamination at SWMU 21-027(c)

The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at SWMU 21-027(c). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:

- Lateral extent of americium-241 and isotopic plutonium southeast of location 21-27409
- Vertical extent of americium-241, cesium-137, and isotopic plutonium between locations 21-27402 and 21-27403
- Lateral extent of lead southeast of 21-27412
- Vertical extent of lead at location 21-27412

- Lateral extent of strontium-90 southwest of location 21-27410
- Vertical extent of several SVOCs at location 21-27401

### 6.24.1 Soil and Rock Sampling and Analytical Results

The complete data set for SWMU 21-027(c) includes results from soil and tuff samples collected at the site during the Phase I and II investigations. The discussion below focuses on the Phase II sampling. Table 4.2-24 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.24-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.24-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.24-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.24-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.24-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.24-3.

All analytical results for soil and tuff samples collected at SWMU 21-027(c) are provided on DVD in Appendix G.

### 6.24.2 Spatial Distribution of COPCs at SWMU 21-027(c)

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.24-1 through 6.24-3.

- Lateral extent is defined for americium-241 and isotopic plutonium southeast of location 21-27409 by decreasing activities at location 21-605232.
- Vertical extent is defined for americium-241, cesium-137, and isotopic plutonium at locations 21-27402 and 21-27403 by decreasing activities with depth at location 21-605233.
- Lead concentrations increased southeast of location 21-27412 at location 21-605234; however, no additional samples can be collected on the slope and extent is defined by sampling conducted at Los Alamos Canyon (LANL 2004, 087390).
- Vertical extent is defined for lead at location 21-27412 by decreasing concentrations with depth.
- Lateral extent is defined for strontium-90 southwest of location 21-27410 by decreasing activities at location 21-605236.
- Vertical extent is defined for several SVOCs at location 21-27401 by decreasing concentrations with depth.

### 6.24.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.07, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the construction worker scenario is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2 which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 5 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The total excess cancer risk for the residential scenario is approximately $8 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4 which is (below, above) the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 14 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### 6.24.4 Summary of Ecological Risk-Screening Results

- There is no potential risk to ecological receptors at this site.

## 6.25 Site Contamination at AOC C-21-027

The sections below summarize the results of laboratory analyses for soil and tuff samples at AOC C-21-027. The data needs for this site were identified in the DP Site Aggregate Area supplemental investigation work plan (LANL 2006, 092079).

### 6.25.1 Soil and Rock Sampling and Analytical Results

The complete data set for AOC C-21-027 includes results from soil and tuff samples collected at the site during the Phase II investigation. Table 4.2-25 provides the samples collected at this site.

The analytical results for inorganic chemicals above BVs are provided for soil and tuff in Table 6.25-1. The locations and analytical results of inorganic chemicals detected above BVs are shown in Figure 6.25-1.

The analytical results for organic chemicals detected are provided for soil and tuff in Table 6.25-2. The locations and analytical results of detected organic chemicals are shown in Figure 6.25-2.

The analytical results for radionuclides detected or detected above BVs or FVs are provided for soil and tuff in Table 6.25-3. The locations and analytical results of radionuclides detected or detected above BVs or FVs are shown in Figure 6.25-3.

All analytical results for soil and tuff samples collected at AOC C-21-027 are provided on DVD in Appendix G.

For consistency, COPC determinations are made for AOC C-21-027 using the same methods previously presented and approved for the Phase I sites. Inorganic chemical and radionuclide data were compared with media-specific background data (LANL 1998, 059730). The first step for background comparisons is to compare the site data with a BV (LANL 1998, 059730). The BV may be a calculated value for the background data set (upper tolerance limit [95, 95] or the 95% upper confidence bound on the 95th quantile), a detection limit (DL), or it may be calculated based on secular equilibrium or a total analysis. An FV for fallout radionuclides (americium-241, cesium-137, plutonium-238, plutonium-239, strontium-90, and tritium) applies only to surface samples from depths of 0.0–1 ft. In some cases, background data and/or a BV or FV are unavailable, and the detected inorganic chemical or radionuclide is retained as a COPC. Organic chemicals are retained as COPCs if they are detected at the site.

If a site-specific datum exceeds its BV, an additional evaluation of the datum may be performed by comparing the chemical concentration with the range of background concentrations for that chemical. If

the site concentration is within the range of background concentrations, the analyte is not retained as a COPC.

#### 6.25.1.1 Inorganic Chemicals in Soil

Antimony was detected above the BV (0.83 mg/kg) in 4 of 10 soil samples. Two of these samples exceeded the maximum background concentration of antimony in soil (1 mg/kg). Antimony also had a DL (0.99 mg/kg) above the BV in one soil sample. Antimony is identified as a COPC in soil.

Cadmium was detected above the BV (0.4 mg/kg) in 1 of 10 soil samples. It was not detected above the maximum background concentration of cadmium in soil (2.6 mg/kg). Cadmium also had one DL (0.56 mg/kg) above the BV in the one soil sample. None of the results exceeded the maximum background concentration of cadmium in soil (2.6 mg/kg). Cadmium is not identified as a COPC in soil.

Calcium was detected above the BV (6120 mg/kg) in 2 of 10 soil samples. It was detected above the maximum background concentration of calcium in soil (14,000 mg/kg) in one sample at a concentration of 27,000 mg/kg. Calcium is identified as a COPC in soil.

Chromium was detected above the BV (19.3 mg/kg) in 3 of 10 soil samples. It was detected above the maximum background concentration of chromium in soil (36.5 mg/kg) in one sample at a concentration of 67 mg/kg. Chromium is identified as a COPC in soil.

Total cyanide was detected above the BV (0.5 mg/kg) in 3 of 10 soil samples. One DL was also above the BV (0.54). Total cyanide is identified as a COPC in soil.

Lead was detected above the BV (22.3 mg/kg) in 2 of 10 soil samples, and above the maximum soil background concentration (28 mg/kg) in both samples. Lead is identified as a COPC in soil.

Nitrate and perchlorate were detected in one or more soil samples and have no soil BVs. Nitrate and perchlorate are identified as COPCs in soil.

Silver was not detected above the BV (1 mg/kg) but had DLs (1.1 mg/kg) above the BV in 3 of 10 soil samples. The DLs are similar to the BV; therefore, silver is not identified as a COPC in soil.

Thallium was not detected but had DLs (1 mg/kg to 1.1 mg/kg) above the BV (0.73 mg/kg) in 5 of 10 soil samples and above the maximum soil background concentration (1 mg/kg) in these samples. Thallium is identified as a COPC in soil.

Zinc was detected above the BV (48.8 mg/kg) in 5 of 10 soil samples and above the maximum background concentration (75.5 mg/kg) in two of these samples, with a maximum sample concentration of 625 mg/kg. Zinc is identified as a COPC in soil.

#### 6.25.1.2 Inorganic Chemicals in Tuff

Aluminum was detected above the BV (7340 mg/kg) in one of seven tuff samples. The detected concentration (8,400 mg/kg) is essentially the same as the maximum background concentration for aluminum in tuff (8,370 mg/kg). Aluminum is not identified as a COPC in tuff.

Antimony was detected above the BV (0.5 mg/kg) in one of seven tuff samples and had DLs (0.53 mg/kg to 2.2 mg/kg) above the BV in four tuff samples. Antimony is identified as a COPC in tuff.

Arsenic was detected above the BV (2.79 mg/kg) in one of seven tuff samples, with a concentration of 3.2 mg/kg. The concentration did not exceed the maximum background concentration of arsenic in tuff (5 mg/kg). Arsenic is not identified as a COPC in tuff.

Barium was detected above the BV (46 mg/kg) in three of seven tuff samples. All three detections were either equivalent to or exceeded the maximum background concentration of barium in tuff (51.6 mg/kg). Barium is identified as a COPC in tuff.

Calcium was detected above the BV (2200 mg/kg) and the maximum background concentration of calcium in tuff (2230 mg/kg) in four of seven tuff samples, with a maximum concentration of 28,880 mg/kg. Calcium is identified as a COPC in tuff.

Chromium was detected above the BV (7.14 mg/kg) in five of seven tuff samples. Two of the five detections above BV also exceeded the maximum background concentration of chromium in tuff (13 mg/kg). Chromium is identified as a COPC in tuff.

Cobalt was detected above the BV (3.14 mg/kg) in one of seven tuff samples at a concentration of 3.5 mg/kg. Cobalt is identified as a COPC in tuff.

Copper was detected above the BV (4.66 mg/kg) in one of seven tuff samples, with a sample concentration of 5.1 mg/kg. This concentration is less than maximum background concentration of copper in tuff (6.2 mg/kg). Copper is not identified as a COPC in tuff.

Total cyanide was not detected above the BV (0.5 mg/kg) but had DLs above the BV in two of seven soil samples. Therefore, total cyanide is identified as a COPC in tuff.

Lead was detected above the BV (11.2 mg/kg) in two of seven tuff samples. Both detected concentrations are less than the maximum background concentration of lead in tuff (15.5 mg/kg). Lead is not identified as a COPC in tuff.

Magnesium was detected above the BV (1690 mg/kg) in one of seven tuff samples. The detected concentration of 1800 mg/kg is below the maximum background concentration of magnesium in tuff (2820 mg/kg). Magnesium is not identified as a COPC in tuff.

Nickel was detected above the BV (6.58 mg/kg) in two of seven tuff samples. These sample results also exceeded the maximum background concentration of nickel in tuff (7 mg/kg). Nickel is identified as a COPC in tuff.

Nitrate and perchlorate were detected in one or more tuff samples and have no tuff BVs. Nitrate and perchlorate are identified as COPCs in tuff.

Selenium was not detected but had DLs (0.49 mg/kg to 1.0 mg/kg) above the BV (0.3 mg/kg) in all seven tuff samples. Selenium is identified as a COPC in tuff.

Silver was not detected above the BV (1 mg/kg) but had DLs (1.1 mg/kg to 1.2 mg/kg) above the BV in four of seven tuff samples. The DLs are below the maximum background concentration for silver in tuff (1.9 mg/kg). Therefore, silver is not identified as a COPC in tuff.

Thallium was not detected but had DLs (1.2 mg/kg) above the BV (1.1 mg/kg) in two of seven tuff samples. The DLs are less than the maximum background concentration of thallium in tuff (1.7 mg/kg). Thallium is not identified as a COPC in tuff.

#### 6.25.1.3 Organic Chemicals in Soil

The following organic chemicals were detected in soil samples at AOC C-21-027 and are identified as COPCs in soil: acetone; Aroclor-1254; Aroclor-1260; benzo(a)anthracene; benzo(a)pyrene, benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; bis(2-ethylhexyl)phthalate; chrysene; di-n-butylphthalate; fluoranthene; heptachlorodibenzodioxin[1,2,3,4,6,7,8-]; heptachlorodibenzofuran[1,2,3,4,6,7,8-]; heptachlorodibenzofuran[1,2,3,4,7,8,9-]; hexachlorodibenzodioxin[1,2,3,4,7,8-]; hexachlorodibenzodioxin[1,2,3,6,7,8-]; hexachlorodibenzodioxin[1,2,3,7,8,9-]; hexachlorodibenzofuran[1,2,3,4,7,8-]; hexachlorodibenzofuran[1,2,3,6,7,8-]; hexachlorodibenzofuran[1,2,3,7,8,9-]; hexachlorodibenzofuran[2,3,4,6,7,8-]; indeno(1,2,3-cd)pyrene octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]; octachlorodibenzofuran[1,2,3,4,6,7,8,9-]; pentachlorodibenzodioxin[1,2,3,7,8-]; pentachlorodibenzofuran[1,2,3,7,8-]; pentachlorodibenzofuran[2,3,4,7,8-]; phenanthrene; pyrene; tetrachlorodibenzodioxin[2,3,7,8-]; and tetrachlorodibenzofuran[2,3,7,8-].

#### 6.25.1.4 Organic Chemicals in Tuff

The following organic chemicals were detected in tuff samples at AOC C-21-027 and are identified as COPCs in tuff: acetone; heptachlorodibenzodioxin[1,2,3,4,6,7,8-]; heptachlorodibenzofuran[1,2,3,4,6,7,8-]; heptachlorodibenzofuran[1,2,3,4,7,8,9-]; hexachlorodibenzodioxin[1,2,3,4,7,8-]; hexachlorodibenzodioxin[1,2,3,6,7,8-]; hexachlorodibenzodioxin[1,2,3,7,8,9-]; hexachlorodibenzofuran[1,2,3,4,7,8-]; hexachlorodibenzofuran[1,2,3,6,7,8-]; hexachlorodibenzofuran[1,2,3,7,8,9-]; hexachlorodibenzofuran[2,3,4,6,7,8-]; octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]; octachlorodibenzofuran[1,2,3,4,6,7,8,9-]; pentachlorodibenzodioxin[1,2,3,7,8-]; pentachlorodibenzofuran[1,2,3,7,8-]; pentachlorodibenzofuran[2,3,4,7,8-]; and tetrachlorodibenzodioxin[2,3,7,8-].

#### 6.25.1.5 Radionuclides in Soil

Americium-241, cesium-137, plutonium-238, plutonium-239/240, tritium, uranium-234, and uranium-235/236 were all detected in soil at activities above the BVs/FVs or at depths where FVs do not apply. These radionuclides are identified as COPCs in soil.

#### 6.25.1.6 Radionuclides in Tuff

Americium-241, cesium-137, plutonium-238, and plutonium-239/240 were all detected in tuff. These radionuclides are identified as COPCs in tuff.

### 6.25.2 Spatial Distribution of COPCs at AOC C-21-027

The spatial distribution of the Phase II extent sampling results is presented below and shown in Figures 6.25-1 through 6.25-3.

- Lateral extent is not defined for calcium, lead, nitrate, perchlorate, zinc, americium-241, isotopic plutonium, tritium, uranium-234, or uranium-235 east of location 21-610684.
- Lateral extent is not defined for chromium, nitrate, perchlorate, zinc, americium-241, or isotopic plutonium east of location 21-605338.
- Vertical extent is not defined for calcium at location 21-605339.

- Vertical extent is not defined for chromium, dioxin/furans, americium-241, or plutonium-239 at location 21-605340.
- Vertical extent is not defined for americium-241, isotopic plutonium, nitrate, or perchlorate at location 21-605341.
- Lateral extent is not defined for americium-241, isotopic plutonium, or nitrate west of location 21-605341.
- Lateral extent is not defined for americium-241 or isotopic plutonium east of location 21-610682.
- Lateral extent is not defined for dioxin/furans downslope of the outfall area.

### 6.25.3 Summary of Human Health and Ecological Risk-Screening Results

The screening risk assessments for this site will be performed in the Phase III investigation report.

## 7.0 CONCLUSIONS

### 7.1 Nature and Extent of Contamination

The nature and extent of contamination have been defined for 15 of the 26 sites sampled as part of the Phase II investigation. Summaries of the nature and extent of contamination and remaining extent requirements are presented in the following sections.

The extent of contamination is not defined for the following sites:

- Consolidated Unit 21-003-99 and SWMU 21-024(c): vertical extent of chromium and copper; lateral extent of cesium-137, nitrate, and tritium
- Consolidated Unit 21-006(c)-99: vertical extent of americium-241
- SWMU 21-022(h) or SWMU 21-022(i): both part of Consolidated Unit 21-022(h)-99; vertical extent of barium at SWMU 21-022(h); and sample collection pending removal of building 21-002 at SWMU 21-022(i)
- Consolidated Unit 21-023(a)-99: vertical extent of plutonium-239 and several SVOCs
- SWMU 21-024(d): vertical extent of americium-241, SVOCs, and tritium
- SWMU 21-024(g): vertical extent of isotopic uranium
- SWMU 21-024(k): vertical extent of barium, calcium, and strontium; sample collection also pending under piping near DP East buildings
- SWMU 21-024(n): lateral extent of plutonium-239 and uranium-238
- Consolidated Unit 21-026(a)-99: lateral extent of calcium
- AOC C-21-027: lateral extent of americium-241, calcium, chromium, dioxin/furans, isotopic plutonium, lead, nitrate, perchlorate, tritium, uranium-234, uranium-235, and zinc; vertical extent of americium-241, calcium, chromium, dioxin/furans, nitrate, perchlorate, and plutonium-239

The nature and extent of contamination are defined for the following sites:

- AOC 21-002(b)
- SWMU 21-009
- SWMU 21-012(b)

- SWMU 21-013(c)
- SWMU 21-022(f)
- SWMU 21-024(a)
- SWMU 21-024(b)
- SWMU 21-024(e)
- SWMU 21-024(h)
- SWMU 21-024(i)
- SWMU 21-024(j)
- Consolidated Unit 21-024(l)-99
- SWMU 21-024(o)
- SWMU 21-027(a)
- SWMU 21-027(c)

## 7.2 Summary of Risk-Screening Assessments

Human health and ecological risk-screening assessments were performed for 15 sites for which the nature and extent of contamination have been defined. Risk-screening assessments were also performed for six additional sites [Consolidated Units 21-006(c)-99, 21-023(a)-99, and 21-026(a)-99 and SWMUs 21-022(h), 21-024(d), and 21-024(g)] where extent is not defined but where additional sampling will not affect the risk assessment results. The samples needed to define extent at these sites will be collected from approximately 20 ft bgs. Ecological risk-screening assessments were not performed for SWMUs 21-022(f) and 21-022(j) because the samples were collected below 5 ft bgs, and therefore, there are no complete pathways to receptors.

### 7.2.1 Human Health Risk-Screening Assessments

Human health risk-screening assessments were performed for 20 sites, and a portion of Consolidated Unit 21-022(h)-99 [SWMU 21-022(h)]. A human health risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99)] because samples were collected from depths greater than 5 ft where no complete pathways are present and receptors are not exposed to contaminants. Human health risk-screening assessments were not performed for Consolidated Unit 21-003-99, SWMUs 21-022(i) [part of Consolidated Unit 21-022(h)-99], 21-024(c), 21-024(k), and 21-024(n), or AOC C-21-027 because extent of contamination was not defined at these sites. Human health risk-screening assessments are presented in Appendix H, section H-4.0. Seventeen sites were determined to have no potential unacceptable risks or doses to human health under the industrial, residential, or construction worker scenarios. Four sites were determined to pose a potential unacceptable risk or dose to human health under the industrial, residential, and/or construction worker scenarios.

### 7.2.2 Ecological Risk-Screening Assessment

The ecological risk-screening assessments were performed for 20 sites. An ecological risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99)] because samples were collected from depths greater than 5 ft where no complete pathways are present and receptors are not exposed to contaminants. Ecological risk-screening assessments were not performed for Consolidated Unit 21-003-99, SWMUs 21-022(i) [part of Consolidated Unit 21-022(h)], 21-024(c),

21-024(k) and 21-024(n) or AOC C-21-027 because extent of contamination was not defined at these sites. The ecological risk-screening assessments are presented in Appendix H, section H-5.0. At all but one of the sites, there is no potential ecological risk to receptors. There is a potential ecological risk to the deer mouse and montane shrew at SWMU 21-027(a) from dioxin/furans.

Sites within the DP Site Aggregate Area are not accessible by the public and are not planned for release by DOE in the foreseeable future. Therefore, an as low as reasonably achievable (ALARA) evaluation for radiological exposure to the public is not currently required. Should DOE's plans for releasing these areas change, an ALARA evaluation will be conducted at that time. It should be noted that the Laboratory addresses considerations for radiation exposures to workers under the Laboratory's occupational radiological protection program in compliance with 10 Code of Federal Regulations 835. The Laboratory's radiation protection program implements ALARA and consists of the following elements: management commitment, training, design review, radiological work review, performance assessments, and documentation.

## 8.0 RECOMMENDATIONS

The following sections present sites where additional field characterization activities are required, sites the Laboratory is recommending as complete, and sites where remediation is necessary. The characterization activities and risk-screening results are summarized in Table 8.0-1.

### 8.1 Additional Field Characterization Activities

The extent of contamination has not been defined for the following sites included in the DP Site Aggregate Area investigation. Additional sampling is needed to define the extent of contamination for one or more COPCs as follows.

- Consolidated Unit 21-003-99 and SWMU 21-024(c): vertical extent of chromium and copper; lateral extent of cesium-137, nitrate, and tritium
- Consolidated Unit 21-006(c)-99: vertical extent of americium-241
- SWMU 21-022(h) or SWMU 21-022(i), both part of Consolidated Unit 21-022(h)-99: vertical extent of barium at SWMU 21-022(h) and sample collection pending removal of building 21-002 at SWMU 21-022(i)
- Consolidated Unit 21-023(a)-99: vertical extent of plutonium-239 and several SVOCs
- SWMU 21-024(d): vertical extent of americium-241, SVOCs, and tritium
- SWMU 21-024(g): vertical extent of isotopic uranium
- SWMU 21-024(k): vertical extent of barium, calcium, and strontium; sample collection also pending under piping near DP East buildings
- SWMU 21-024(n): lateral extent of plutonium-239 and uranium-238
- SWMU 21-026(a)-99: lateral extent of calcium
- AOC C-21-027: lateral extent of americium-241, calcium, chromium, dioxin/furans, isotopic plutonium, lead, nitrate, perchlorate, tritium, uranium-234, uranium-235, and zinc; vertical extent of americium-241, calcium, chromium, dioxin/furans, nitrate, perchlorate, and plutonium-239

The extent issues will be addressed in a Phase III investigation work plan to be submitted to NMED after the Phase II investigation report is reviewed and approved. Once additional data are available and extent

is defined, human health and ecological risk-screening assessments will be conducted to determine if the sites pose a potential unacceptable risk or dose to human health or the environment.

Four sites have been determined to pose potential unacceptable risks or doses to human health under the industrial, residential, and/or construction worker scenarios and/or the environment.

**SWMU 21-022(h):**

- Under the industrial scenario potential unacceptable risk from benzo(a)pyrene and a potential hazard from lead
- Under the construction worker scenario potential unacceptable hazard from lead and potential unacceptable dose from plutonium-239
- Under the residential scenario potential unacceptable risk from benzo(a)pyrene, potential hazard from lead, and potential unacceptable dose from plutonium-239

**SWMU 21-024(b):**

- Under the construction worker scenario potential unacceptable dose from plutonium-239 and americium-241
- Under the residential scenario potential unacceptable dose from plutonium-239 and americium-241

**Consolidated Unit 21-026(a)-99:**

- Under the industrial scenario potential unacceptable risk from benzo(a)pyrene
- Under the construction worker scenario potential unacceptable risk from dibenz(a,h)anthracene
- Under the residential scenario potential unacceptable risk from dibenz(a,h)anthracene

**SWMU 21-027(a):**

- Under the industrial scenario potential unacceptable risk from dioxin/furans
- Under the construction worker scenario potential unacceptable hazard from dioxin/furans and potential unacceptable dose from isotopic plutonium
- Under the residential scenario potential unacceptable risk from dioxin/furans and potential unacceptable dose from isotopic plutonium
- Ecological receptors: potential unacceptable ecological risks from dioxin/furans to the deer mouse and montane shrew

A Phase III investigation work plan will be submitted after the Phase II report is reviewed to address the potential unacceptable risks/doses at these sites. The sites will be remediated to levels that will eliminate potential unacceptable risks and doses to human and ecological receptors.

### 8.2 Recommendations for Corrective Actions Complete

Thirteen sites for which nature and extent of contamination are defined do not pose potential unacceptable risks or doses under the current and reasonably foreseeable future land use scenarios (residential, industrial, and construction worker):

- AOC 21-002(b)
- SWMU 21-009
- SWMU 21-012(b)
- SWMU 21-013(c)
- SWMU 21-022(f)
- SWMU 21-024(a)
- SWMU 21-024(e)
- SWMU 21-024(h)
- SWMU 21-024(i)
- SWMU 21-024(j)
- Consolidated Unit 21-024(l)-99
- SWMU 21-024(o)
- SWMU 21-027(c)

These 14 sites are appropriate for corrective actions complete without controls because they do not pose potential unacceptable risks or doses under a residential scenario and to the environment.

### 8.3 Schedule for Recommended Activities

A Phase III investigation work plan will be developed and submitted to NMED 6 mo after this investigation report is reviewed and approved. The Phase III investigation work plan will provide details and a schedule for implementing sampling activities, conducting remediation activities, and submitting an investigation report.

## 9.0 REFERENCES AND MAP DATA SOURCES

### 9.1 References

*The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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### 9.2 Map Data Sources

The following list includes all documents cited in this plan. Parenthetical information following each Feature Data Source Statements for Map Products

Environmental Stewardship-Environmental Remediation & Surveillance Program

GIS Project PMR05046

Map Numbers of the Series with Prefix "PMR05046"

Dirt Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Former Structures of the Los Alamos Site; Los Alamos National Laboratory, Waste and Environmental Services Division, EP2008-0441; 1:2,500 Scale Data; 08 August 2008.

Hypsography, 20- and 100-ft Contour Intervals; Los Alamos National Laboratory, ENV-Environmental Remediation and Surveillance Program; 1991.

Materials Disposal Areas; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; ER2004-0221; 1:2,500 Scale Data; 23 April 2004.

Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Potential Release Sites; Los Alamos National Laboratory, Waste and Environmental Services Division, Environmental Data and Analysis Group, EP2008-0623; 1:2,500 Scale Data; 10 December 2008.

Security and Industrial Fences and Gates; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Structures; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Materials Disposal Areas; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; ER2004-0221; 1:2,500 Scale Data; 23 April 2004.

2000lanlhlsd; Los Alamos National Laboratory, ENV-Environmental Remediation and Surveillance Program; October 1, 2004.

Aggregate Areas; Los Alamos National Laboratory, ENV Environmental Remediation & Surveillance Program, ER2005-0496; 1:2,500 Scale Data; 22 September 2005.

Waste Storage Features; Los Alamos National Laboratory, Environment and Remediation Support Services Division, GIS/Geotechnical Services Group, EP2007-0032; 1:2,500 Scale Data; 13 April 2007.

Technical Area Boundaries; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Office; September 2007; as published 04 December 2008.

Point Feature Locations of the Environmental Restoration Project Database; Los Alamos National Laboratory, Waste and Environmental Services Division, EP2008-0592; 04 November 2008.

Communication Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 08 August 2002; as published 15 January 2009.

Electric Utility Grid; County of Los Alamos, Information Services; as published 04 March 2009.

Natural Gas Supply Distribution; County of Los Alamos, Information Services; as published 04 March 2009.

Primary Industrial Waste Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Sewer Line System; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Steam Line Distribution System; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

Water Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 January 2009.

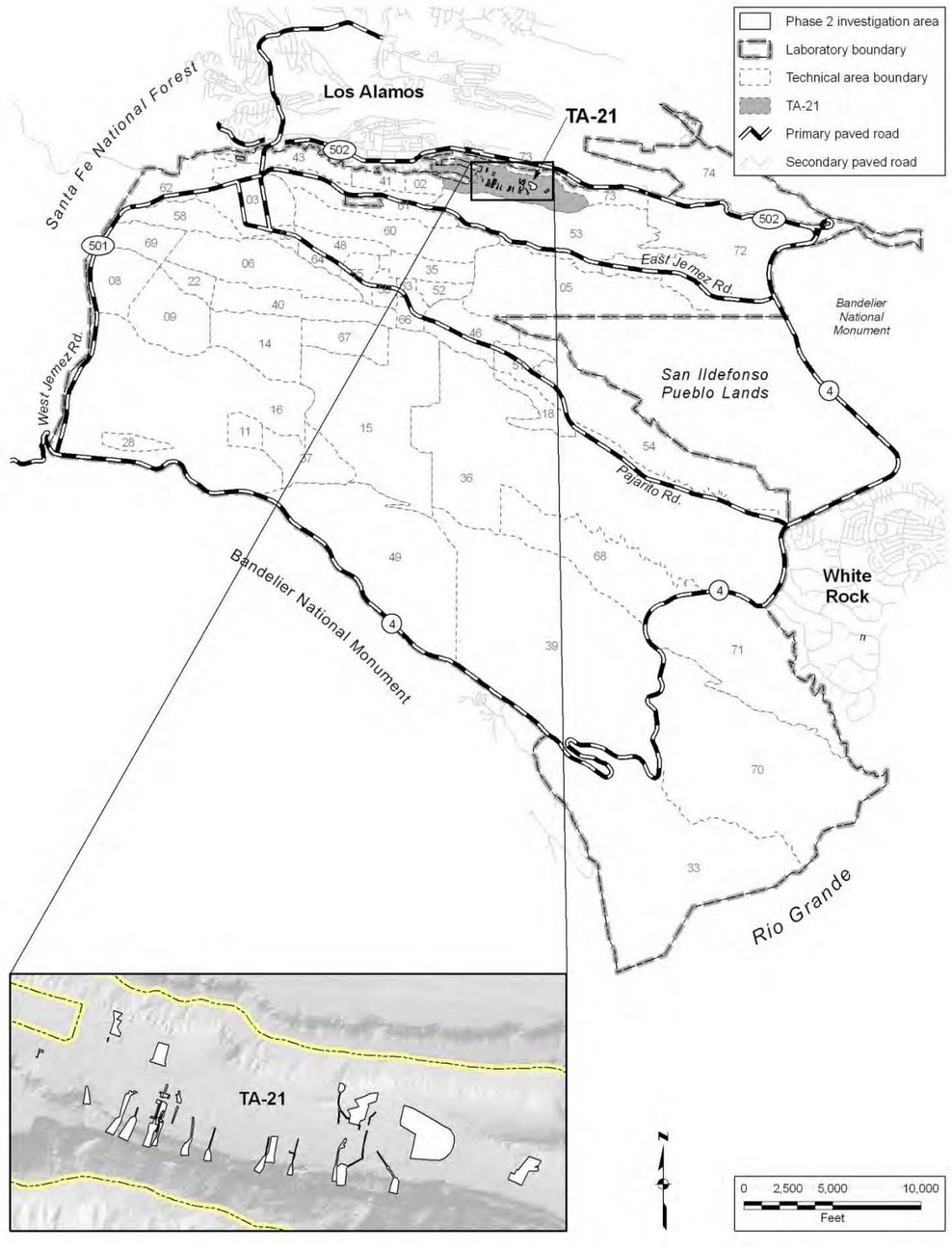



**Figure 1.1-1 Location of DP Site Aggregate Area with respect to Laboratory TAs**

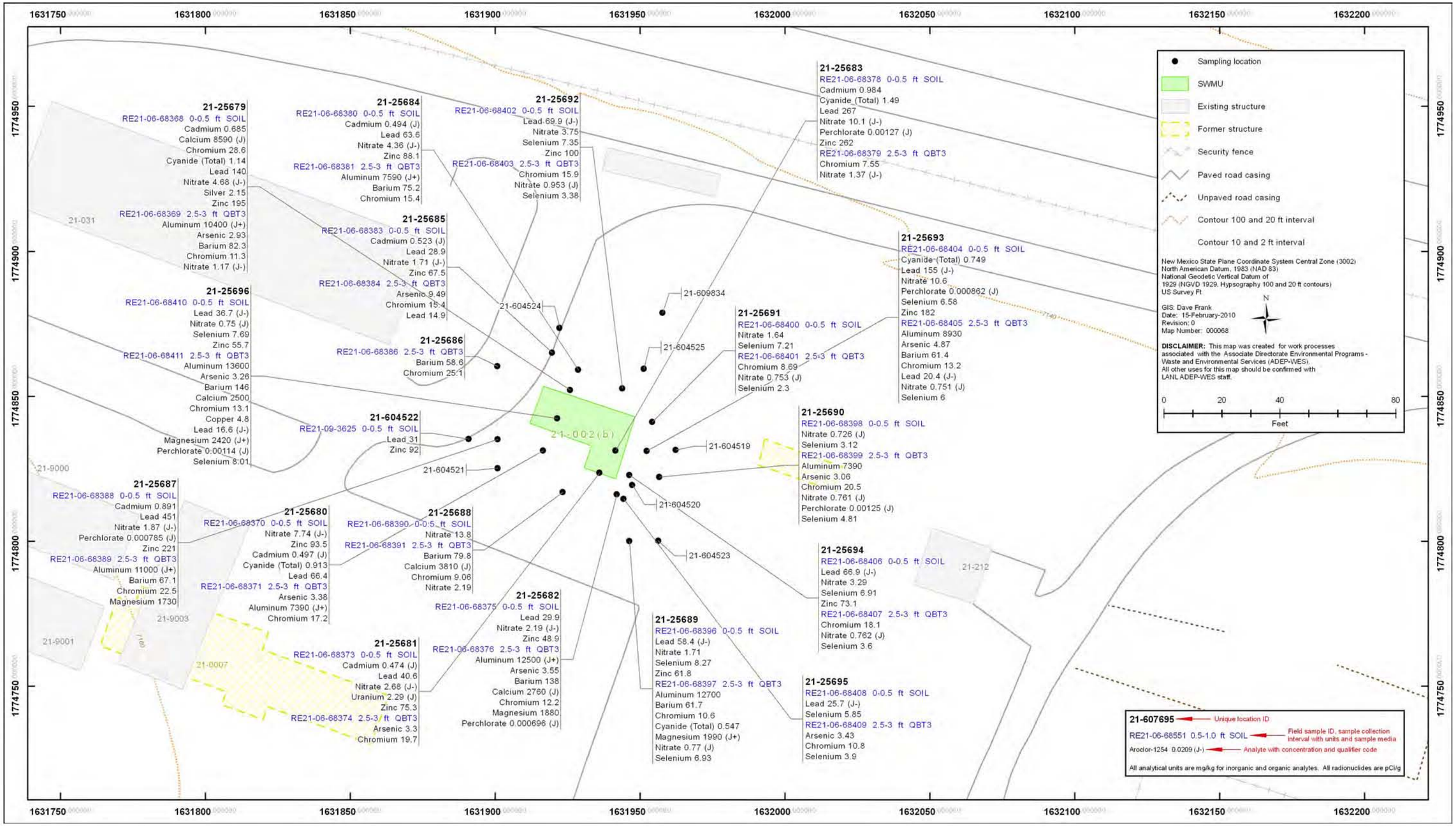



**Figure 6.1-1 Inorganic chemicals detected or detected above BVs at AOC 21-002(b)**

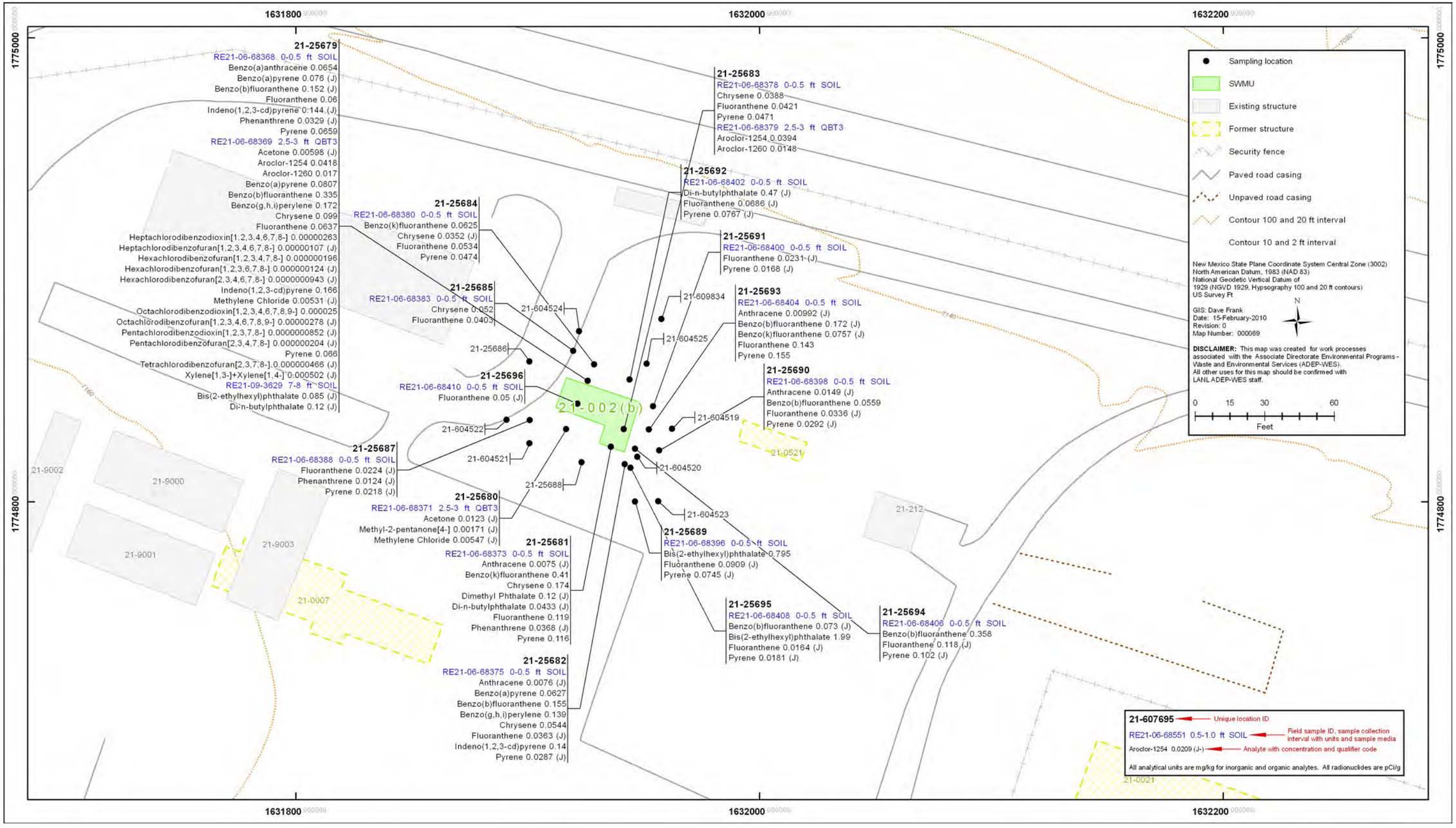



**Figure 6.1-2 Organic chemicals detected at AOC 21-002(b)**

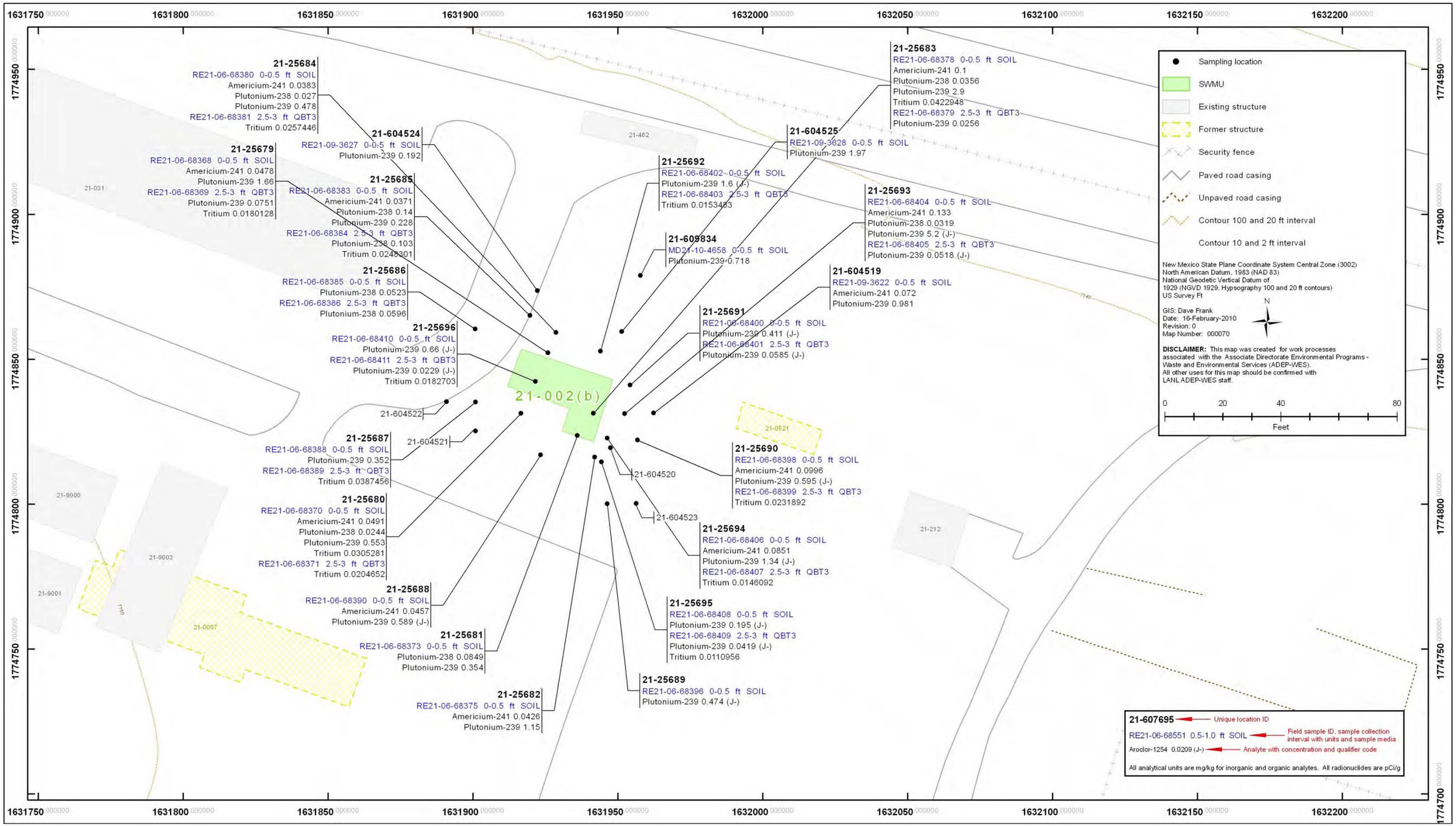
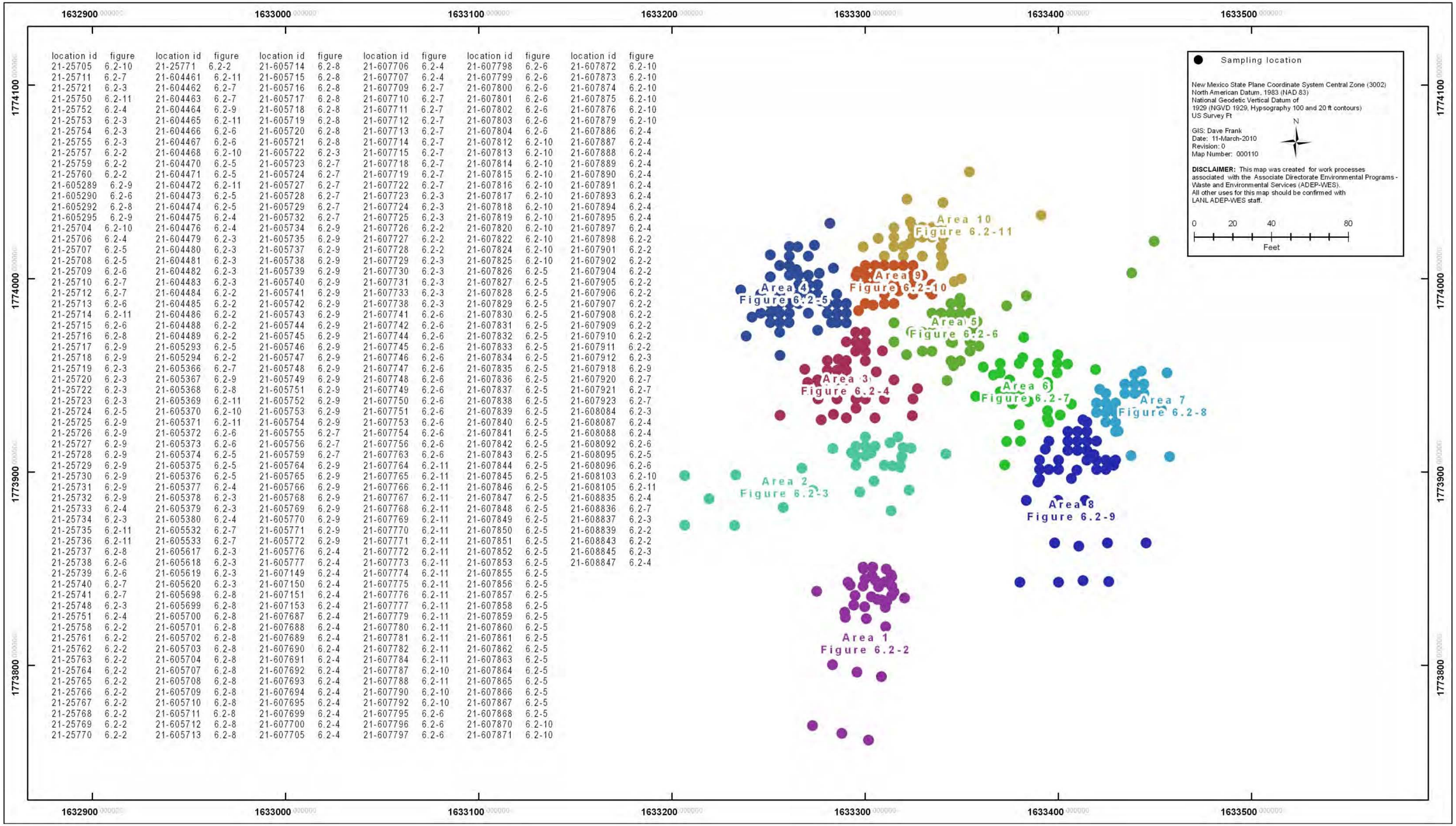



**Figure 6.1-3 Radionuclides detected or detected above BVs/FVs at AOC 21-002(b)**




| location id | figure | location id | figure | location id | figure | location id | figure | location id | figure | location id | figure |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21-25705 | 6.2-10 | 21-25771 | 6.2-2 | 21-605714 | 6.2-8 | 21-607706 | 6.2-4 | 21-607798 | 6.2-6 | 21-607872 | 6.2-10 |
| 21-25711 | 6.2-7 | 21-604461 | 6.2-11 | 21-605715 | 6.2-8 | 21-607707 | 6.2-4 | 21-607799 | 6.2-6 | 21-607873 | 6.2-10 |
| 21-25721 | 6.2-3 | 21-604462 | 6.2-7 | 21-605716 | 6.2-8 | 21-607709 | 6.2-7 | 21-607800 | 6.2-6 | 21-607874 | 6.2-10 |
| 21-25750 | 6.2-11 | 21-604463 | 6.2-7 | 21-605717 | 6.2-8 | 21-607710 | 6.2-7 | 21-607801 | 6.2-6 | 21-607875 | 6.2-10 |
| 21-25752 | 6.2-4 | 21-604464 | 6.2-9 | 21-605718 | 6.2-8 | 21-607711 | 6.2-7 | 21-607802 | 6.2-6 | 21-607876 | 6.2-10 |
| 21-25753 | 6.2-3 | 21-604465 | 6.2-11 | 21-605719 | 6.2-8 | 21-607712 | 6.2-7 | 21-607803 | 6.2-6 | 21-607879 | 6.2-10 |
| 21-25754 | 6.2-3 | 21-604466 | 6.2-6 | 21-605720 | 6.2-8 | 21-607713 | 6.2-7 | 21-607804 | 6.2-6 | 21-607886 | 6.2-4 |
| 21-25755 | 6.2-3 | 21-604467 | 6.2-6 | 21-605721 | 6.2-8 | 21-607714 | 6.2-7 | 21-607812 | 6.2-10 | 21-607887 | 6.2-4 |
| 21-25757 | 6.2-2 | 21-604468 | 6.2-10 | 21-605722 | 6.2-3 | 21-607715 | 6.2-7 | 21-607813 | 6.2-10 | 21-607888 | 6.2-4 |
| 21-25759 | 6.2-2 | 21-604470 | 6.2-5 | 21-605723 | 6.2-7 | 21-607718 | 6.2-7 | 21-607814 | 6.2-10 | 21-607889 | 6.2-4 |
| 21-25760 | 6.2-2 | 21-604471 | 6.2-5 | 21-605724 | 6.2-7 | 21-607719 | 6.2-7 | 21-607815 | 6.2-10 | 21-607890 | 6.2-4 |
| 21-605289 | 6.2-9 | 21-604472 | 6.2-11 | 21-605727 | 6.2-7 | 21-607722 | 6.2-7 | 21-607816 | 6.2-10 | 21-607891 | 6.2-4 |
| 21-605290 | 6.2-6 | 21-604473 | 6.2-5 | 21-605728 | 6.2-7 | 21-607723 | 6.2-3 | 21-607817 | 6.2-10 | 21-607893 | 6.2-4 |
| 21-605292 | 6.2-8 | 21-604474 | 6.2-5 | 21-605729 | 6.2-7 | 21-607724 | 6.2-3 | 21-607818 | 6.2-10 | 21-607894 | 6.2-4 |
| 21-605295 | 6.2-9 | 21-604475 | 6.2-4 | 21-605732 | 6.2-7 | 21-607725 | 6.2-3 | 21-607819 | 6.2-10 | 21-607895 | 6.2-4 |
| 21-25704 | 6.2-10 | 21-604476 | 6.2-4 | 21-605734 | 6.2-9 | 21-607726 | 6.2-2 | 21-607820 | 6.2-10 | 21-607897 | 6.2-4 |
| 21-25706 | 6.2-4 | 21-604479 | 6.2-3 | 21-605735 | 6.2-9 | 21-607727 | 6.2-2 | 21-607822 | 6.2-10 | 21-607898 | 6.2-2 |
| 21-25707 | 6.2-5 | 21-604480 | 6.2-3 | 21-605737 | 6.2-9 | 21-607728 | 6.2-2 | 21-607824 | 6.2-10 | 21-607901 | 6.2-2 |
| 21-25708 | 6.2-5 | 21-604481 | 6.2-3 | 21-605738 | 6.2-9 | 21-607729 | 6.2-3 | 21-607825 | 6.2-10 | 21-607902 | 6.2-2 |
| 21-25709 | 6.2-6 | 21-604482 | 6.2-3 | 21-605739 | 6.2-9 | 21-607730 | 6.2-3 | 21-607826 | 6.2-5 | 21-607904 | 6.2-2 |
| 21-25710 | 6.2-7 | 21-604483 | 6.2-3 | 21-605740 | 6.2-9 | 21-607731 | 6.2-3 | 21-607827 | 6.2-5 | 21-607905 | 6.2-2 |
| 21-25712 | 6.2-7 | 21-604484 | 6.2-2 | 21-605741 | 6.2-9 | 21-607733 | 6.2-3 | 21-607828 | 6.2-5 | 21-607906 | 6.2-2 |
| 21-25713 | 6.2-6 | 21-604485 | 6.2-2 | 21-605742 | 6.2-9 | 21-607738 | 6.2-3 | 21-607829 | 6.2-5 | 21-607907 | 6.2-2 |
| 21-25714 | 6.2-11 | 21-604486 | 6.2-2 | 21-605743 | 6.2-9 | 21-607741 | 6.2-6 | 21-607830 | 6.2-5 | 21-607908 | 6.2-2 |
| 21-25715 | 6.2-6 | 21-604488 | 6.2-2 | 21-605744 | 6.2-9 | 21-607742 | 6.2-6 | 21-607831 | 6.2-5 | 21-607909 | 6.2-2 |
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| 21-25717 | 6.2-9 | 21-605293 | 6.2-5 | 21-605746 | 6.2-9 | 21-607745 | 6.2-6 | 21-607833 | 6.2-5 | 21-607911 | 6.2-2 |
| 21-25718 | 6.2-9 | 21-605294 | 6.2-2 | 21-605747 | 6.2-9 | 21-607746 | 6.2-6 | 21-607834 | 6.2-5 | 21-607912 | 6.2-3 |
| 21-25719 | 6.2-3 | 21-605366 | 6.2-7 | 21-605748 | 6.2-9 | 21-607747 | 6.2-6 | 21-607835 | 6.2-5 | 21-607918 | 6.2-9 |
| 21-25720 | 6.2-3 | 21-605367 | 6.2-9 | 21-605749 | 6.2-9 | 21-607748 | 6.2-6 | 21-607836 | 6.2-5 | 21-607920 | 6.2-7 |
| 21-25722 | 6.2-3 | 21-605368 | 6.2-8 | 21-605751 | 6.2-9 | 21-607749 | 6.2-6 | 21-607837 | 6.2-5 | 21-607921 | 6.2-7 |
| 21-25723 | 6.2-3 | 21-605369 | 6.2-11 | 21-605752 | 6.2-9 | 21-607750 | 6.2-6 | 21-607838 | 6.2-5 | 21-607923 | 6.2-7 |
| 21-25724 | 6.2-5 | 21-605370 | 6.2-10 | 21-605753 | 6.2-9 | 21-607751 | 6.2-6 | 21-607839 | 6.2-5 | 21-608084 | 6.2-3 |
| 21-25725 | 6.2-9 | 21-605371 | 6.2-11 | 21-605754 | 6.2-9 | 21-607753 | 6.2-6 | 21-607840 | 6.2-5 | 21-608087 | 6.2-4 |
| 21-25726 | 6.2-9 | 21-605372 | 6.2-6 | 21-605755 | 6.2-7 | 21-607754 | 6.2-6 | 21-607841 | 6.2-5 | 21-608088 | 6.2-4 |
| 21-25727 | 6.2-9 | 21-605373 | 6.2-6 | 21-605756 | 6.2-7 | 21-607756 | 6.2-6 | 21-607842 | 6.2-5 | 21-608092 | 6.2-6 |
| 21-25728 | 6.2-9 | 21-605374 | 6.2-5 | 21-605759 | 6.2-7 | 21-607763 | 6.2-6 | 21-607843 | 6.2-5 | 21-608095 | 6.2-5 |
| 21-25729 | 6.2-9 | 21-605375 | 6.2-5 | 21-605764 | 6.2-9 | 21-607764 | 6.2-11 | 21-607844 | 6.2-5 | 21-608096 | 6.2-6 |
| 21-25730 | 6.2-9 | 21-605376 | 6.2-5 | 21-605765 | 6.2-9 | 21-607765 | 6.2-11 | 21-607845 | 6.2-5 | 21-608103 | 6.2-10 |
| 21-25731 | 6.2-9 | 21-605377 | 6.2-4 | 21-605766 | 6.2-9 | 21-607766 | 6.2-11 | 21-607846 | 6.2-5 | 21-608105 | 6.2-11 |
| 21-25732 | 6.2-9 | 21-605378 | 6.2-3 | 21-605768 | 6.2-9 | 21-607767 | 6.2-11 | 21-607847 | 6.2-5 | 21-608835 | 6.2-4 |
| 21-25733 | 6.2-4 | 21-605379 | 6.2-3 | 21-605769 | 6.2-9 | 21-607768 | 6.2-11 | 21-607848 | 6.2-5 | 21-608836 | 6.2-7 |
| 21-25734 | 6.2-3 | 21-605380 | 6.2-4 | 21-605770 | 6.2-9 | 21-607769 | 6.2-11 | 21-607849 | 6.2-5 | 21-608837 | 6.2-3 |
| 21-25735 | 6.2-11 | 21-605532 | 6.2-7 | 21-605771 | 6.2-9 | 21-607770 | 6.2-11 | 21-607850 | 6.2-5 | 21-608839 | 6.2-2 |
| 21-25736 | 6.2-11 | 21-605533 | 6.2-7 | 21-605772 | 6.2-9 | 21-607771 | 6.2-11 | 21-607851 | 6.2-5 | 21-608843 | 6.2-2 |
| 21-25737 | 6.2-8 | 21-605617 | 6.2-3 | 21-605776 | 6.2-4 | 21-607772 | 6.2-11 | 21-607852 | 6.2-5 | 21-608845 | 6.2-3 |
| 21-25738 | 6.2-6 | 21-605618 | 6.2-3 | 21-605777 | 6.2-4 | 21-607773 | 6.2-11 | 21-607853 | 6.2-5 | 21-608847 | 6.2-4 |
| 21-25739 | 6.2-6 | 21-605619 | 6.2-3 | 21-607149 | 6.2-4 | 21-607774 | 6.2-11 | 21-607855 | 6.2-5 | | |
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| 21-25741 | 6.2-7 | 21-605698 | 6.2-8 | 21-607151 | 6.2-4 | 21-607776 | 6.2-11 | 21-607857 | 6.2-5 | | |
| 21-25748 | 6.2-3 | 21-605699 | 6.2-8 | 21-607153 | 6.2-4 | 21-607777 | 6.2-11 | 21-607858 | 6.2-5 | | |
| 21-25751 | 6.2-4 | 21-605700 | 6.2-8 | 21-607687 | 6.2-4 | 21-607779 | 6.2-11 | 21-607859 | 6.2-5 | | |
| 21-25758 | 6.2-2 | 21-605701 | 6.2-8 | 21-607688 | 6.2-4 | 21-607780 | 6.2-11 | 21-607860 | 6.2-5 | | |
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| 21-25762 | 6.2-2 | 21-605703 | 6.2-8 | 21-607690 | 6.2-4 | 21-607782 | 6.2-11 | 21-607862 | 6.2-5 | | |
| 21-25763 | 6.2-2 | 21-605704 | 6.2-8 | 21-607691 | 6.2-4 | 21-607784 | 6.2-11 | 21-607863 | 6.2-5 | | |
| 21-25764 | 6.2-2 | 21-605707 | 6.2-8 | 21-607692 | 6.2-4 | 21-607787 | 6.2-10 | 21-607864 | 6.2-5 | | |
| 21-25765 | 6.2-2 | 21-605708 | 6.2-8 | 21-607693 | 6.2-4 | 21-607788 | 6.2-11 | 21-607865 | 6.2-5 | | |
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| 21-25769 | 6.2-2 | 21-605712 | 6.2-8 | 21-607700 | 6.2-4 | 21-607796 | 6.2-6 | 21-607870 | 6.2-10 | | |
| 21-25770 | 6.2-2 | 21-605713 | 6.2-8 | 21-607705 | 6.2-4 | 21-607797 | 6.2-6 | 21-607871 | 6.2-10 | | |

**Figure 6.2-1 Legend map for organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c)**

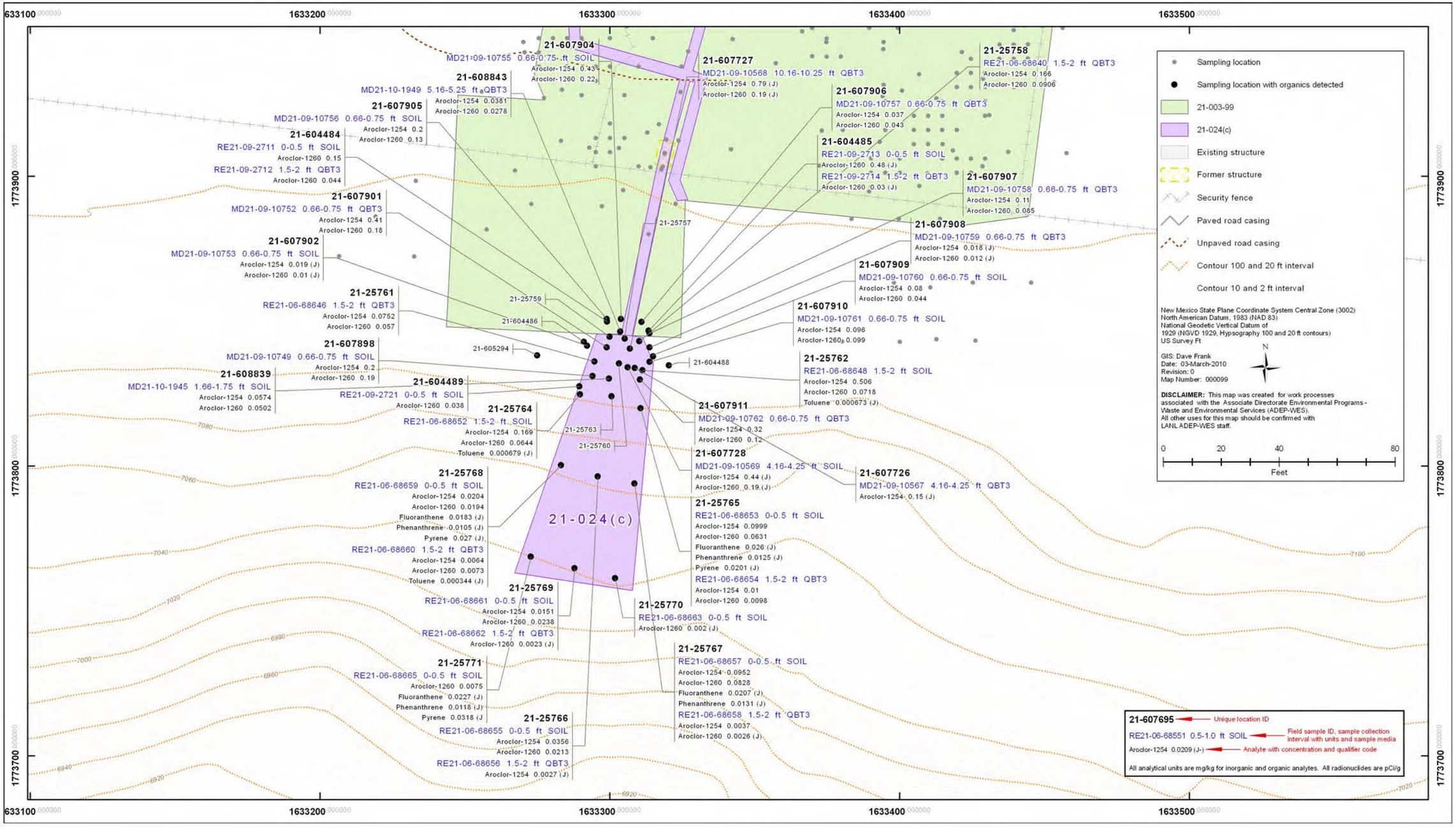



**Figure 6.2-2 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 1**

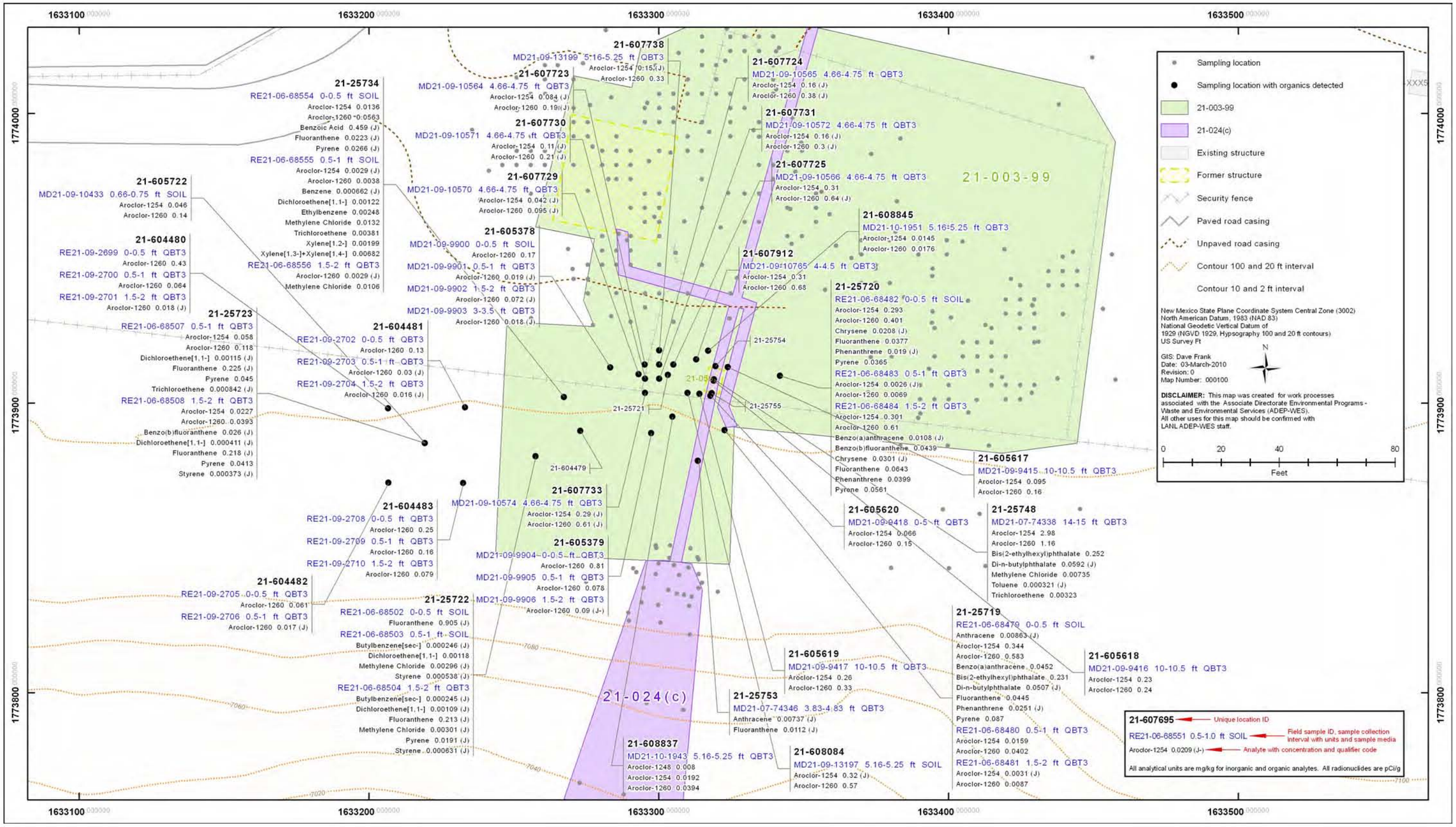



**Figure 6.2-3 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 2**

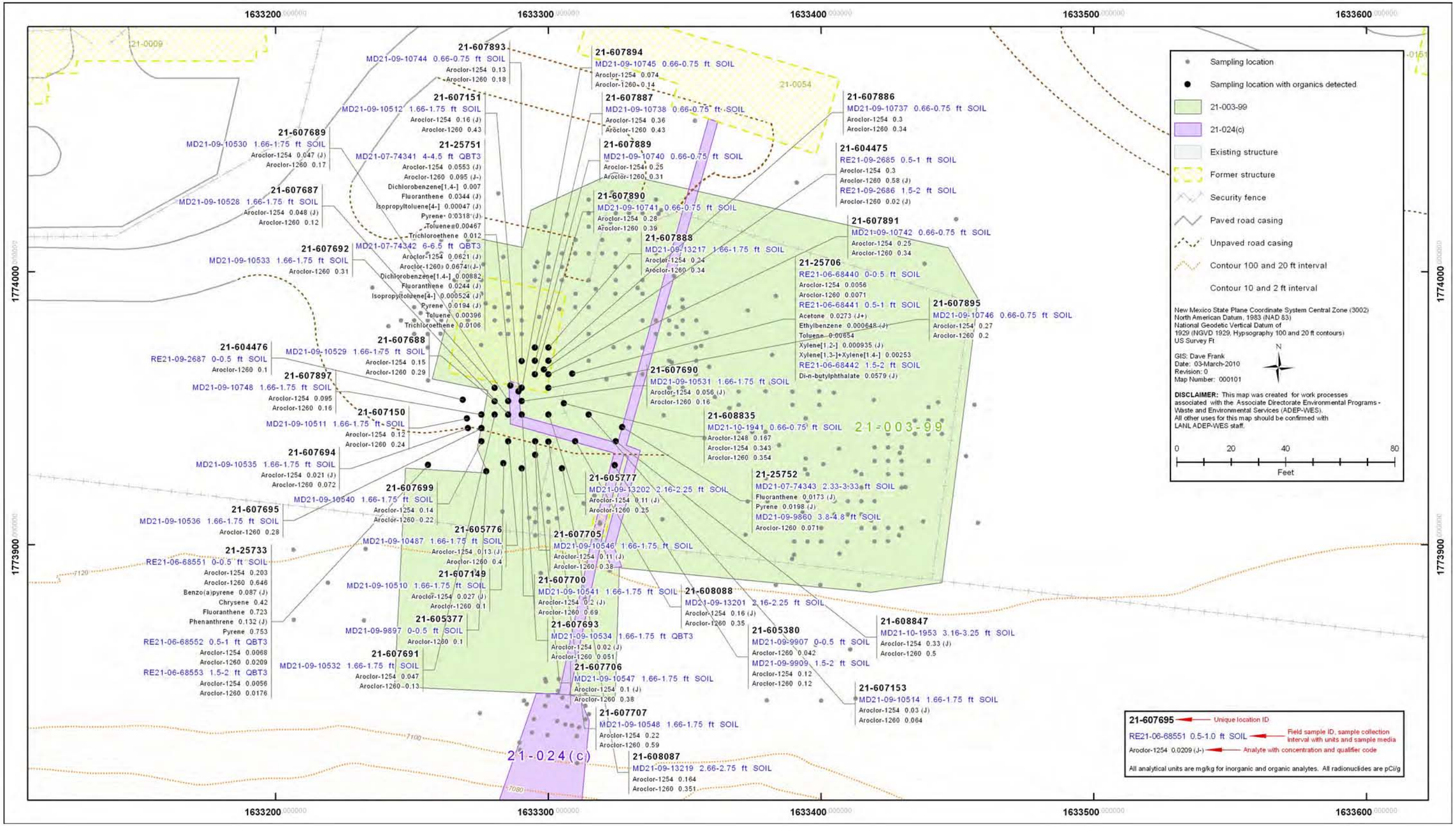



**Figure 6.2-4 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 3**

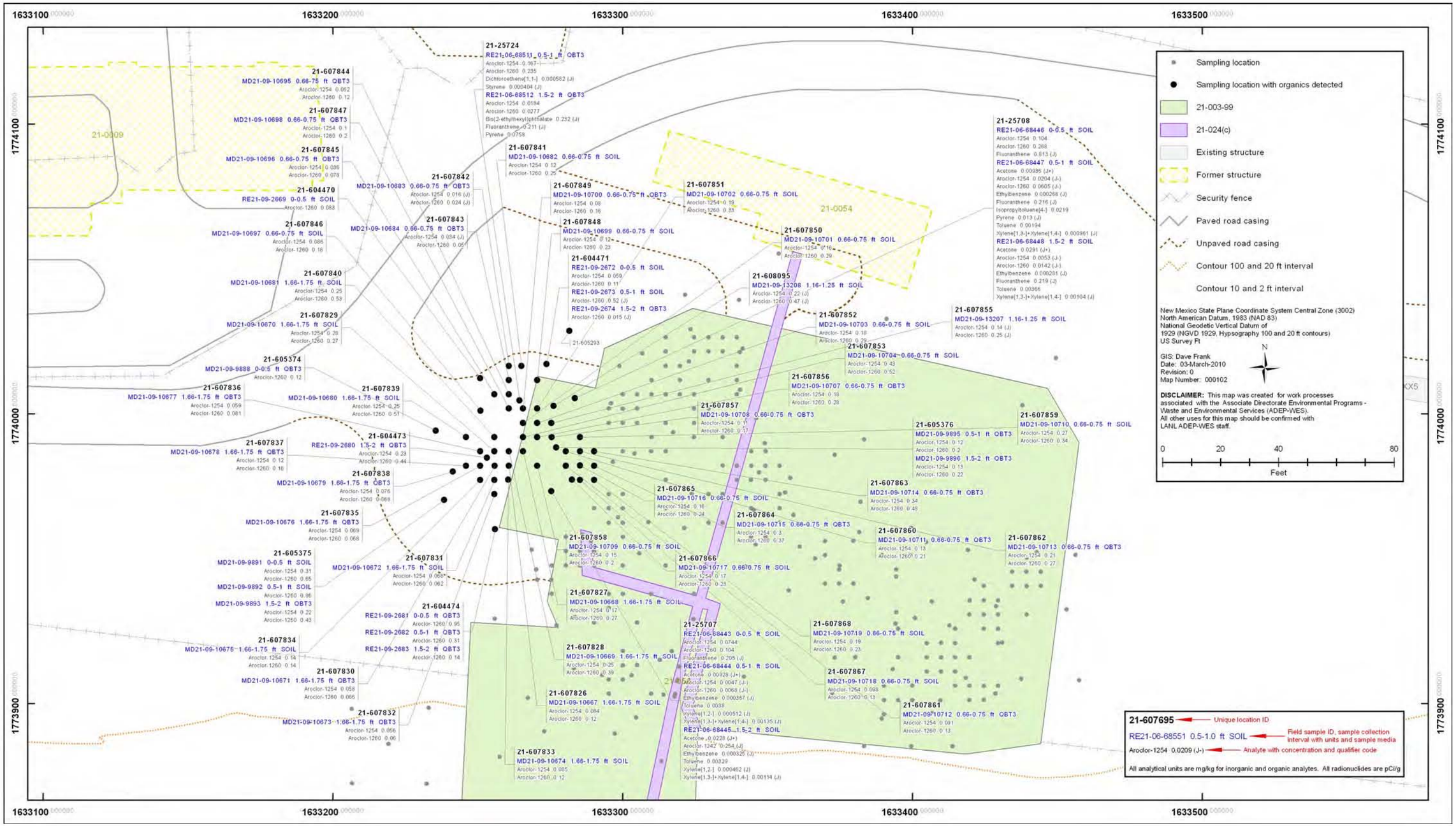



**Figure 6.2-5 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 4**

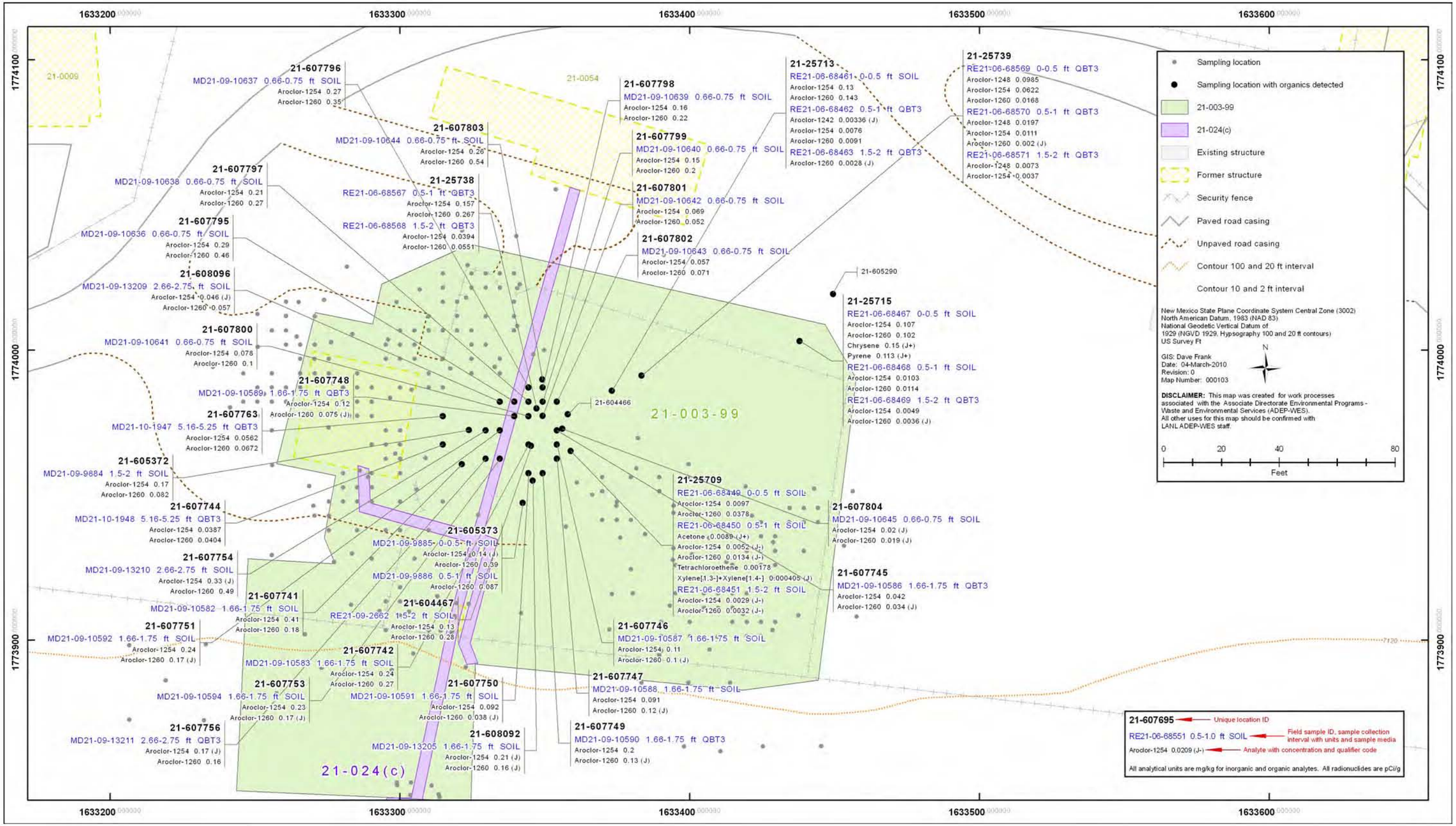



**Figure 6.2-6 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 5**

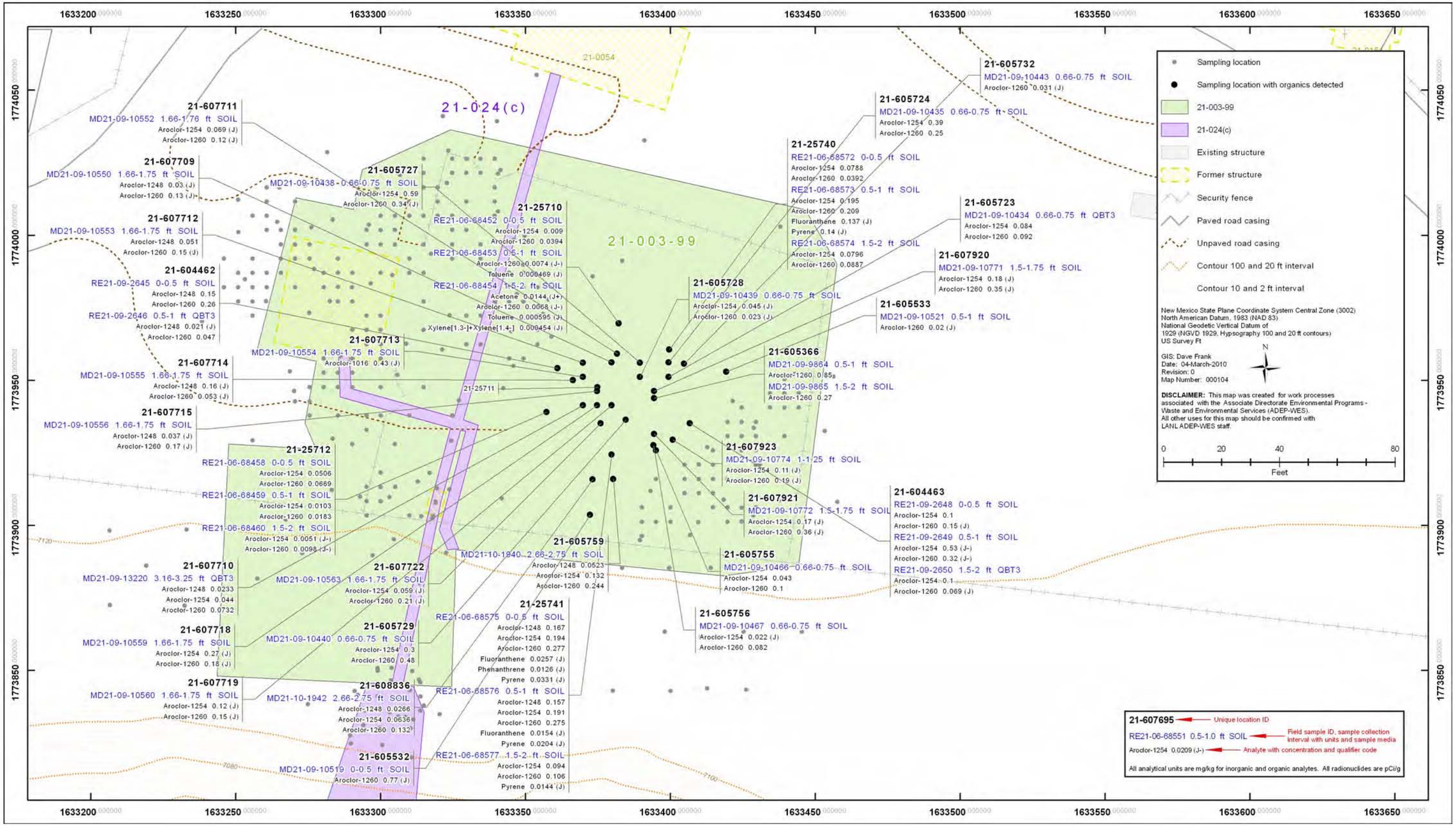



**Figure 6.2-7 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 6**

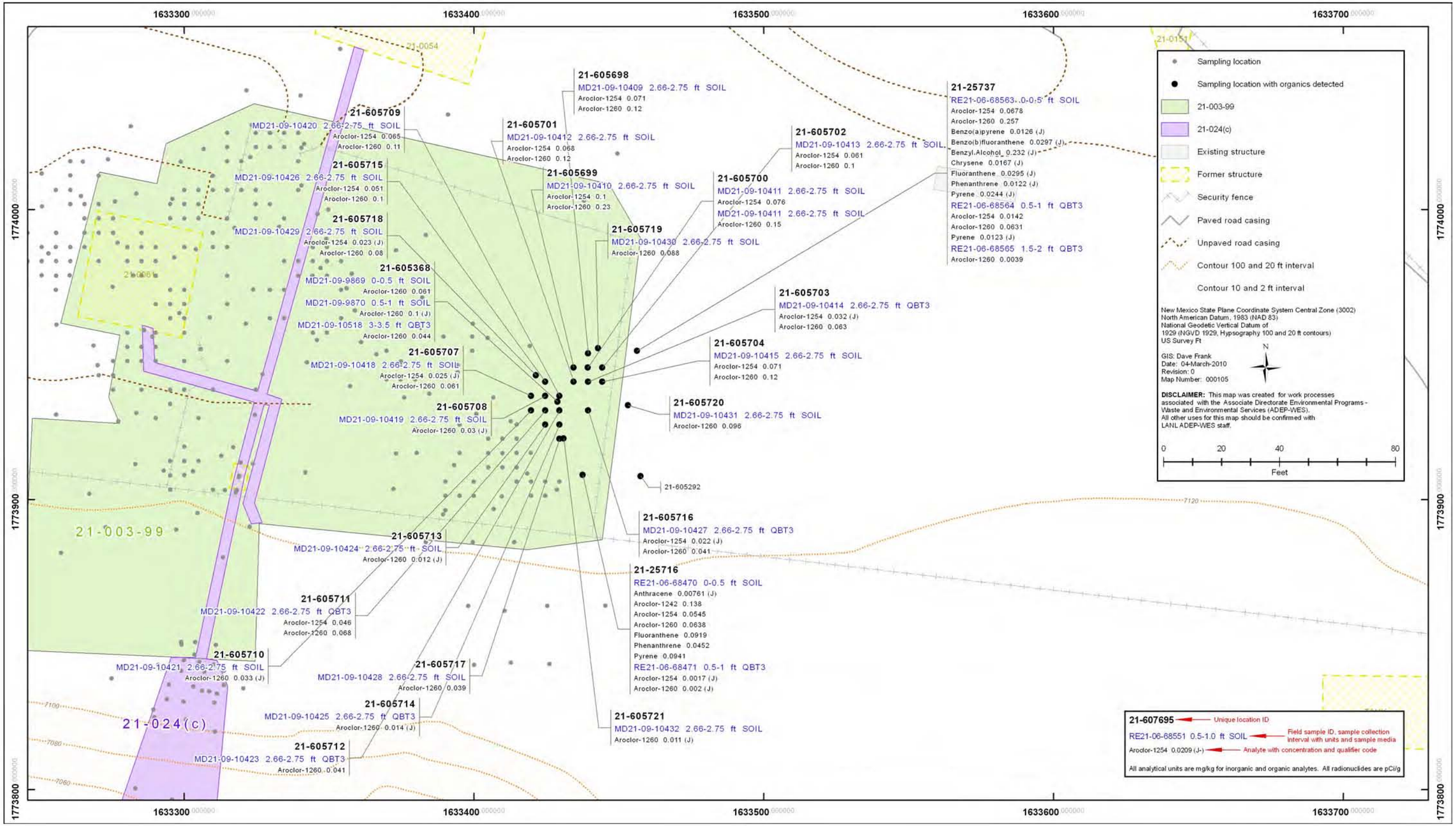



**Figure 6.2-8 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 7**

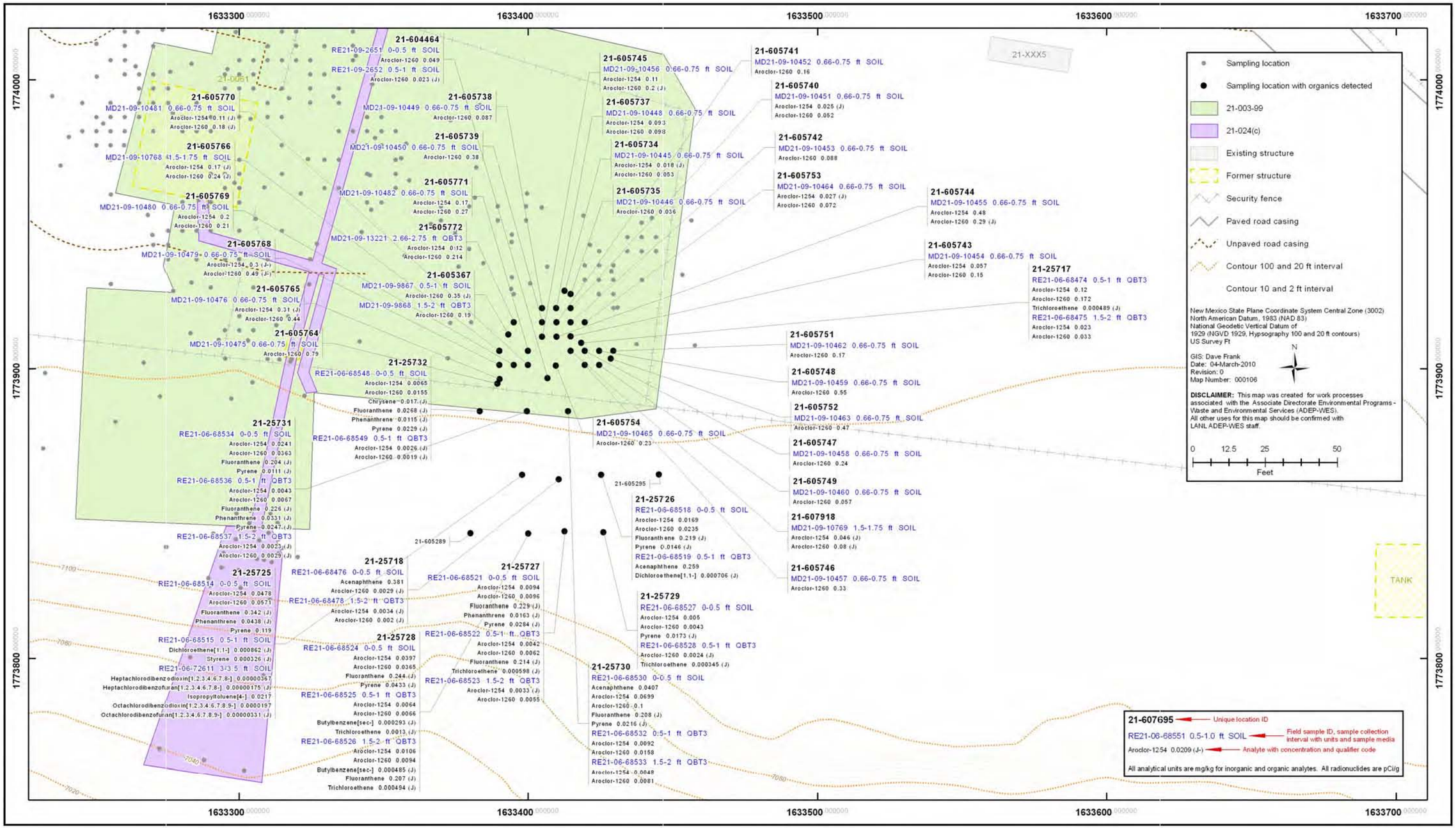



**Figure 6.2-9 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 8**

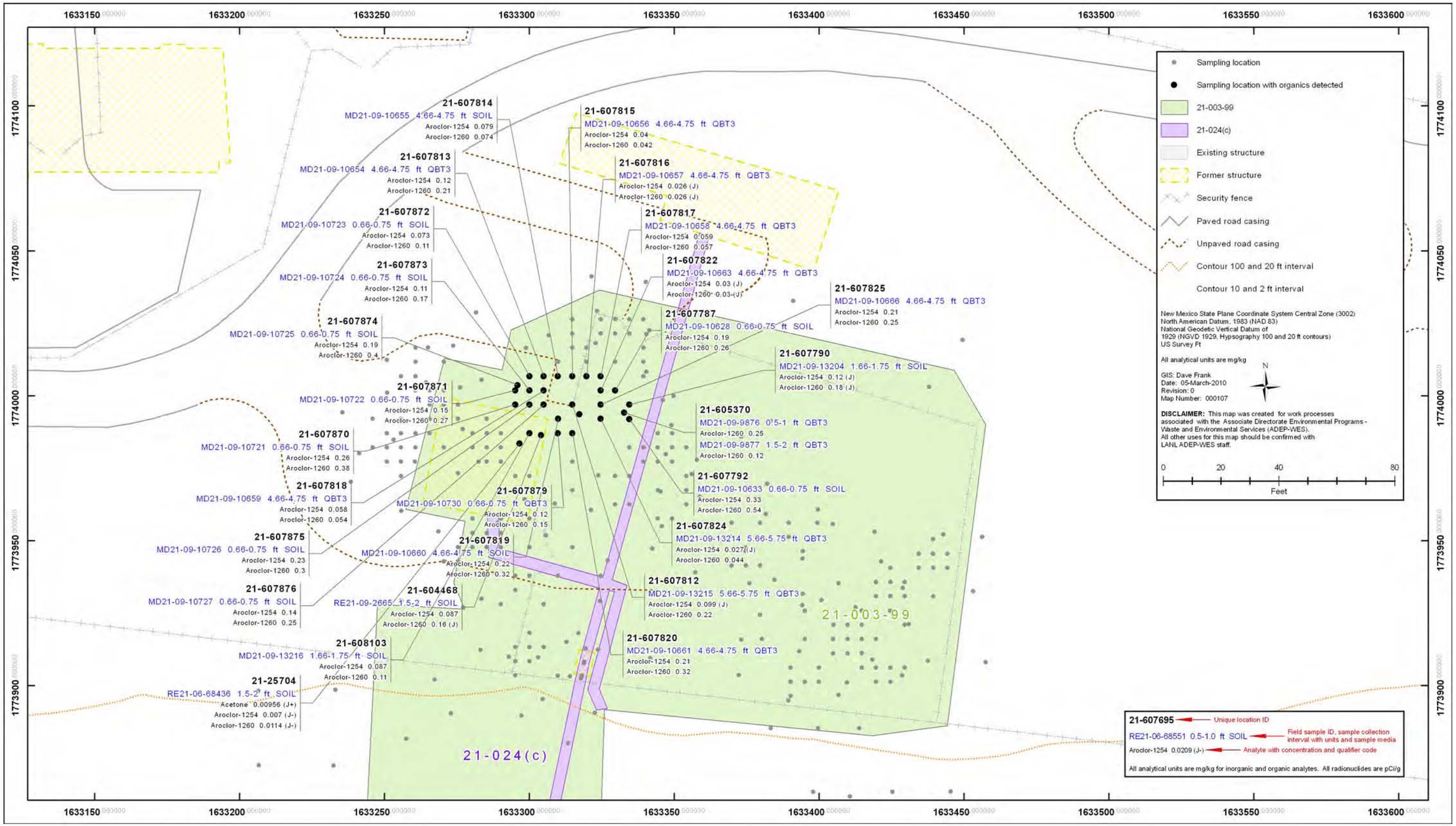



**Figure 6.2-10 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 9**

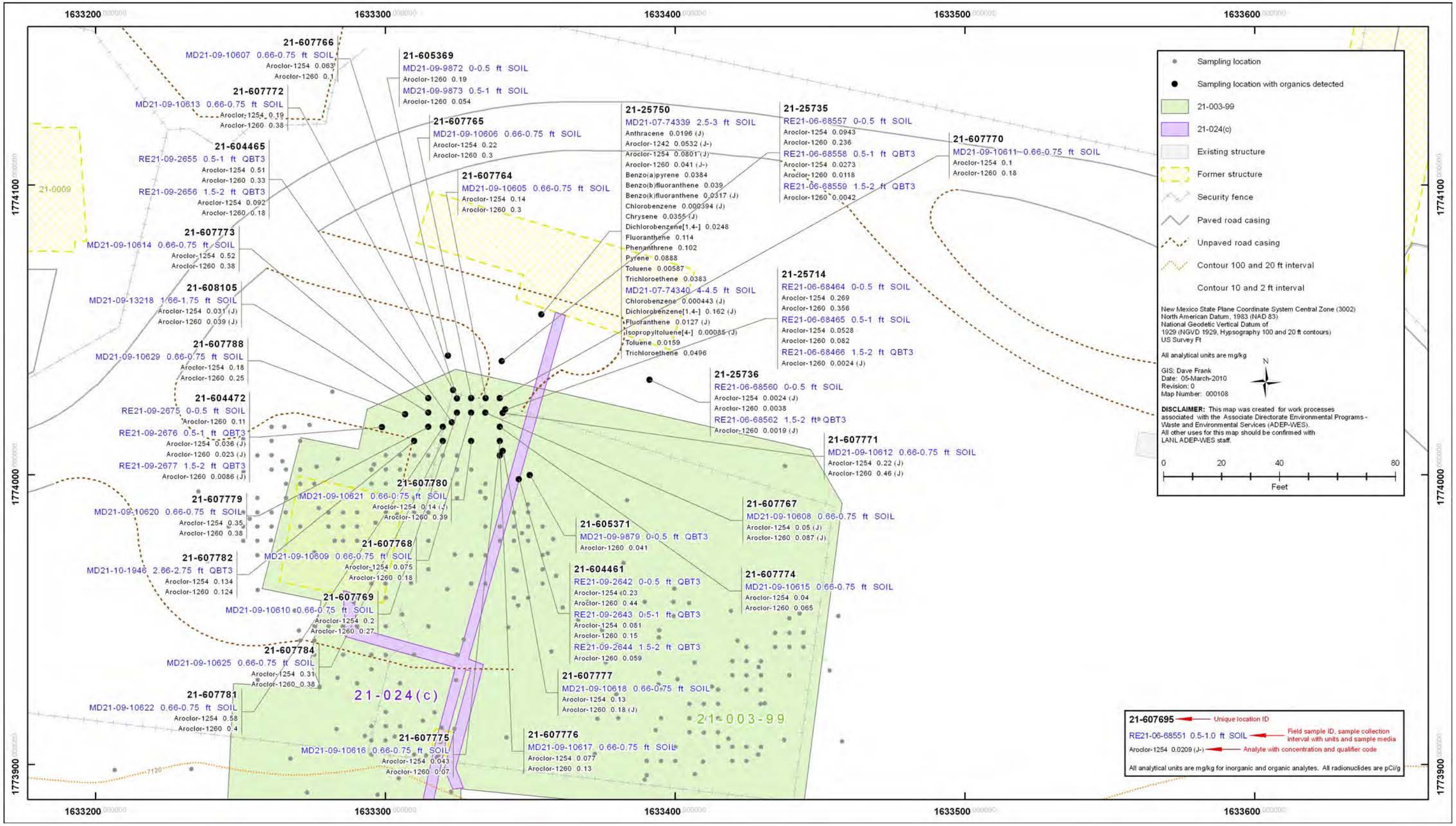



**Figure 6.2-11 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 10**

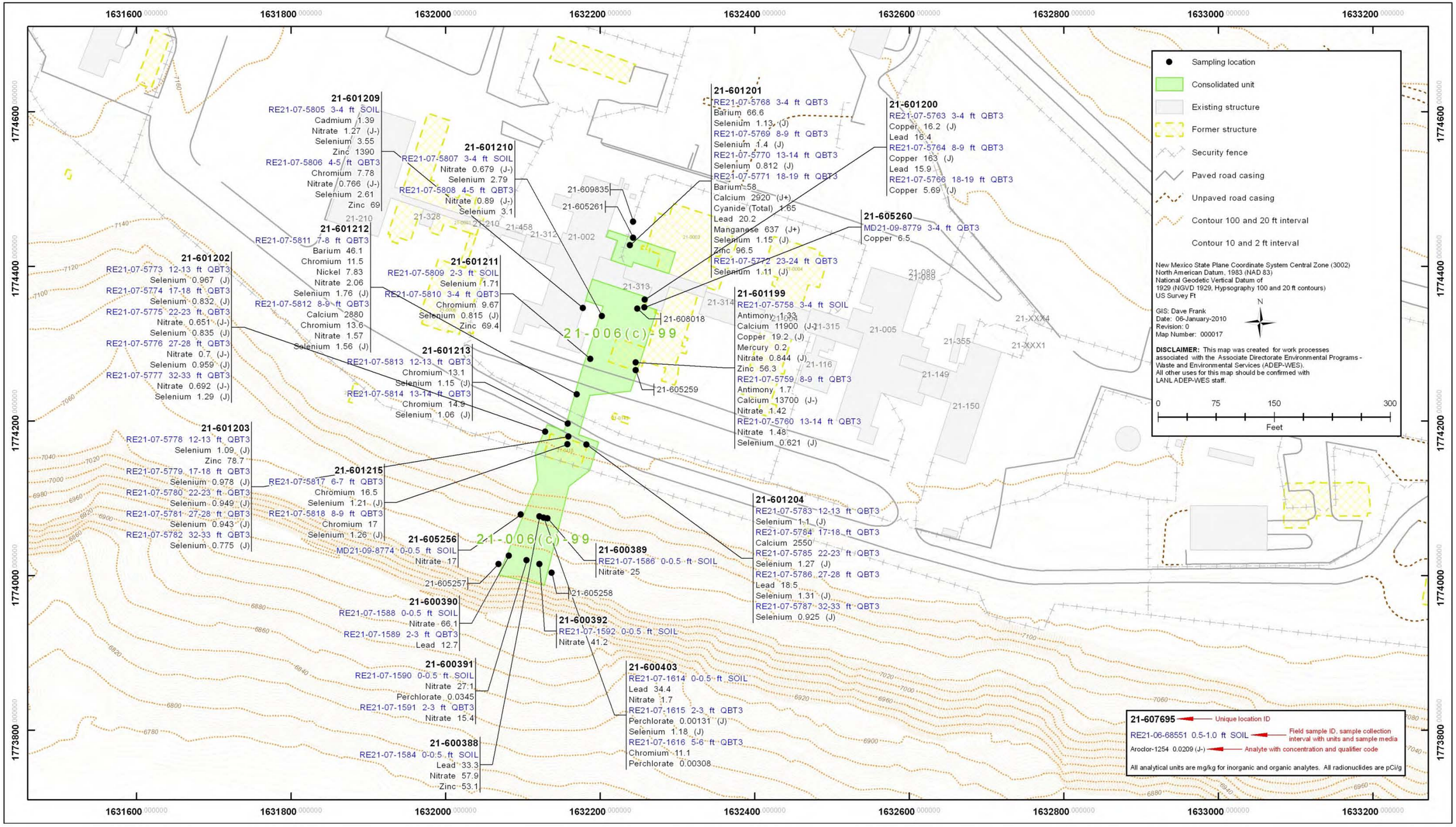



**Figure 6.3-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-006(c)-99**

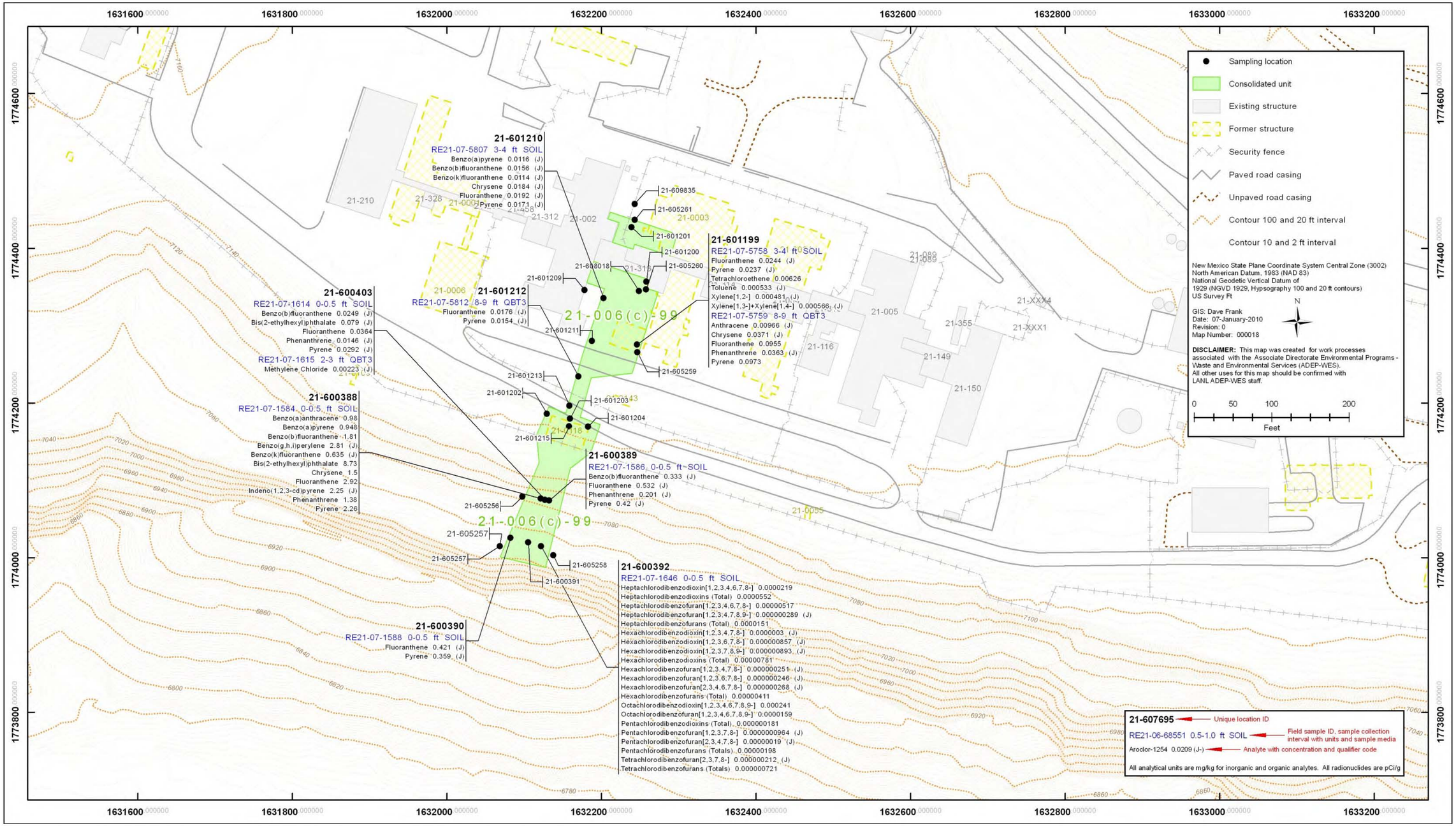



**Figure 6.3-2 Organic chemicals detected at Consolidated Unit 21-006(c)-99**

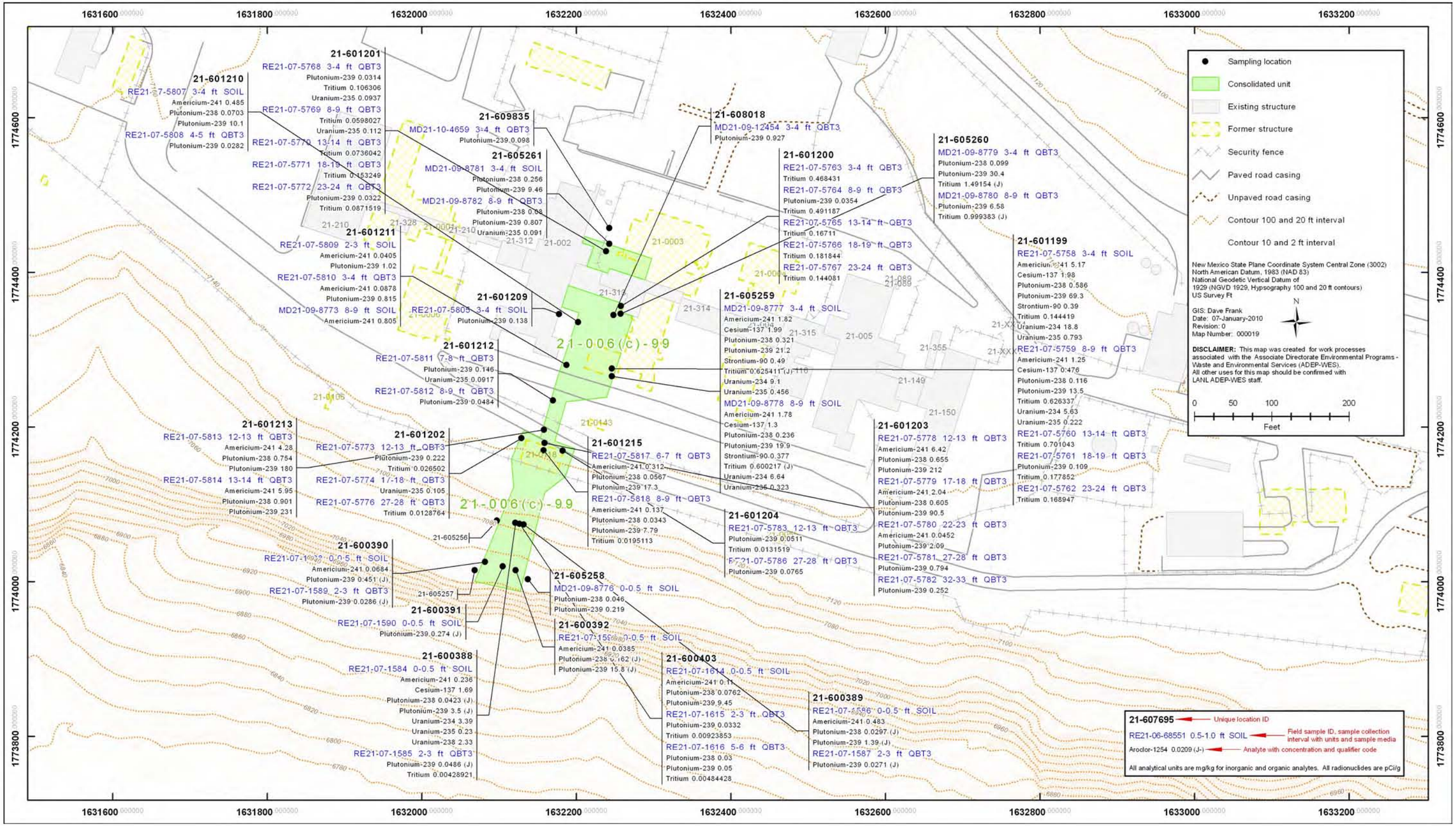



**Figure 6.3-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-006(c)-99**

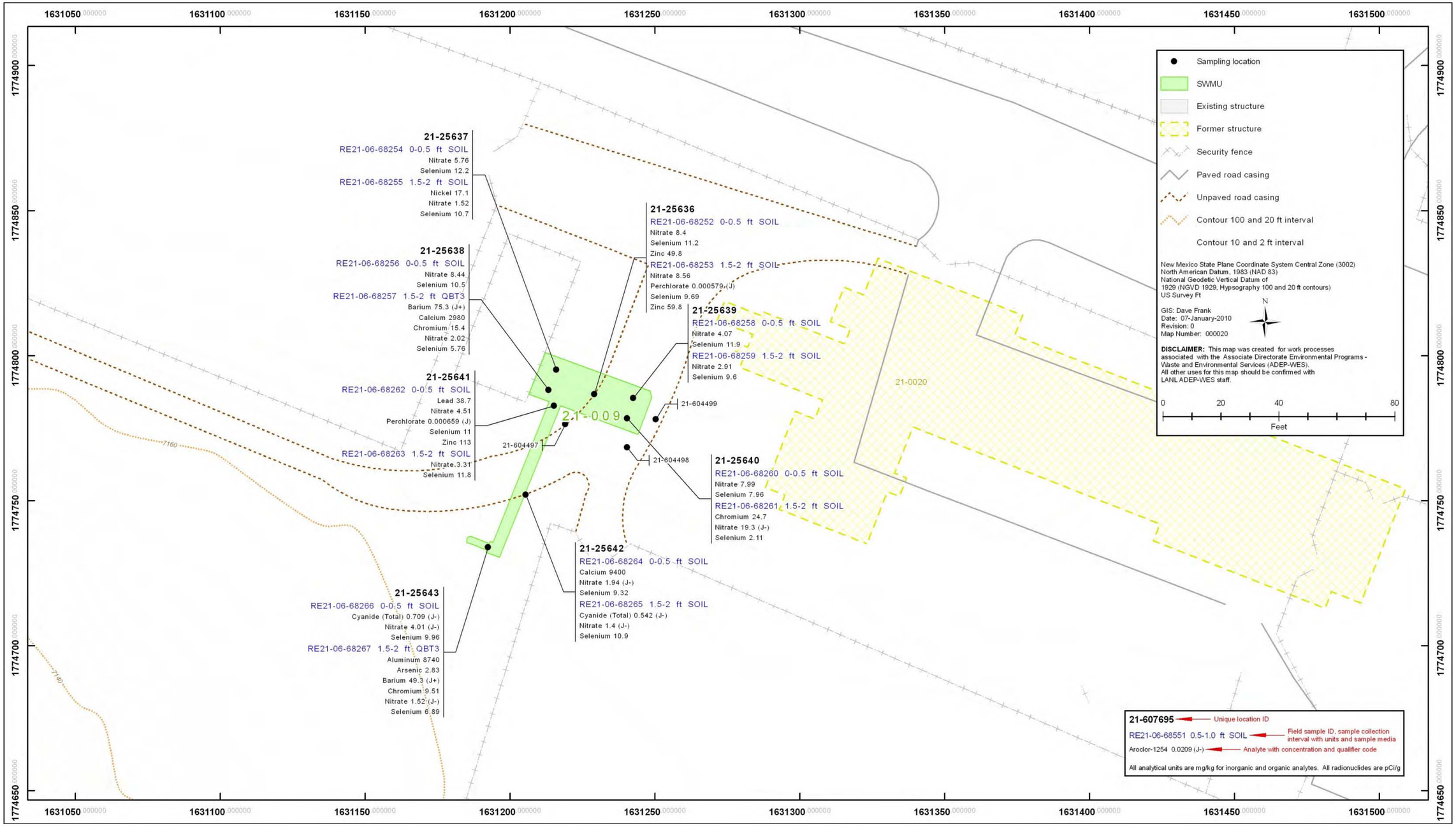



**Figure 6.4-1 Inorganic chemicals detected or detected above BVs at SWMU 21-009**

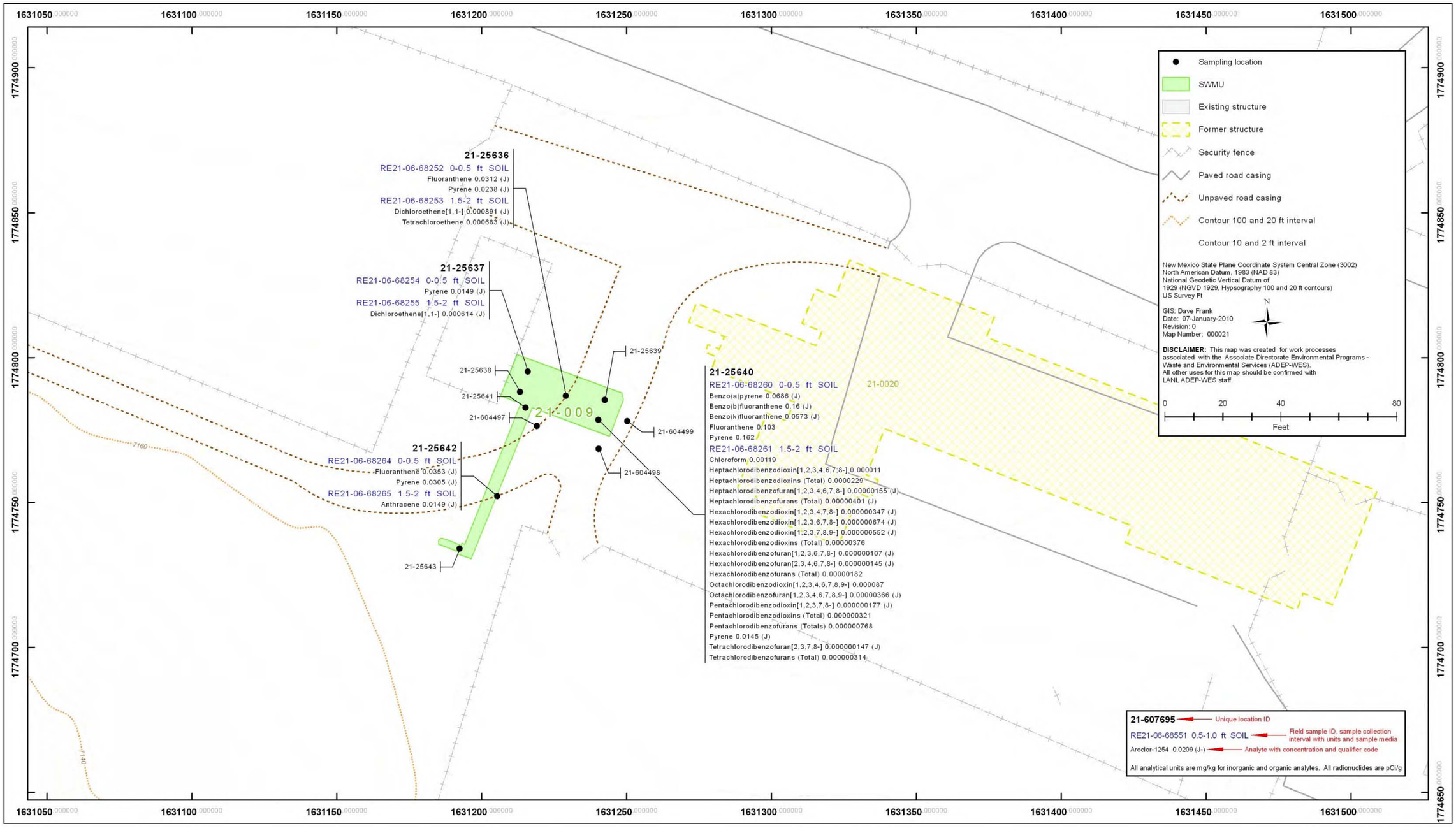



**Figure 6.4-2 Organic chemicals detected at SWMU 21-009**

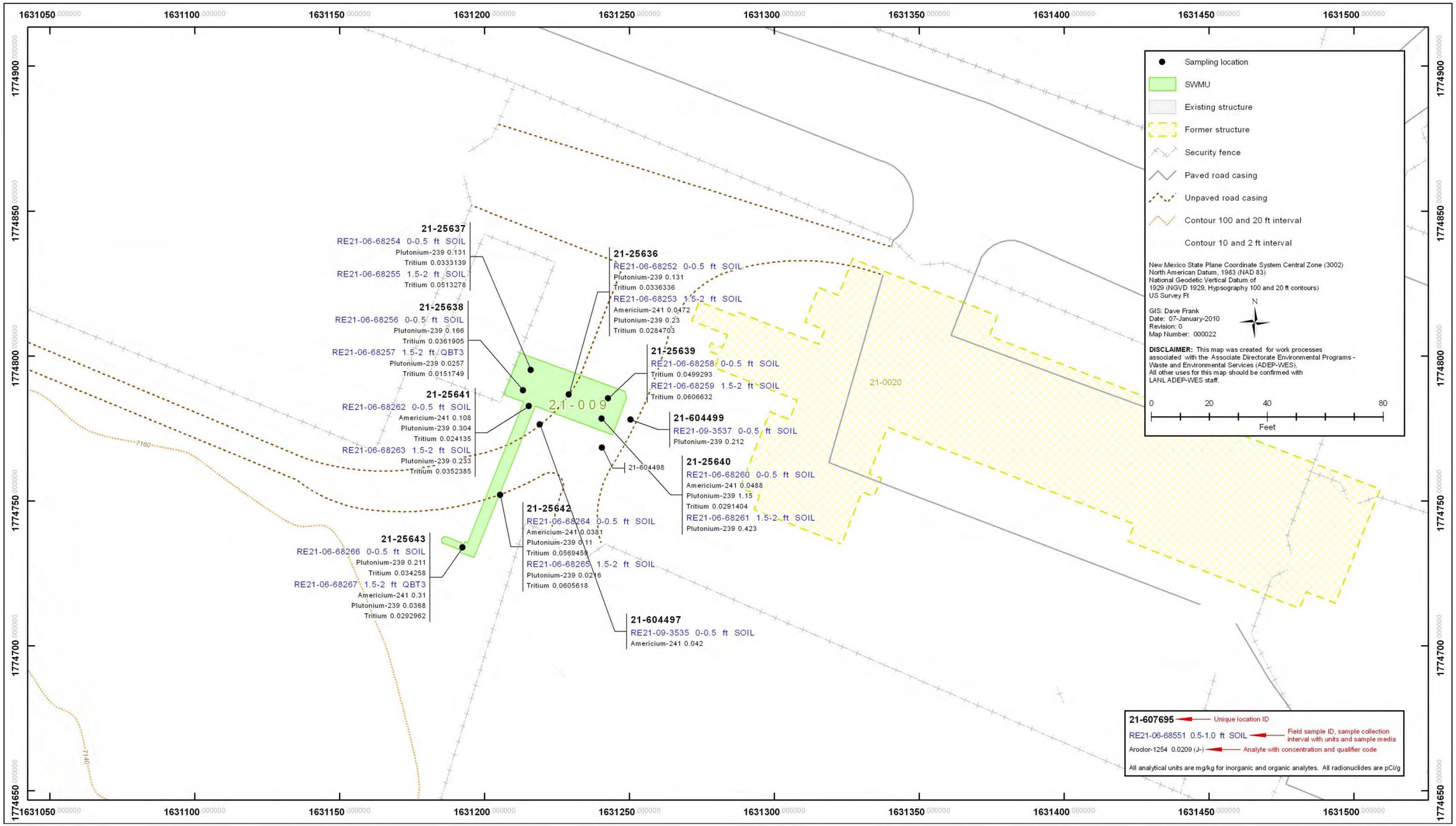



**Figure 6.4-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-009**

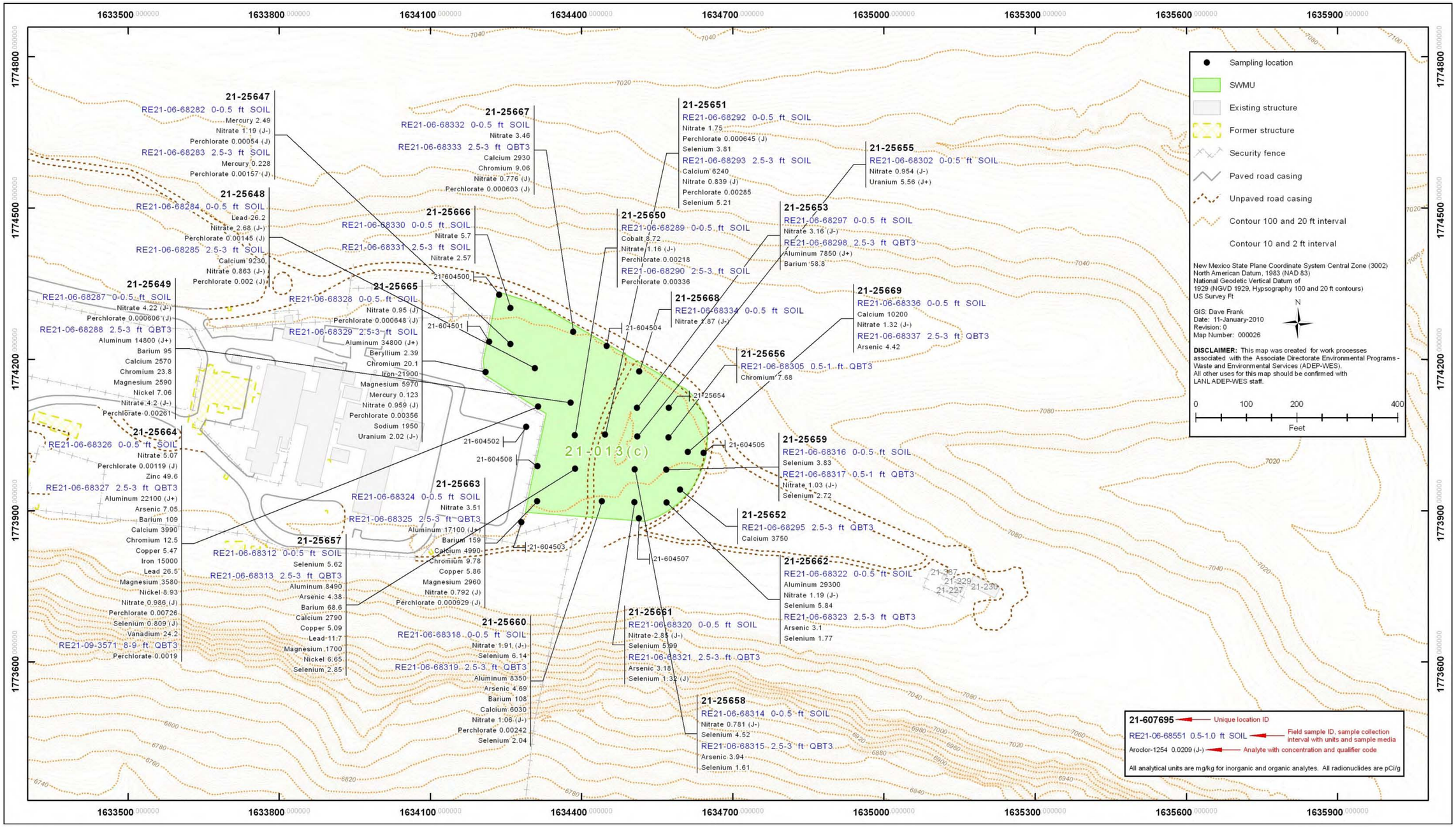



**Figure 6.6-1 Inorganic chemicals detected or detected above BVs at SWMU 21-013(c)**

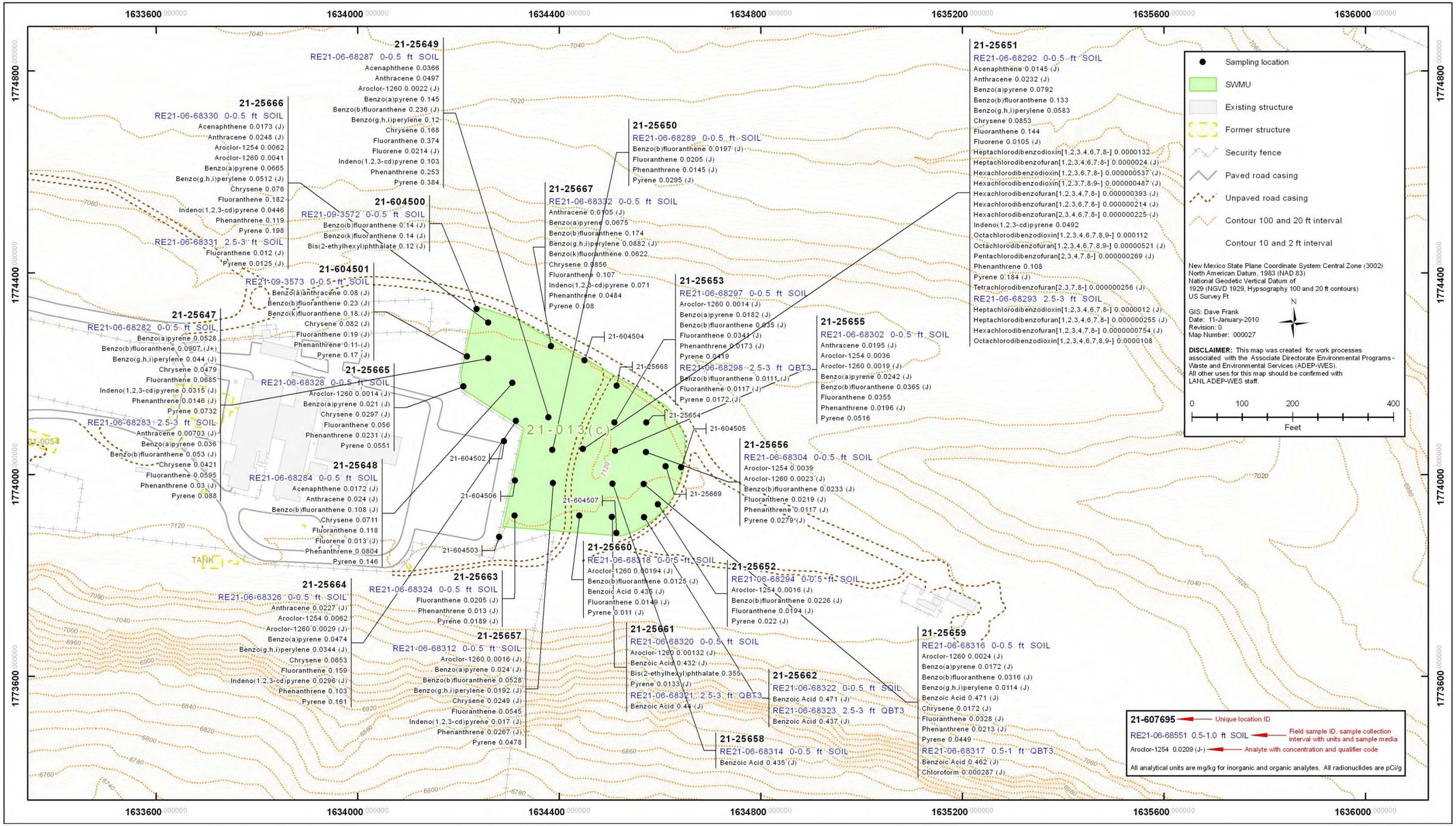



**Figure 6.6-2 Organic chemicals detected at SWMU 21-013(c)**

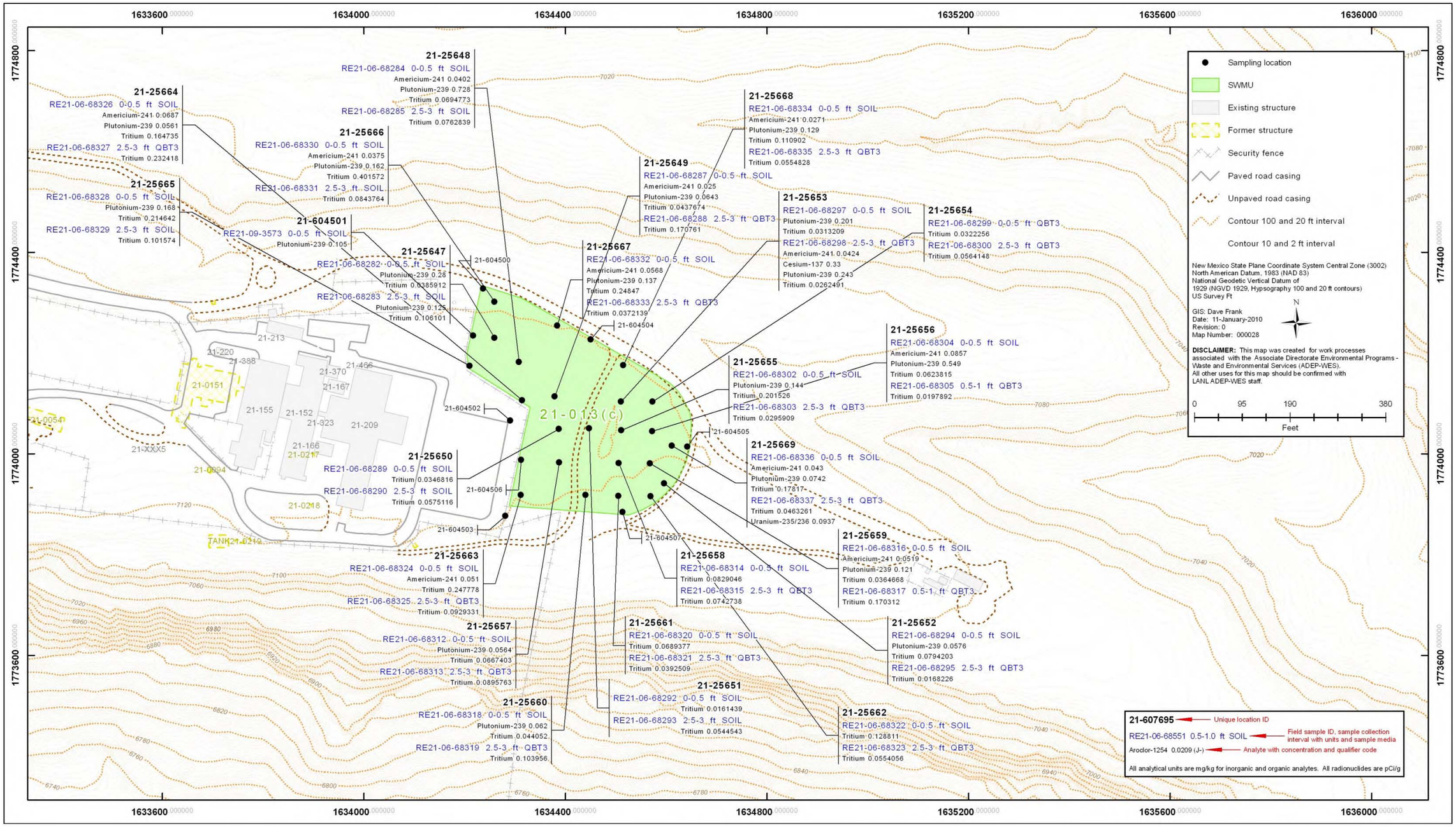



**Figure 6.6-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-013(c)**

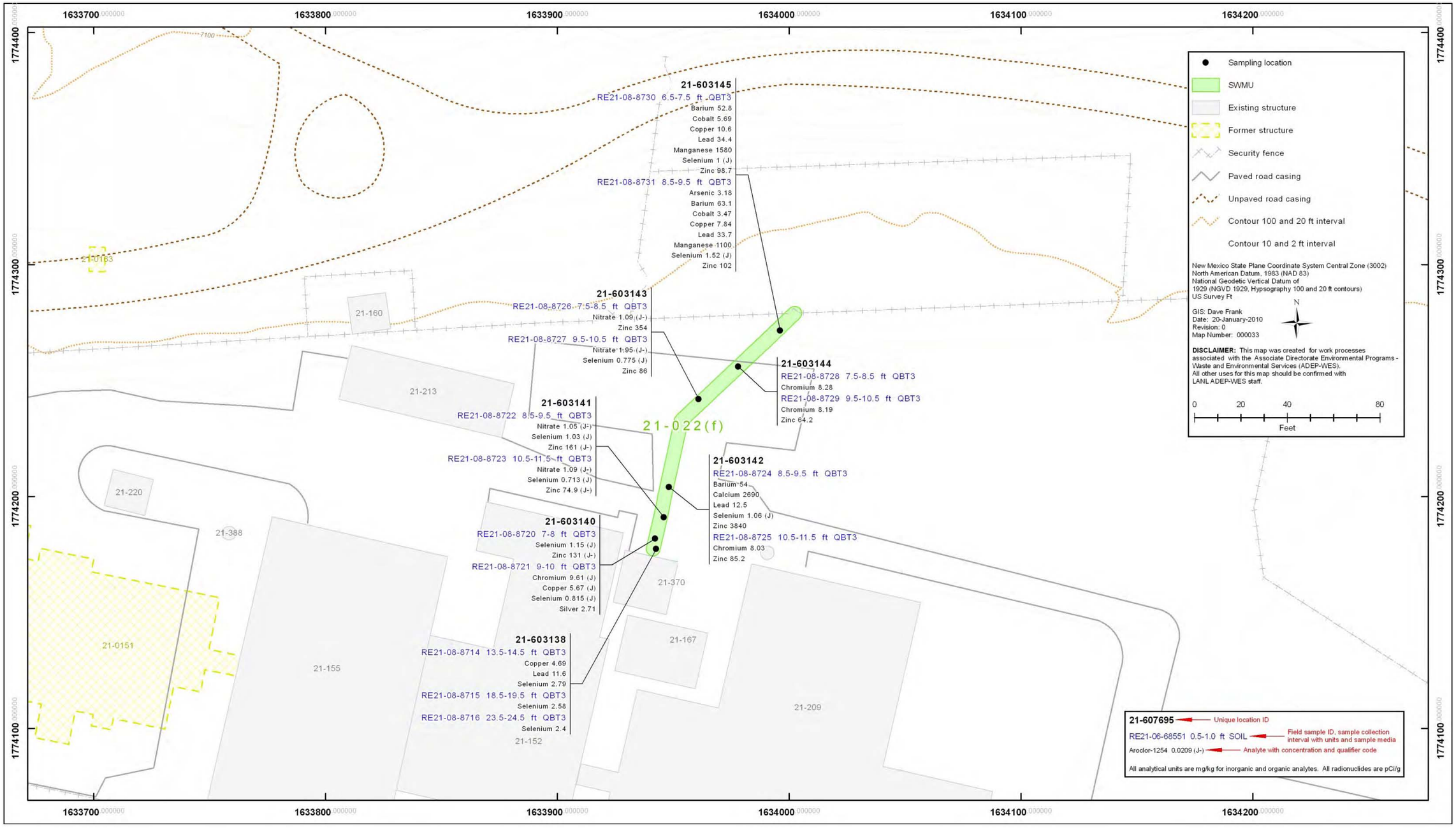



**Figure 6.7-1 Inorganic chemicals detected or detected above BVs at SWMU 21-022(f)**

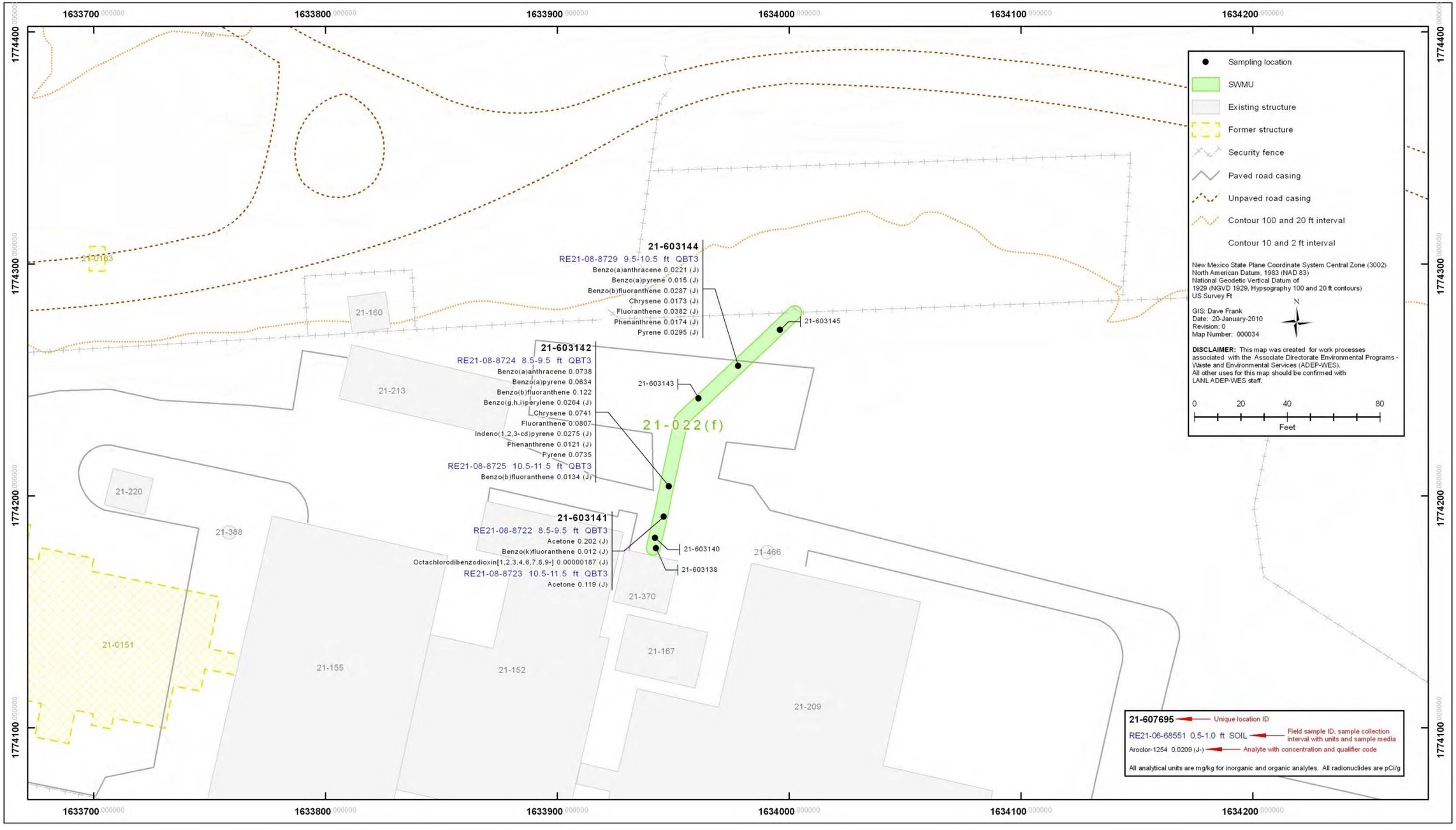



**Figure 6.7-2 Organic chemicals detected at SWMU 21-022(f)**

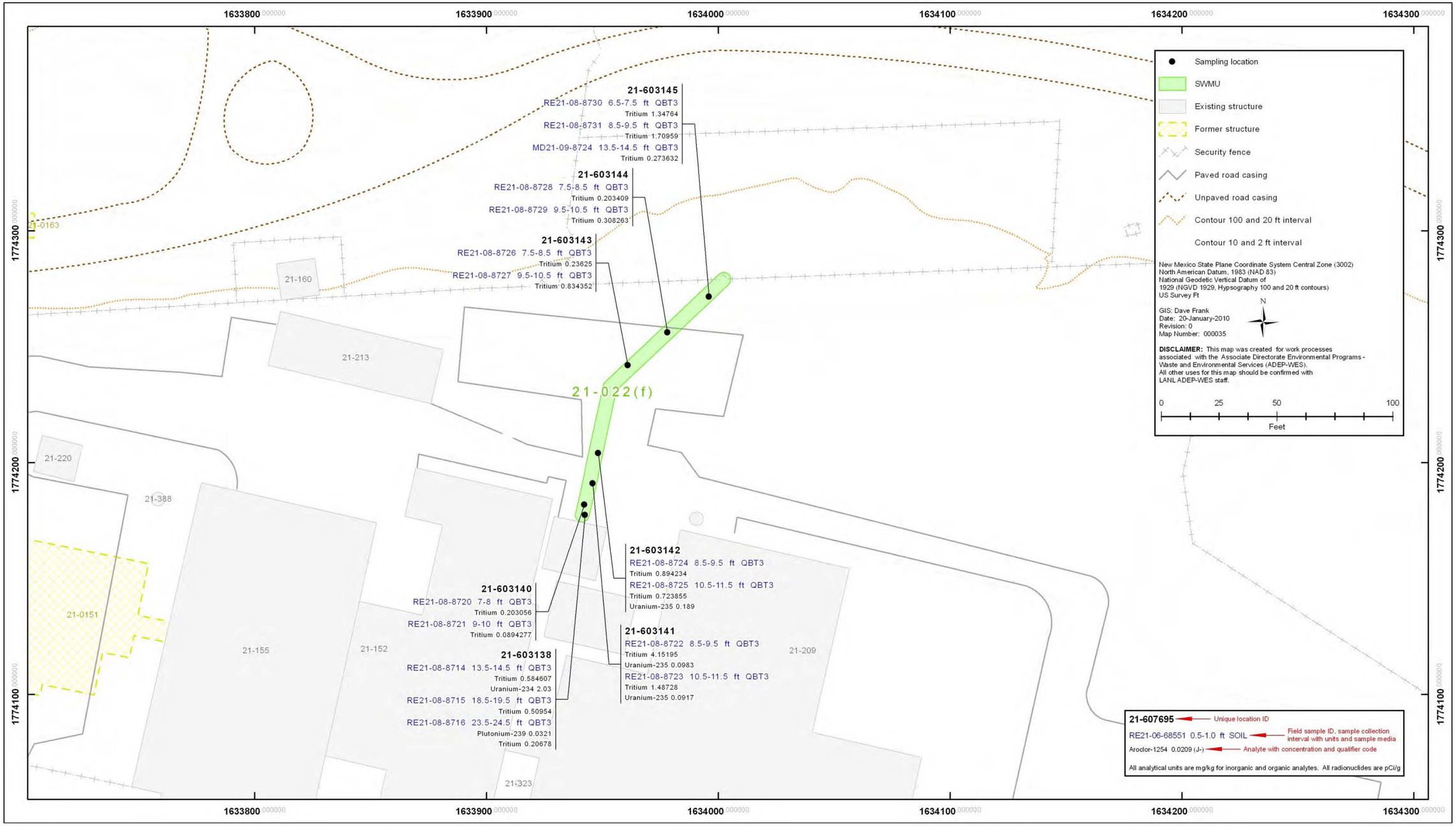



**Figure 6.7-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-022(f)**

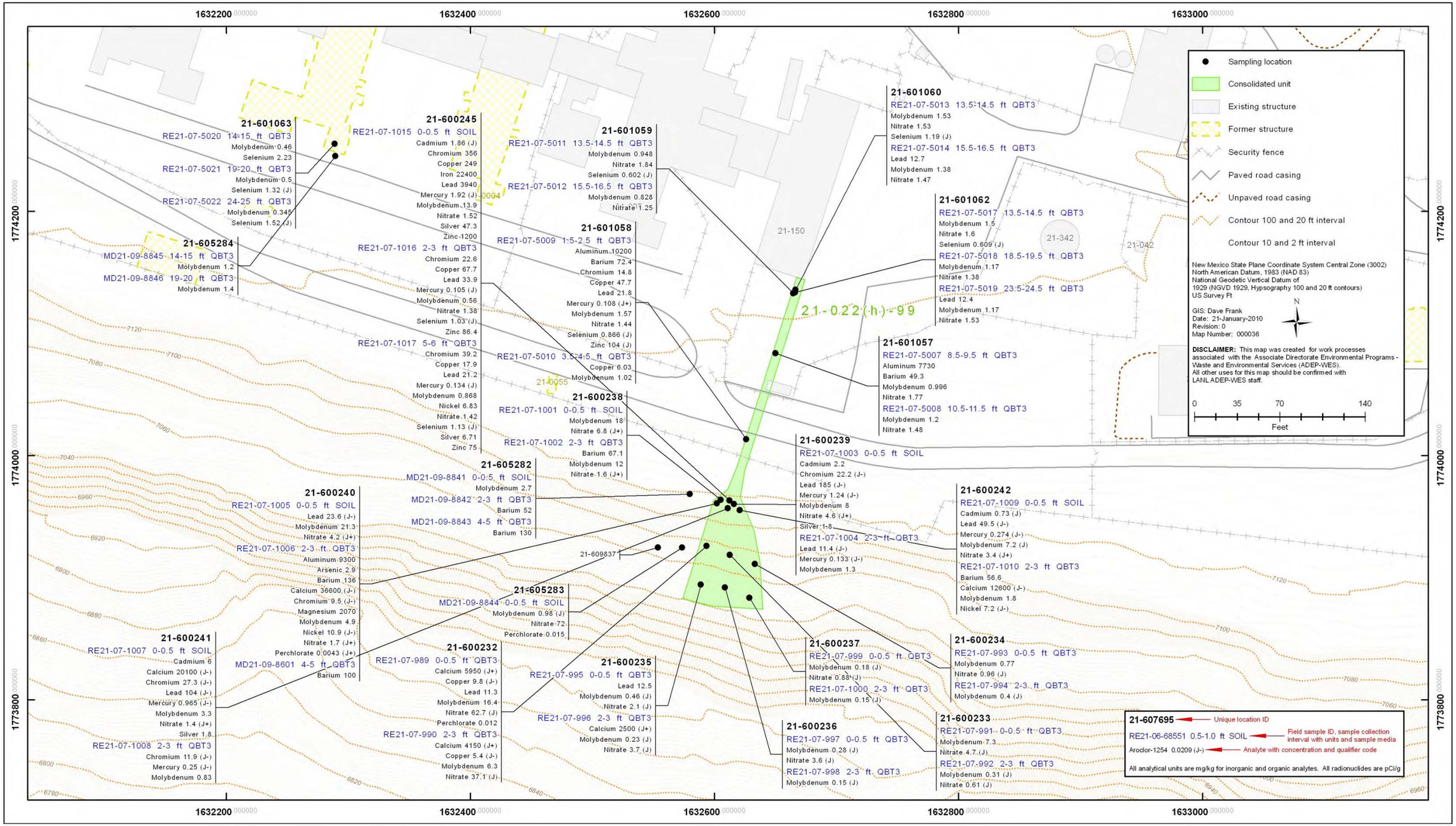



**Figure 6.8-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-022(h)-99**

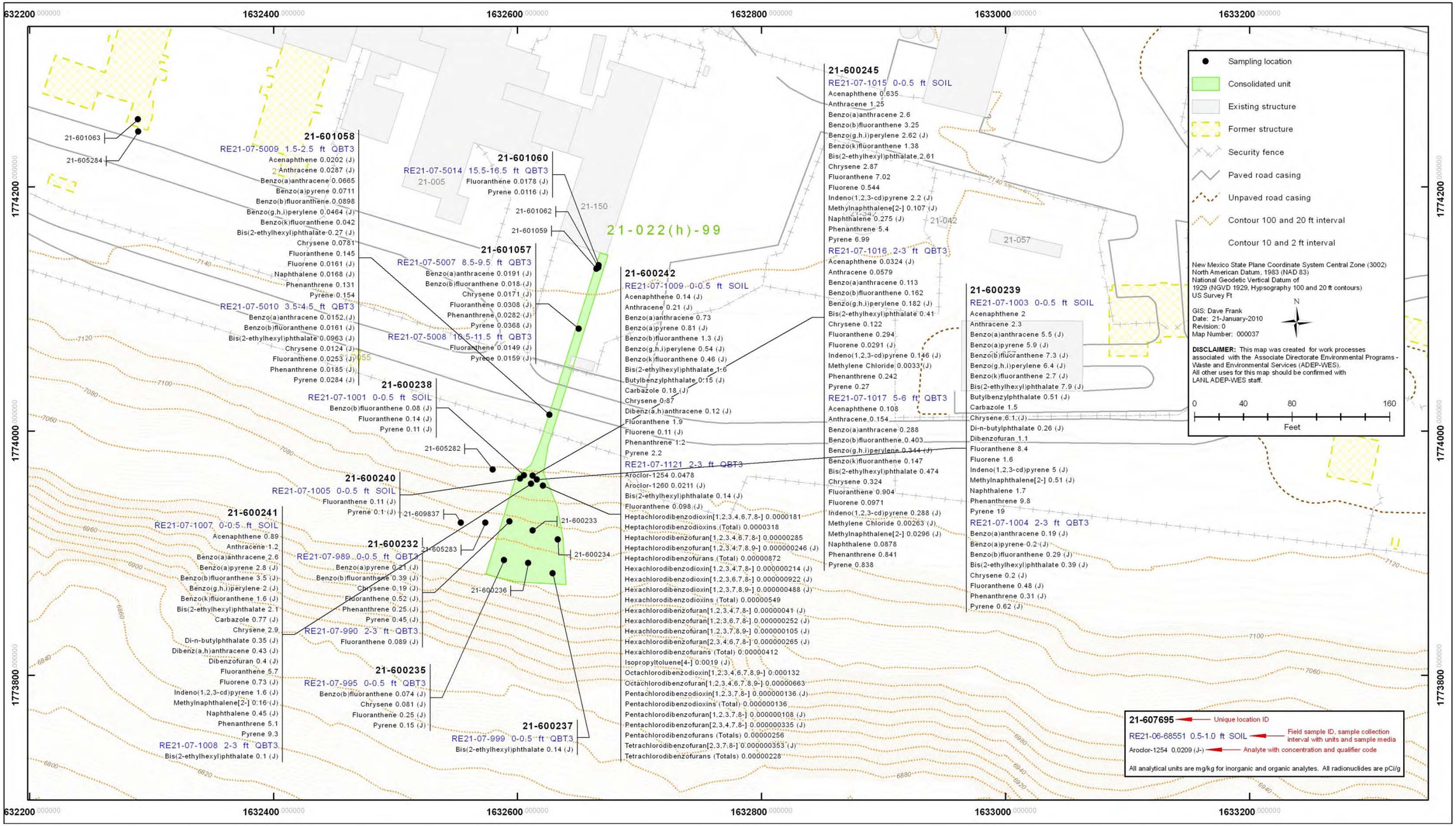



**Figure 6.8-2 Organic chemicals detected at Consolidated Unit 21-022(h)-99**

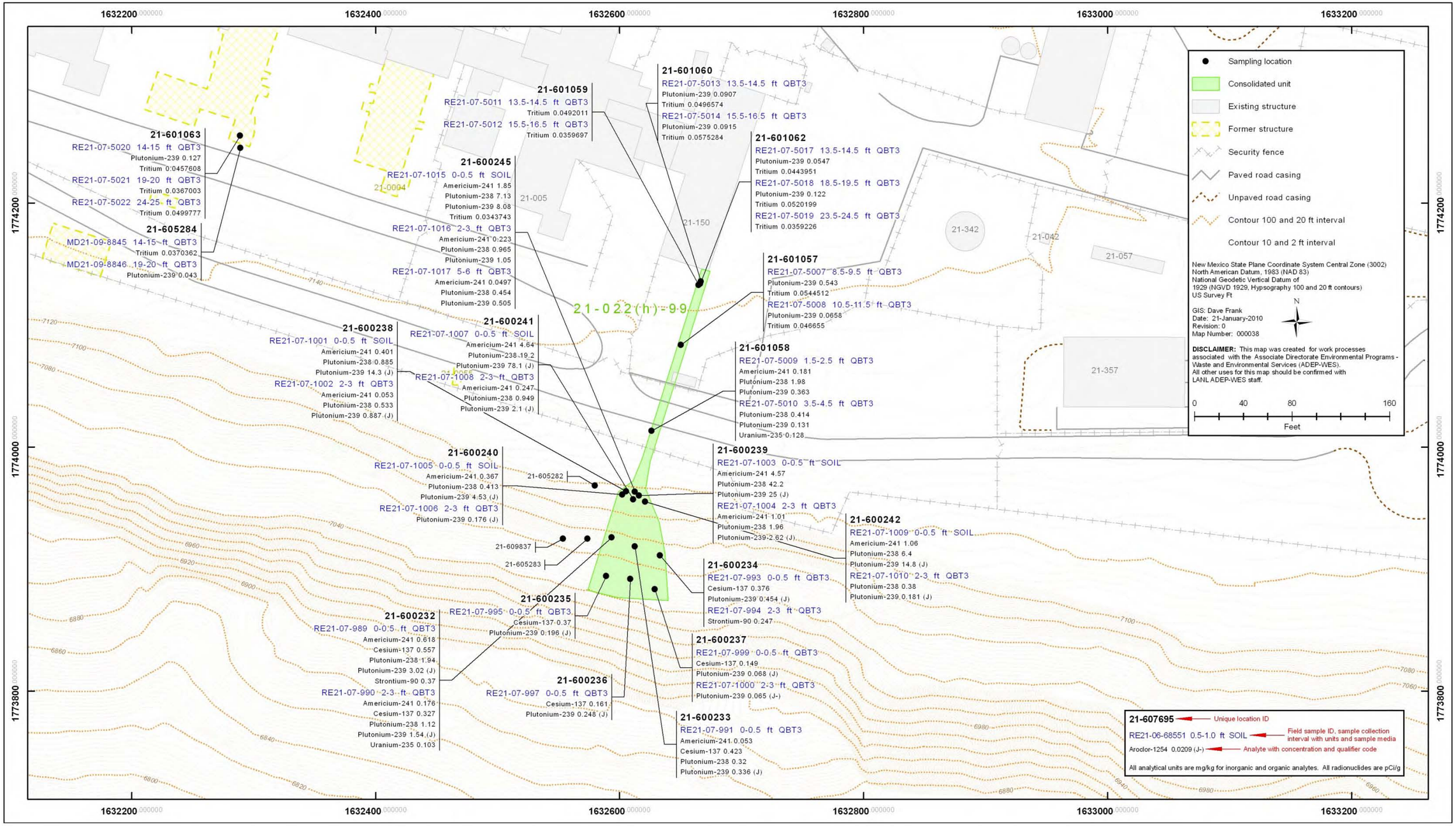



**Figure 6.8-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-022(h)-99**

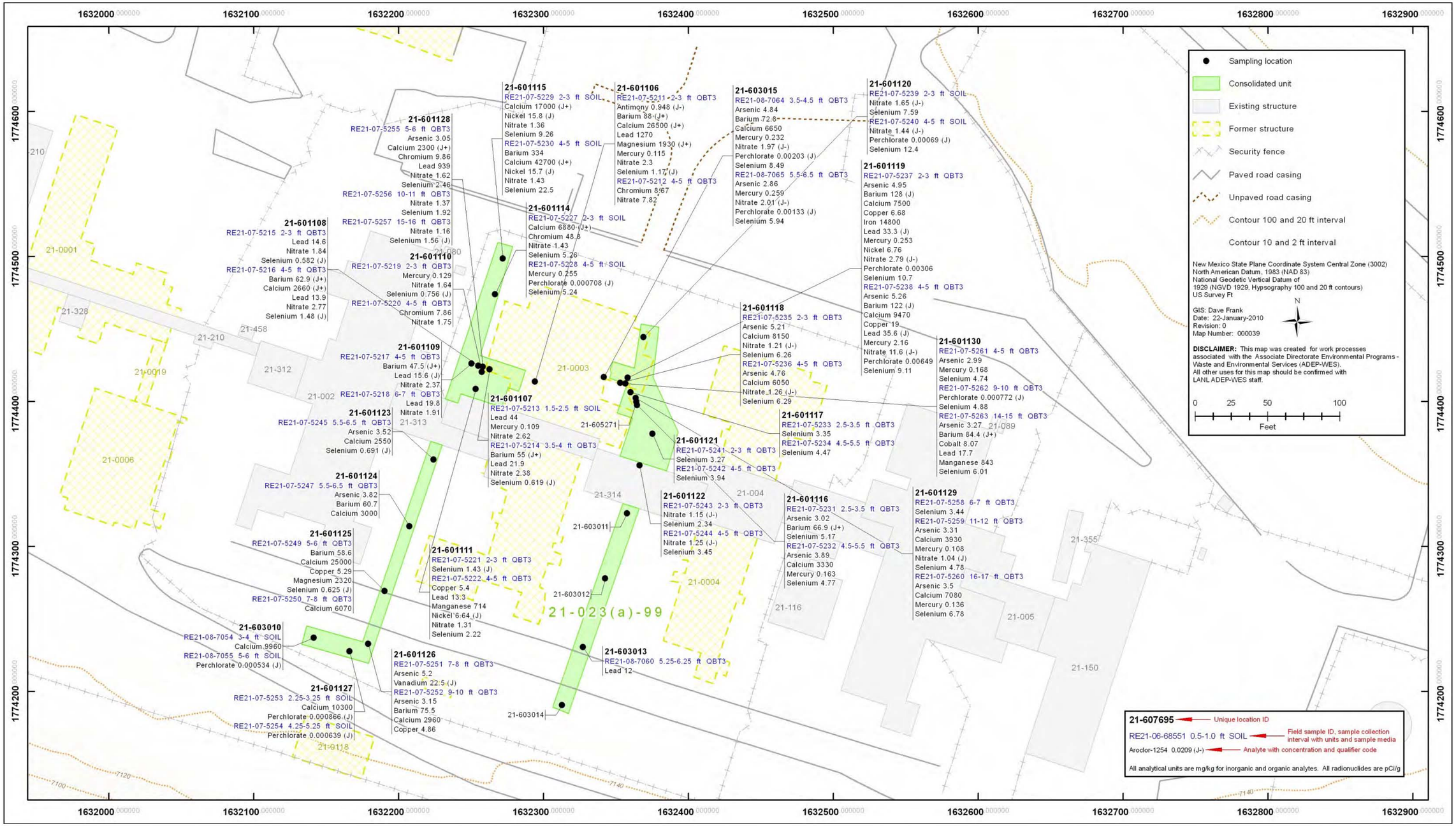



**Figure 6.9-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-023(a)-99**

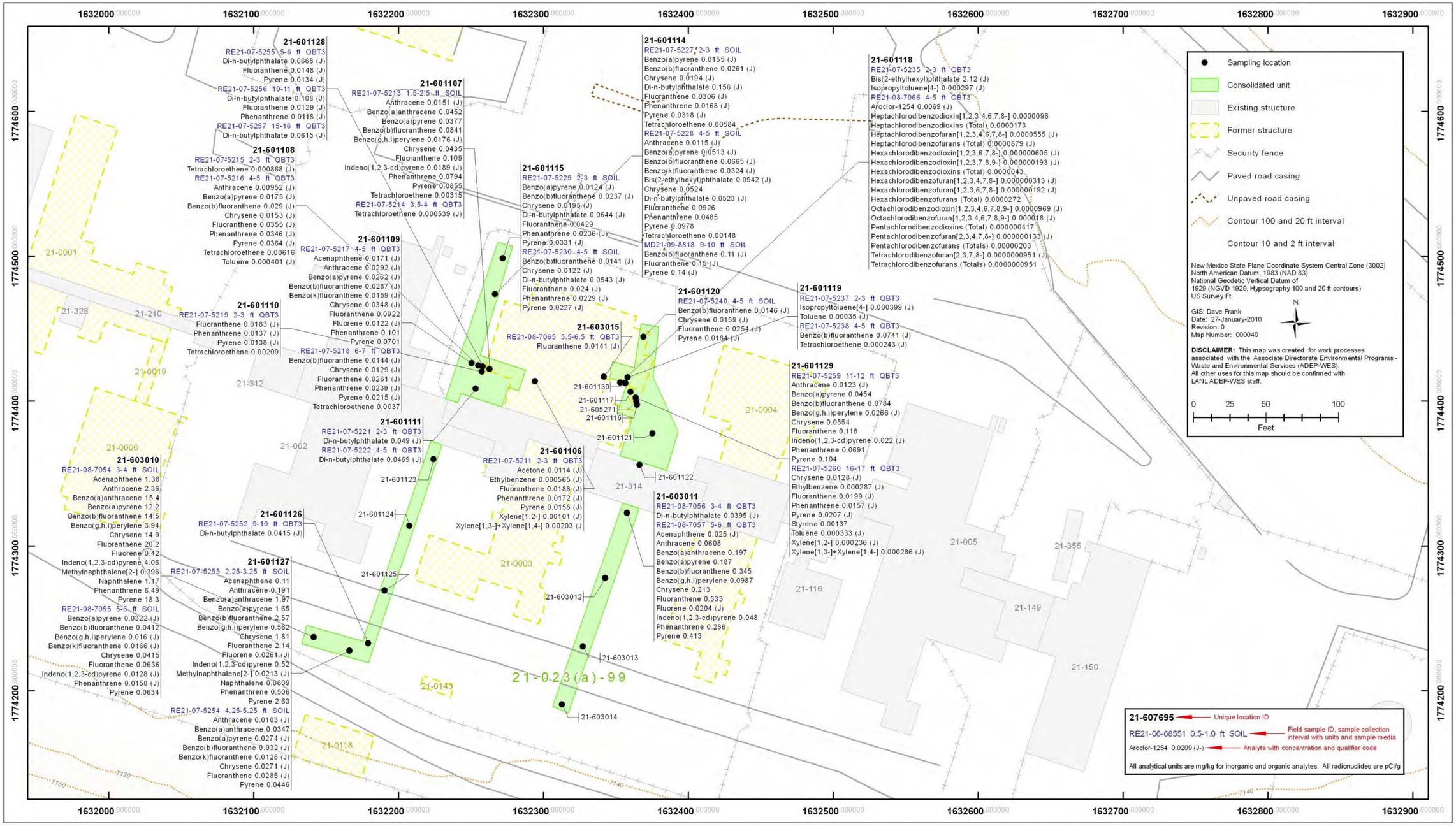



**Figure 6.9-2 Organic chemicals detected at Consolidated Unit 21-023(a)-99**

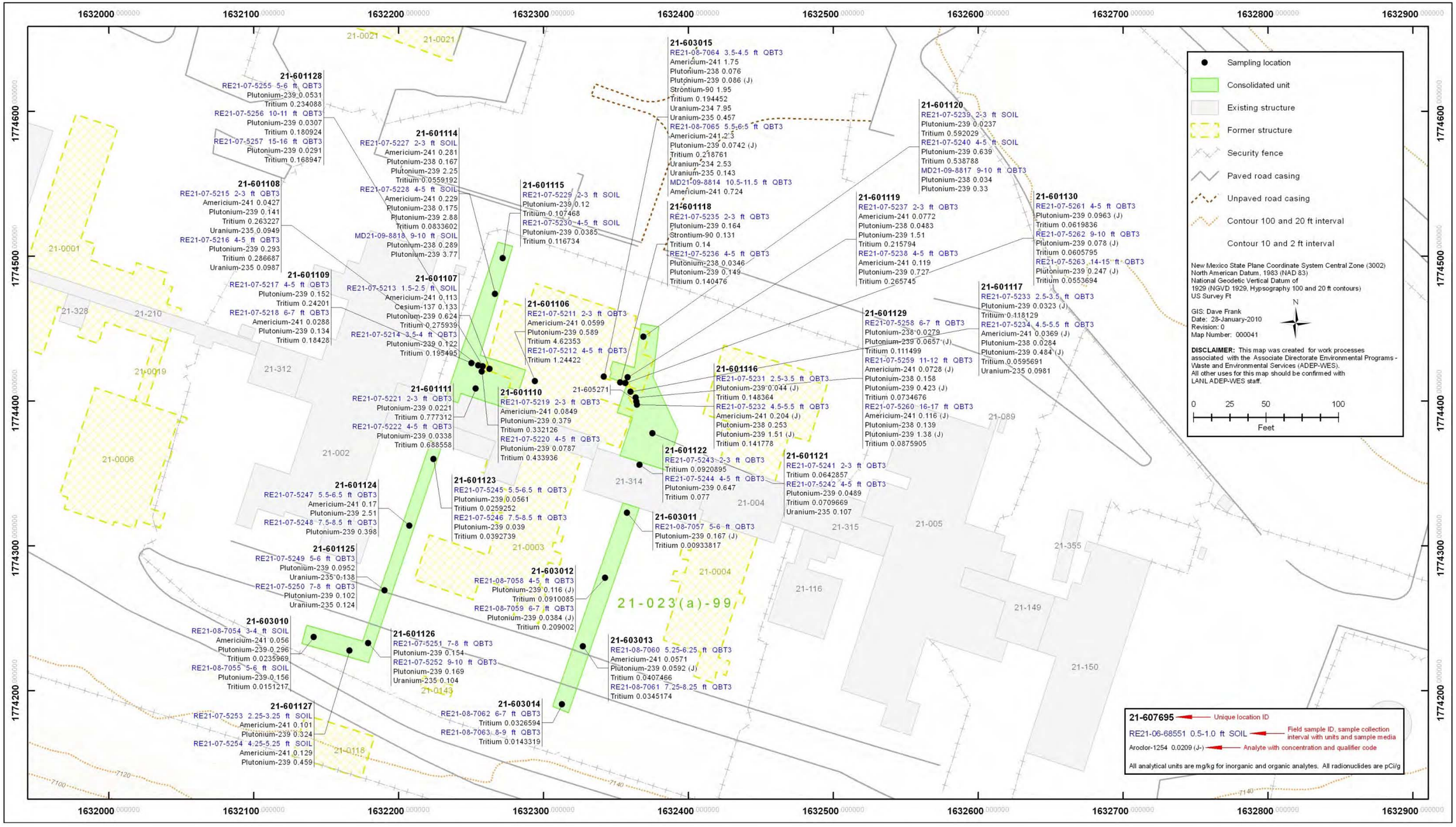



**Figure 6.9-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-023(a)-99**

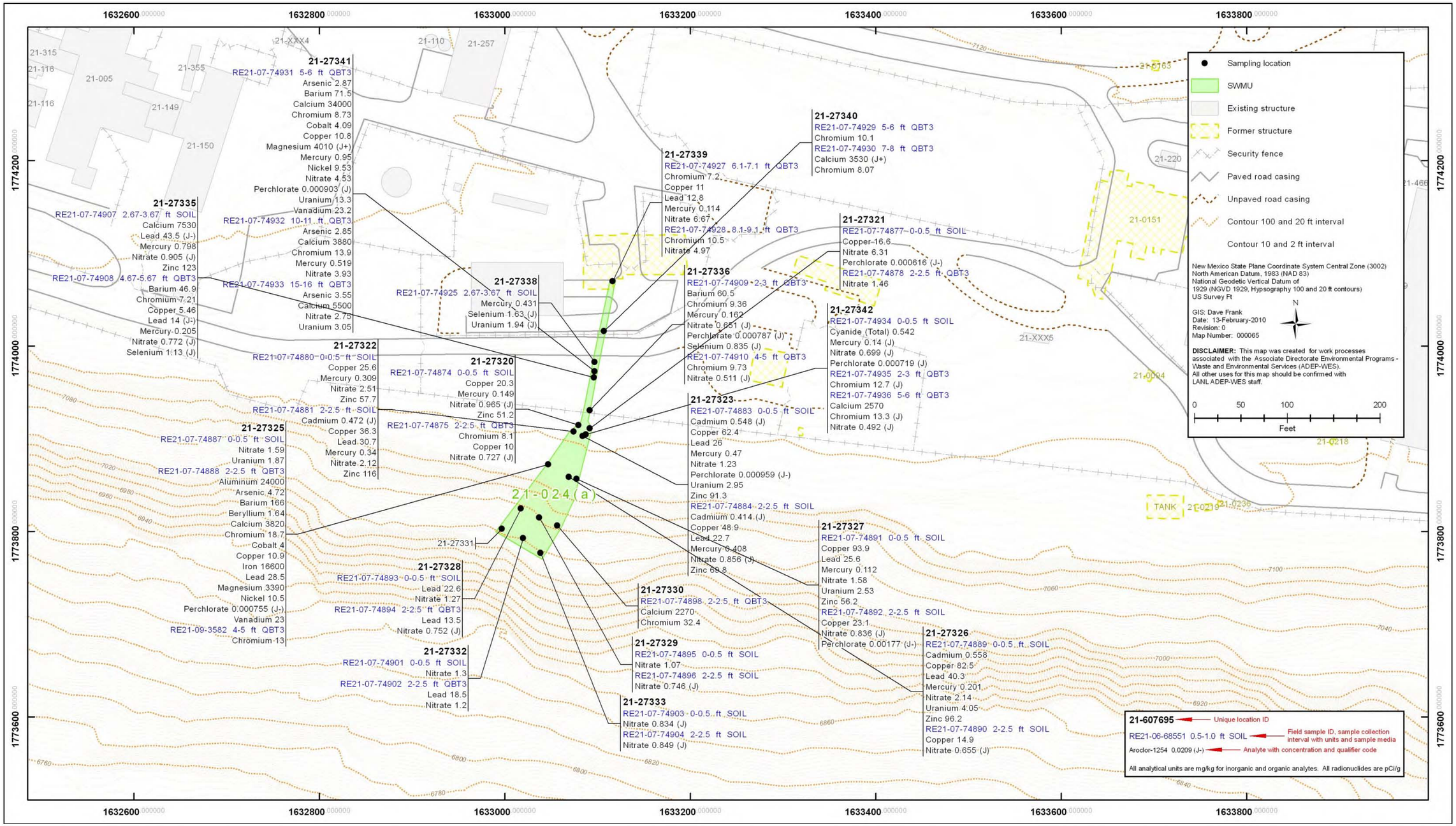



**Figure 6.10-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(a)**

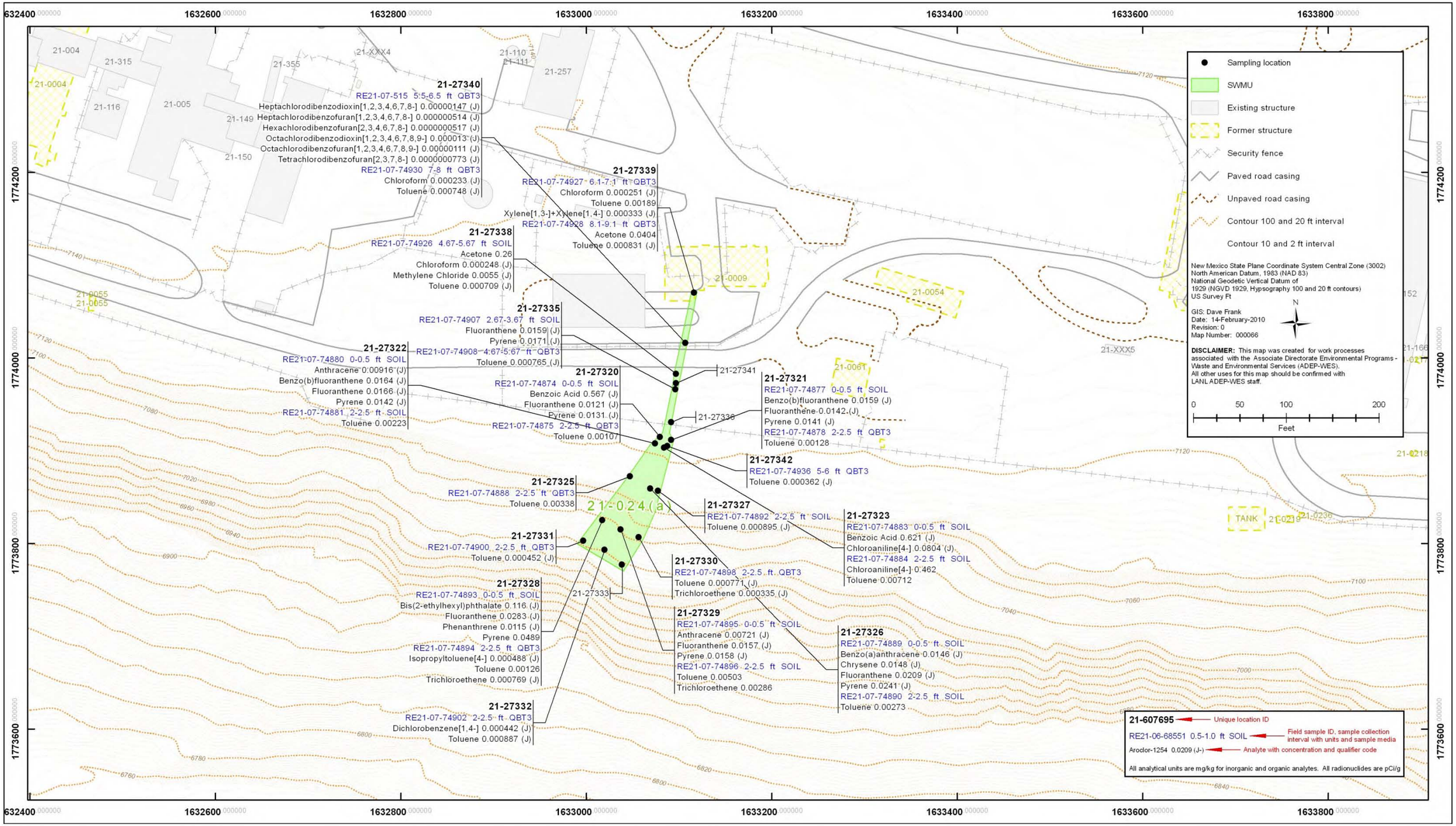



**Figure 6.10-2 Organic chemicals detected at SWMU 21-024(a)**

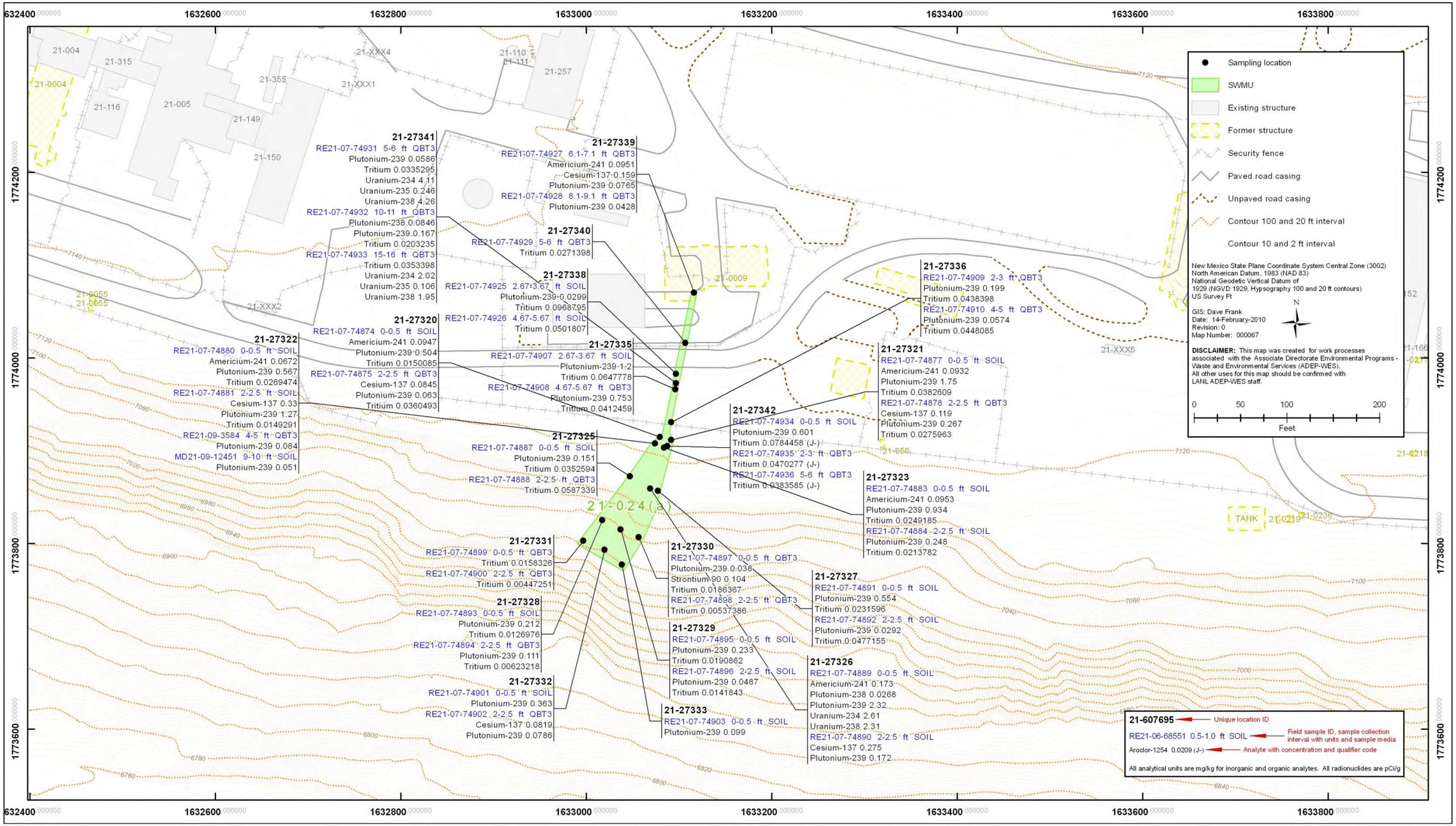



**Figure 6.10-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(a)**

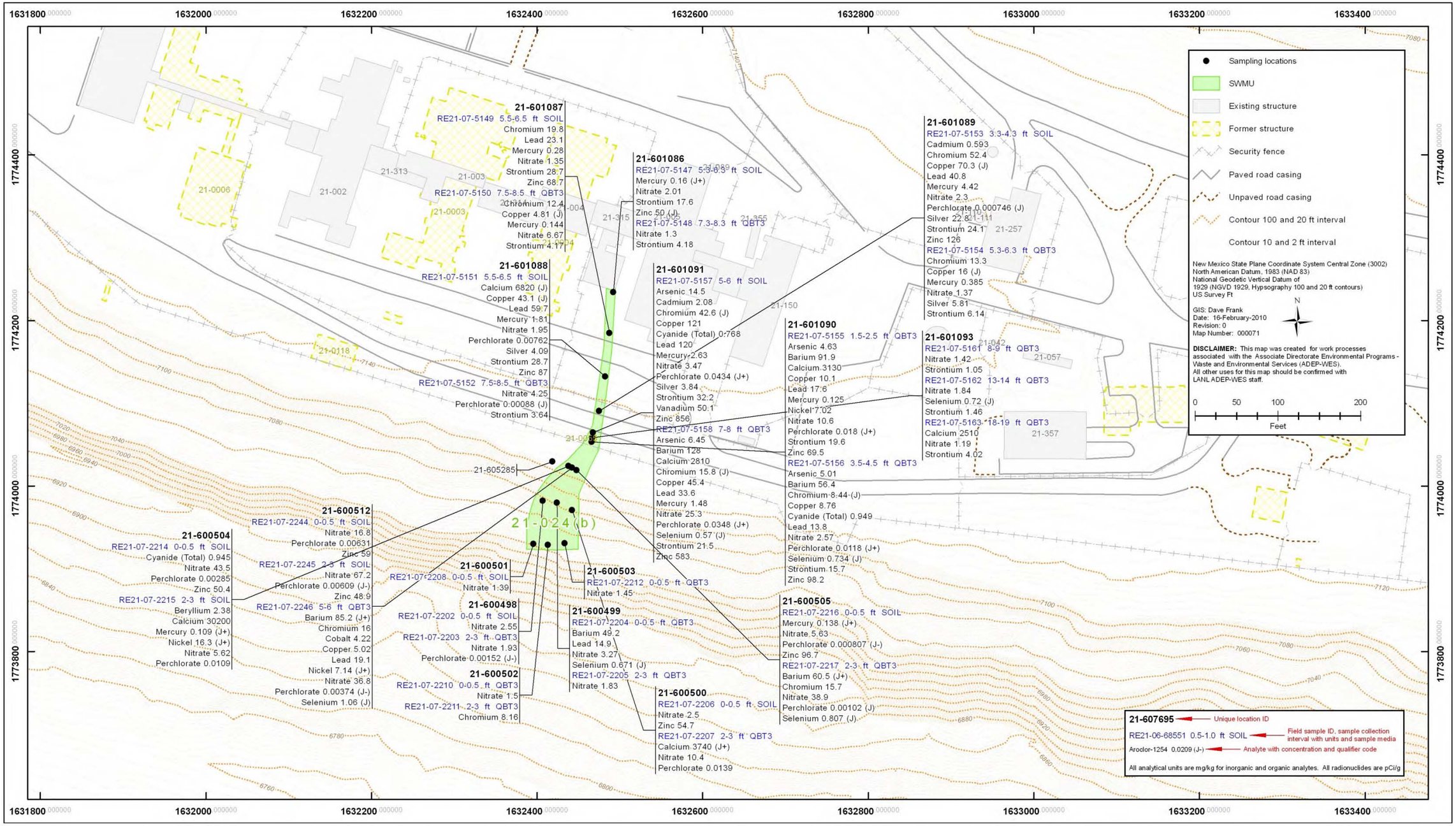



**Figure 6.11-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(b)**

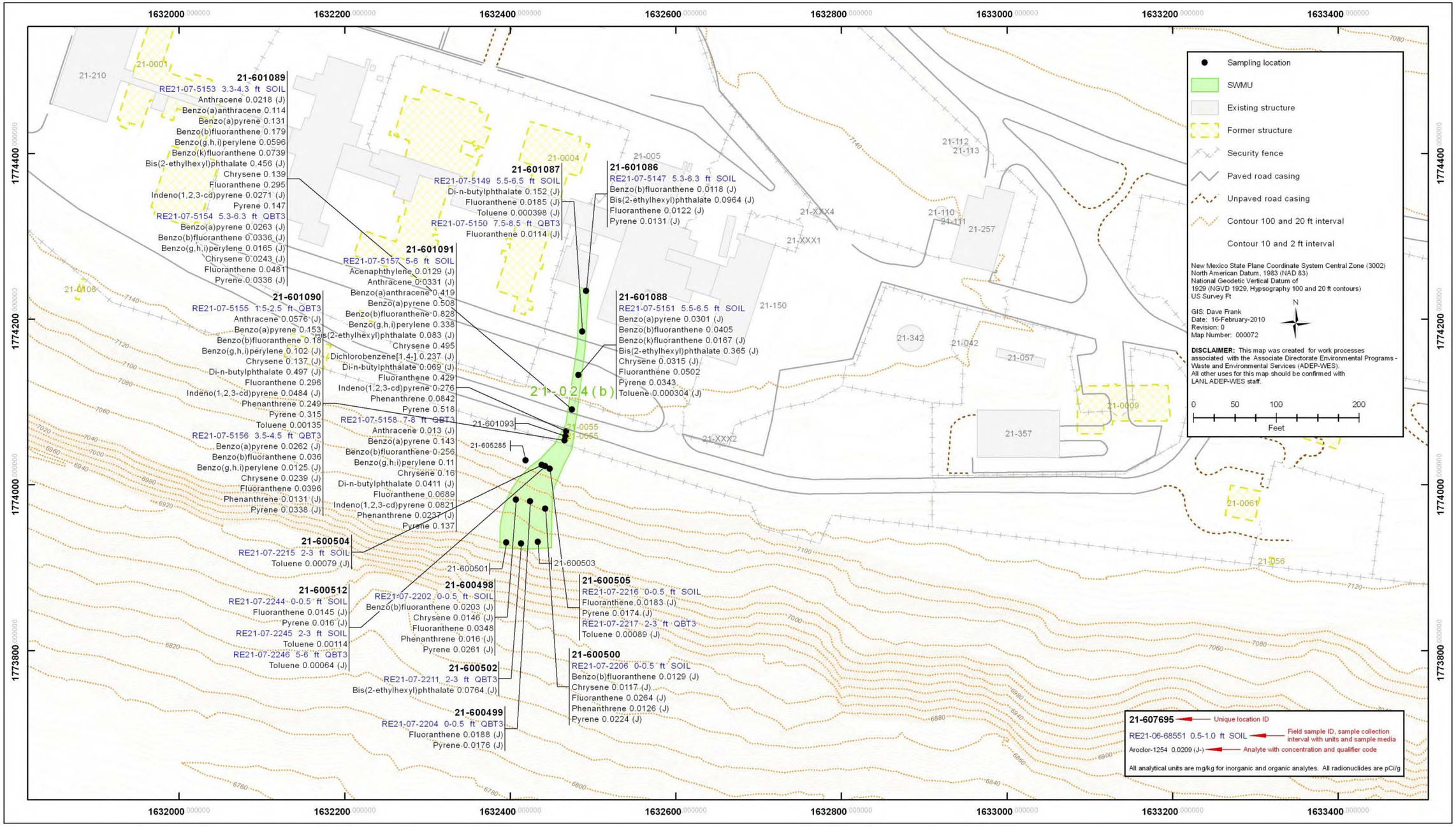



**Figure 6.11-2 Organic chemicals detected at SWMU 21-024(b)**

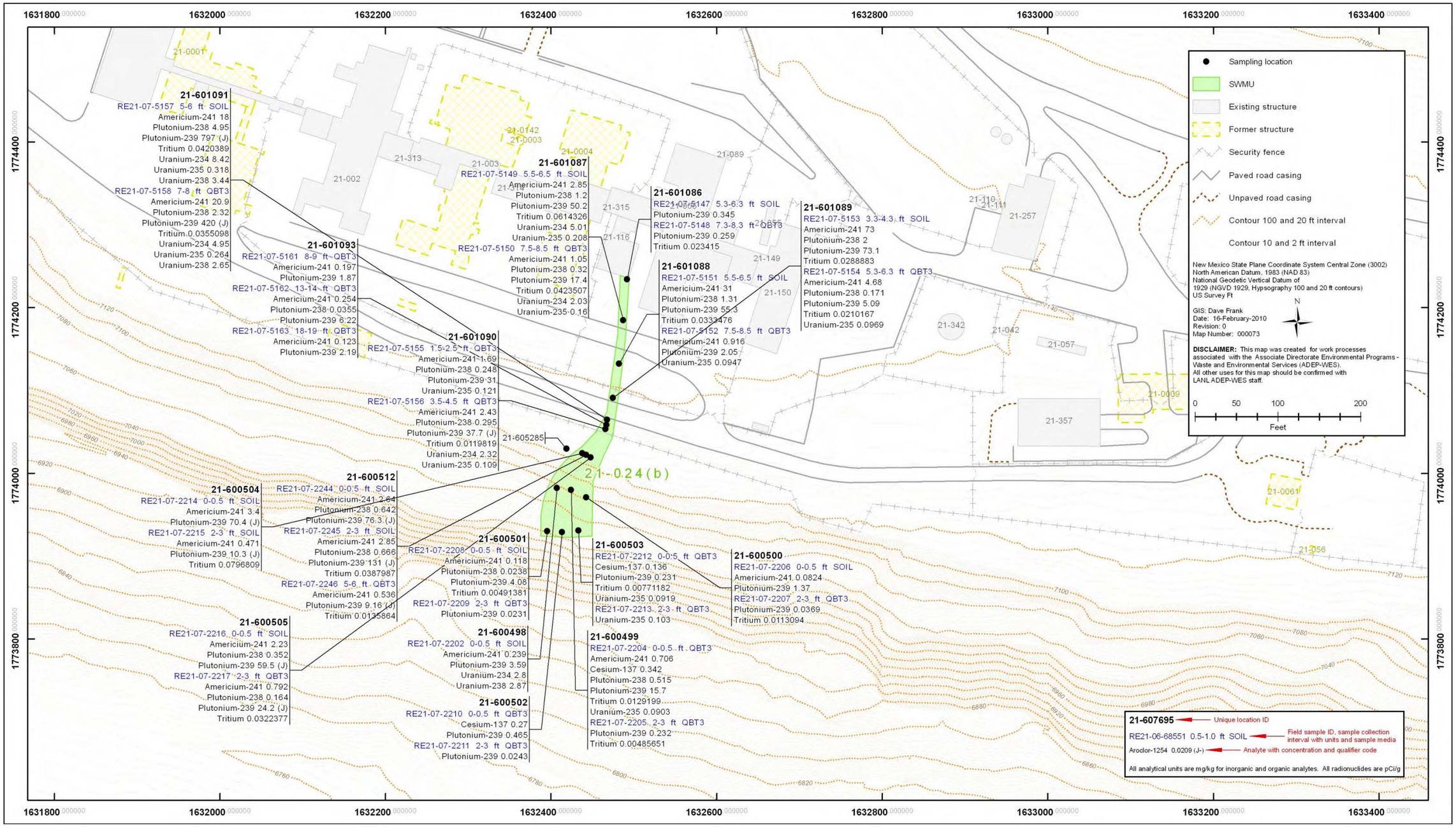



**Figure 6.11-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(b)**

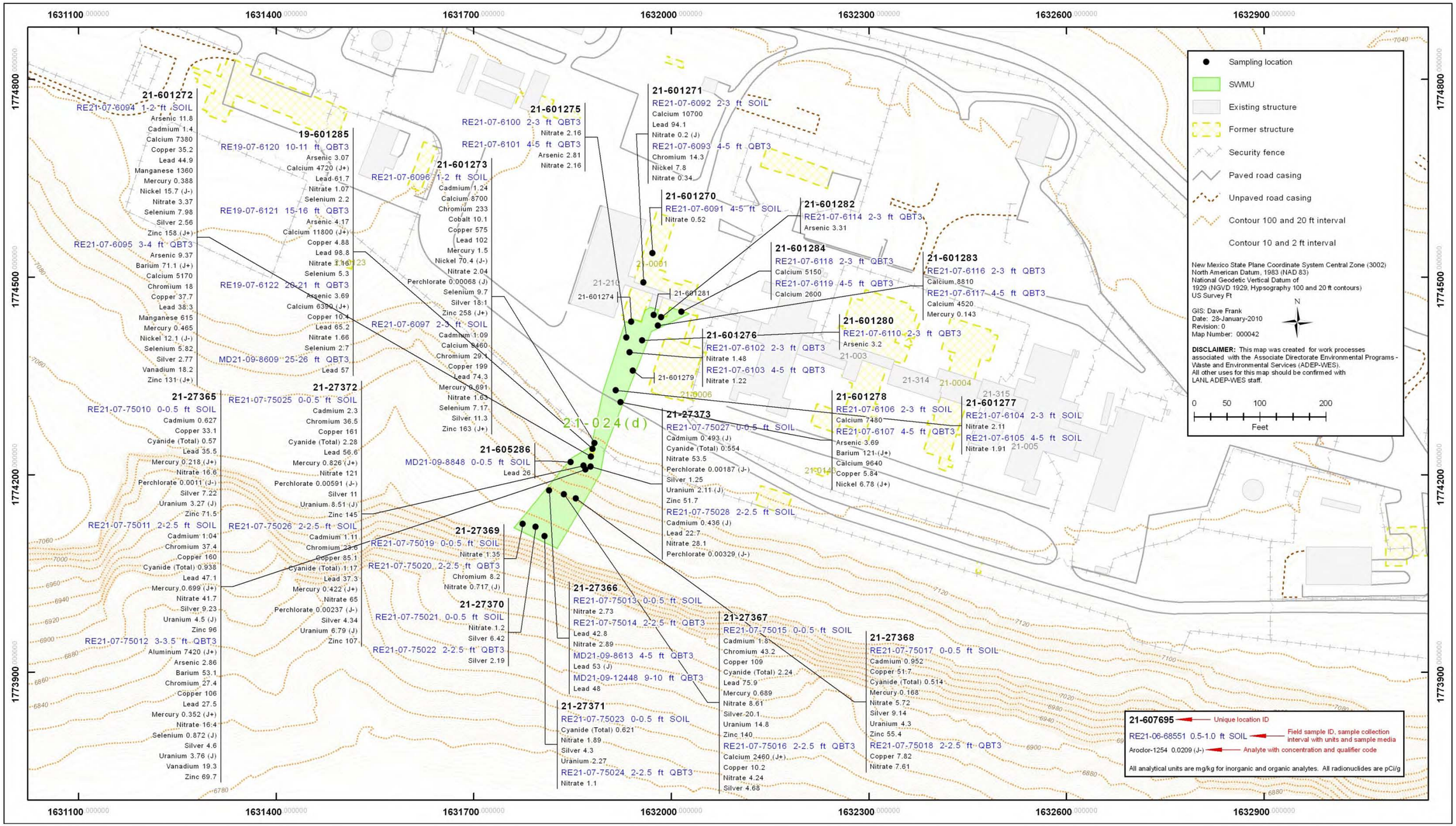



**Figure 6.12-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(d)**

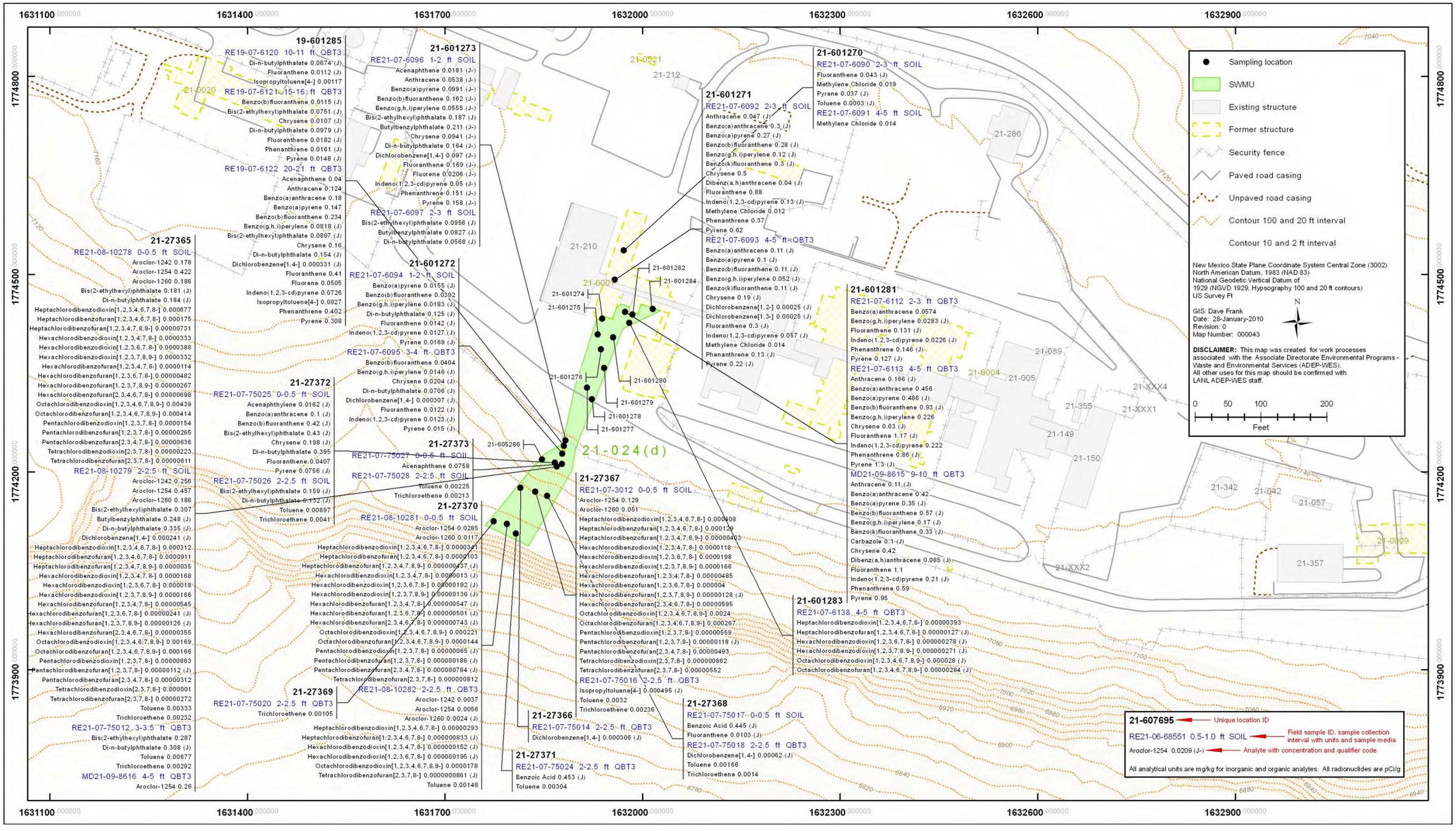



**Figure 6.12-2 Organic chemicals detected at SWMU 21-024(d)**

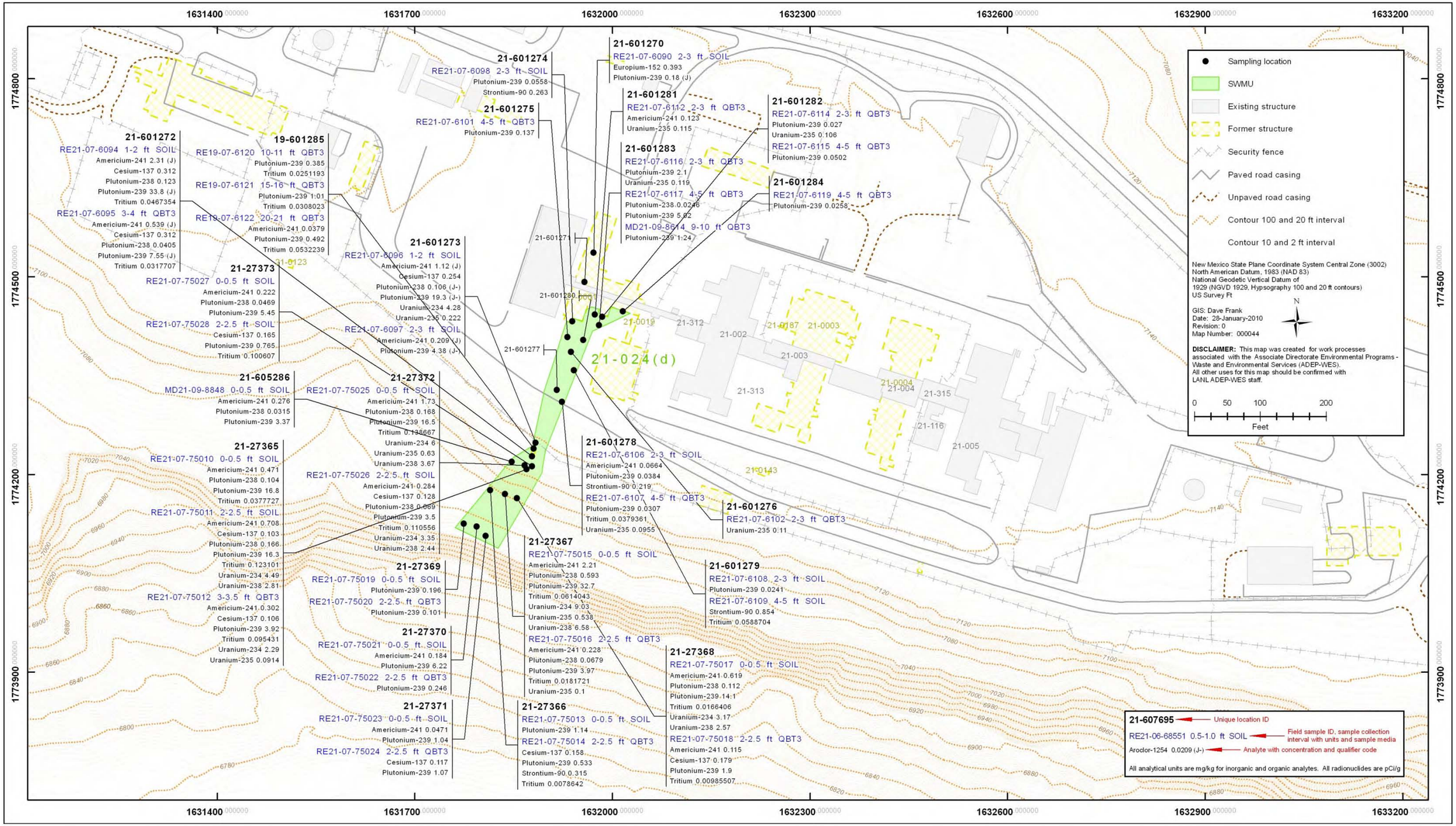



**Figure 6.12-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(d)**

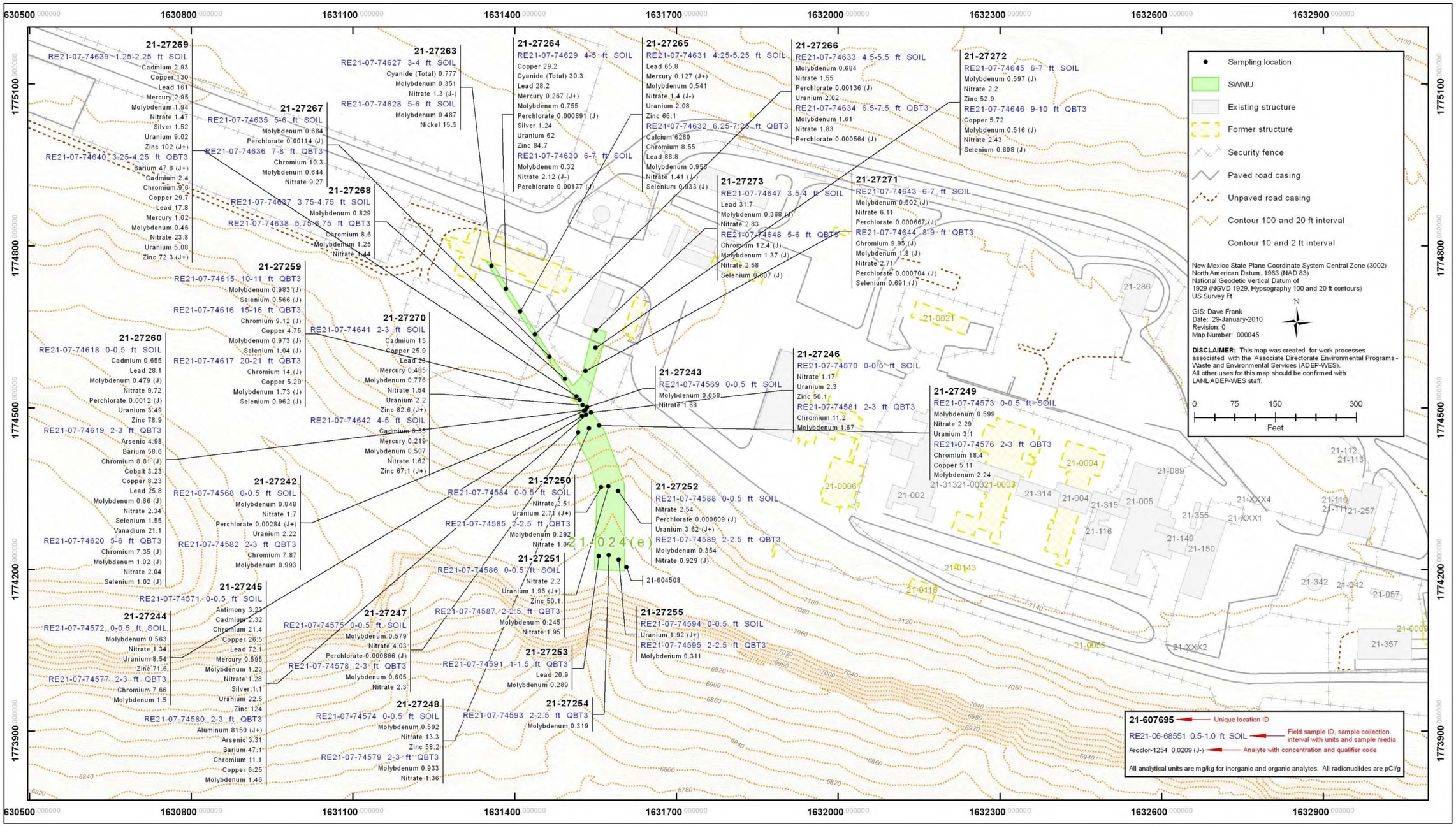



**Figure 6.13-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(e)**

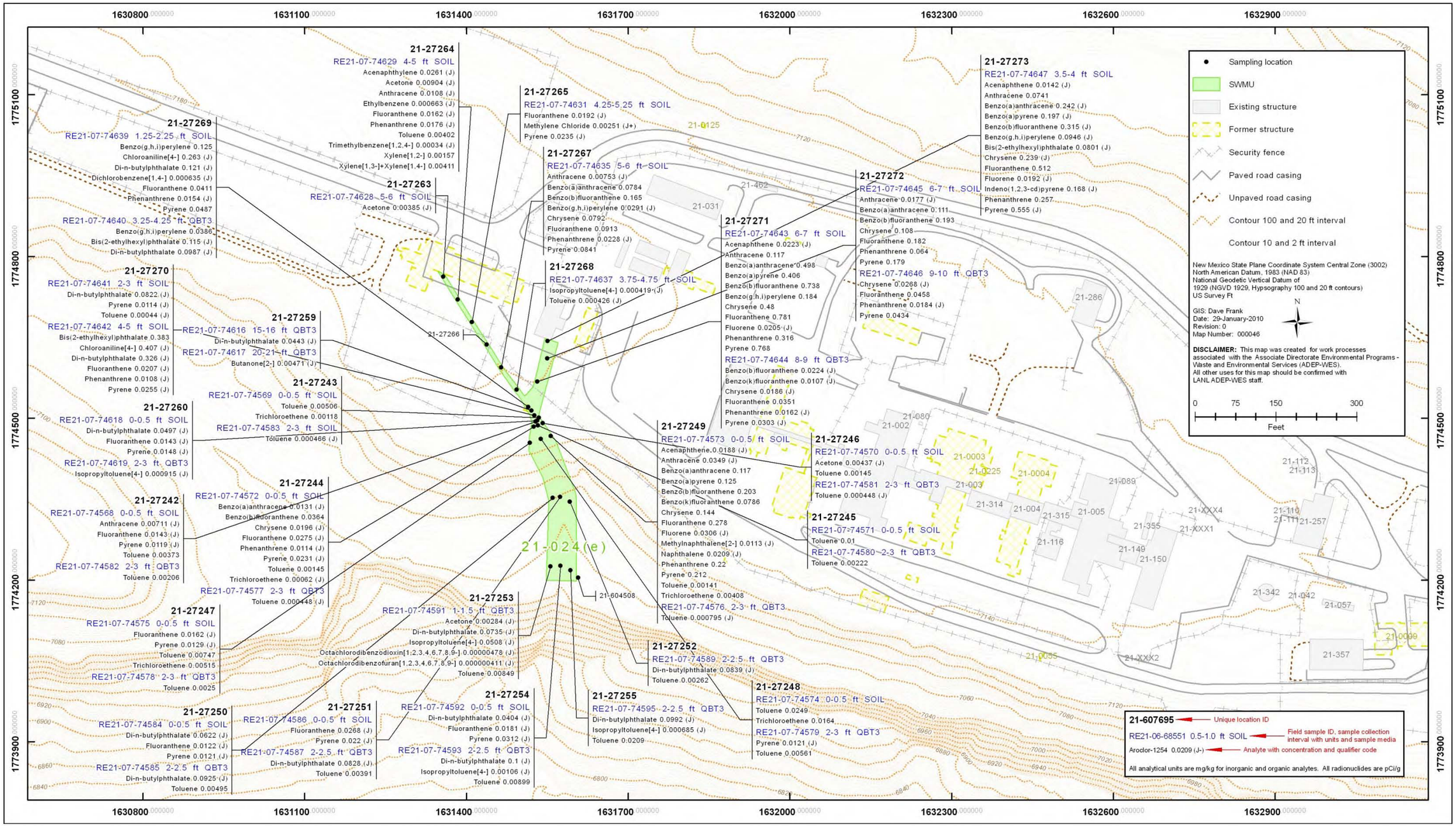



**Figure 6.13-2 Organic chemicals detected at SWMU 21-024(e)**

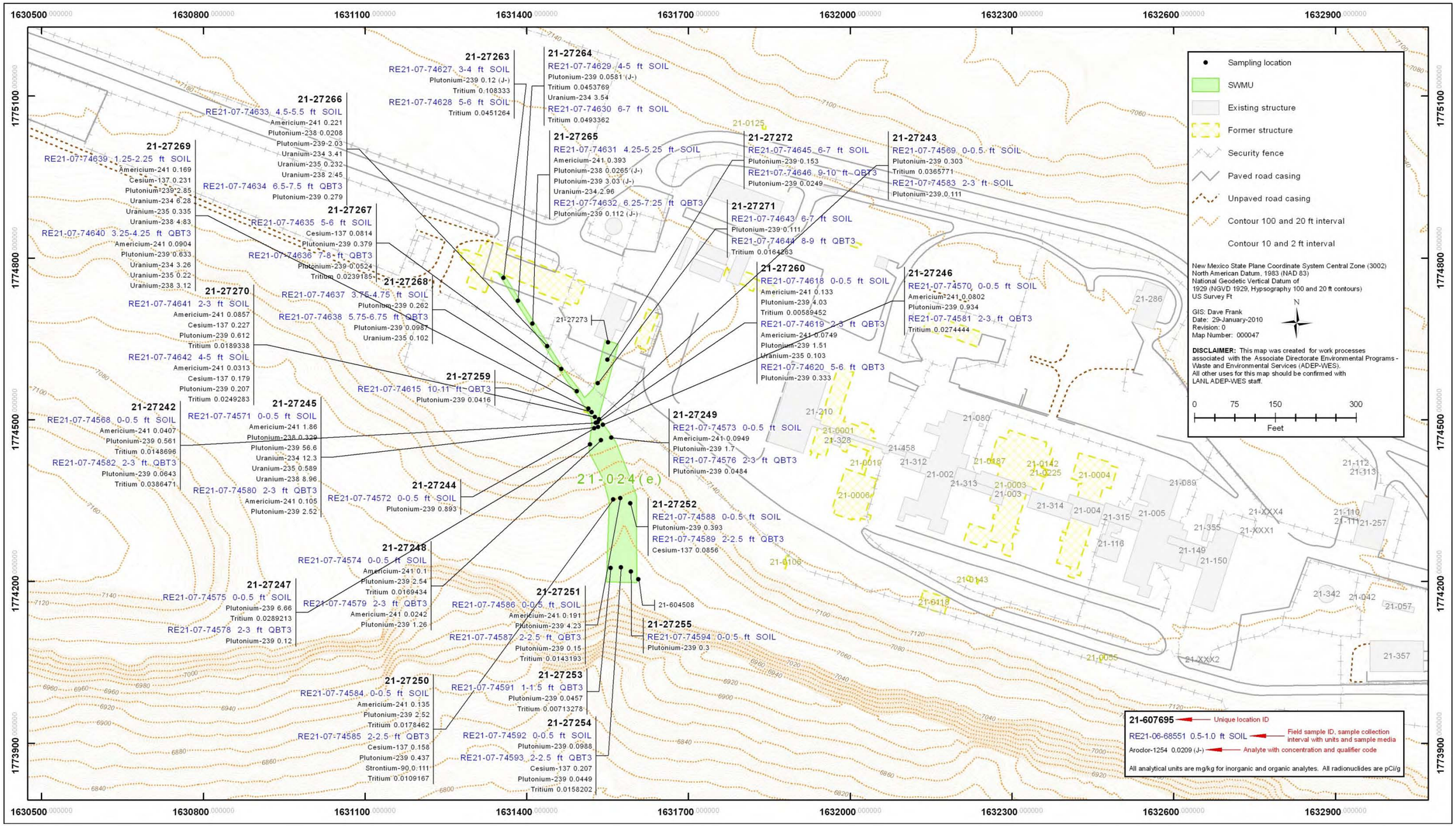



**Figure 6.13-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(e)**

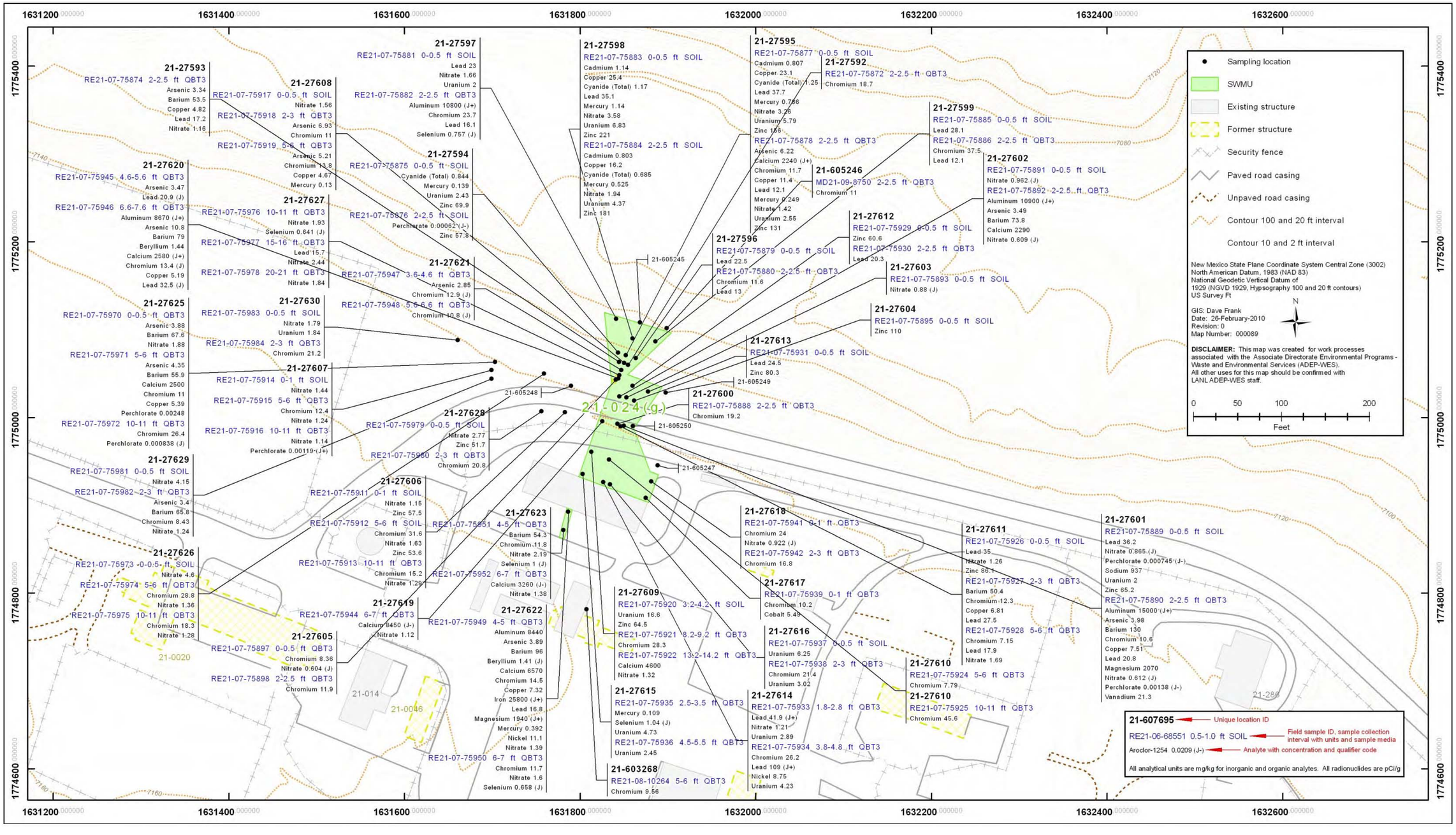



**Figure 6.14-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(g)**

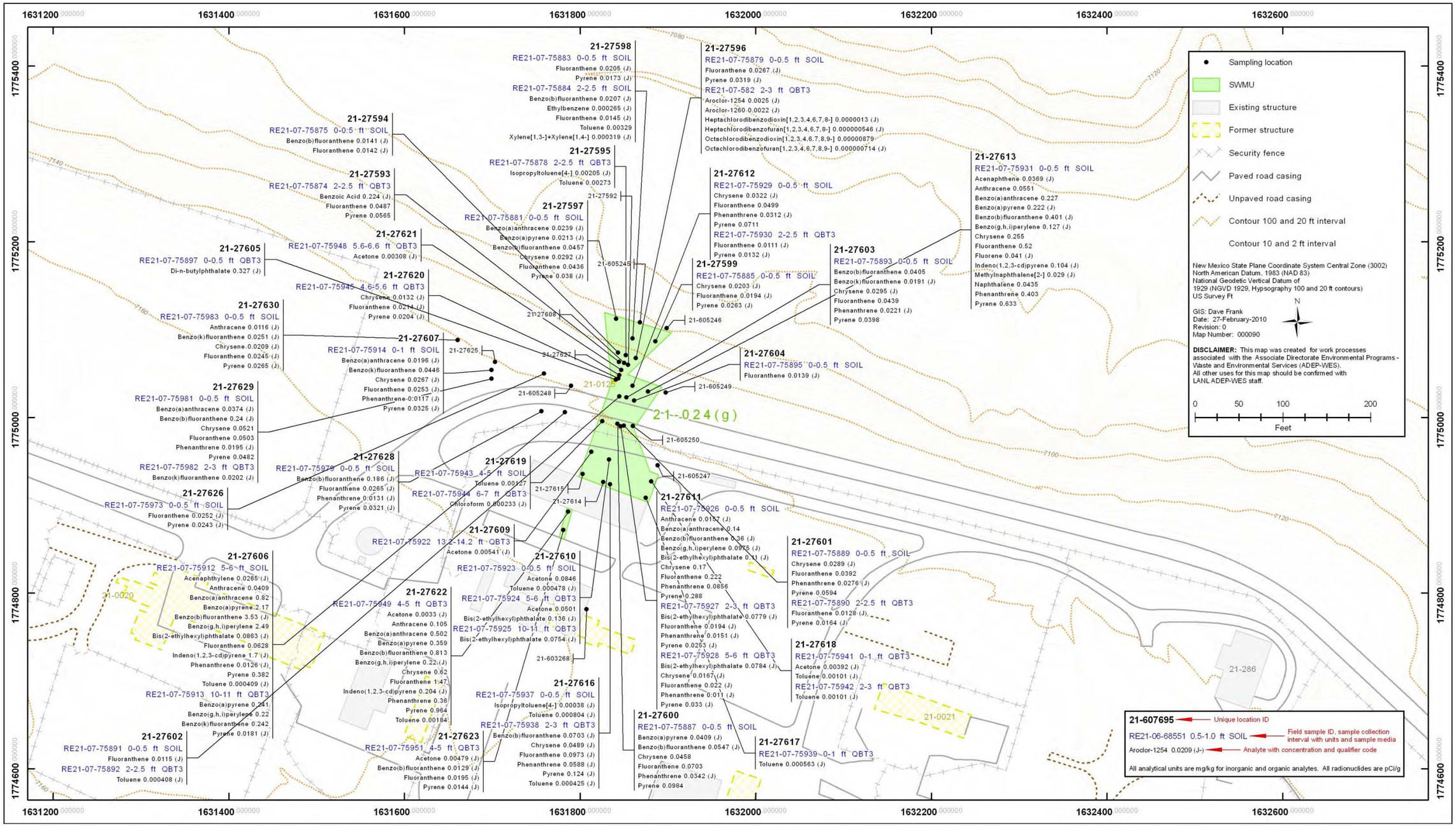



**Figure 6.14-2 Organic chemicals detected at SWMU 21-024(g)**

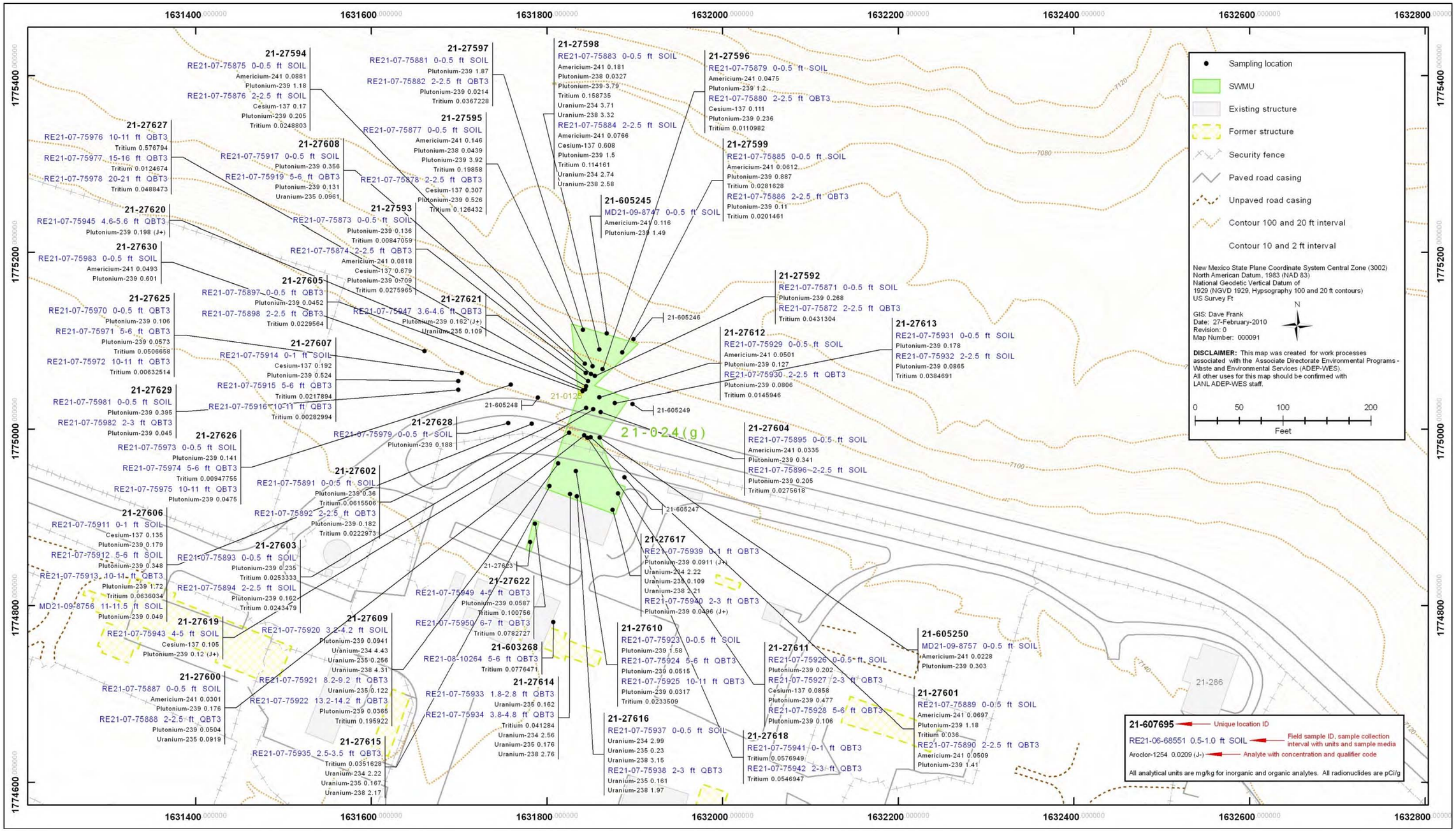



**Figure 6.14-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(g)**

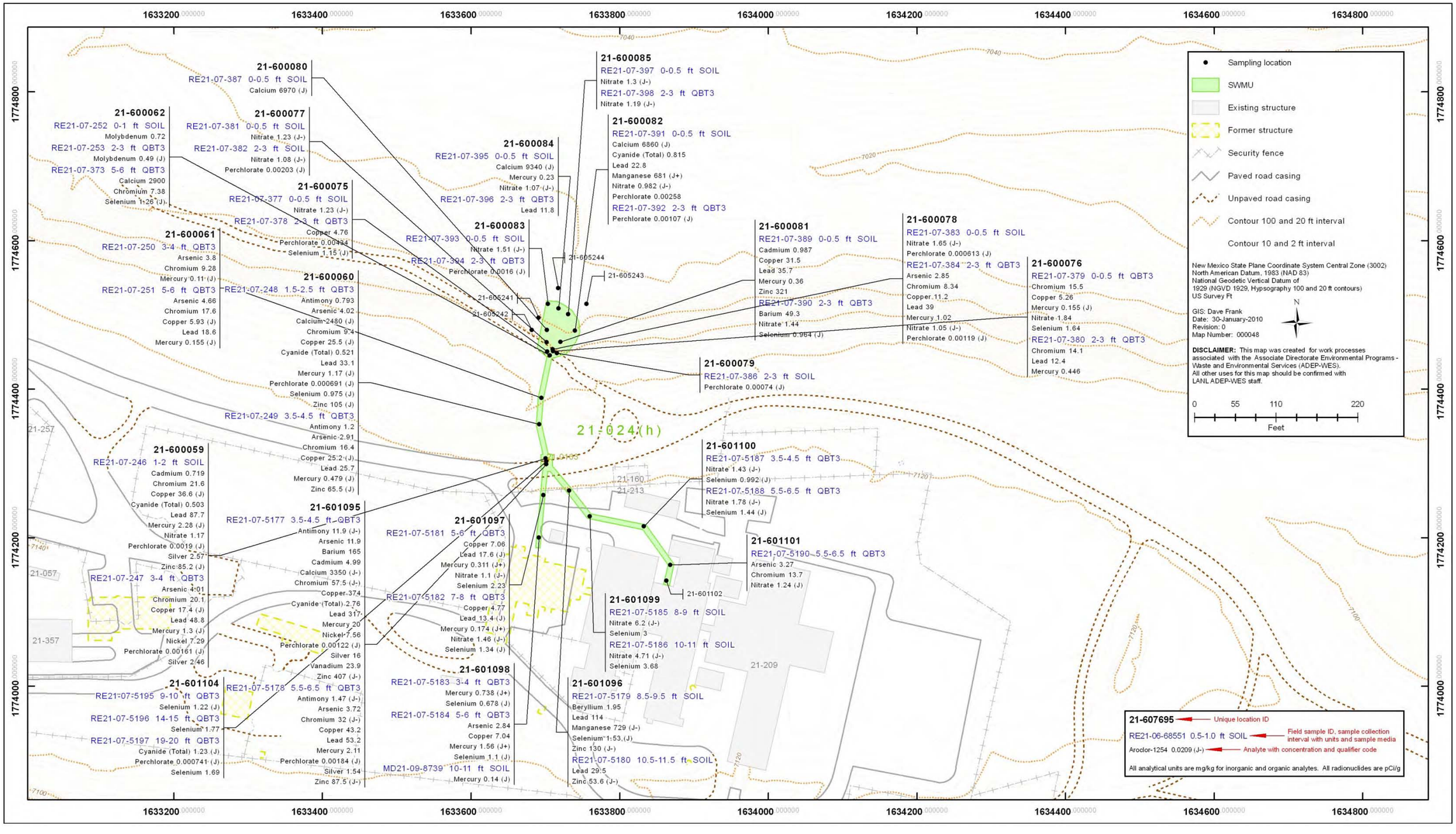



**Figure 6.15-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(h)**

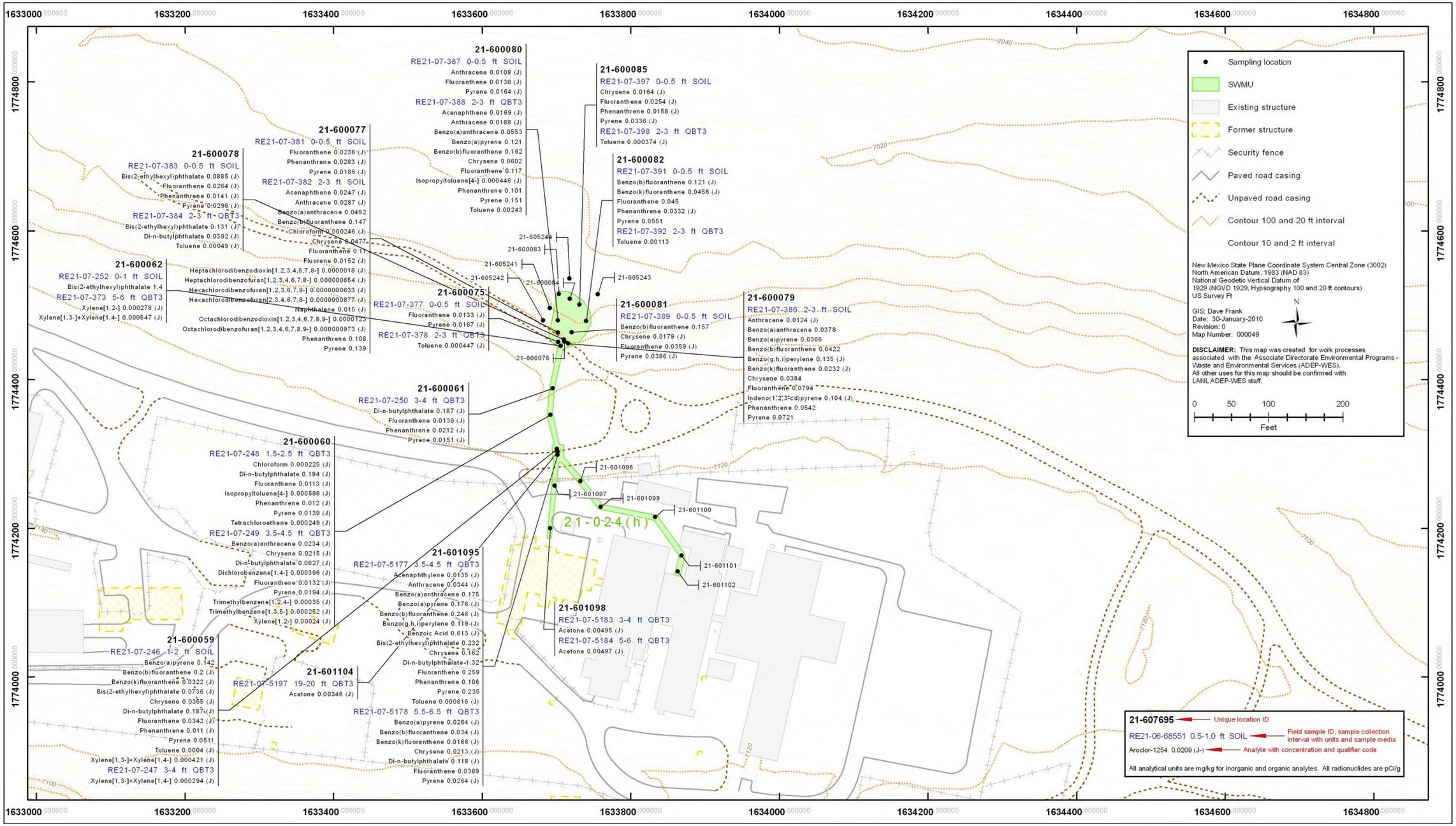



**Figure 6.15-2 Organic chemicals detected at SWMU 21-024(h)**

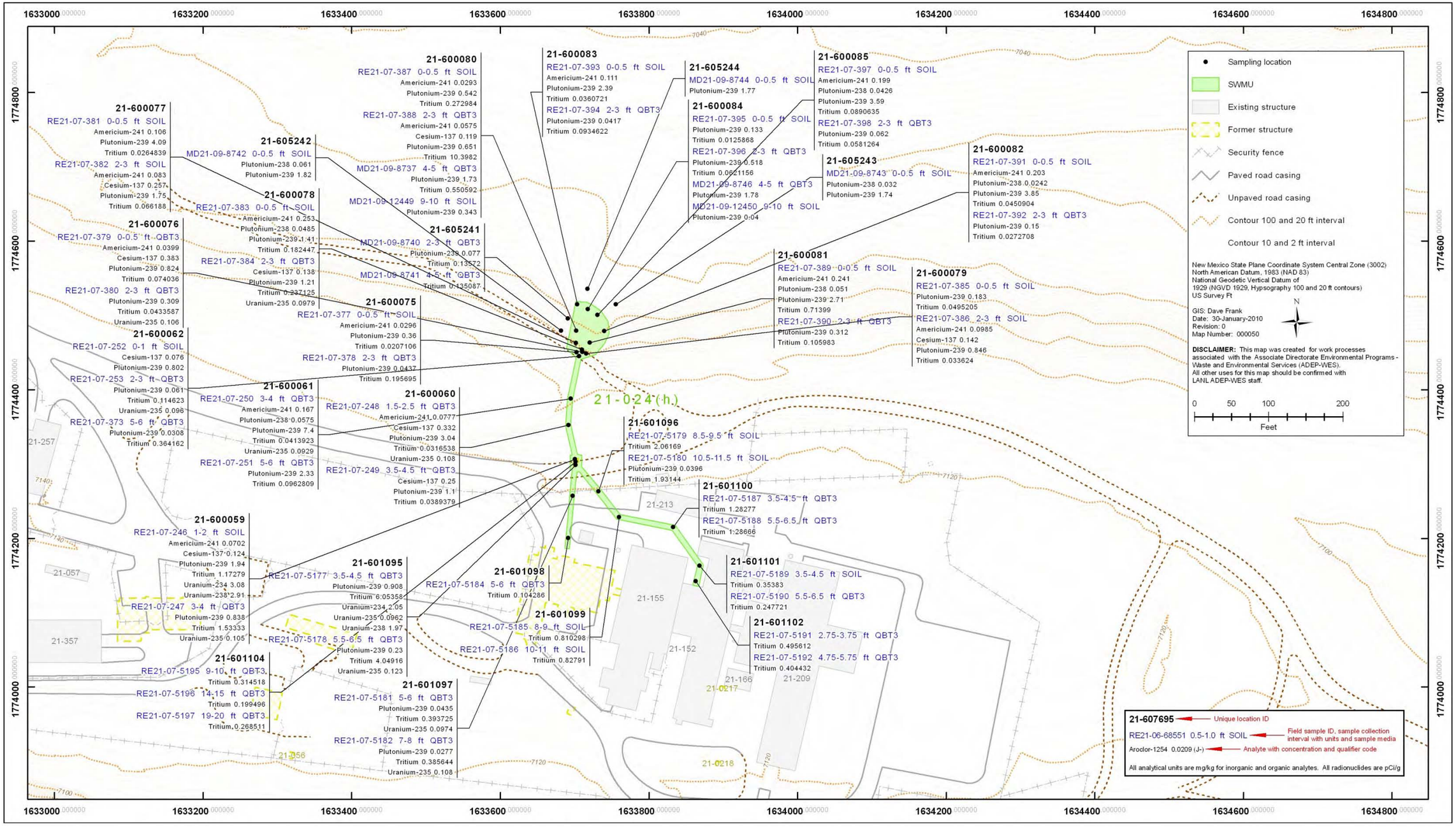



**Figure 6.15-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(h)**

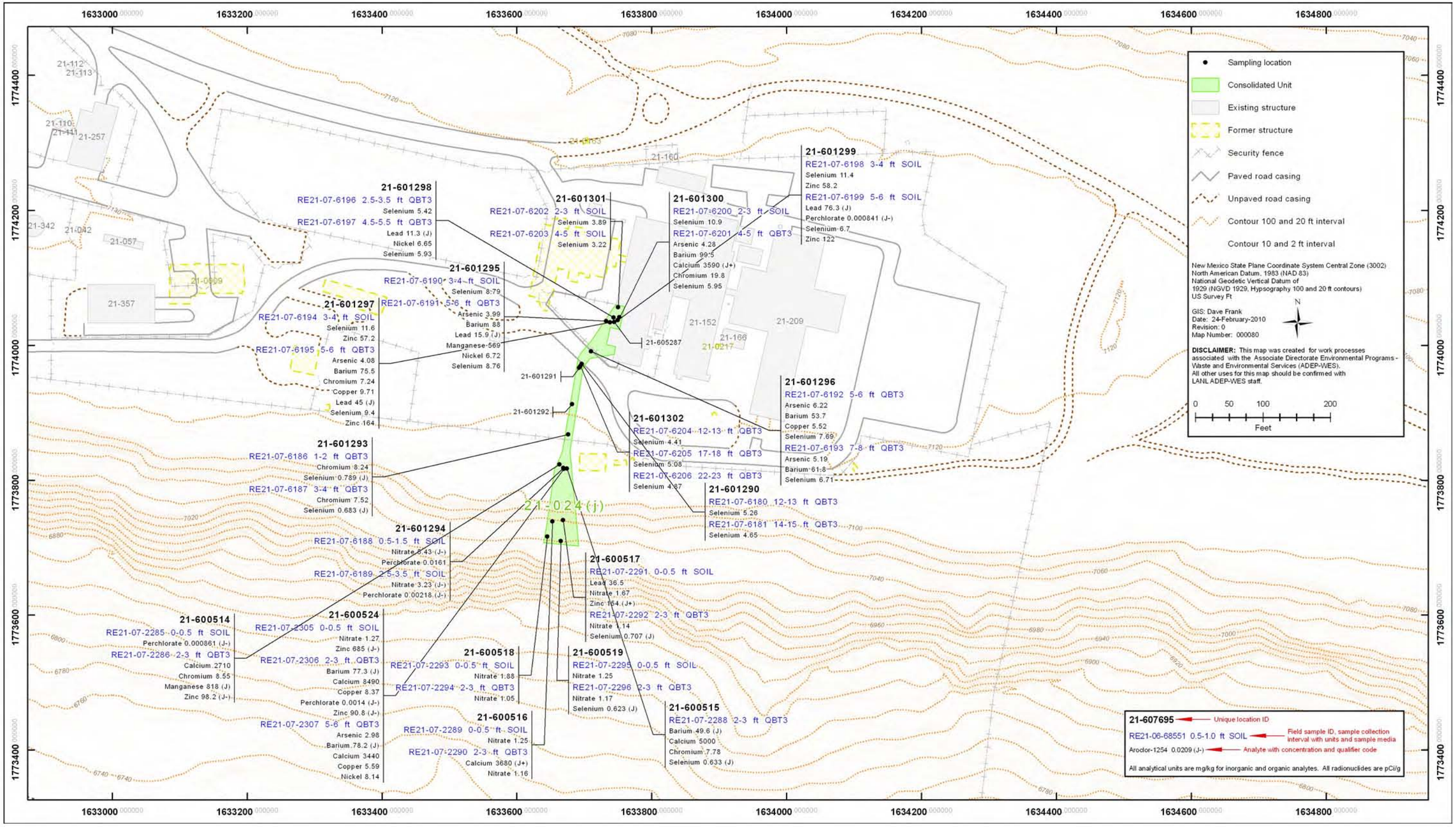



**Figure 6.17-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(j)**

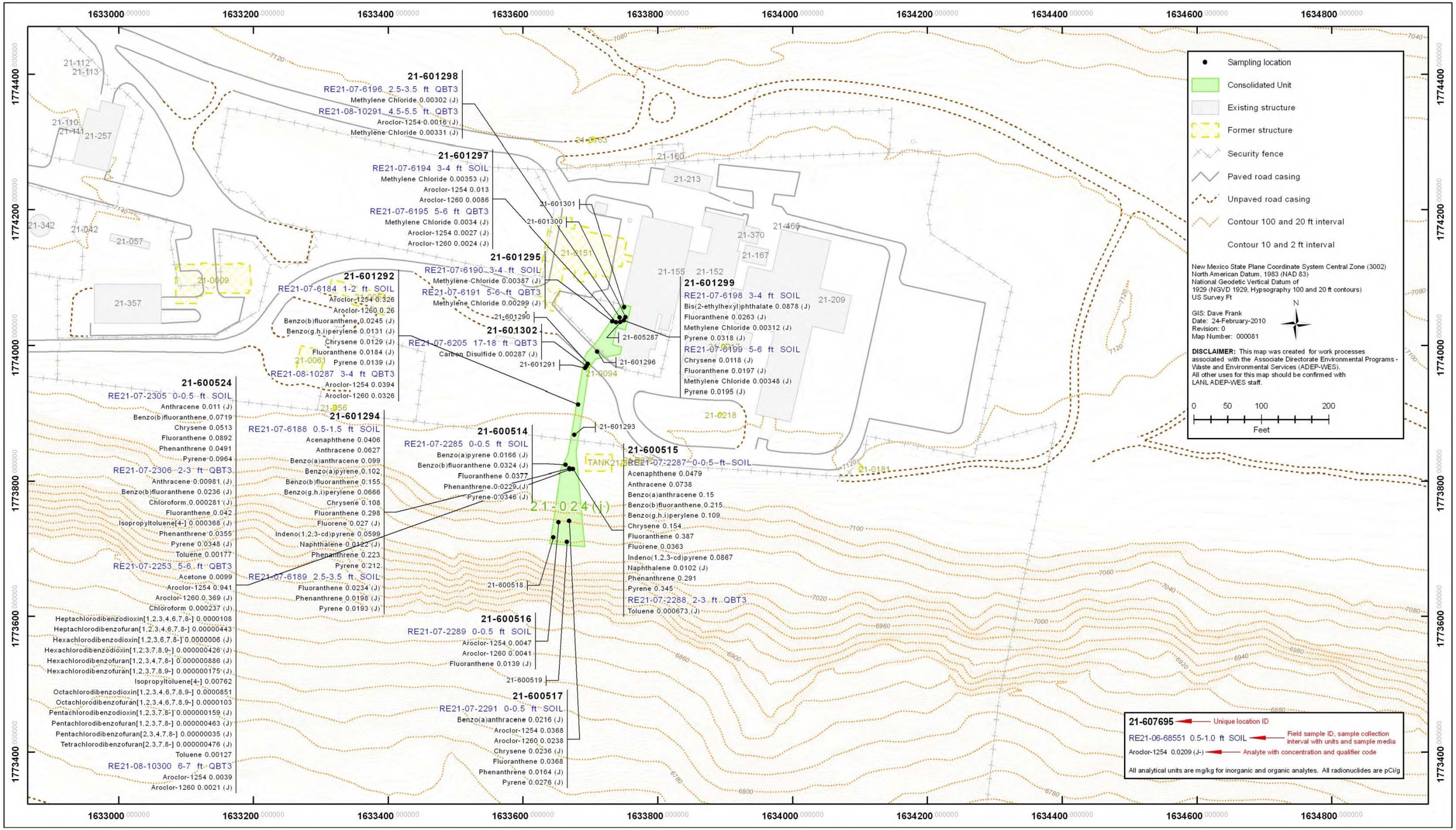



**Figure 6.17-2 Organic chemicals detected at SWMU 21-024(j)**

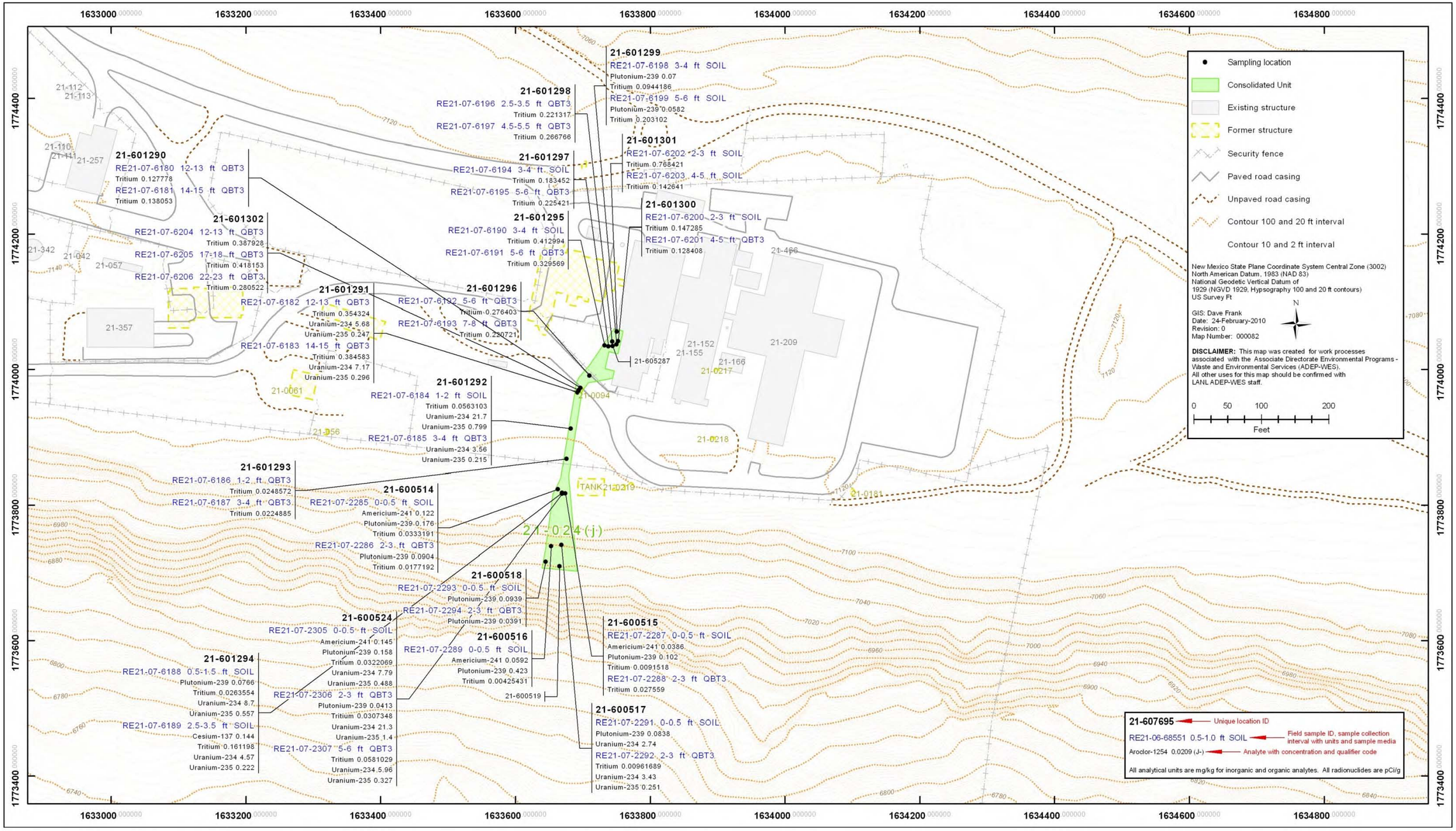



**Figure 6.17-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(j)**

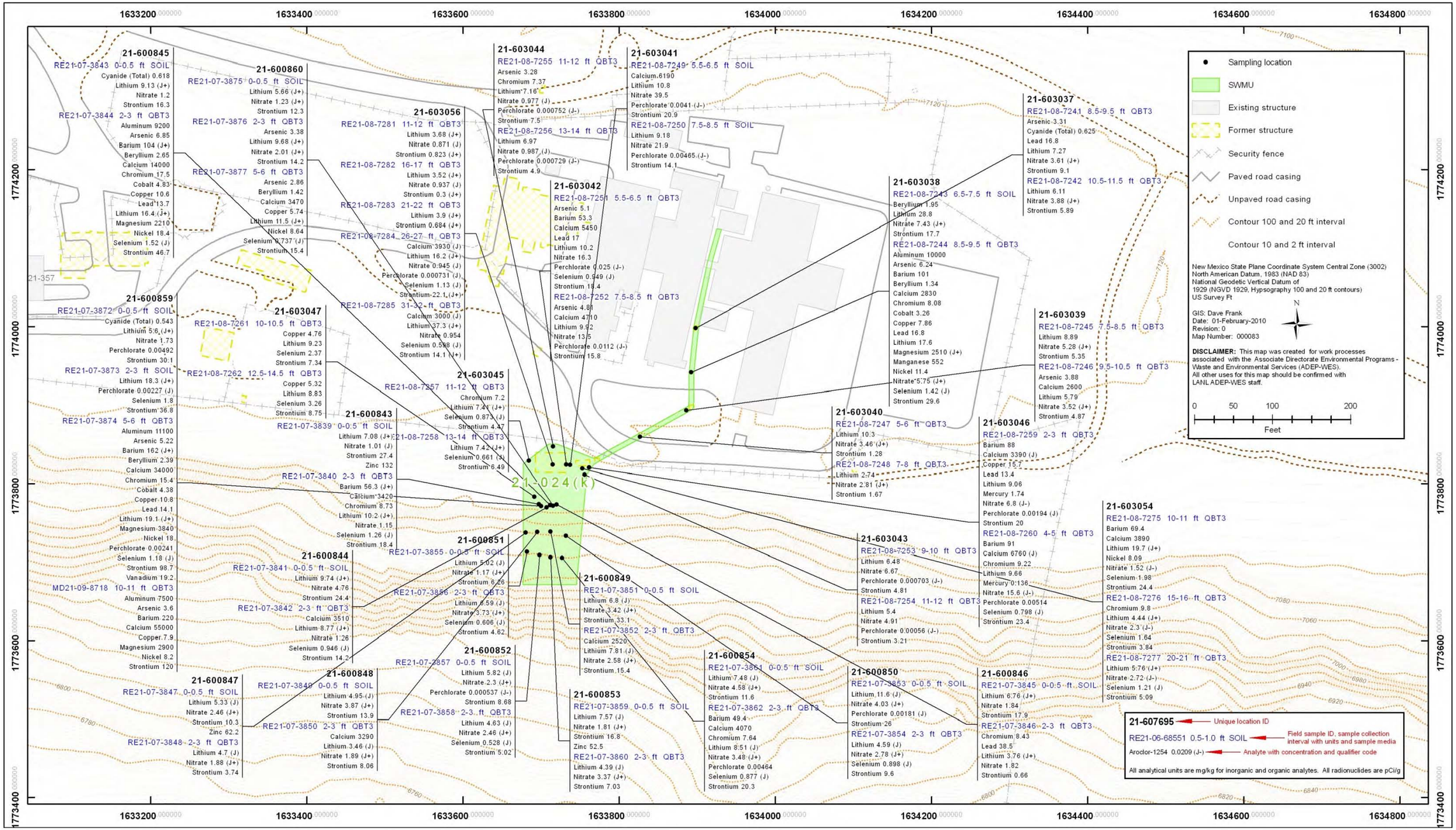



**Figure 6.18-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(k)**

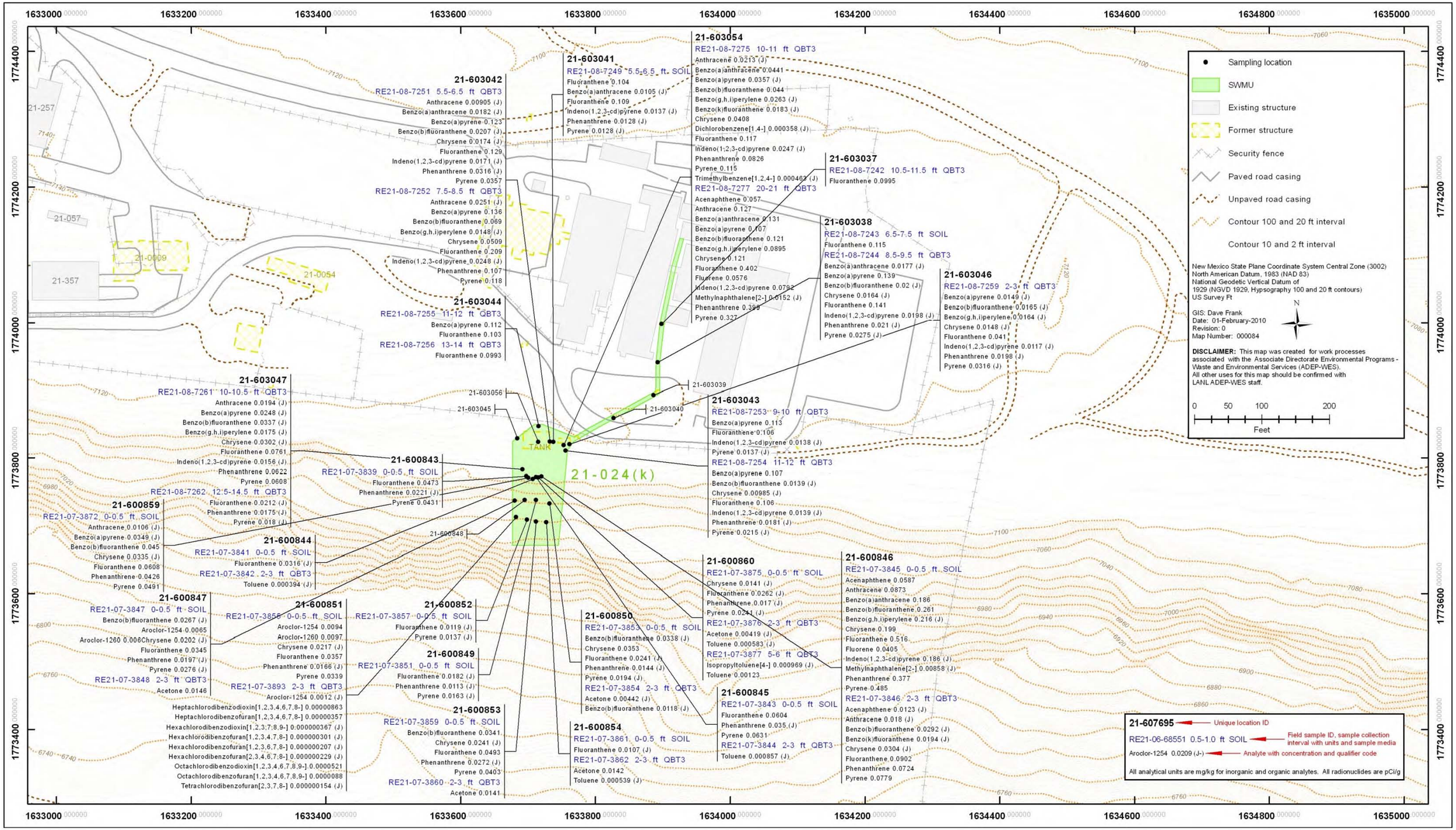



**Figure 6.18-2 Organic chemicals detected at SWMU 21-024(k)**

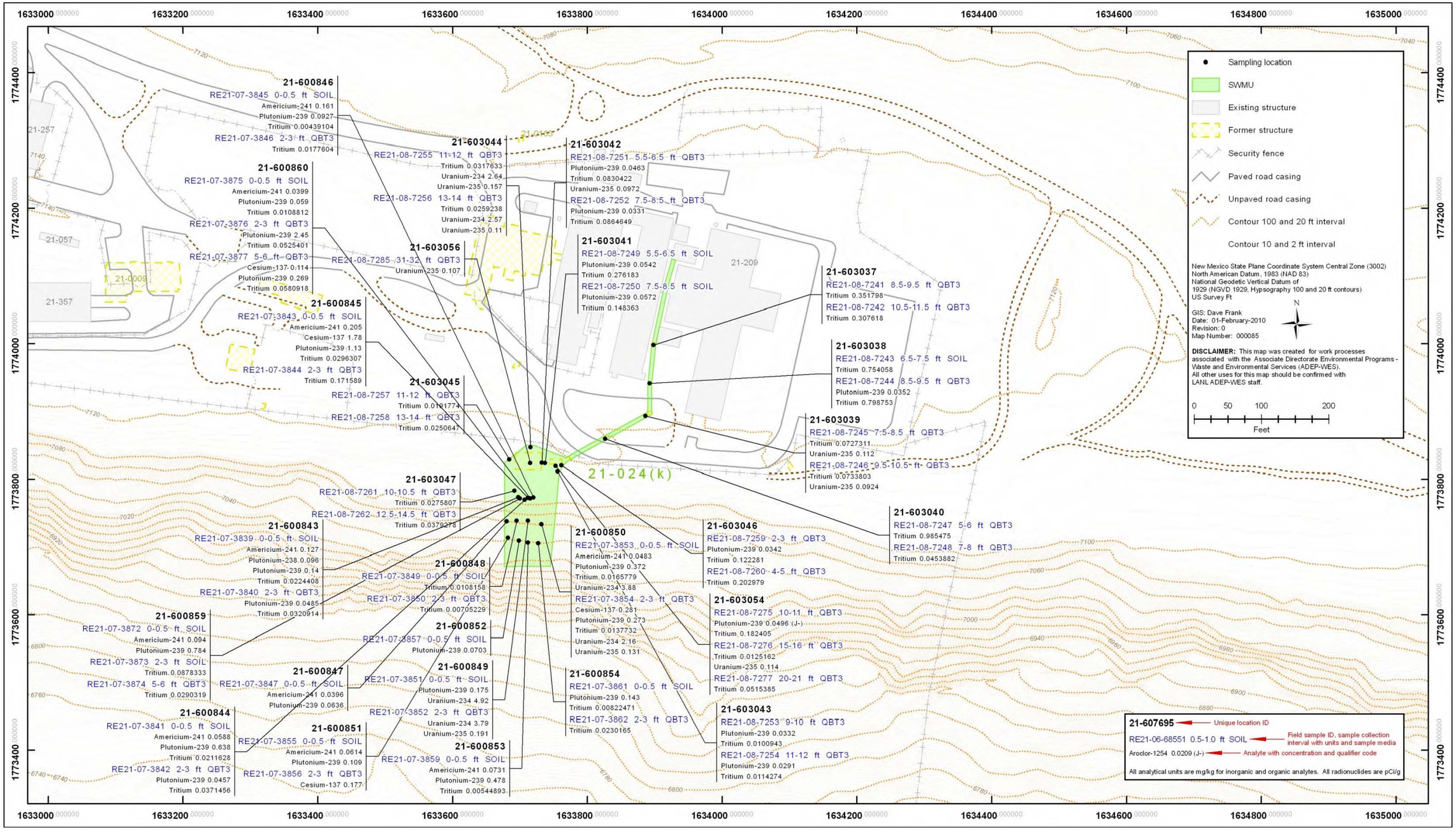



**Figure 6.18-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(k)**

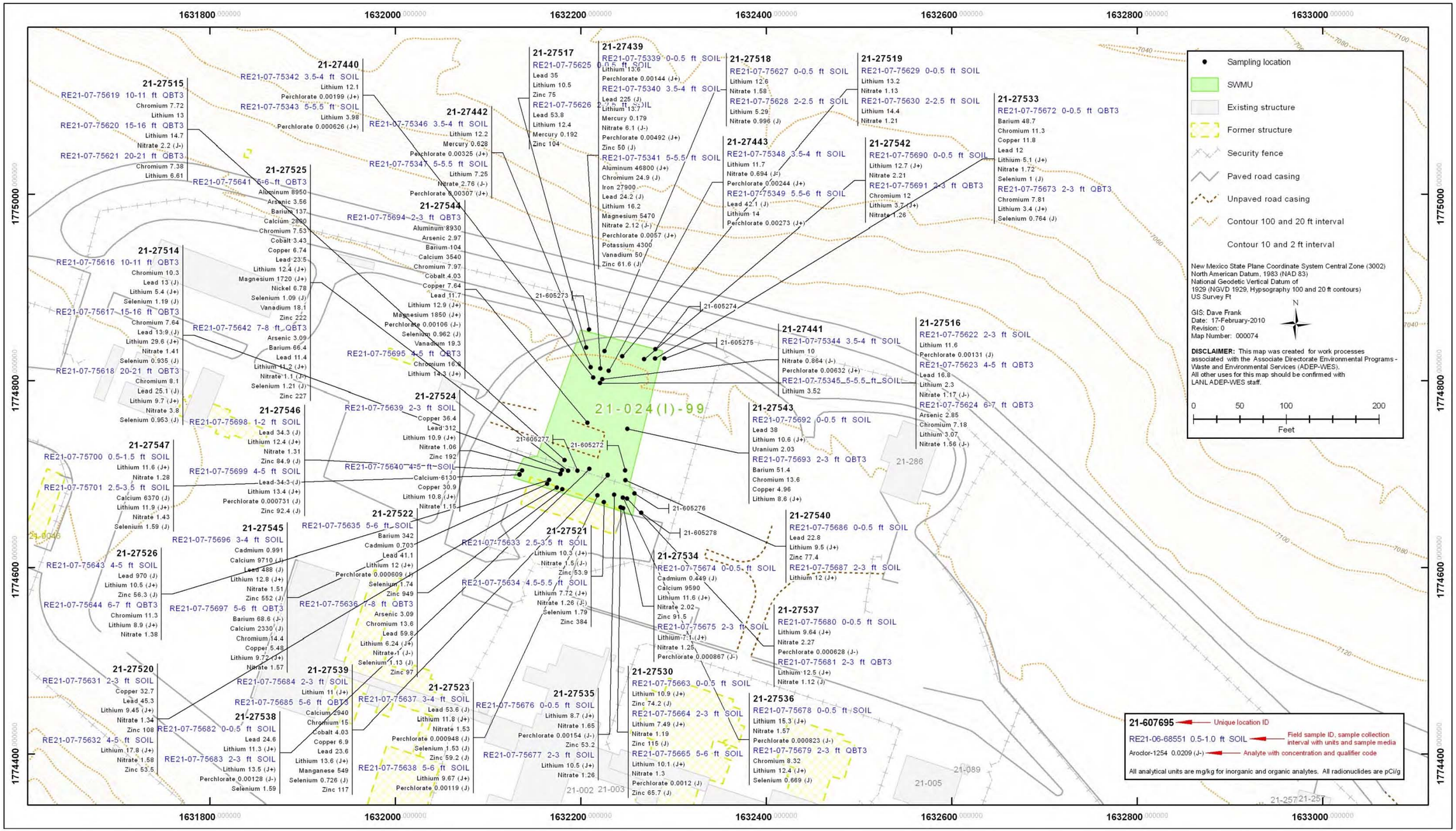



**Figure 6.19-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-024(I)-99**

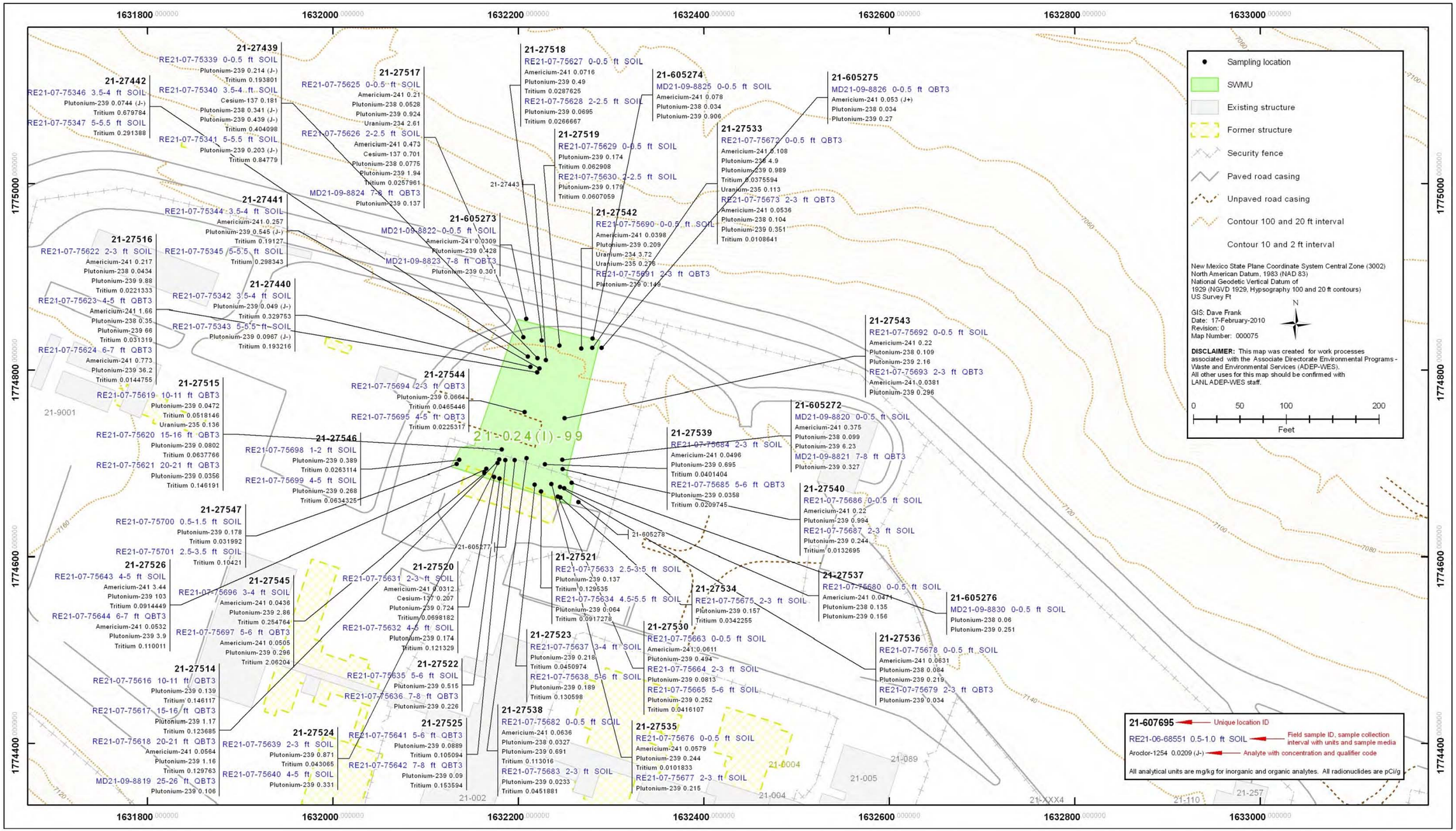



**Figure 6.19-2 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-024(l)-99**

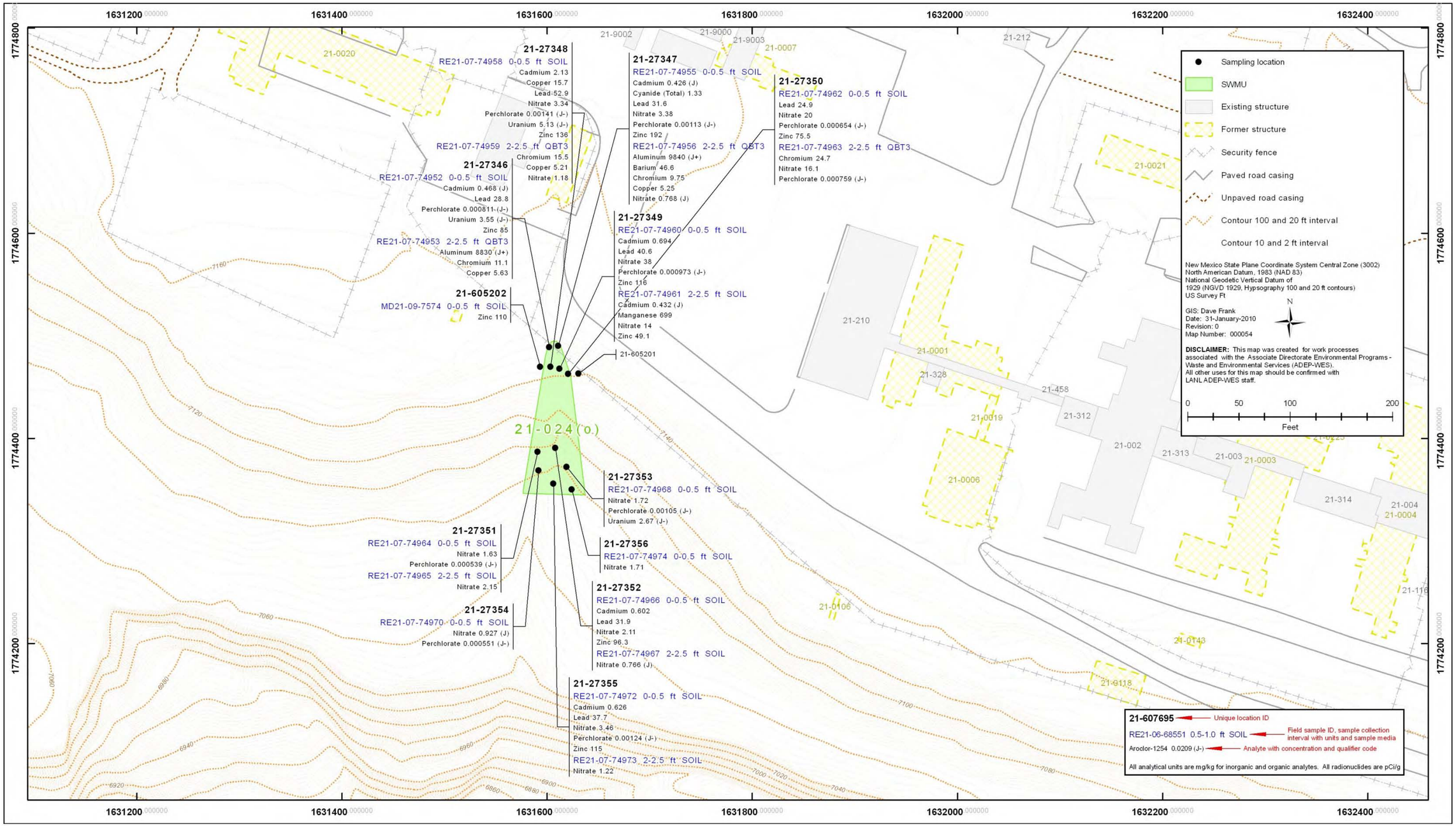



**Figure 6.21-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(o)**

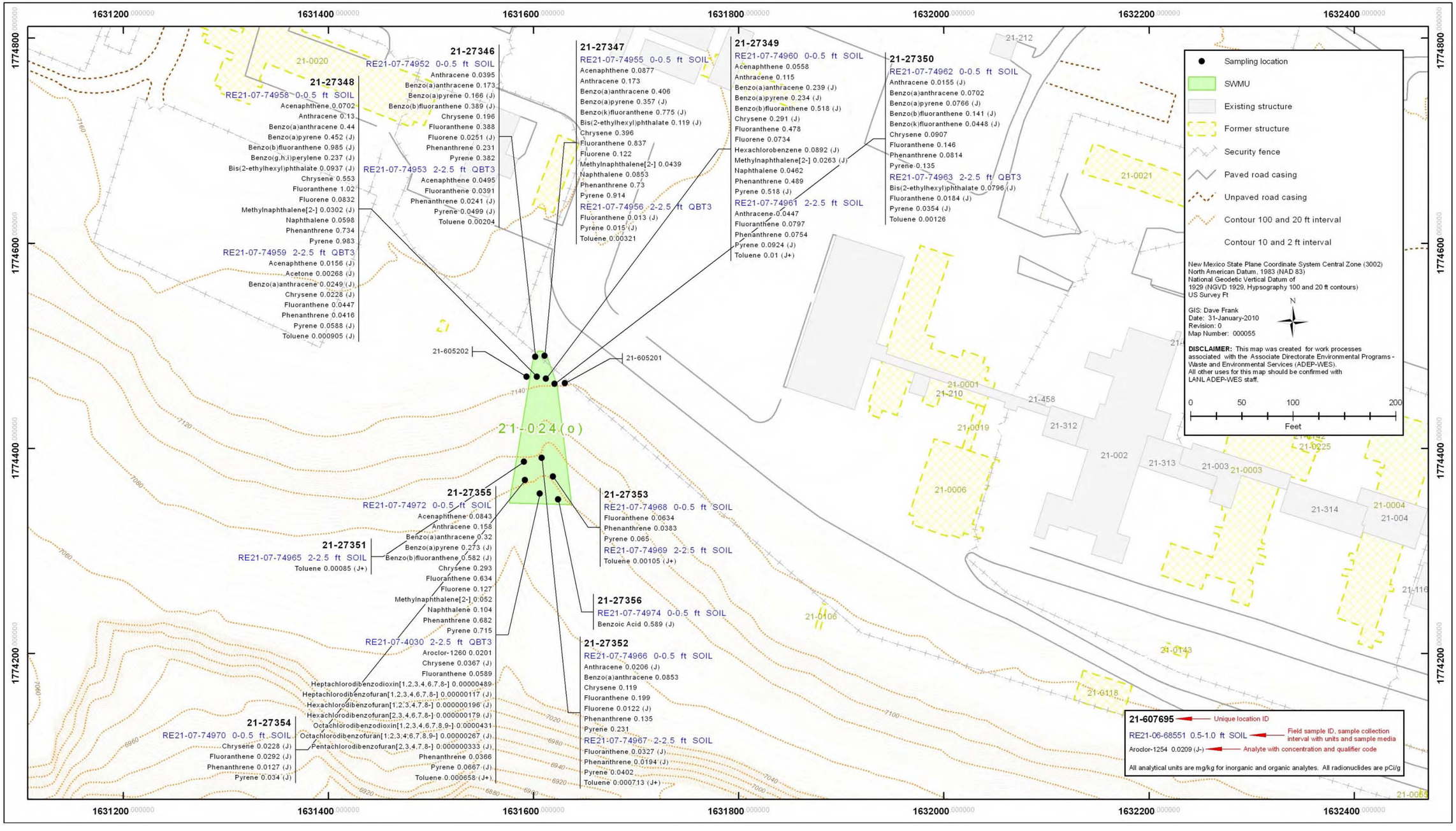



**Figure 6.21-2 Organic chemicals detected at SWMU 21-024(o)**

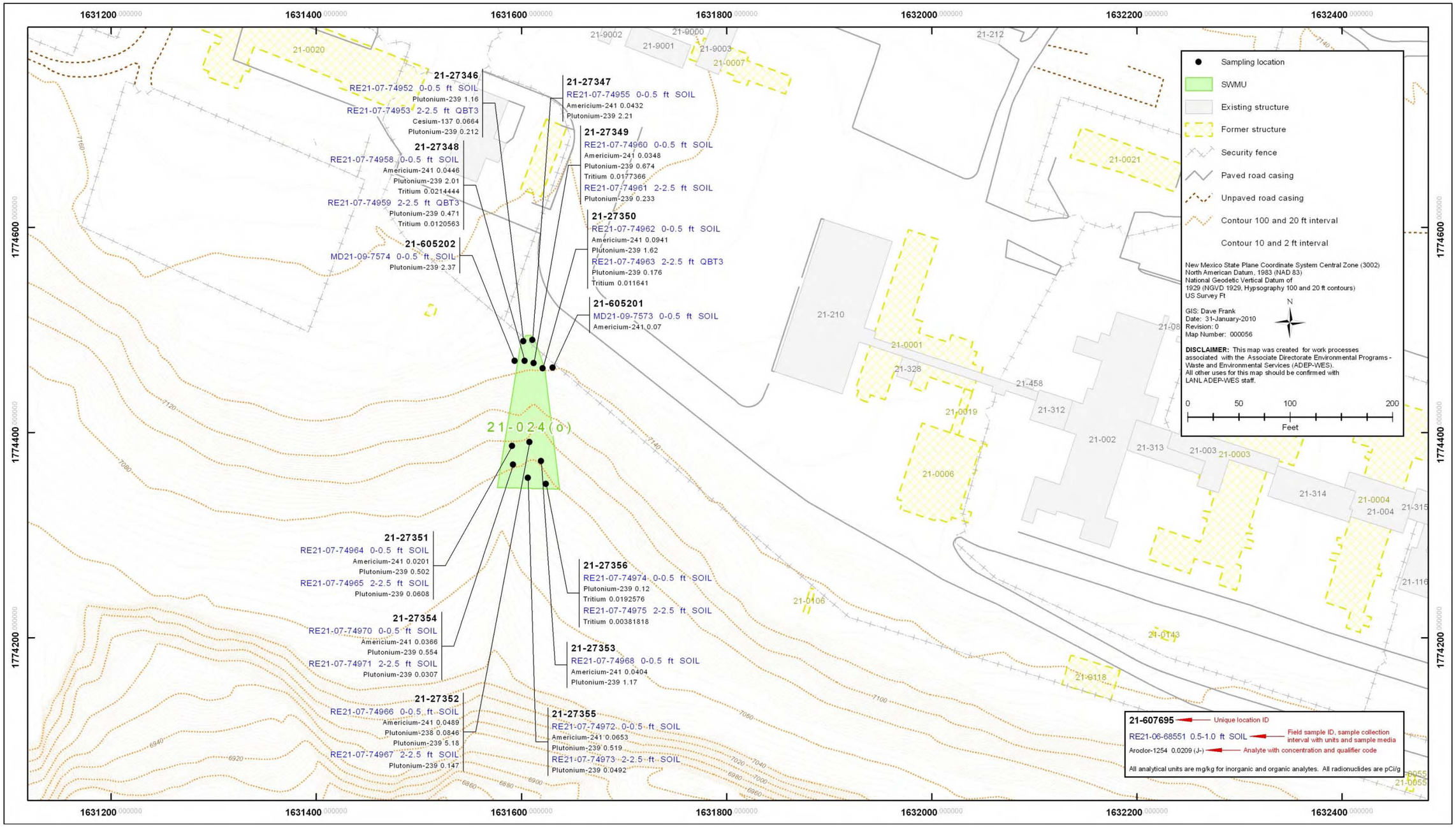



**Figure 6.21-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(o)**

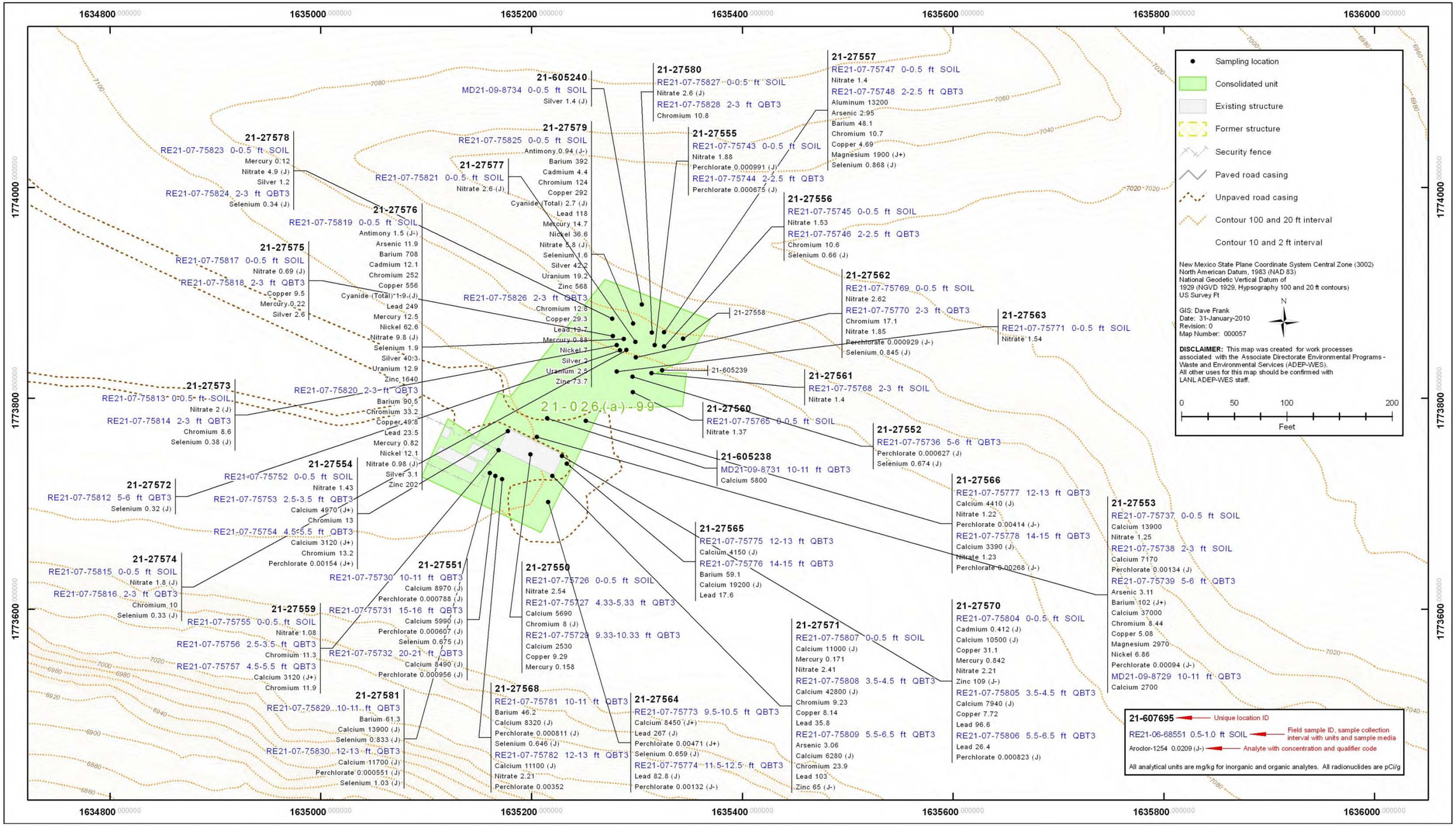



**Figure 6.22-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-026(a)-99**

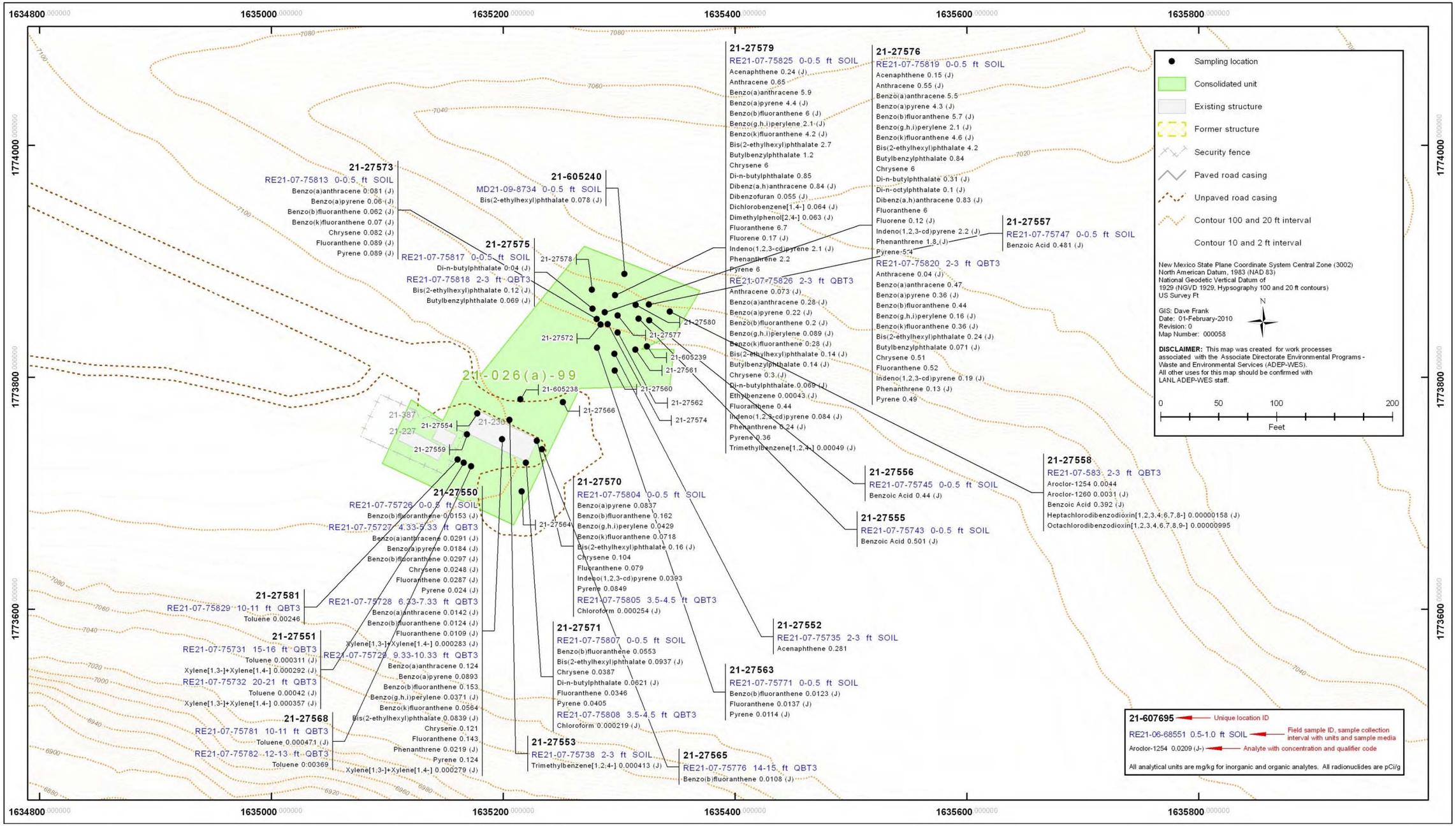



**Figure 6.22-2 Organic chemicals detected at Consolidated Unit 21-026(a)-99**

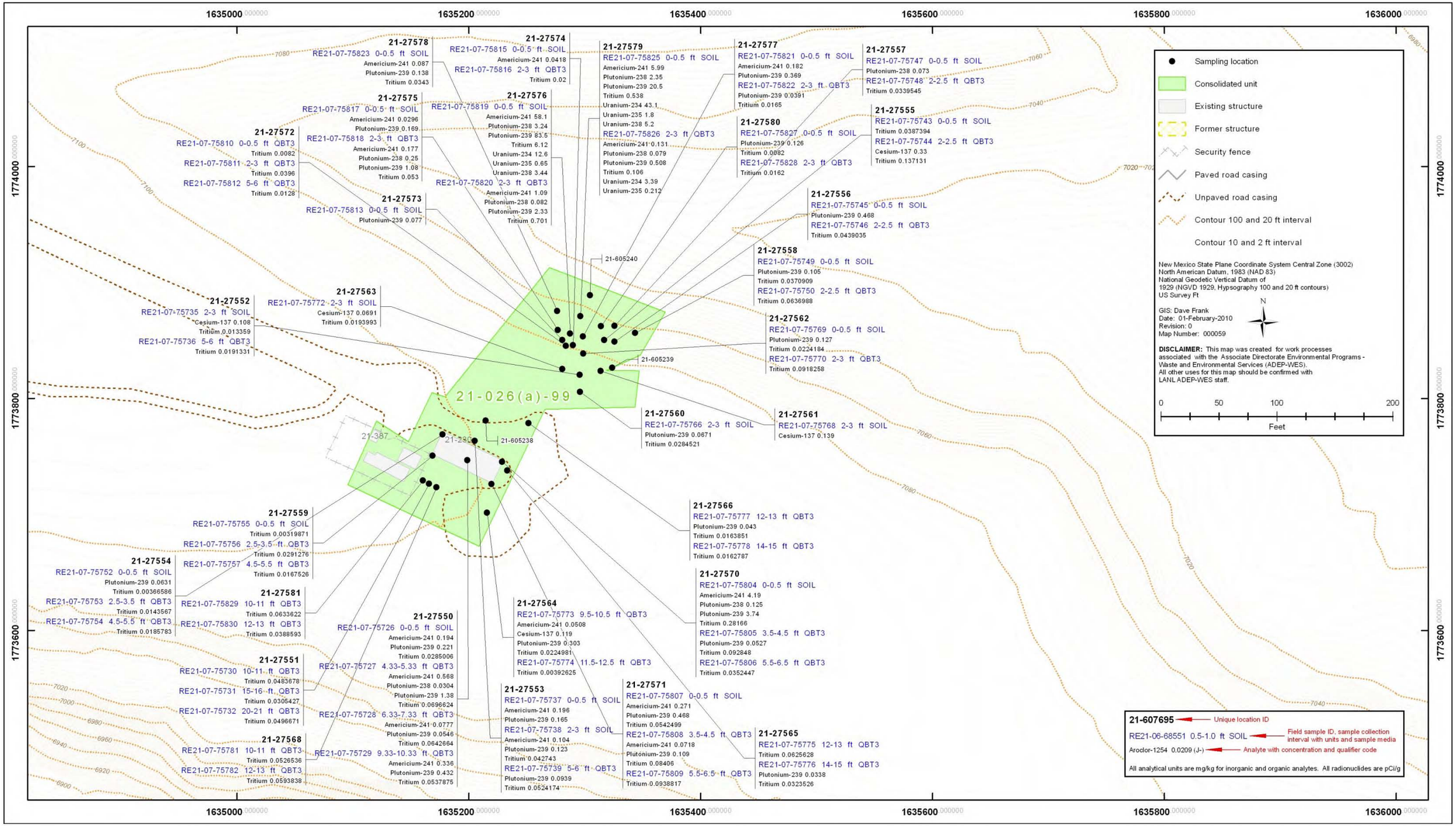



**Figure 6.22-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-026(a)-99**

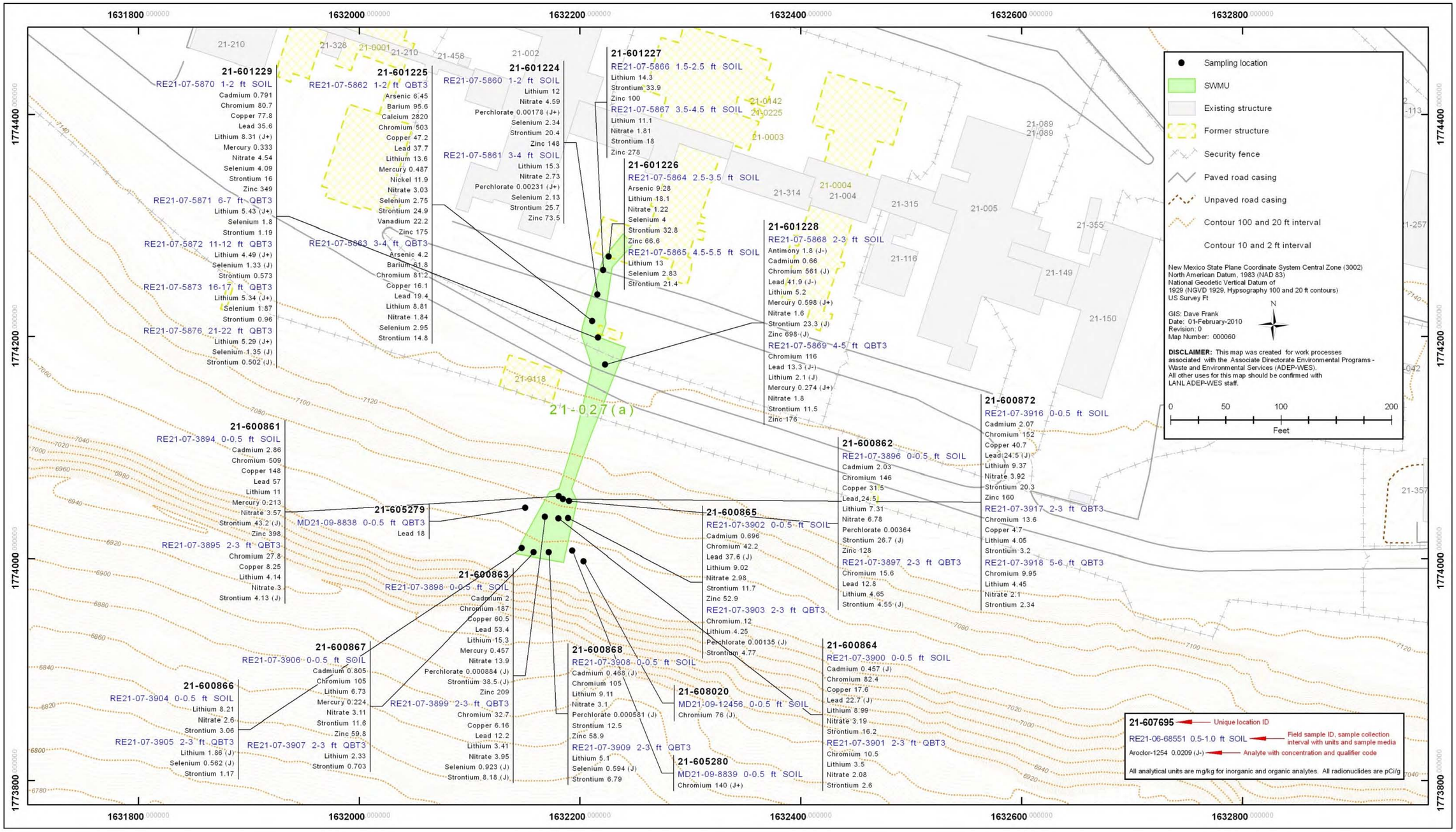



**Figure 6.23-1 Inorganic chemicals detected or detected above BVs at SWMU 21-027(a)**

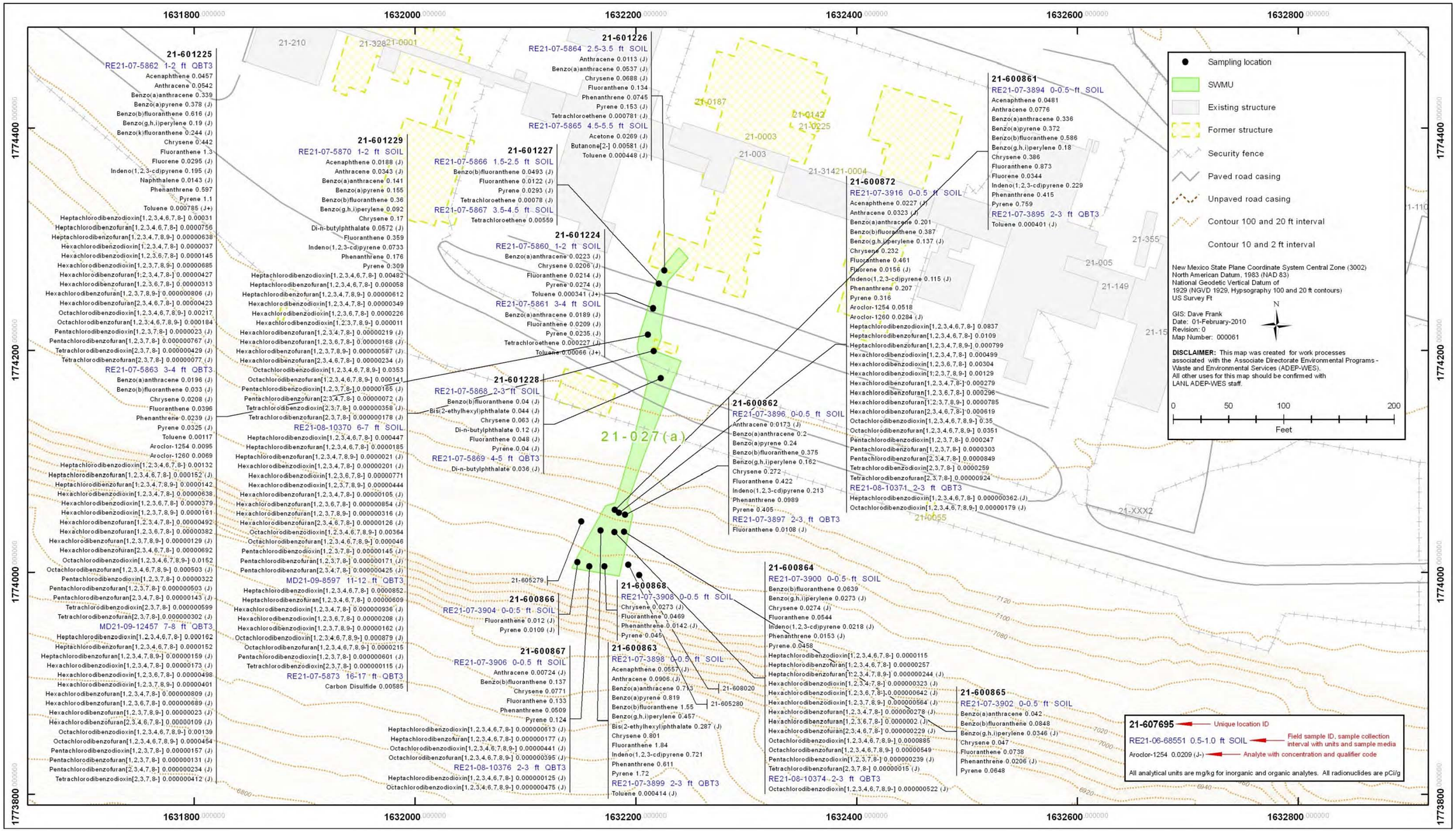



**Figure 6.23-2 Organic chemicals detected at SWMU 21-027(a)**

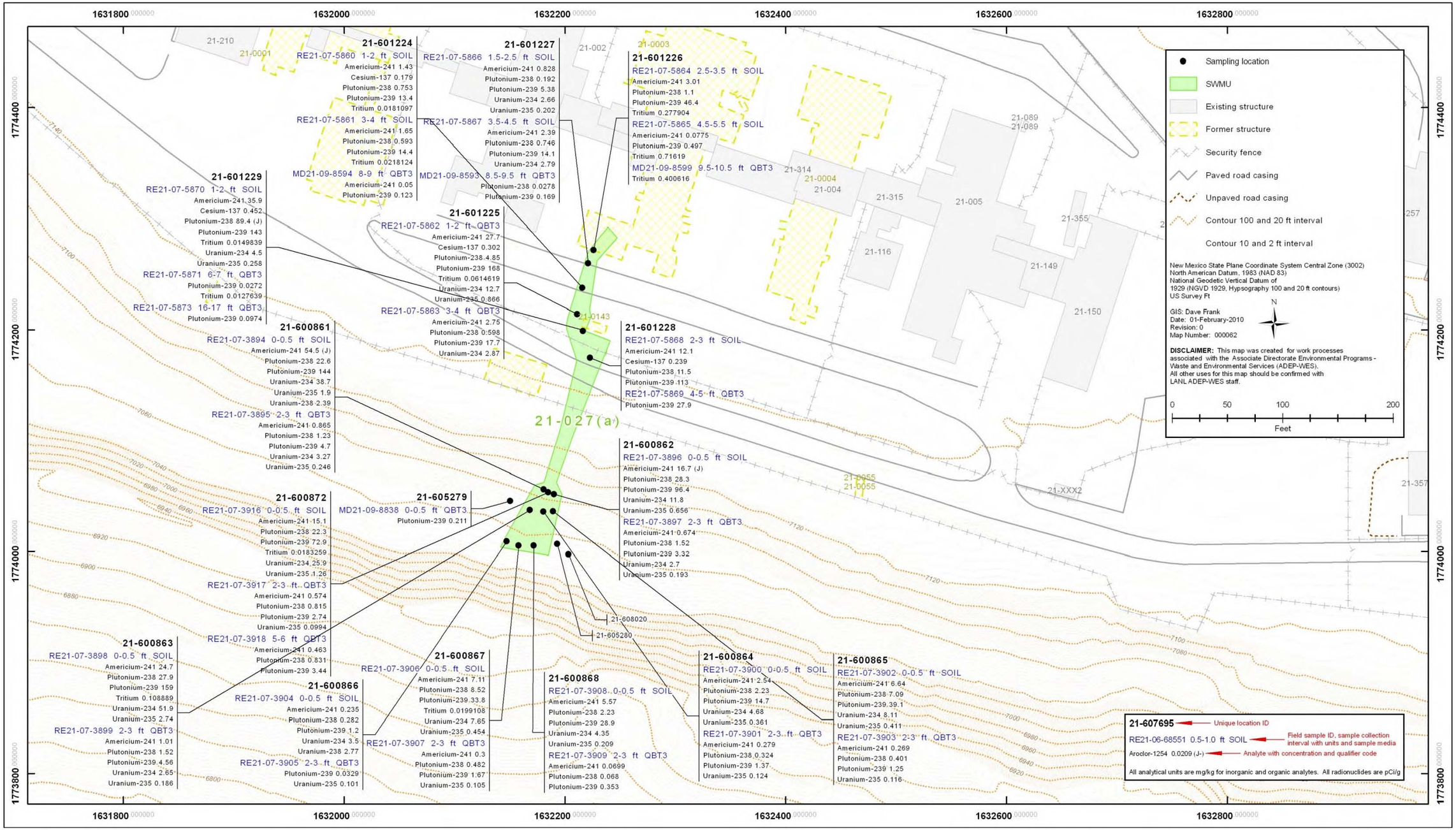



**Figure 6.23-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-027(a)**

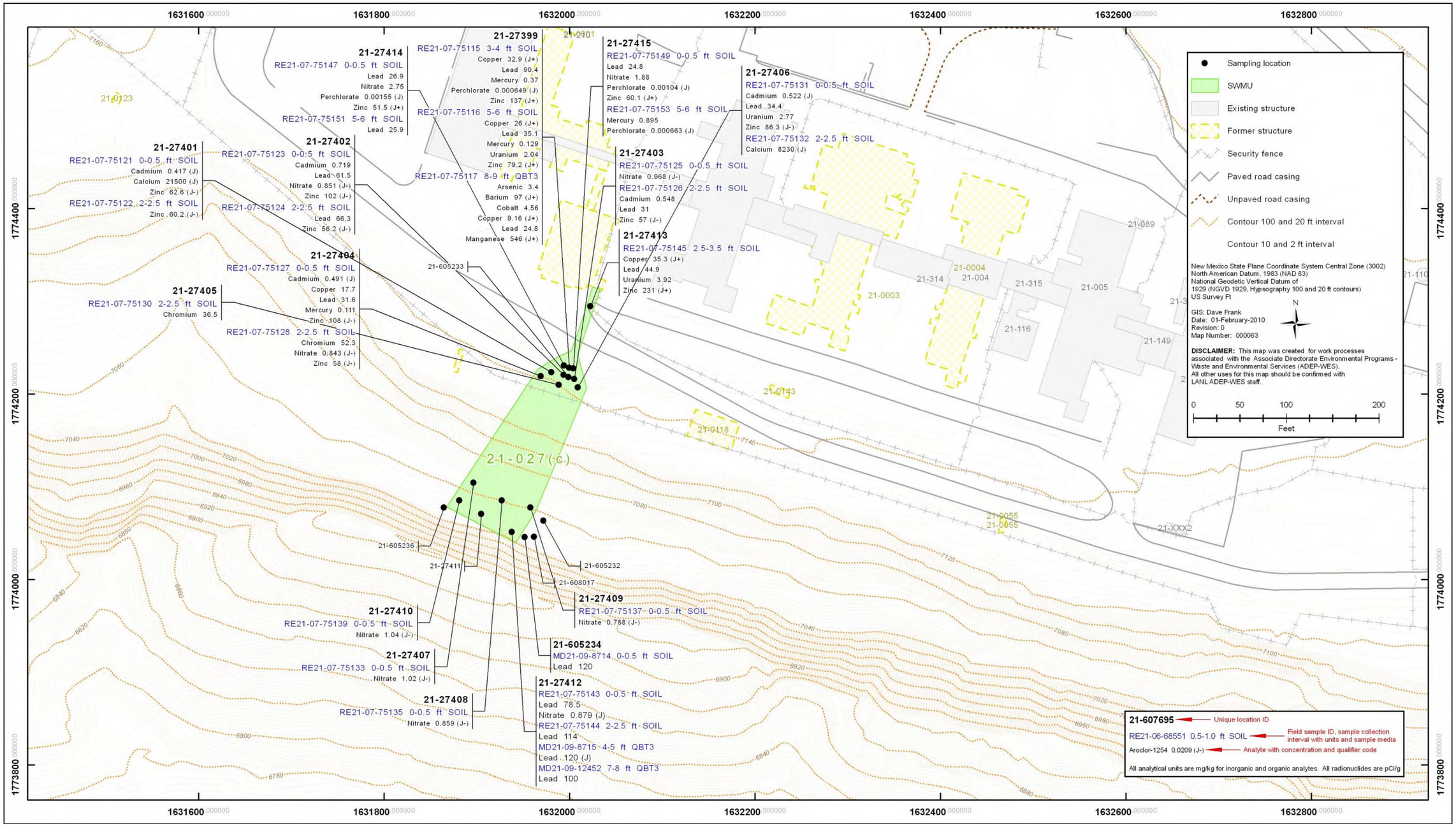



**Figure 6.24-1 Inorganic chemicals detected or detected above BVs at SWMU 21-027(c)**

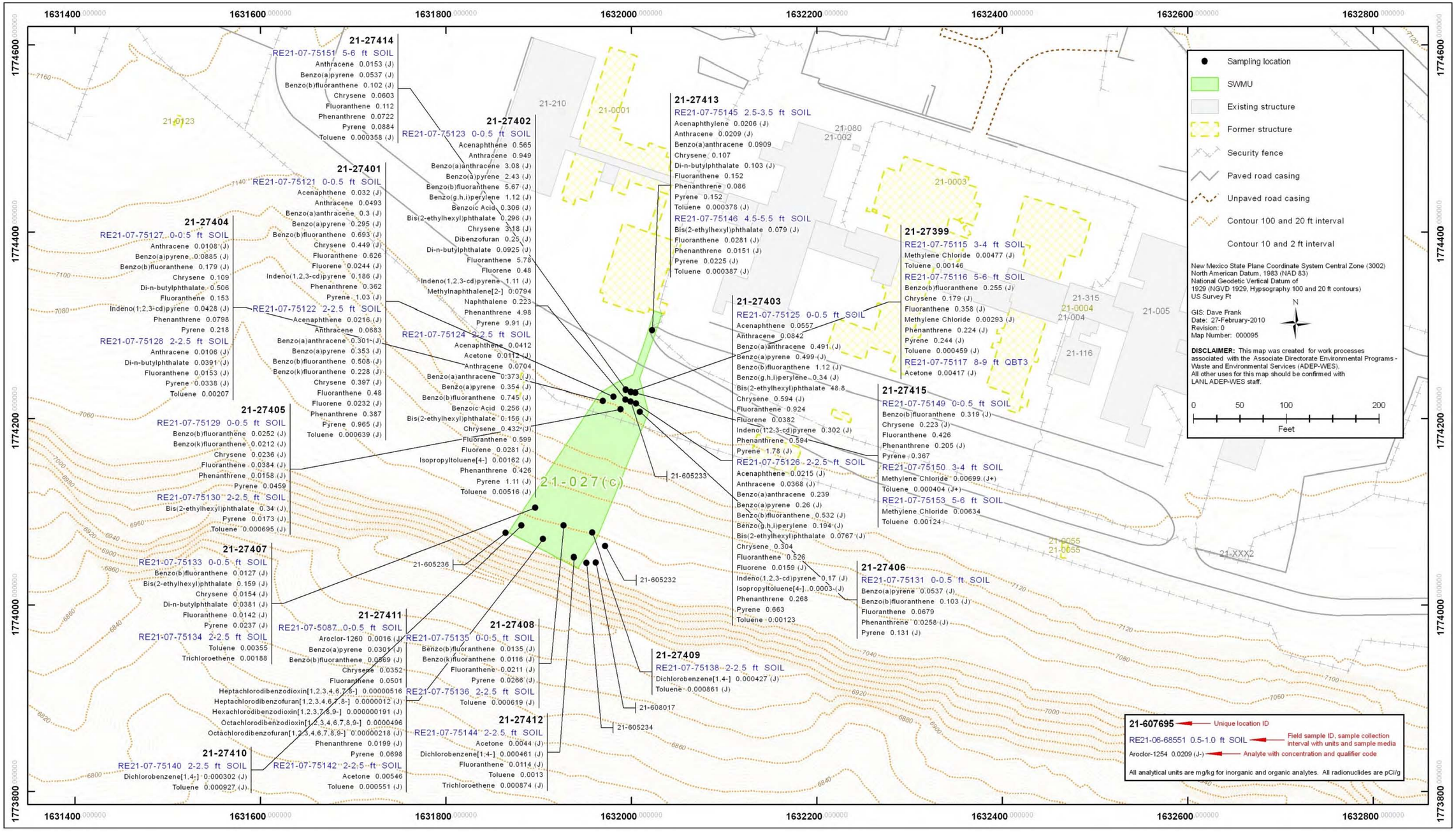



**Figure 6.24-2 Organic chemicals detected at SWMU 21-027(c)**

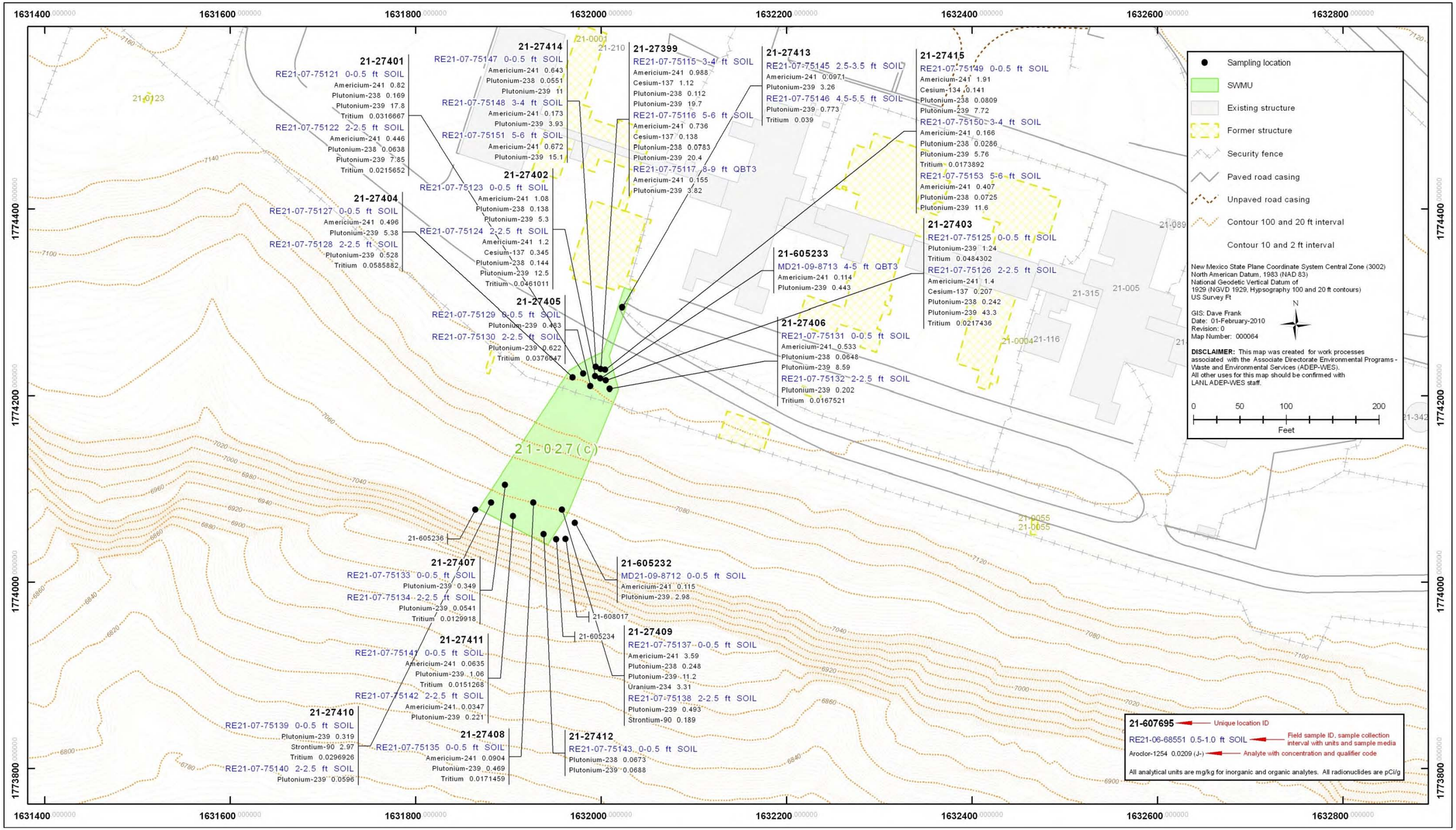



**Figure 6.24-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-027(c)**

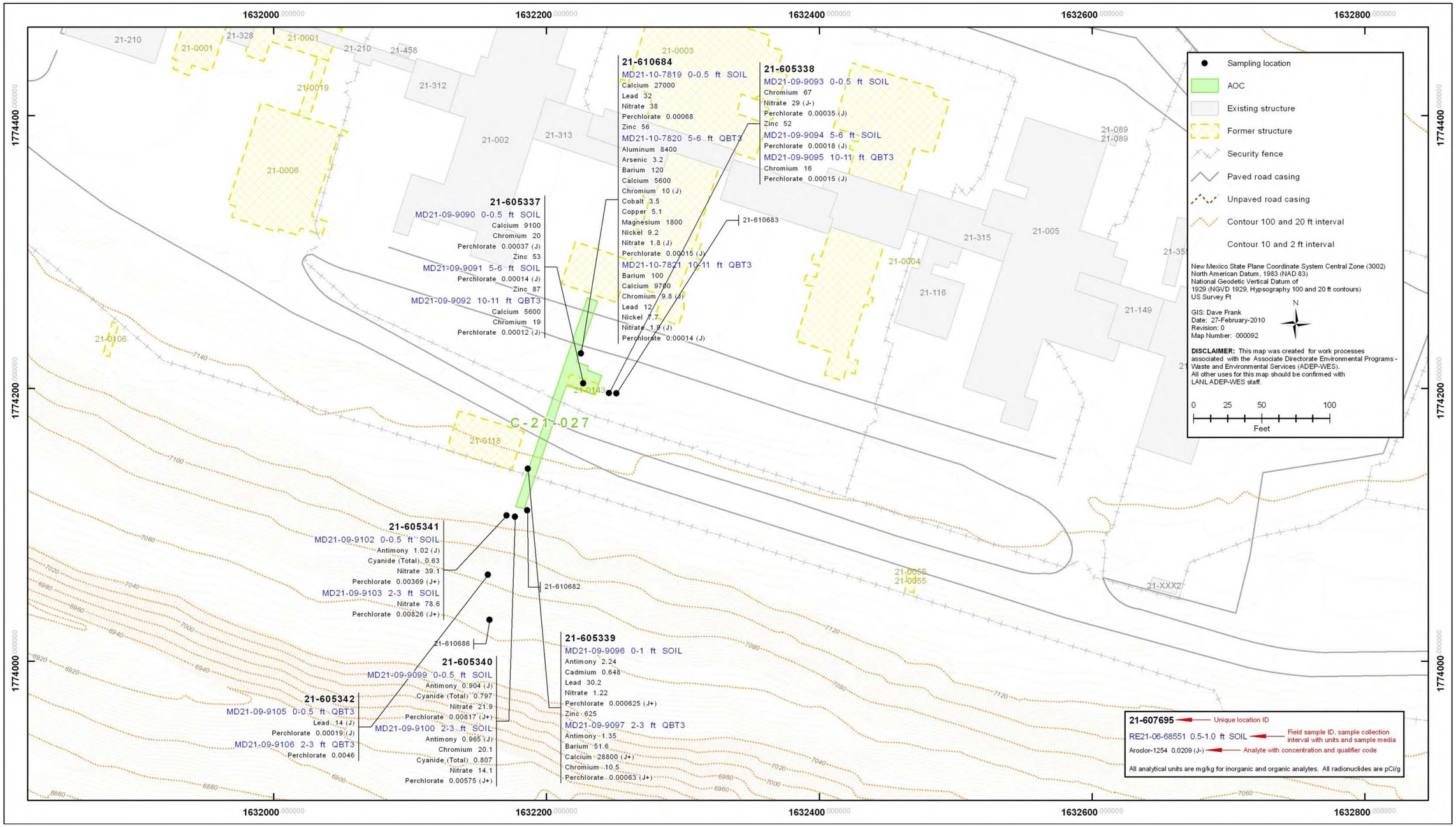



**Figure 6.25-1 Inorganic chemicals detected or detected above BVs at AOC C-21-027**

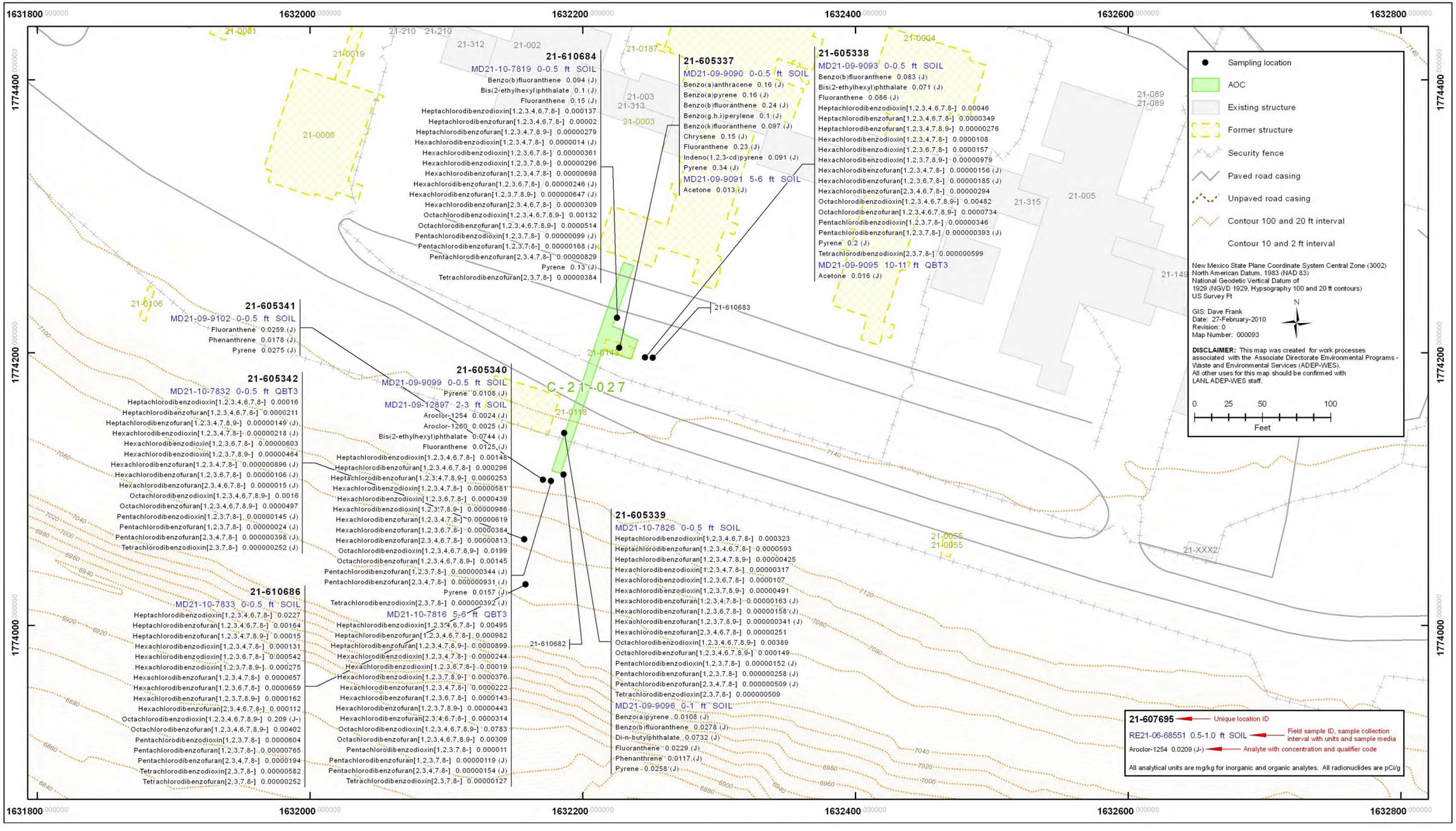



**Figure 6.25-2 Organic chemicals detected at AOC-C-21-027**

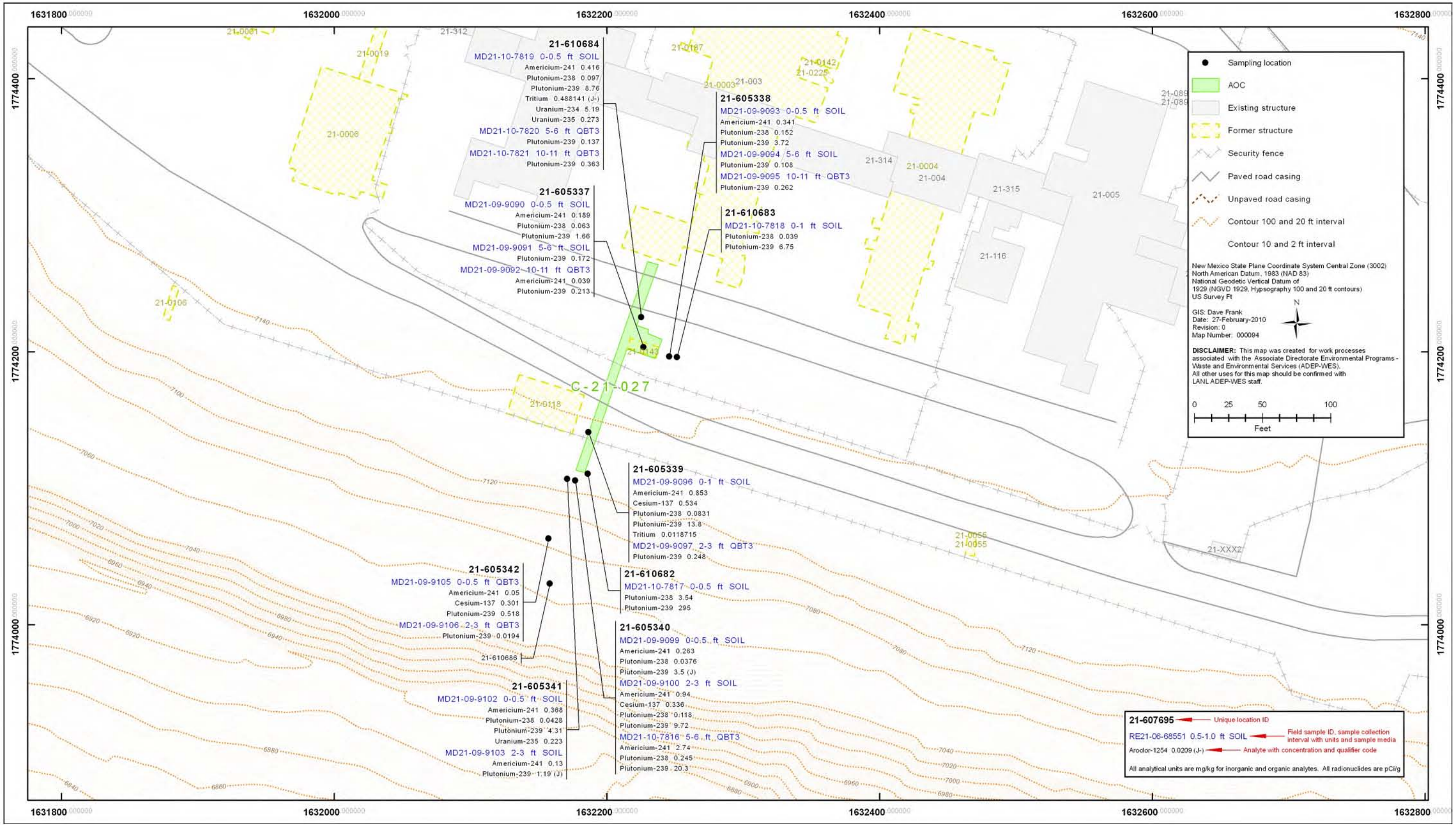



**Figure 6.25-3 Radionuclides detected or detected above BVs/FVs at AOC C-21-027**

**Table 1.1-1**
**DP Site Aggregate Area Sites Addressed in this Report**

| Consolidated Unit | SWMU/AOC Number | Site Description | Site Status |
|---|---|---|---|
| | AOC 21-002(b) | Container storage area | Investigated, reported, risk assessment completed |
| 21-003-99 | SWMU 21-003 | Container storage area, PCB Site | Remediated, reported |
| | AOC 21-013(f) | Surface disposal site, PCB Site | |
| 21-006(c)-99 | SWMU 21-006(a) | Seepage pits | Investigated, reported, risk assessment completed |
| | SWMU 21-006(b) | Seepage pits | |
| | SWMU 21-006(c) | Seepage pits | |
| | SWMU 21-006(d) | Seepage pits | |
| | SWMU 21-009 | Waste treatment laboratory | Investigated, reported, risk assessment |
| | SWMU 21-012(b) | Dry well and system | Investigated, reported, risk assessment completed |
| | SWMU 21-013(c) | Surface disposal area | Investigated, reported, risk assessment completed |
| 21-017(a)-99 | SWMU 21-022(f) | Sump and pipeline | Investigated, reported, risk assessment completed |
| 21-022(h)-99 | SWMU 21-022(h) | Sump, pipeline, and outfall | Investigated, reported, risk assessment completed |
| | SWMU 21-022(i) | Sump pump | |
| | SWMU 21-022(j) | Sump pump | |
| 21-023(a)-99 | SWMU 21-023(a) | Septic system, building 21-3 | Investigated, reported, risk assessment completed |
| | SWMU 21-023(b) | Septic system, building 21-3 | |
| | SWMU 21-023(d) | Septic system, building 21-3 | |
| | SWMU 21-024(a) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(b) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(c) | Septic system | Combined with Consolidated Unit 21-003-99, remediated, reported |
| | SWMU 21-024(d) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(e) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(g) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(h) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(i) | Septic system | Investigated, reported, risk assessment completed |

**Table 1.1-1 (continued)**

| Consolidated Unit | SWMU/AOC Number | Site Description | Site Status |
|---|---|---|---|
| | SWMU 21-024(j) | Septic system | Investigated, reported, risk assessment completed |
| | SWMU 21-024(k) | Septic system | Investigated, reported |
| 21-024(l)-99 | AOC 21-004(a) | Aboveground tank | Investigated, reported, risk assessment completed |
| | SWMU 21-022(a) | Waste line and sump | |
| | SWMU 21-024(l) | Outfall | |
| | SWMU 21-024(n) | Drainline | Investigated, reported |
| | SWMU 21-024(o) | Drainage area | Investigated, reported, risk assessment completed |
| 21-026(a)-99 | SWMU 21-013(a) | Surface disposal area | Investigated, reported, risk assessment completed |
| | SWMU 21-026(a) | Sewage treatment plant | |
| | SWMU 21-026(b) | Sludge drying/sand filter beds | |
| | AOC 21-026(c) | Dosing siphon chamber | |
| | AOC 21-026(d) | Outfall | |
| | SWMU 21-027(a) | Surface drainage and outfalls | Investigated, reported, risk assessment completed |
| | SWMU 21-027(c) | Pipe and outfall | Investigated, reported, risk assessment completed |
| | AOC C-21-027 | Cooling tower and outfall | Investigated, reported |
| n/a* | n/a | Diesel spill from tank 21-57 | Investigated, reported |

Note: Shading denotes SWMUs/AOCs that are not consolidated.

* n/a = Not applicable.

**Table 1.1-2**
**SWMUs and AOCs Not Addressed in this Report**

| Consolidated Unit | SWMU/AOC Number | Site Description | Site Status |
|---|---|---|---|
| 21-002(a) | SWMU 21-002(a) | Container storage areas | Investigation delayed |
| 21-004(b)-99 | SWMU 21-004(b) | Tank and/or associated equipment | Other work plan (Deferred Sites) |
| | SWMU 21-004(c) | Tank and/or associated equipment | Other work plan (Deferred Sites) |
| | AOC 21-004(d) | Drain line | Other work plan (Deferred Sites) |
| 21-006(e)-99 | SWMU 21-006(e) | Seepage pit | Continued investigation (Middle Los Alamos Aggregate Area Investigation) |
| | AOC 21-006(f) | Seepage pit | Continued investigation (Middle Los Alamos Aggregate Area Investigation) |
| | SWMU 21-011(b) | Sump | Other work plan (Deferred Sites) |
| | SWMU 21-011(k) | Outfall | Remedy complete |
| 21-013(d)-99 | SWMU 21-013(d) | Surface disposal site (cold dump) | Remedy complete |
| | SWMU 21-013(e) | Surface disposal site | Remedy complete |
| | SWMU 21-014 | MDA A | Vapor monitoring |
| | SWMU 21-015 | MDA B | Investigation/remediation ongoing |
| 21-016(a)-99 | AOC 21-001 | Container storage | Other work plan (Deferred Sites) |
| | SWMU 21-007 | Incinerators | Other work plan (Deferred Sites) |
| | SWMU 21-010(a) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(b) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(c) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(d) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(e) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(f) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(g) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-010(h) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-011(a) | Waste treatment facility | Other work plan (Deferred Sites) |
| | SWMU 21-011(c) | Tank and sump | Other work plan (Deferred Sites) |
| | SWMU 21-011(d) | Aboveground tank | Other work plan (Deferred Sites) |
| | SWMU 21-011(e) | Aboveground tank | Other work plan (Deferred Sites) |
| | SWMU 21-011(f) | Aboveground tank | Other work plan (Deferred Sites) |
| | SWMU 21-011(g) | Aboveground tank | Other work plan (Deferred Sites) |
| | AOC 21-011(h) | Aboveground tank | Other work plan (Deferred Sites) |
| | SWMU 21-011(i) | Aboveground tank | Other work plan (Deferred Sites) |
| | SWMU 21-011(j) | Aboveground tank | Other work plan (Deferred Sites) |
| | SWMU 21-016(a) | MDA T | Other work plan (Deferred Sites) |
| | SWMU 21-016(b) | MDA T | Other work plan (Deferred Sites) |
| | AOC 21-028(a) | Container storage | Other work plan (Deferred Sites) |
| | AOC C-21-009 | One-time spill | Other work plan (Deferred Sites) |
| | AOC C-21-012 | One-time spill | Other work plan (Deferred Sites) |

**Table 1.1-2 (continued)**

| Consolidated Unit | SWMU/AOC Number | Site Description | Site Status |
|---|---|---|---|
| 21-017(a)-99 | SWMU 21-017(a) | MDA U | No further action |
| | SWMU 21-017(b) | MDA U | No further action |
| | SWMU 21-017(c) | MDA U | No further action |
| 21-018(a)-99 | SWMU 21-013(b) | Surface disposal site | Vapor monitoring |
| | AOC 21-013(g) | Surface disposal site | Vapor monitoring |
| | SWMU 21-018(a) | MDA V | Vapor monitoring |
| | SWMU 21-018(b) | MDA V laundry facility | Vapor monitoring |
| | SWMU 21-023(c) | Septic system | Vapor monitoring |
| 21-021-99 | SWMU 21-021 | Systematic release (sitewide) | Investigation complete |
| 21-022(b)-99 | SWMU 21-022(b) | Waste lines, Building 21-2 | Other work plan (Deferred Sites) |
| | SWMU 21-022(c) | Waste lines, Building 21-3 | Other work plan (Deferred Sites) |
| | SWMU 21-022(d) | Waste lines, Building 21-4 | Other work plan (Deferred Sites) |
| | SWMU 21-022(e) | Waste lines, Building 21-5 | Other work plan (Deferred Sites) |
| | SWMU 21-022(g) | Waste lines, Building 21-150 | Other work plan (Deferred Sites) |
| | SWMU 21-024(f) | Septic system | Remedy complete |
| 21-027(d)-99 | SWMU 21-027(d) | Drain line | Partial remedy complete |
| | AOC 21-028(c) | Container storage Building 21-3 | Continued investigation (Middle Los Alamos Aggregate Area Investigation) |
| | SWMU 21-029 | DP tank farm | Investigation complete |
| | AOC 21-030 | Sump | Remedy complete |
| | AOC C-21-001 | One-time spill | Addressed (Supplemental DP Site) |
| | AOC C-21-002 | Nonintentional release area | Continued investigation |
| | AOC C-21-005 | One-time spill | Continued investigation |
| | AOC C-21-006 | Unintentional release area | Delayed investigation |
| | AOC C-21-007 | Non-intentional release area | Other work plan (Deferred Sites) |
| | AOC C-21-033 | One-time spill | Other work plan (Deferred Sites) |
| | AOC C-21-034 | Tank | Other work plan (Deferred Sites) |
| | AOC C-21-035 | Aboveground tank | Other work plan (Deferred Sites) |
| | AOC C-21-036 | Aboveground tank | Other work plan (Deferred Sites) |
| | AOC C-21-037 | Aboveground tank | Other work plan (Deferred Sites) |
| | AOC 21-028(d) | Container storage dock area | Delayed investigation |

Note: Shading denotes SWMUs/AOCs that are not consolidated.

**Table 1.1-3**
**SWMUs, AOCs, and**
**Consolidated Units Approved for No Further Action**

| Consolidated Unit | SWMU/AOC Number | ER ID Number of Request or Approval Document |
|---|---|---|
| | SWMU 21-005 | NMED 2001, 070236 |
| | AOC 21-008 | EPA 2004, 087296 |
| | SWMU 21-012(a) | NMED 1998, 063042 |
| 21-021-99 | AOC 21-019(a) | EPA 2004, 087296 |
| | AOC 21-019(b) | EPA 2004, 087296 |
| | AOC 21-019(c) | EPA 2004, 087296 |
| | AOC 21-019(d) | EPA 2004, 087296 |
| | AOC 21-019(e) | EPA 2004, 087296 |
| | AOC 21-019(f) | EPA 2004, 087296 |
| | AOC 21-019(g) | EPA 2004, 087296 |
| | AOC 21-019(h) | EPA 2004, 087296 |
| | AOC 21-019(i) | EPA 2004, 087296 |
| | AOC 21-019(j) | EPA 2004, 087296 |
| | AOC 21-019(k) | EPA 2004, 087296 |
| | AOC 21-019(l) | EPA 2004, 087296 |
| | AOC 21-019(m) | EPA 2004, 087296 |
| | AOC 21-020(a) | EPA 2004, 087296 |
| | AOC 21-020(b) | EPA 2004, 087296 |
| | SWMU 21-024(m) | NMED 1998, 063042 |
| | AOC 21-025(a) | EPA 2004, 087296 |
| | AOC 21-025(b) | EPA 2004, 087296 |
| | SWMU 21-027(b) | NMED 1998, 063042 |
| | AOC 21-028(b) | EPA 2004, 087296 |
| | AOC 21-028(e) | EPA 2004, 087296 |
| | SWMU 21-029 | NMED 2003, 078138 |
| | AOC C-21-002 | EPA 2004, 087296 |
| | AOC C-21-003 | EPA 2004, 087296 |
| | AOC C-21-004 | EPA 2004, 087296 |
| | AOC C-21-008 | EPA 2004, 087296 |
| | AOC C-21-010 | EPA 2004, 087296 |
| | AOC C-21-011 | EPA 2004, 087296 |
| | AOC C-21-013 | EPA 2004, 087296 |
| | AOC C-21-014 | EPA 2004, 087296 |
| | AOC C-21-015 | EPA 2004, 087296 |
| | AOC C-21-016 | EPA 2004, 087296 |
| | AOC C-21-017 | EPA 2004, 087296 |

**Table 1.1-3 (continued)**

| Consolidated Unit | SWMU/AOC Number | ER ID Number of Request or Approval Document |
|---|---|---|
| | AOC C-21-018 | EPA 2004, 087296 |
| | AOC C-21-019 | EPA 2004, 087296 |
| | AOC C-21-020 | EPA 2004, 087296 |
| | AOC C-21-021 | EPA 2004, 087296 |
| | AOC C-21-022 | EPA 2004, 087296 |
| | AOC C-21-023 | EPA 2004, 087296 |
| | AOC C-21-024 | EPA 2004, 087296 |
| | AOC C-21-025 | EPA 2004, 087296 |
| | AOC C-21-026 | EPA 2004, 087296 |
| 21-027(d)-99 | AOC C-21-028 | EPA 2004, 087296 |
| | AOC C-21-029 | EPA 2004, 087296 |
| | AOC C-21-030 | EPA 2004, 087296 |
| | AOC C-21-031 | EPA 2004, 087296 |
| | AOC C-21-032 | EPA 2004, 087296 |

Note: Shading denotes SWMUs/AOCs that are not consolidated.

**Table 3.1-1**
**DP Site Phases I and II Sample Location Coordinates**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-002(b) | 21-25679 | 1631925.88 | 1774852.06 |
| 21-002(b) | 21-25680 | 1631916.58 | 1774831.20 |
| 21-002(b) | 21-25681 | 1631935.98 | 1774823.49 |
| 21-002(b) | 21-25682 | 1631941.96 | 1774816.05 |
| 21-002(b) | 21-25683 | 1631941.56 | 1774831.20 |
| 21-002(b) | 21-25684 | 1631928.67 | 1774859.10 |
| 21-002(b) | 21-25685 | 1631919.64 | 1774864.95 |
| 21-002(b) | 21-25686 | 1631900.77 | 1774860.30 |
| 21-002(b) | 21-25687 | 1631900.91 | 1774835.05 |
| 21-002(b) | 21-25688 | 1631923.36 | 1774816.85 |
| 21-002(b) | 21-25689 | 1631946.35 | 1774799.97 |
| 21-002(b) | 21-25690 | 1631956.71 | 1774822.03 |
| 21-002(b) | 21-25691 | 1631954.19 | 1774841.03 |
| 21-002(b) | 21-25692 | 1631943.95 | 1774852.59 |
| 21-002(b) | 21-25693 | 1631952.33 | 1774831.07 |
| 21-002(b) | 21-25694 | 1631946.35 | 1774822.69 |
| 21-002(b) | 21-25695 | 1631944.35 | 1774814.46 |
| 21-002(b) | 21-25696 | 1631921.50 | 1774842.23 |
| 21-002(b) | 21-604519 | 1631962.32 | 1774831.35 |
| 21-002(b) | 21-604520 | 1631947.40 | 1774819.27 |
| 21-002(b) | 21-604521 | 1631900.85 | 1774825.10 |
| 21-002(b) | 21-604522 | 1631890.92 | 1774835.16 |
| 21-002(b) | 21-604523 | 1631956.31 | 1774800.05 |
| 21-002(b) | 21-604524 | 1631922.22 | 1774873.48 |
| 21-002(b) | 21-604525 | 1631951.30 | 1774859.42 |
| 21-002(b) | 21-609834 | 1631957.76 | 1774878.70 |
| 21-006(c)-99 | 21-600388 | 1632121.66 | 1774076.10 |
| 21-006(c)-99 | 21-600389 | 1632132.24 | 1774073.81 |
| 21-006(c)-99 | 21-600390 | 1632082.36 | 1774025.37 |
| 21-006(c)-99 | 21-600391 | 1632105.32 | 1774019.60 |
| 21-006(c)-99 | 21-600392 | 1632121.99 | 1774014.64 |
| 21-006(c)-99 | 21-600403 | 1632127.06 | 1774074.65 |
| 21-006(c)-99 | 21-601199 | 1632246.25 | 1774275.45 |
| 21-006(c)-99 | 21-601200 | 1632258.15 | 1774356.55 |
| 21-006(c)-99 | 21-601201 | 1632238.98 | 1774427.08 |
| 21-006(c)-99 | 21-601202 | 1632129.43 | 1774185.73 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-006(c)-99 | 21-601203 | 1632159.45 | 1774179.43 |
| 21-006(c)-99 | 21-601204 | 1632182.75 | 1774169.10 |
| 21-006(c)-99 | 21-601209 | 1632178.17 | 1774345.82 |
| 21-006(c)-99 | 21-601210 | 1632202.77 | 1774335.46 |
| 21-006(c)-99 | 21-601211 | 1632187.66 | 1774280.07 |
| 21-006(c)-99 | 21-601212 | 1632170.20 | 1774234.17 |
| 21-006(c)-99 | 21-601213 | 1632158.45 | 1774196.26 |
| 21-006(c)-99 | 21-601215 | 1632158.08 | 1774169.59 |
| 21-006(c)-99 | 21-605256 | 1632097.68 | 1774078.73 |
| 21-006(c)-99 | 21-605257 | 1632068.84 | 1774014.64 |
| 21-006(c)-99 | 21-605258 | 1632137.86 | 1774003.02 |
| 21-006(c)-99 | 21-605259 | 1632246.36 | 1774265.49 |
| 21-006(c)-99 | 21-605260 | 1632257.80 | 1774346.53 |
| 21-006(c)-99 | 21-605261 | 1632243.02 | 1774436.75 |
| 21-006(c)-99 | 21-608018 | 1632248.63 | 1774344.75 |
| 21-006(c)-99 | 21-609835 | 1632243.07 | 1774457.24 |
| 21-009 | 21-25636 | 1631229.12 | 1774786.74 |
| 21-009 | 21-25637 | 1631216.06 | 1774795.14 |
| 21-009 | 21-25638 | 1631213.37 | 1774788.16 |
| 21-009 | 21-25639 | 1631242.64 | 1774785.38 |
| 21-009 | 21-25640 | 1631240.43 | 1774778.43 |
| 21-009 | 21-25641 | 1631215.32 | 1774782.69 |
| 21-009 | 21-25642 | 1631205.43 | 1774752.09 |
| 21-009 | 21-25643 | 1631192.49 | 1774733.98 |
| 21-009 | 21-604497 | 1631219.17 | 1774776.32 |
| 21-009 | 21-604498 | 1631240.53 | 1774768.41 |
| 21-009 | 21-604499 | 1631250.43 | 1774777.99 |
| 21-012(b) | 21-25778 | 1633104.84 | 1773929.22 |
| 21-012(b) | 21-25779 | 1633114.10 | 1773927.43 |
| 21-012(b) | 21-25780 | 1633098.45 | 1773921.71 |
| 21-012(b) | 21-25781 | 1633107.31 | 1773919.93 |
| 21-012(b) | 21-25782 | 1633116.83 | 1773916.66 |
| 21-012(b) | 21-25783 | 1633095.63 | 1773902.56 |
| 21-012(b) | 21-25784 | 1633089.07 | 1773869.51 |
| 21-012(b) | 21-25785 | 1633126.98 | 1773916.71 |
| 21-012(b) | 21-25786 | 1633124.63 | 1773866.67 |
| 21-012(b) | 21-25787 | 1633149.40 | 1773921.32 |
| 21-012(b) | 21-25788 | 1633159.60 | 1773920.38 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-012(b) | 21-25789 | 1633136.72 | 1773916.06 |
| 21-012(b) | 21-25790 | 1633146.98 | 1773915.22 |
| 21-012(b) | 21-25791 | 1633156.82 | 1773913.20 |
| 21-012(b) | 21-25792 | 1633155.94 | 1773893.53 |
| 21-012(b) | 21-25793 | 1633153.66 | 1773864.04 |
| 21-012(b) | 21-25794 | 1633132.73 | 1773926.59 |
| 21-012(b) | 21-25795 | 1633143.74 | 1773927.86 |
| 21-012(b) | 21-25796 | 1633130.56 | 1773899.03 |
| 21-012(b) | 21-25797 | 1633153.00 | 1773919.47 |
| 21-012(b) | 21-25798 | 1633141.31 | 1773917.94 |
| 21-012(b) | 21-25800 | 1633121.36 | 1773954.58 |
| 21-012(b) | 21-25801 | 1633149.99 | 1773951.39 |
| 21-012(b) | 21-25802 | 1633159.04 | 1773950.25 |
| 21-012(b) | 21-25803 | 1633131.70 | 1774016.40 |
| 21-012(b) | 21-25804 | 1633164.02 | 1773977.32 |
| 21-012(b) | 21-25805 | 1633166.96 | 1774022.69 |
| 21-012(b) | 21-25806 | 1633173.95 | 1774028.15 |
| 21-012(b) | 21-25807 | 1633139.88 | 1774065.59 |
| 21-012(b) | 21-25808 | 1633136.76 | 1774069.37 |
| 21-012(b) | 21-25809 | 1633142.03 | 1774067.92 |
| 21-012(b) | 21-25810 | 1633111.78 | 1773924.41 |
| 21-012(b) | 21-25811 | 1633179.20 | 1774069.66 |
| 21-012(b) | 21-25812 | 1633142.00 | 1774070.06 |
| 21-012(b) | 21-25813 | 1633162.41 | 1774057.73 |
| 21-012(b) | 21-25814 | 1633182.32 | 1774069.74 |
| 21-012(b) | 21-25815 | 1633179.21 | 1774067.59 |
| 21-012(b) | 21-25816 | 1633181.68 | 1774065.91 |
| 21-012(b) | 21-25817 | 1633160.05 | 1774040.42 |
| 21-012(b) | 21-27671 | 1633163.02 | 1774038.96 |
| 21-012(b) | 21-27672 | 1633161.65 | 1774052.71 |
| 21-012(b) | 21-27673 | 1633139.07 | 1774068.30 |
| 21-012(b) | 21-27674 | 1633182.22 | 1774069.03 |
| 21-012(b) | 21-604526 | 1633191.78 | 1774066.29 |
| 21-012(b) | 21-604527 | 1633126.79 | 1774069.32 |
| 21-012(b) | 21-604528 | 1633172.93 | 1773921.46 |
| 21-012(b) | 21-604529 | 1633139.48 | 1773848.55 |
| 21-013(c) | 21-25647 | 1634259.31 | 1774230.24 |
| 21-013(c) | 21-25648 | 1634307.75 | 1774181.80 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-013(c) | 21-25649 | 1634378.94 | 1774113.55 |
| 21-013(c) | 21-25650 | 1634387.01 | 1774048.97 |
| 21-013(c) | 21-25651 | 1634447.19 | 1774050.44 |
| 21-013(c) | 21-25652 | 1634596.17 | 1773941.09 |
| 21-013(c) | 21-25653 | 1634510.30 | 1774103.28 |
| 21-013(c) | 21-25654 | 1634573.42 | 1774103.28 |
| 21-013(c) | 21-25655 | 1634511.04 | 1774046.77 |
| 21-013(c) | 21-25656 | 1634572.69 | 1774044.57 |
| 21-013(c) | 21-25657 | 1634387.74 | 1773982.92 |
| 21-013(c) | 21-25658 | 1634505.90 | 1773981.45 |
| 21-013(c) | 21-25659 | 1634568.28 | 1773980.72 |
| 21-013(c) | 21-25660 | 1634440.58 | 1773918.33 |
| 21-013(c) | 21-25661 | 1634505.17 | 1773916.13 |
| 21-013(c) | 21-25662 | 1634569.02 | 1773915.40 |
| 21-013(c) | 21-25663 | 1634312.15 | 1773918.33 |
| 21-013(c) | 21-25664 | 1634314.35 | 1774106.21 |
| 21-013(c) | 21-25665 | 1634210.14 | 1774174.47 |
| 21-013(c) | 21-25666 | 1634259.31 | 1774301.43 |
| 21-013(c) | 21-25667 | 1634384.07 | 1774254.46 |
| 21-013(c) | 21-25668 | 1634514.71 | 1774175.93 |
| 21-013(c) | 21-25669 | 1634611.58 | 1774015.94 |
| 21-013(c) | 21-604500 | 1634236.89 | 1774327.82 |
| 21-013(c) | 21-604501 | 1634217.19 | 1774234.20 |
| 21-013(c) | 21-604502 | 1634290.81 | 1774066.04 |
| 21-013(c) | 21-604503 | 1634281.16 | 1773876.47 |
| 21-013(c) | 21-604504 | 1634450.45 | 1774226.47 |
| 21-013(c) | 21-604505 | 1634642.32 | 1774014.03 |
| 21-013(c) | 21-604506 | 1634312.79 | 1773988.12 |
| 21-013(c) | 21-604507 | 1634514.01 | 1773884.04 |
| 21-022(f) | 21-603138 | 1633942.58 | 1774177.34 |
| 21-022(f) | 21-603140 | 1633942.27 | 1774181.83 |
| 21-022(f) | 21-603141 | 1633945.91 | 1774191.00 |
| 21-022(f) | 21-603142 | 1633948.24 | 1774203.97 |
| 21-022(f) | 21-603143 | 1633960.98 | 1774241.88 |
| 21-022(f) | 21-603144 | 1633978.05 | 1774256.01 |
| 21-022(f) | 21-603145 | 1633996.05 | 1774271.48 |
| 21-022(h)-99 | 21-600232 | 1632593.68 | 1773925.82 |
| 21-022(h)-99 | 21-600233 | 1632612.66 | 1773918.37 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-022(h)-99 | 21-600234 | 1632633.17 | 1773911.15 |
| 21-022(h)-99 | 21-600235 | 1632588.94 | 1773894.11 |
| 21-022(h)-99 | 21-600236 | 1632608.83 | 1773891.87 |
| 21-022(h)-99 | 21-600237 | 1632628.86 | 1773883.44 |
| 21-022(h)-99 | 21-600238 | 1632605.32 | 1773963.62 |
| 21-022(h)-99 | 21-600239 | 1632616.04 | 1773960.12 |
| 21-022(h)-99 | 21-600240 | 1632602.17 | 1773960.84 |
| 21-022(h)-99 | 21-600241 | 1632611.17 | 1773956.85 |
| 21-022(h)-99 | 21-600242 | 1632620.97 | 1773955.18 |
| 21-022(h)-99 | 21-600245 | 1632612.44 | 1773963.22 |
| 21-022(h)-99 | 21-601057 | 1632650.21 | 1774083.74 |
| 21-022(h)-99 | 21-601058 | 1632626.15 | 1774013.16 |
| 21-022(h)-99 | 21-601059 | 1632664.70 | 1774132.71 |
| 21-022(h)-99 | 21-601060 | 1632666.64 | 1774135.57 |
| 21-022(h)-99 | 21-601062 | 1632666.26 | 1774133.67 |
| 21-022(h)-99 | 21-601063 | 1632288.93 | 1774255.23 |
| 21-022(h)-99 | 21-605282 | 1632579.95 | 1773968.43 |
| 21-022(h)-99 | 21-605283 | 1632573.71 | 1773924.66 |
| 21-022(h)-99 | 21-605284 | 1632289.40 | 1774245.11 |
| 21-022(h)-99 | 21-609837 | 1632553.71 | 1773924.66 |
| 21-023(a)-99 | 21-601106 | 1632294.21 | 1774413.64 |
| 21-023(a)-99 | 21-601107 | 1632262.82 | 1774421.92 |
| 21-023(a)-99 | 21-601108 | 1632255.10 | 1774424.51 |
| 21-023(a)-99 | 21-601109 | 1632250.49 | 1774426.07 |
| 21-023(a)-99 | 21-601110 | 1632257.62 | 1774420.31 |
| 21-023(a)-99 | 21-601111 | 1632253.37 | 1774408.32 |
| 21-023(a)-99 | 21-601114 | 1632266.69 | 1774473.69 |
| 21-023(a)-99 | 21-601115 | 1632272.02 | 1774498.40 |
| 21-023(a)-99 | 21-601116 | 1632364.78 | 1774397.27 |
| 21-023(a)-99 | 21-601117 | 1632360.23 | 1774406.18 |
| 21-023(a)-99 | 21-601118 | 1632353.14 | 1774412.67 |
| 21-023(a)-99 | 21-601119 | 1632358.23 | 1774416.10 |
| 21-023(a)-99 | 21-601120 | 1632369.16 | 1774444.29 |
| 21-023(a)-99 | 21-601121 | 1632375.34 | 1774377.48 |
| 21-023(a)-99 | 21-601122 | 1632366.57 | 1774355.84 |
| 21-023(a)-99 | 21-601123 | 1632224.13 | 1774359.73 |
| 21-023(a)-99 | 21-601124 | 1632207.47 | 1774313.72 |
| 21-023(a)-99 | 21-601125 | 1632190.53 | 1774269.19 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-023(a)-99 | 21-601126 | 1632179.12 | 1774232.72 |
| 21-023(a)-99 | 21-601127 | 1632166.19 | 1774227.62 |
| 21-023(a)-99 | 21-601128 | 1632258.34 | 1774423.69 |
| 21-023(a)-99 | 21-601129 | 1632363.82 | 1774402.18 |
| 21-023(a)-99 | 21-601130 | 1632356.62 | 1774412.22 |
| 21-023(a)-99 | 21-603010 | 1632141.51 | 1774236.78 |
| 21-023(a)-99 | 21-603011 | 1632357.90 | 1774322.67 |
| 21-023(a)-99 | 21-603012 | 1632342.66 | 1774277.66 |
| 21-023(a)-99 | 21-603013 | 1632327.42 | 1774230.45 |
| 21-023(a)-99 | 21-603014 | 1632312.85 | 1774190.48 |
| 21-023(a)-99 | 21-603015 | 1632341.78 | 1774416.70 |
| 21-023(a)-99 | 21-605271 | 1632364.21 | 1774399.55 |
| 21-024(a) | 21-27320 | 1633079.62 | 1773914.64 |
| 21-024(a) | 21-27321 | 1633091.78 | 1773911.26 |
| 21-024(a) | 21-27322 | 1633074.33 | 1773907.58 |
| 21-024(a) | 21-27323 | 1633084.10 | 1773902.95 |
| 21-024(a) | 21-27325 | 1633047.14 | 1773872.23 |
| 21-024(a) | 21-27326 | 1633069.16 | 1773858.92 |
| 21-024(a) | 21-27327 | 1633077.57 | 1773856.69 |
| 21-024(a) | 21-27328 | 1633017.57 | 1773824.82 |
| 21-024(a) | 21-27329 | 1633037.33 | 1773814.94 |
| 21-024(a) | 21-27330 | 1633056.57 | 1773806.45 |
| 21-024(a) | 21-27331 | 1632996.93 | 1773802.79 |
| 21-024(a) | 21-27332 | 1633020.04 | 1773792.87 |
| 21-024(a) | 21-27333 | 1633038.57 | 1773776.91 |
| 21-024(a) | 21-27335 | 1633096.44 | 1773965.99 |
| 21-024(a) | 21-27336 | 1633091.66 | 1773930.58 |
| 21-024(a) | 21-27338 | 1633097.13 | 1773982.61 |
| 21-024(a) | 21-27339 | 1633116.38 | 1774070.03 |
| 21-024(a) | 21-27340 | 1633106.98 | 1774016.03 |
| 21-024(a) | 21-27341 | 1633096.91 | 1773972.56 |
| 21-024(a) | 21-27342 | 1633087.74 | 1773904.64 |
| 21-024(b) | 21-600498 | 1632407.15 | 1773981.92 |
| 21-024(b) | 21-600499 | 1632424.20 | 1773979.79 |
| 21-024(b) | 21-600500 | 1632442.54 | 1773970.91 |
| 21-024(b) | 21-600501 | 1632395.56 | 1773930.07 |
| 21-024(b) | 21-600502 | 1632413.36 | 1773928.81 |
| 21-024(b) | 21-600503 | 1632433.38 | 1773930.85 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(b) | 21-600504 | 1632438.05 | 1774023.91 |
| 21-024(b) | 21-600505 | 1632447.86 | 1774019.11 |
| 21-024(b) | 21-600512 | 1632442.43 | 1774022.11 |
| 21-024(b) | 21-601086 | 1632492.00 | 1774233.94 |
| 21-024(b) | 21-601087 | 1632487.32 | 1774184.67 |
| 21-024(b) | 21-601088 | 1632482.41 | 1774132.27 |
| 21-024(b) | 21-601089 | 1632474.88 | 1774090.74 |
| 21-024(b) | 21-601090 | 1632465.96 | 1774053.33 |
| 21-024(b) | 21-601091 | 1632467.72 | 1774064.38 |
| 21-024(b) | 21-601093 | 1632466.99 | 1774058.34 |
| 21-024(b) | 21-605285 | 1632418.82 | 1774029.38 |
| 21-024(c), 21-003-99 | 21-25704 | 1633296.67 | 1773983.38 |
| 21-024(c), 21-003-99 | 21-25705 | 1633317.44 | 1773993.56 |
| 21-024(c), 21-003-99 | 21-25706 | 1633308.89 | 1773962.60 |
| 21-024(c), 21-003-99 | 21-25707 | 1633275.49 | 1773973.19 |
| 21-024(c), 21-003-99 | 21-25708 | 1633283.63 | 1774005.37 |
| 21-024(c), 21-003-99 | 21-25709 | 1633358.99 | 1773965.05 |
| 21-024(c), 21-003-99 | 21-25710 | 1633382.21 | 1773969.53 |
| 21-024(c), 21-003-99 | 21-25711 | 1633374.88 | 1773947.53 |
| 21-024(c), 21-003-99 | 21-25712 | 1633357.36 | 1773938.98 |
| 21-024(c), 21-003-99 | 21-25713 | 1633373.25 | 1773985.82 |
| 21-024(c), 21-003-99 | 21-25714 | 1633341.48 | 1774022.48 |
| 21-024(c), 21-003-99 | 21-25715 | 1633438.02 | 1774002.93 |
| 21-024(c), 21-003-99 | 21-25716 | 1633437.61 | 1773908.42 |
| 21-024(c), 21-003-99 | 21-25717 | 1633418.46 | 1773908.83 |
| 21-024(c), 21-003-99 | 21-25718 | 1633410.72 | 1773861.58 |
| 21-024(c), 21-003-99 | 21-25719 | 1633322.74 | 1773890.50 |
| 21-024(c), 21-003-99 | 21-25720 | 1633341.88 | 1773909.24 |
| 21-024(c), 21-003-99 | 21-25721 | 1633303.18 | 1773909.65 |
| 21-024(c), 21-003-99 | 21-25722 | 1633257.56 | 1773881.54 |
| 21-024(c), 21-003-99 | 21-25723 | 1633219.27 | 1773886.02 |
| 21-024(c), 21-003-99 | 21-25724 | 1633264.49 | 1774004.56 |
| 21-024(c), 21-003-99 | 21-25725 | 1633398.10 | 1773863.21 |
| 21-024(c), 21-003-99 | 21-25726 | 1633425.39 | 1773863.21 |
| 21-024(c), 21-003-99 | 21-25727 | 1633412.76 | 1773843.66 |
| 21-024(c), 21-003-99 | 21-25728 | 1633400.13 | 1773842.84 |
| 21-024(c), 21-003-99 | 21-25729 | 1633426.20 | 1773843.25 |
| 21-024(c), 21-003-99 | 21-25730 | 1633413.98 | 1773885.21 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-25731 | 1633399.73 | 1773885.21 |
| 21-024(c), 21-003-99 | 21-25732 | 1633383.43 | 1773885.21 |
| 21-024(c), 21-003-99 | 21-25733 | 1633255.93 | 1773929.20 |
| 21-024(c), 21-003-99 | 21-25734 | 1633267.34 | 1773901.91 |
| 21-024(c), 21-003-99 | 21-25735 | 1633340.25 | 1774039.18 |
| 21-024(c), 21-003-99 | 21-25736 | 1633391.17 | 1774032.67 |
| 21-024(c), 21-003-99 | 21-25737 | 1633456.35 | 1773951.20 |
| 21-024(c), 21-003-99 | 21-25738 | 1633347.18 | 1773979.71 |
| 21-024(c), 21-003-99 | 21-25739 | 1633383.43 | 1773991.12 |
| 21-024(c), 21-003-99 | 21-25740 | 1633399.73 | 1773960.57 |
| 21-024(c), 21-003-99 | 21-25741 | 1633379.77 | 1773924.31 |
| 21-024(c), 21-003-99 | 21-25748 | 1633319.06 | 1773908.09 |
| 21-024(c), 21-003-99 | 21-25750 | 1633353.91 | 1774055.28 |
| 21-024(c), 21-003-99 | 21-25751 | 1633286.22 | 1773958.28 |
| 21-024(c), 21-003-99 | 21-25752 | 1633327.12 | 1773943.06 |
| 21-024(c), 21-003-99 | 21-25753 | 1633313.50 | 1773879.97 |
| 21-024(c), 21-003-99 | 21-25754 | 1633319.58 | 1773912.63 |
| 21-024(c), 21-003-99 | 21-25755 | 1633318.29 | 1773903.25 |
| 21-024(c), 21-003-99 | 21-25757 | 1633305.24 | 1773843.91 |
| 21-024(c), 21-003-99 | 21-25758 | 1633310.26 | 1773843.03 |
| 21-024(c), 21-003-99 | 21-25759 | 1633300.01 | 1773844.56 |
| 21-024(c), 21-003-99 | 21-25760 | 1633303.28 | 1773835.40 |
| 21-024(c), 21-003-99 | 21-25761 | 1633294.78 | 1773836.06 |
| 21-024(c), 21-003-99 | 21-25762 | 1633311.35 | 1773833.01 |
| 21-024(c), 21-003-99 | 21-25763 | 1633300.67 | 1773824.07 |
| 21-024(c), 21-003-99 | 21-25764 | 1633289.76 | 1773824.72 |
| 21-024(c), 21-003-99 | 21-25765 | 1633310.69 | 1773819.92 |
| 21-024(c), 21-003-99 | 21-25766 | 1633295.87 | 1773796.38 |
| 21-024(c), 21-003-99 | 21-25767 | 1633308.51 | 1773793.98 |
| 21-024(c), 21-003-99 | 21-25768 | 1633283.22 | 1773800.30 |
| 21-024(c), 21-003-99 | 21-25769 | 1633287.92 | 1773764.75 |
| 21-024(c), 21-003-99 | 21-25770 | 1633301.87 | 1773761.21 |
| 21-024(c), 21-003-99 | 21-25771 | 1633272.78 | 1773768.68 |
| 21-024(c), 21-003-99 | 21-604461 | 1633346.13 | 1773998.44 |
| 21-024(c), 21-003-99 | 21-604462 | 1633361.16 | 1773954.17 |
| 21-024(c), 21-003-99 | 21-604463 | 1633406.78 | 1773935.13 |
| 21-024(c), 21-003-99 | 21-604464 | 1633406.87 | 1773896.59 |
| 21-024(c), 21-003-99 | 21-604465 | 1633322.94 | 1774018.02 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-604466 | 1633357.97 | 1773977.75 |
| 21-024(c), 21-003-99 | 21-604467 | 1633345.37 | 1773966.81 |
| 21-024(c), 21-003-99 | 21-604468 | 1633304.12 | 1773986.24 |
| 21-024(c), 21-003-99 | 21-604470 | 1633250.95 | 1774012.26 |
| 21-024(c), 21-003-99 | 21-604471 | 1633273.86 | 1774017.15 |
| 21-024(c), 21-003-99 | 21-604472 | 1633298.91 | 1774016.43 |
| 21-024(c), 21-003-99 | 21-604473 | 1633253.25 | 1773984.77 |
| 21-024(c), 21-003-99 | 21-604474 | 1633255.99 | 1773960.17 |
| 21-024(c), 21-003-99 | 21-604475 | 1633298.46 | 1773964.19 |
| 21-024(c), 21-003-99 | 21-604476 | 1633268.76 | 1773953.02 |
| 21-024(c), 21-003-99 | 21-604479 | 1633273.01 | 1773890.32 |
| 21-024(c), 21-003-99 | 21-604480 | 1633206.63 | 1773898.11 |
| 21-024(c), 21-003-99 | 21-604481 | 1633233.13 | 1773898.41 |
| 21-024(c), 21-003-99 | 21-604482 | 1633206.71 | 1773872.42 |
| 21-024(c), 21-003-99 | 21-604483 | 1633232.51 | 1773872.25 |
| 21-024(c), 21-003-99 | 21-604484 | 1633299.15 | 1773849.82 |
| 21-024(c), 21-003-99 | 21-604485 | 1633313.40 | 1773846.65 |
| 21-024(c), 21-003-99 | 21-604486 | 1633291.16 | 1773842.83 |
| 21-024(c), 21-003-99 | 21-604488 | 1633320.43 | 1773834.75 |
| 21-024(c), 21-003-99 | 21-604489 | 1633289.53 | 1773827.46 |
| 21-024(c), 21-003-99 | 21-605289 | 1633380.21 | 1773842.95 |
| 21-024(c), 21-003-99 | 21-605290 | 1633449.57 | 1774019.21 |
| 21-024(c), 21-003-99 | 21-605292 | 1633457.64 | 1773907.96 |
| 21-024(c), 21-003-99 | 21-605293 | 1633281.74 | 1774028.62 |
| 21-024(c), 21-003-99 | 21-605294 | 1633275.00 | 1773838.19 |
| 21-024(c), 21-003-99 | 21-605295 | 1633445.44 | 1773863.27 |
| 21-024(c), 21-003-99 | 21-605366 | 1633394.44 | 1773943.78 |
| 21-024(c), 21-003-99 | 21-605367 | 1633393.28 | 1773911.78 |
| 21-024(c), 21-003-99 | 21-605368 | 1633428.92 | 1773933.62 |
| 21-024(c), 21-003-99 | 21-605369 | 1633321.61 | 1774041.03 |
| 21-024(c), 21-003-99 | 21-605370 | 1633332.79 | 1773994.03 |
| 21-024(c), 21-003-99 | 21-605371 | 1633349.84 | 1773999.81 |
| 21-024(c), 21-003-99 | 21-605372 | 1633323.94 | 1773972.35 |
| 21-024(c), 21-003-99 | 21-605373 | 1633342.46 | 1773947.23 |
| 21-024(c), 21-003-99 | 21-605374 | 1633235.59 | 1773994.13 |
| 21-024(c), 21-003-99 | 21-605375 | 1633238.52 | 1773970.18 |
| 21-024(c), 21-003-99 | 21-605376 | 1633277.13 | 1773988.39 |
| 21-024(c), 21-003-99 | 21-605377 | 1633277.32 | 1773926.88 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-605378 | 1633283.25 | 1773912.13 |
| 21-024(c), 21-003-99 | 21-605379 | 1633297.36 | 1773889.54 |
| 21-024(c), 21-003-99 | 21-605380 | 1633324.45 | 1773929.09 |
| 21-024(c), 21-003-99 | 21-605532 | 1633372.34 | 1773903.56 |
| 21-024(c), 21-003-99 | 21-605533 | 1633419.32 | 1773952.90 |
| 21-024(c), 21-003-99 | 21-605617 | 1633323.82 | 1773912.29 |
| 21-024(c), 21-003-99 | 21-605618 | 1633318.97 | 1773907.67 |
| 21-024(c), 21-003-99 | 21-605619 | 1633314.12 | 1773903.06 |
| 21-024(c), 21-003-99 | 21-605620 | 1633317.90 | 1773902.38 |
| 21-024(c), 21-003-99 | 21-605698 | 1633439.44 | 1773950.36 |
| 21-024(c), 21-003-99 | 21-605699 | 1633434.52 | 1773945.42 |
| 21-024(c), 21-003-99 | 21-605700 | 1633439.42 | 1773945.42 |
| 21-024(c), 21-003-99 | 21-605701 | 1633434.50 | 1773940.53 |
| 21-024(c), 21-003-99 | 21-605702 | 1633444.36 | 1773945.45 |
| 21-024(c), 21-003-99 | 21-605703 | 1633439.45 | 1773940.48 |
| 21-024(c), 21-003-99 | 21-605704 | 1633444.36 | 1773940.54 |
| 21-024(c), 21-003-99 | 21-605707 | 1633419.77 | 1773935.59 |
| 21-024(c), 21-003-99 | 21-605708 | 1633424.70 | 1773935.61 |
| 21-024(c), 21-003-99 | 21-605709 | 1633429.61 | 1773935.60 |
| 21-024(c), 21-003-99 | 21-605710 | 1633419.76 | 1773930.68 |
| 21-024(c), 21-003-99 | 21-605711 | 1633424.68 | 1773930.68 |
| 21-024(c), 21-003-99 | 21-605712 | 1633429.60 | 1773930.68 |
| 21-024(c), 21-003-99 | 21-605713 | 1633424.66 | 1773925.75 |
| 21-024(c), 21-003-99 | 21-605714 | 1633429.59 | 1773925.76 |
| 21-024(c), 21-003-99 | 21-605715 | 1633424.69 | 1773940.53 |
| 21-024(c), 21-003-99 | 21-605716 | 1633439.46 | 1773930.67 |
| 21-024(c), 21-003-99 | 21-605717 | 1633429.59 | 1773920.84 |
| 21-024(c), 21-003-99 | 21-605718 | 1633421.53 | 1773942.77 |
| 21-024(c), 21-003-99 | 21-605719 | 1633442.97 | 1773952.07 |
| 21-024(c), 21-003-99 | 21-605720 | 1633453.31 | 1773932.41 |
| 21-024(c), 21-003-99 | 21-605721 | 1633431.03 | 1773921.02 |
| 21-024(c), 21-003-99 | 21-605722 | 1633219.28 | 1773886.02 |
| 21-024(c), 21-003-99 | 21-605723 | 1633399.43 | 1773951.15 |
| 21-024(c), 21-003-99 | 21-605724 | 1633399.45 | 1773956.08 |
| 21-024(c), 21-003-99 | 21-605727 | 1633389.59 | 1773956.06 |
| 21-024(c), 21-003-99 | 21-605728 | 1633389.59 | 1773951.15 |
| 21-024(c), 21-003-99 | 21-605729 | 1633384.67 | 1773936.39 |
| 21-024(c), 21-003-99 | 21-605732 | 1633404.85 | 1773955.64 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-605734 | 1633412.77 | 1773926.86 |
| 21-024(c), 21-003-99 | 21-605735 | 1633414.83 | 1773925.78 |
| 21-024(c), 21-003-99 | 21-605737 | 1633409.90 | 1773920.85 |
| 21-024(c), 21-003-99 | 21-605738 | 1633405.00 | 1773920.83 |
| 21-024(c), 21-003-99 | 21-605739 | 1633404.99 | 1773915.92 |
| 21-024(c), 21-003-99 | 21-605740 | 1633414.84 | 1773920.84 |
| 21-024(c), 21-003-99 | 21-605741 | 1633409.93 | 1773915.92 |
| 21-024(c), 21-003-99 | 21-605742 | 1633414.84 | 1773915.93 |
| 21-024(c), 21-003-99 | 21-605743 | 1633414.85 | 1773911.02 |
| 21-024(c), 21-003-99 | 21-605744 | 1633409.92 | 1773910.99 |
| 21-024(c), 21-003-99 | 21-605745 | 1633404.99 | 1773911.00 |
| 21-024(c), 21-003-99 | 21-605746 | 1633419.76 | 1773901.17 |
| 21-024(c), 21-003-99 | 21-605747 | 1633419.76 | 1773906.09 |
| 21-024(c), 21-003-99 | 21-605748 | 1633424.69 | 1773906.06 |
| 21-024(c), 21-003-99 | 21-605749 | 1633424.69 | 1773901.19 |
| 21-024(c), 21-003-99 | 21-605751 | 1633429.60 | 1773906.07 |
| 21-024(c), 21-003-99 | 21-605752 | 1633428.69 | 1773903.35 |
| 21-024(c), 21-003-99 | 21-605753 | 1633419.75 | 1773915.93 |
| 21-024(c), 21-003-99 | 21-605754 | 1633409.69 | 1773900.96 |
| 21-024(c), 21-003-99 | 21-605755 | 1633395.18 | 1773925.77 |
| 21-024(c), 21-003-99 | 21-605756 | 1633394.28 | 1773927.57 |
| 21-024(c), 21-003-99 | 21-605759 | 1633380.40 | 1773915.93 |
| 21-024(c), 21-003-99 | 21-605764 | 1633389.53 | 1773894.75 |
| 21-024(c), 21-003-99 | 21-605765 | 1633390.24 | 1773896.24 |
| 21-024(c), 21-003-99 | 21-605766 | 1633390.23 | 1773906.10 |
| 21-024(c), 21-003-99 | 21-605768 | 1633390.23 | 1773901.17 |
| 21-024(c), 21-003-99 | 21-605769 | 1633395.15 | 1773901.17 |
| 21-024(c), 21-003-99 | 21-605770 | 1633400.08 | 1773901.17 |
| 21-024(c), 21-003-99 | 21-605771 | 1633400.08 | 1773906.08 |
| 21-024(c), 21-003-99 | 21-605772 | 1633395.17 | 1773915.94 |
| 21-024(c), 21-003-99 | 21-605776 | 1633285.39 | 1773937.79 |
| 21-024(c), 21-003-99 | 21-605777 | 1633300.15 | 1773947.62 |
| 21-024(c), 21-003-99 | 21-607149 | 1633283.58 | 1773929.79 |
| 21-024(c), 21-003-99 | 21-607150 | 1633270.25 | 1773946.21 |
| 21-024(c), 21-003-99 | 21-607151 | 1633289.11 | 1773956.08 |
| 21-024(c), 21-003-99 | 21-607153 | 1633314.92 | 1773947.61 |
| 21-024(c), 21-003-99 | 21-607687 | 1633280.46 | 1773957.47 |
| 21-024(c), 21-003-99 | 21-607688 | 1633280.47 | 1773952.53 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-607689 | 1633285.39 | 1773952.54 |
| 21-024(c), 21-003-99 | 21-607690 | 1633290.31 | 1773952.55 |
| 21-024(c), 21-003-99 | 21-607691 | 1633280.46 | 1773947.62 |
| 21-024(c), 21-003-99 | 21-607692 | 1633285.39 | 1773947.62 |
| 21-024(c), 21-003-99 | 21-607693 | 1633290.31 | 1773947.62 |
| 21-024(c), 21-003-99 | 21-607694 | 1633270.62 | 1773942.70 |
| 21-024(c), 21-003-99 | 21-607695 | 1633275.54 | 1773942.70 |
| 21-024(c), 21-003-99 | 21-607699 | 1633275.56 | 1773937.78 |
| 21-024(c), 21-003-99 | 21-607700 | 1633290.31 | 1773927.95 |
| 21-024(c), 21-003-99 | 21-607705 | 1633295.24 | 1773932.85 |
| 21-024(c), 21-003-99 | 21-607706 | 1633295.24 | 1773937.78 |
| 21-024(c), 21-003-99 | 21-607707 | 1633300.15 | 1773937.77 |
| 21-024(c), 21-003-99 | 21-607709 | 1633379.75 | 1773956.11 |
| 21-024(c), 21-003-99 | 21-607710 | 1633369.90 | 1773941.32 |
| 21-024(c), 21-003-99 | 21-607711 | 1633381.69 | 1773959.11 |
| 21-024(c), 21-003-99 | 21-607712 | 1633369.91 | 1773956.06 |
| 21-024(c), 21-003-99 | 21-607713 | 1633369.91 | 1773951.17 |
| 21-024(c), 21-003-99 | 21-607714 | 1633366.49 | 1773949.97 |
| 21-024(c), 21-003-99 | 21-607715 | 1633374.84 | 1773946.24 |
| 21-024(c), 21-003-99 | 21-607718 | 1633374.85 | 1773941.31 |
| 21-024(c), 21-003-99 | 21-607719 | 1633379.76 | 1773941.31 |
| 21-024(c), 21-003-99 | 21-607722 | 1633376.07 | 1773935.14 |
| 21-024(c), 21-003-99 | 21-607723 | 1633295.23 | 1773913.18 |
| 21-024(c), 21-003-99 | 21-607724 | 1633300.15 | 1773913.17 |
| 21-024(c), 21-003-99 | 21-607725 | 1633305.08 | 1773913.18 |
| 21-024(c), 21-003-99 | 21-607726 | 1633308.72 | 1773833.76 |
| 21-024(c), 21-003-99 | 21-607727 | 1633307.02 | 1773840.51 |
| 21-024(c), 21-003-99 | 21-607728 | 1633306.27 | 1773834.02 |
| 21-024(c), 21-003-99 | 21-607729 | 1633293.03 | 1773909.81 |
| 21-024(c), 21-003-99 | 21-607730 | 1633295.24 | 1773908.25 |
| 21-024(c), 21-003-99 | 21-607731 | 1633300.14 | 1773908.27 |
| 21-024(c), 21-003-99 | 21-607733 | 1633295.24 | 1773903.35 |
| 21-024(c), 21-003-99 | 21-607738 | 1633300.16 | 1773918.10 |
| 21-024(c), 21-003-99 | 21-607741 | 1633321.40 | 1773960.54 |
| 21-024(c), 21-003-99 | 21-607742 | 1633344.45 | 1773967.30 |
| 21-024(c), 21-003-99 | 21-607744 | 1633314.92 | 1773967.30 |
| 21-024(c), 21-003-99 | 21-607745 | 1633354.26 | 1773972.19 |
| 21-024(c), 21-003-99 | 21-607746 | 1633354.28 | 1773967.31 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-607747 | 1633354.26 | 1773962.38 |
| 21-024(c), 21-003-99 | 21-607748 | 1633339.52 | 1773977.12 |
| 21-024(c), 21-003-99 | 21-607749 | 1633349.36 | 1773957.46 |
| 21-024(c), 21-003-99 | 21-607750 | 1633344.43 | 1773957.46 |
| 21-024(c), 21-003-99 | 21-607751 | 1633334.58 | 1773972.22 |
| 21-024(c), 21-003-99 | 21-607753 | 1633334.59 | 1773962.39 |
| 21-024(c), 21-003-99 | 21-607754 | 1633329.67 | 1773972.21 |
| 21-024(c), 21-003-99 | 21-607756 | 1633329.67 | 1773962.37 |
| 21-024(c), 21-003-99 | 21-607763 | 1633314.90 | 1773977.13 |
| 21-024(c), 21-003-99 | 21-607764 | 1633334.60 | 1774026.34 |
| 21-024(c), 21-003-99 | 21-607765 | 1633329.67 | 1774026.35 |
| 21-024(c), 21-003-99 | 21-607766 | 1633324.76 | 1774026.33 |
| 21-024(c), 21-003-99 | 21-607767 | 1633334.59 | 1774021.41 |
| 21-024(c), 21-003-99 | 21-607768 | 1633329.67 | 1774021.42 |
| 21-024(c), 21-003-99 | 21-607769 | 1633324.76 | 1774021.43 |
| 21-024(c), 21-003-99 | 21-607770 | 1633339.51 | 1774026.34 |
| 21-024(c), 21-003-99 | 21-607771 | 1633340.54 | 1774021.23 |
| 21-024(c), 21-003-99 | 21-607772 | 1633323.48 | 1774029.14 |
| 21-024(c), 21-003-99 | 21-607773 | 1633314.92 | 1774026.34 |
| 21-024(c), 21-003-99 | 21-607774 | 1633339.50 | 1774016.50 |
| 21-024(c), 21-003-99 | 21-607775 | 1633339.51 | 1774011.58 |
| 21-024(c), 21-003-99 | 21-607776 | 1633339.51 | 1774006.66 |
| 21-024(c), 21-003-99 | 21-607777 | 1633340.55 | 1774008.19 |
| 21-024(c), 21-003-99 | 21-607779 | 1633314.91 | 1774016.51 |
| 21-024(c), 21-003-99 | 21-607780 | 1633329.68 | 1774011.57 |
| 21-024(c), 21-003-99 | 21-607781 | 1633319.83 | 1774016.50 |
| 21-024(c), 21-003-99 | 21-607782 | 1633310.03 | 1774011.57 |
| 21-024(c), 21-003-99 | 21-607784 | 1633319.83 | 1774011.59 |
| 21-024(c), 21-003-99 | 21-607787 | 1633329.67 | 1774001.74 |
| 21-024(c), 21-003-99 | 21-607788 | 1633306.85 | 1774020.78 |
| 21-024(c), 21-003-99 | 21-607790 | 1633334.59 | 1773996.82 |
| 21-024(c), 21-003-99 | 21-607792 | 1633334.59 | 1773991.89 |
| 21-024(c), 21-003-99 | 21-607795 | 1633339.52 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607796 | 1633344.44 | 1773986.98 |
| 21-024(c), 21-003-99 | 21-607797 | 1633344.44 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607798 | 1633349.35 | 1773986.97 |
| 21-024(c), 21-003-99 | 21-607799 | 1633349.35 | 1773982.05 |
| 21-024(c), 21-003-99 | 21-607800 | 1633344.42 | 1773977.13 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-607801 | 1633349.36 | 1773977.14 |
| 21-024(c), 21-003-99 | 21-607802 | 1633354.27 | 1773982.05 |
| 21-024(c), 21-003-99 | 21-607803 | 1633349.19 | 1773989.74 |
| 21-024(c), 21-003-99 | 21-607804 | 1633356.14 | 1773972.79 |
| 21-024(c), 21-003-99 | 21-607812 | 1633314.92 | 1773996.83 |
| 21-024(c), 21-003-99 | 21-607813 | 1633305.07 | 1774006.67 |
| 21-024(c), 21-003-99 | 21-607814 | 1633309.99 | 1774006.66 |
| 21-024(c), 21-003-99 | 21-607815 | 1633314.92 | 1774006.66 |
| 21-024(c), 21-003-99 | 21-607816 | 1633319.83 | 1774006.65 |
| 21-024(c), 21-003-99 | 21-607817 | 1633324.76 | 1774006.66 |
| 21-024(c), 21-003-99 | 21-607818 | 1633305.07 | 1774001.74 |
| 21-024(c), 21-003-99 | 21-607819 | 1633310.00 | 1773991.90 |
| 21-024(c), 21-003-99 | 21-607820 | 1633314.90 | 1773986.98 |
| 21-024(c), 21-003-99 | 21-607822 | 1633324.75 | 1774001.74 |
| 21-024(c), 21-003-99 | 21-607824 | 1633324.75 | 1773991.91 |
| 21-024(c), 21-003-99 | 21-607825 | 1633324.76 | 1773996.83 |
| 21-024(c), 21-003-99 | 21-607826 | 1633260.79 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607827 | 1633265.70 | 1773986.99 |
| 21-024(c), 21-003-99 | 21-607828 | 1633260.79 | 1773986.98 |
| 21-024(c), 21-003-99 | 21-607829 | 1633255.86 | 1773986.97 |
| 21-024(c), 21-003-99 | 21-607830 | 1633255.88 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607831 | 1633255.87 | 1773977.14 |
| 21-024(c), 21-003-99 | 21-607832 | 1633255.86 | 1773972.22 |
| 21-024(c), 21-003-99 | 21-607833 | 1633260.57 | 1773977.23 |
| 21-024(c), 21-003-99 | 21-607834 | 1633250.95 | 1773977.15 |
| 21-024(c), 21-003-99 | 21-607835 | 1633250.94 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607836 | 1633250.94 | 1773986.97 |
| 21-024(c), 21-003-99 | 21-607837 | 1633246.03 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607838 | 1633241.44 | 1773980.04 |
| 21-024(c), 21-003-99 | 21-607839 | 1633246.03 | 1773991.90 |
| 21-024(c), 21-003-99 | 21-607840 | 1633255.87 | 1773991.90 |
| 21-024(c), 21-003-99 | 21-607841 | 1633265.15 | 1774016.46 |
| 21-024(c), 21-003-99 | 21-607842 | 1633260.79 | 1774016.49 |
| 21-024(c), 21-003-99 | 21-607843 | 1633260.78 | 1774011.59 |
| 21-024(c), 21-003-99 | 21-607844 | 1633260.80 | 1774006.67 |
| 21-024(c), 21-003-99 | 21-607845 | 1633255.86 | 1774006.65 |
| 21-024(c), 21-003-99 | 21-607846 | 1633251.05 | 1774000.96 |
| 21-024(c), 21-003-99 | 21-607847 | 1633260.79 | 1774001.74 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-607848 | 1633270.63 | 1774011.57 |
| 21-024(c), 21-003-99 | 21-607849 | 1633265.72 | 1774001.74 |
| 21-024(c), 21-003-99 | 21-607850 | 1633265.71 | 1773996.82 |
| 21-024(c), 21-003-99 | 21-607851 | 1633270.63 | 1774001.74 |
| 21-024(c), 21-003-99 | 21-607852 | 1633270.62 | 1773996.82 |
| 21-024(c), 21-003-99 | 21-607853 | 1633265.71 | 1773991.89 |
| 21-024(c), 21-003-99 | 21-607855 | 1633275.54 | 1773996.83 |
| 21-024(c), 21-003-99 | 21-607856 | 1633270.63 | 1773991.90 |
| 21-024(c), 21-003-99 | 21-607857 | 1633275.55 | 1773991.90 |
| 21-024(c), 21-003-99 | 21-607858 | 1633270.63 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607859 | 1633285.38 | 1773991.90 |
| 21-024(c), 21-003-99 | 21-607860 | 1633280.48 | 1773986.98 |
| 21-024(c), 21-003-99 | 21-607861 | 1633280.47 | 1773982.06 |
| 21-024(c), 21-003-99 | 21-607862 | 1633285.39 | 1773986.97 |
| 21-024(c), 21-003-99 | 21-607863 | 1633290.31 | 1773986.99 |
| 21-024(c), 21-003-99 | 21-607864 | 1633290.30 | 1773982.05 |
| 21-024(c), 21-003-99 | 21-607865 | 1633285.39 | 1773982.07 |
| 21-024(c), 21-003-99 | 21-607866 | 1633282.58 | 1773977.22 |
| 21-024(c), 21-003-99 | 21-607867 | 1633285.39 | 1773977.15 |
| 21-024(c), 21-003-99 | 21-607868 | 1633290.31 | 1773977.13 |
| 21-024(c), 21-003-99 | 21-607870 | 1633295.23 | 1773996.83 |
| 21-024(c), 21-003-99 | 21-607871 | 1633295.23 | 1774001.74 |
| 21-024(c), 21-003-99 | 21-607872 | 1633300.15 | 1774006.67 |
| 21-024(c), 21-003-99 | 21-607873 | 1633300.15 | 1774001.72 |
| 21-024(c), 21-003-99 | 21-607874 | 1633296.05 | 1774003.52 |
| 21-024(c), 21-003-99 | 21-607875 | 1633300.15 | 1773996.82 |
| 21-024(c), 21-003-99 | 21-607876 | 1633305.07 | 1773996.82 |
| 21-024(c), 21-003-99 | 21-607879 | 1633309.98 | 1773986.96 |
| 21-024(c), 21-003-99 | 21-607886 | 1633300.14 | 1773967.30 |
| 21-024(c), 21-003-99 | 21-607887 | 1633295.22 | 1773972.22 |
| 21-024(c), 21-003-99 | 21-607888 | 1633300.14 | 1773972.21 |
| 21-024(c), 21-003-99 | 21-607889 | 1633295.23 | 1773967.30 |
| 21-024(c), 21-003-99 | 21-607890 | 1633295.22 | 1773962.37 |
| 21-024(c), 21-003-99 | 21-607891 | 1633300.14 | 1773962.38 |
| 21-024(c), 21-003-99 | 21-607893 | 1633290.31 | 1773967.29 |
| 21-024(c), 21-003-99 | 21-607894 | 1633290.31 | 1773957.47 |
| 21-024(c), 21-003-99 | 21-607895 | 1633300.16 | 1773957.46 |
| 21-024(c), 21-003-99 | 21-607897 | 1633275.55 | 1773947.62 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(c), 21-003-99 | 21-607898 | 1633294.09 | 1773831.06 |
| 21-024(c), 21-003-99 | 21-607901 | 1633299.00 | 1773840.88 |
| 21-024(c), 21-003-99 | 21-607902 | 1633292.24 | 1773841.46 |
| 21-024(c), 21-003-99 | 21-607904 | 1633303.92 | 1773850.74 |
| 21-024(c), 21-003-99 | 21-607905 | 1633299.00 | 1773850.73 |
| 21-024(c), 21-003-99 | 21-607906 | 1633311.01 | 1773849.73 |
| 21-024(c), 21-003-99 | 21-607907 | 1633313.76 | 1773845.80 |
| 21-024(c), 21-003-99 | 21-607908 | 1633313.77 | 1773840.89 |
| 21-024(c), 21-003-99 | 21-607909 | 1633314.97 | 1773837.83 |
| 21-024(c), 21-003-99 | 21-607910 | 1633313.76 | 1773835.98 |
| 21-024(c), 21-003-99 | 21-607911 | 1633310.47 | 1773829.86 |
| 21-024(c), 21-003-99 | 21-607912 | 1633312.96 | 1773915.00 |
| 21-024(c), 21-003-99 | 21-607918 | 1633414.84 | 1773906.09 |
| 21-024(c), 21-003-99 | 21-607920 | 1633394.52 | 1773946.24 |
| 21-024(c), 21-003-99 | 21-607921 | 1633394.51 | 1773931.48 |
| 21-024(c), 21-003-99 | 21-607923 | 1633400.90 | 1773929.43 |
| 21-024(c), 21-003-99 | 21-608084 | 1633309.98 | 1773903.34 |
| 21-024(c), 21-003-99 | 21-608087 | 1633305.07 | 1773927.94 |
| 21-024(c), 21-003-99 | 21-608088 | 1633309.98 | 1773937.78 |
| 21-024(c), 21-003-99 | 21-608092 | 1633345.88 | 1773954.85 |
| 21-024(c), 21-003-99 | 21-608095 | 1633276.30 | 1774002.68 |
| 21-024(c), 21-003-99 | 21-608096 | 1633334.59 | 1773982.07 |
| 21-024(c), 21-003-99 | 21-608103 | 1633300.16 | 1773986.97 |
| 21-024(c), 21-003-99 | 21-608105 | 1633314.91 | 1774021.43 |
| 21-024(c), 21-003-99 | 21-608835 | 1633305.86 | 1773951.74 |
| 21-024(c), 21-003-99 | 21-608836 | 1633373.23 | 1773915.74 |
| 21-024(c), 21-003-99 | 21-608837 | 1633304.69 | 1773895.16 |
| 21-024(c), 21-003-99 | 21-608839 | 1633299.83 | 1773830.15 |
| 21-024(c), 21-003-99 | 21-608843 | 1633303.68 | 1773846.40 |
| 21-024(c), 21-003-99 | 21-608845 | 1633317.02 | 1773917.98 |
| 21-024(c), 21-003-99 | 21-608847 | 1633324.76 | 1773937.78 |
| 21-024(d) | 19-601285 | 1631880.78 | 1774239.09 |
| 21-024(d) | 21-27365 | 1631870.06 | 1774207.87 |
| 21-024(d) | 21-27366 | 1631814.81 | 1774175.84 |
| 21-024(d) | 21-27367 | 1631837.36 | 1774169.80 |
| 21-024(d) | 21-27368 | 1631855.44 | 1774163.50 |
| 21-024(d) | 21-27369 | 1631774.46 | 1774124.87 |
| 21-024(d) | 21-27370 | 1631794.14 | 1774120.82 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(d) | 21-27371 | 1631808.03 | 1774106.25 |
| 21-024(d) | 21-27372 | 1631866.95 | 1774213.66 |
| 21-024(d) | 21-27373 | 1631878.07 | 1774212.12 |
| 21-024(d) | 21-601270 | 1631971.69 | 1774536.18 |
| 21-024(d) | 21-601271 | 1631957.82 | 1774491.77 |
| 21-024(d) | 21-601272 | 1631878.38 | 1774227.40 |
| 21-024(d) | 21-601273 | 1631883.49 | 1774247.57 |
| 21-024(d) | 21-601274 | 1631939.21 | 1774432.17 |
| 21-024(d) | 21-601275 | 1631932.02 | 1774408.31 |
| 21-024(d) | 21-601276 | 1631937.23 | 1774385.69 |
| 21-024(d) | 21-601277 | 1631915.79 | 1774327.96 |
| 21-024(d) | 21-601278 | 1631923.48 | 1774309.96 |
| 21-024(d) | 21-601279 | 1631941.80 | 1774357.66 |
| 21-024(d) | 21-601280 | 1631955.82 | 1774403.80 |
| 21-024(d) | 21-601281 | 1631973.71 | 1774442.47 |
| 21-024(d) | 21-601282 | 1631984.92 | 1774438.94 |
| 21-024(d) | 21-601283 | 1631979.86 | 1774426.03 |
| 21-024(d) | 21-601284 | 1632015.90 | 1774447.12 |
| 21-024(d) | 21-605286 | 1631847.68 | 1774218.97 |
| 21-024(e) | 21-27242 | 1631528.55 | 1774493.76 |
| 21-024(e) | 21-27243 | 1631534.56 | 1774500.73 |
| 21-024(e) | 21-27244 | 1631525.05 | 1774484.09 |
| 21-024(e) | 21-27245 | 1631532.58 | 1774486.42 |
| 21-024(e) | 21-27246 | 1631541.53 | 1774490.55 |
| 21-024(e) | 21-27247 | 1631517.75 | 1774453.93 |
| 21-024(e) | 21-27248 | 1631538.02 | 1774461.63 |
| 21-024(e) | 21-27249 | 1631556.76 | 1774466.58 |
| 21-024(e) | 21-27250 | 1631560.50 | 1774352.08 |
| 21-024(e) | 21-27251 | 1631573.71 | 1774354.02 |
| 21-024(e) | 21-27252 | 1631591.92 | 1774344.99 |
| 21-024(e) | 21-27253 | 1631555.91 | 1774224.67 |
| 21-024(e) | 21-27254 | 1631574.66 | 1774226.01 |
| 21-024(e) | 21-27255 | 1631593.15 | 1774217.95 |
| 21-024(e) | 21-27259 | 1631520.58 | 1774513.80 |
| 21-024(e) | 21-27260 | 1631531.83 | 1774495.44 |
| 21-024(e) | 21-27263 | 1631357.09 | 1774762.64 |
| 21-024(e) | 21-27264 | 1631383.92 | 1774720.24 |
| 21-024(e) | 21-27265 | 1631410.54 | 1774678.07 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(e) | 21-27266 | 1631437.87 | 1774636.17 |
| 21-024(e) | 21-27267 | 1631464.70 | 1774594.04 |
| 21-024(e) | 21-27268 | 1631493.08 | 1774552.58 |
| 21-024(e) | 21-27269 | 1631514.60 | 1774520.61 |
| 21-024(e) | 21-27270 | 1631526.48 | 1774504.79 |
| 21-024(e) | 21-27271 | 1631531.68 | 1774567.54 |
| 21-024(e) | 21-27272 | 1631549.95 | 1774610.91 |
| 21-024(e) | 21-27273 | 1631550.85 | 1774643.17 |
| 21-024(e) | 21-604508 | 1631607.43 | 1774203.95 |
| 21-024(g) | 21-27592 | 1631854.79 | 1775059.60 |
| 21-024(g) | 21-27593 | 1631844.31 | 1775063.16 |
| 21-024(g) | 21-27594 | 1631843.32 | 1775073.62 |
| 21-024(g) | 21-27595 | 1631852.20 | 1775070.56 |
| 21-024(g) | 21-27596 | 1631863.61 | 1775067.49 |
| 21-024(g) | 21-27597 | 1631841.18 | 1775112.20 |
| 21-024(g) | 21-27598 | 1631859.88 | 1775089.87 |
| 21-024(g) | 21-27599 | 1631885.77 | 1775086.42 |
| 21-024(g) | 21-27600 | 1631842.66 | 1774992.58 |
| 21-024(g) | 21-27601 | 1631850.02 | 1774990.26 |
| 21-024(g) | 21-27602 | 1631844.83 | 1775023.81 |
| 21-024(g) | 21-27603 | 1631852.91 | 1775022.50 |
| 21-024(g) | 21-27604 | 1631861.51 | 1775019.15 |
| 21-024(g) | 21-27605 | 1631840.75 | 1775042.85 |
| 21-024(g) | 21-27606 | 1631782.95 | 1775005.91 |
| 21-024(g) | 21-27607 | 1631699.34 | 1775053.72 |
| 21-024(g) | 21-27608 | 1631850.41 | 1775061.80 |
| 21-024(g) | 21-27609 | 1631812.96 | 1774960.65 |
| 21-024(g) | 21-27610 | 1631832.99 | 1774951.86 |
| 21-024(g) | 21-27611 | 1631846.18 | 1774989.76 |
| 21-024(g) | 21-27612 | 1631859.90 | 1775035.88 |
| 21-024(g) | 21-27613 | 1631877.53 | 1775029.38 |
| 21-024(g) | 21-27614 | 1631826.45 | 1774926.25 |
| 21-024(g) | 21-27615 | 1631803.17 | 1774935.42 |
| 21-024(g) | 21-27616 | 1631834.32 | 1774923.65 |
| 21-024(g) | 21-27617 | 1631874.95 | 1774908.41 |
| 21-024(g) | 21-27618 | 1631880.98 | 1774926.81 |
| 21-024(g) | 21-27619 | 1631825.51 | 1774995.46 |
| 21-024(g) | 21-27620 | 1631843.65 | 1775044.33 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(g) | 21-27621 | 1631847.02 | 1775053.86 |
| 21-024(g) | 21-27622 | 1631786.68 | 1774892.53 |
| 21-024(g) | 21-27623 | 1631780.95 | 1774871.45 |
| 21-024(g) | 21-27625 | 1631703.19 | 1775063.06 |
| 21-024(g) | 21-27626 | 1631758.99 | 1775049.80 |
| 21-024(g) | 21-27627 | 1631844.96 | 1775048.13 |
| 21-024(g) | 21-27628 | 1631756.01 | 1775006.72 |
| 21-024(g) | 21-27629 | 1631699.28 | 1775043.87 |
| 21-024(g) | 21-27630 | 1631660.66 | 1775087.89 |
| 21-024(g) | 21-603268 | 1631807.49 | 1774781.23 |
| 21-024(g) | 21-605245 | 1631868.18 | 1775108.08 |
| 21-024(g) | 21-605246 | 1631898.78 | 1775101.48 |
| 21-024(g) | 21-605247 | 1631888.38 | 1774945.45 |
| 21-024(g) | 21-605248 | 1631789.93 | 1775035.69 |
| 21-024(g) | 21-605249 | 1631897.52 | 1775028.08 |
| 21-024(g) | 21-605250 | 1631860.06 | 1774990.04 |
| 21-024(h) | 21-600059 | 1633700.72 | 1774306.53 |
| 21-024(h) | 21-600060 | 1633691.88 | 1774352.35 |
| 21-024(h) | 21-600061 | 1633694.84 | 1774387.88 |
| 21-024(h) | 21-600062 | 1633706.04 | 1774445.27 |
| 21-024(h) | 21-600075 | 1633702.58 | 1774450.35 |
| 21-024(h) | 21-600076 | 1633710.59 | 1774450.85 |
| 21-024(h) | 21-600077 | 1633701.74 | 1774462.91 |
| 21-024(h) | 21-600078 | 1633710.10 | 1774453.58 |
| 21-024(h) | 21-600079 | 1633715.79 | 1774448.38 |
| 21-024(h) | 21-600080 | 1633702.16 | 1774479.23 |
| 21-024(h) | 21-600081 | 1633720.46 | 1774463.33 |
| 21-024(h) | 21-600082 | 1633739.88 | 1774478.73 |
| 21-024(h) | 21-600083 | 1633703.37 | 1774514.70 |
| 21-024(h) | 21-600084 | 1633718.09 | 1774508.52 |
| 21-024(h) | 21-600085 | 1633730.85 | 1774500.59 |
| 21-024(h) | 21-601095 | 1633701.40 | 1774298.75 |
| 21-024(h) | 21-601096 | 1633732.09 | 1774263.14 |
| 21-024(h) | 21-601097 | 1633697.48 | 1774256.94 |
| 21-024(h) | 21-601098 | 1633691.40 | 1774200.08 |
| 21-024(h) | 21-601099 | 1633759.73 | 1774228.43 |
| 21-024(h) | 21-601100 | 1633832.83 | 1774214.94 |
| 21-024(h) | 21-601101 | 1633868.44 | 1774163.08 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(h) | 21-601102 | 1633863.12 | 1774142.00 |
| 21-024(h) | 21-601104 | 1633701.40 | 1774302.78 |
| 21-024(h) | 21-605241 | 1633691.07 | 1774495.88 |
| 21-024(h) | 21-605242 | 1633682.05 | 1774479.28 |
| 21-024(h) | 21-605243 | 1633755.51 | 1774514.64 |
| 21-024(h) | 21-605244 | 1633717.61 | 1774535.59 |
| 21-024(i) | 21-603022 | 1634014.38 | 1773947.16 |
| 21-024(i) | 21-603023 | 1634049.71 | 1773905.43 |
| 21-024(i) | 21-603024 | 1634076.26 | 1773871.73 |
| 21-024(i) | 21-603025 | 1634097.76 | 1773822.31 |
| 21-024(j) | 21-600514 | 1633663.20 | 1773823.35 |
| 21-024(j) | 21-600515 | 1633674.11 | 1773816.91 |
| 21-024(j) | 21-600516 | 1633652.79 | 1773738.87 |
| 21-024(j) | 21-600517 | 1633668.40 | 1773740.47 |
| 21-024(j) | 21-600518 | 1633644.95 | 1773716.24 |
| 21-024(j) | 21-600519 | 1633665.42 | 1773709.36 |
| 21-024(j) | 21-600524 | 1633669.41 | 1773816.45 |
| 21-024(j) | 21-601290 | 1633696.34 | 1773972.32 |
| 21-024(j) | 21-601291 | 1633692.36 | 1773966.35 |
| 21-024(j) | 21-601292 | 1633682.11 | 1773912.56 |
| 21-024(j) | 21-601293 | 1633676.08 | 1773867.74 |
| 21-024(j) | 21-601294 | 1633669.14 | 1773818.13 |
| 21-024(j) | 21-601295 | 1633732.48 | 1774035.58 |
| 21-024(j) | 21-601296 | 1633710.08 | 1773990.61 |
| 21-024(j) | 21-601297 | 1633738.28 | 1774033.75 |
| 21-024(j) | 21-601298 | 1633743.55 | 1774040.97 |
| 21-024(j) | 21-601299 | 1633749.90 | 1774036.85 |
| 21-024(j) | 21-601300 | 1633752.34 | 1774041.57 |
| 21-024(j) | 21-601301 | 1633750.41 | 1774056.09 |
| 21-024(j) | 21-601302 | 1633694.22 | 1773968.84 |
| 21-024(j) | 21-605287 | 1633744.41 | 1774034.37 |
| 21-024(k) | 21-600843 | 1633697.44 | 1773773.49 |
| 21-024(k) | 21-600844 | 1633707.20 | 1773769.32 |
| 21-024(k) | 21-600845 | 1633711.99 | 1773772.17 |
| 21-024(k) | 21-600846 | 1633719.91 | 1773772.91 |
| 21-024(k) | 21-600847 | 1633680.34 | 1773737.31 |
| 21-024(k) | 21-600848 | 1633695.24 | 1773738.17 |
| 21-024(k) | 21-600849 | 1633712.08 | 1773738.27 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(k) | 21-600850 | 1633731.95 | 1773733.08 |
| 21-024(k) | 21-600851 | 1633682.19 | 1773712.90 |
| 21-024(k) | 21-600852 | 1633698.41 | 1773708.85 |
| 21-024(k) | 21-600853 | 1633712.04 | 1773705.92 |
| 21-024(k) | 21-600854 | 1633727.14 | 1773705.01 |
| 21-024(k) | 21-600859 | 1633700.30 | 1773771.17 |
| 21-024(k) | 21-600860 | 1633715.46 | 1773771.53 |
| 21-024(k) | 21-603037 | 1633898.39 | 1773997.79 |
| 21-024(k) | 21-603038 | 1633892.52 | 1773941.18 |
| 21-024(k) | 21-603039 | 1633886.33 | 1773893.07 |
| 21-024(k) | 21-603040 | 1633826.90 | 1773859.15 |
| 21-024(k) | 21-603041 | 1633737.49 | 1773823.49 |
| 21-024(k) | 21-603042 | 1633732.49 | 1773823.90 |
| 21-024(k) | 21-603043 | 1633755.86 | 1773810.94 |
| 21-024(k) | 21-603044 | 1633715.73 | 1773846.91 |
| 21-024(k) | 21-603045 | 1633684.41 | 1773828.89 |
| 21-024(k) | 21-603046 | 1633761.61 | 1773820.11 |
| 21-024(k) | 21-603047 | 1633691.73 | 1773782.85 |
| 21-024(k) | 21-603054 | 1633753.19 | 1773818.96 |
| 21-024(k) | 21-603056 | 1633715.18 | 1773823.64 |
| 21-024(l)-99 | 21-27439 | 1632220.94 | 1774812.74 |
| 21-024(l)-99 | 21-27440 | 1632213.44 | 1774803.17 |
| 21-024(l)-99 | 21-27441 | 1632223.11 | 1774801.50 |
| 21-024(l)-99 | 21-27442 | 1632210.64 | 1774814.21 |
| 21-024(l)-99 | 21-27443 | 1632230.20 | 1774810.51 |
| 21-024(l)-99 | 21-27514 | 1632179.75 | 1774704.01 |
| 21-024(l)-99 | 21-27515 | 1632182.53 | 1774714.62 |
| 21-024(l)-99 | 21-27516 | 1632220.65 | 1774797.21 |
| 21-024(l)-99 | 21-27517 | 1632205.81 | 1774835.32 |
| 21-024(l)-99 | 21-27518 | 1632225.52 | 1774831.63 |
| 21-024(l)-99 | 21-27519 | 1632244.78 | 1774826.22 |
| 21-024(l)-99 | 21-27520 | 1632174.11 | 1774685.62 |
| 21-024(l)-99 | 21-27521 | 1632224.80 | 1774669.76 |
| 21-024(l)-99 | 21-27522 | 1632179.94 | 1774683.61 |
| 21-024(l)-99 | 21-27523 | 1632217.85 | 1774677.24 |
| 21-024(l)-99 | 21-27524 | 1632177.94 | 1774699.92 |
| 21-024(l)-99 | 21-27525 | 1632186.25 | 1774703.22 |
| 21-024(l)-99 | 21-27526 | 1632165.94 | 1774693.70 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(l)-99 | 21-27530 | 1632243.04 | 1774664.25 |
| 21-024(l)-99 | 21-27533 | 1632280.19 | 1774823.68 |
| 21-024(l)-99 | 21-27534 | 1632245.71 | 1774663.22 |
| 21-024(l)-99 | 21-27535 | 1632235.81 | 1774677.95 |
| 21-024(l)-99 | 21-27536 | 1632245.37 | 1774674.72 |
| 21-024(l)-99 | 21-27537 | 1632249.77 | 1774673.53 |
| 21-024(l)-99 | 21-27538 | 1632209.20 | 1774705.39 |
| 21-024(l)-99 | 21-27539 | 1632229.08 | 1774698.75 |
| 21-024(l)-99 | 21-27540 | 1632248.04 | 1774693.42 |
| 21-024(l)-99 | 21-27542 | 1632268.12 | 1774822.97 |
| 21-024(l)-99 | 21-27543 | 1632250.16 | 1774748.41 |
| 21-024(l)-99 | 21-27544 | 1632207.00 | 1774754.90 |
| 21-024(l)-99 | 21-27545 | 1632163.88 | 1774689.55 |
| 21-024(l)-99 | 21-27546 | 1632136.55 | 1774703.45 |
| 21-024(l)-99 | 21-27547 | 1632133.89 | 1774699.21 |
| 21-024(l)-99 | 21-605272 | 1632247.81 | 1774703.47 |
| 21-024(l)-99 | 21-605273 | 1632208.95 | 1774855.05 |
| 21-024(l)-99 | 21-605274 | 1632280.34 | 1774833.68 |
| 21-024(l)-99 | 21-605275 | 1632290.23 | 1774823.77 |
| 21-024(l)-99 | 21-605276 | 1632257.86 | 1774679.28 |
| 21-024(l)-99 | 21-605277 | 1632196.23 | 1774703.12 |
| 21-024(l)-99 | 21-605278 | 1632265.08 | 1774658.34 |
| 21-024(n) | 21-600667 | 1633984.38 | 1774401.95 |
| 21-024(n) | 21-600668 | 1633994.38 | 1774403.19 |
| 21-024(n) | 21-600669 | 1633983.19 | 1774413.89 |
| 21-024(n) | 21-600670 | 1633994.58 | 1774413.78 |
| 21-024(n) | 21-600671 | 1634004.77 | 1774412.54 |
| 21-024(n) | 21-600672 | 1633973.67 | 1774432.09 |
| 21-024(n) | 21-600673 | 1633993.11 | 1774432.56 |
| 21-024(n) | 21-600674 | 1634013.04 | 1774429.99 |
| 21-024(n) | 21-600675 | 1633992.55 | 1774369.33 |
| 21-024(n) | 21-600676 | 1633856.29 | 1774351.70 |
| 21-024(n) | 21-600677 | 1633866.51 | 1774354.97 |
| 21-024(n) | 21-600678 | 1633848.83 | 1774360.06 |
| 21-024(n) | 21-600679 | 1633858.43 | 1774362.54 |
| 21-024(n) | 21-600680 | 1633868.95 | 1774364.77 |
| 21-024(n) | 21-600681 | 1633829.74 | 1774380.38 |
| 21-024(n) | 21-600682 | 1633850.79 | 1774386.20 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(n) | 21-600683 | 1633868.35 | 1774383.12 |
| 21-024(n) | 21-600684 | 1633870.08 | 1774322.20 |
| 21-024(n) | 21-600685 | 1633913.89 | 1774289.73 |
| 21-024(n) | 21-600686 | 1633924.36 | 1774287.26 |
| 21-024(n) | 21-600687 | 1633906.98 | 1774302.39 |
| 21-024(n) | 21-600688 | 1633917.10 | 1774300.88 |
| 21-024(n) | 21-600689 | 1633927.44 | 1774300.23 |
| 21-024(n) | 21-600690 | 1633900.83 | 1774321.55 |
| 21-024(n) | 21-600691 | 1633920.82 | 1774321.01 |
| 21-024(n) | 21-600692 | 1633936.00 | 1774320.54 |
| 21-024(n) | 21-600694 | 1633861.72 | 1774352.77 |
| 21-024(n) | 21-600695 | 1633990.73 | 1774403.64 |
| 21-024(n) | 21-600710 | 1633923.23 | 1774344.03 |
| 21-024(n) | 21-600711 | 1633788.51 | 1774276.66 |
| 21-024(n) | 21-600712 | 1633798.91 | 1774276.52 |
| 21-024(n) | 21-600713 | 1633783.79 | 1774285.06 |
| 21-024(n) | 21-600714 | 1633793.19 | 1774284.92 |
| 21-024(n) | 21-600715 | 1633803.26 | 1774286.31 |
| 21-024(n) | 21-600716 | 1633774.23 | 1774293.01 |
| 21-024(n) | 21-600717 | 1633792.72 | 1774295.32 |
| 21-024(n) | 21-600718 | 1633814.06 | 1774300.60 |
| 21-024(n) | 21-600719 | 1633871.32 | 1774280.12 |
| 21-024(n) | 21-600720 | 1633878.54 | 1774280.55 |
| 21-024(n) | 21-600721 | 1633865.41 | 1774287.53 |
| 21-024(n) | 21-600722 | 1633875.38 | 1774289.28 |
| 21-024(n) | 21-600723 | 1633885.28 | 1774291.61 |
| 21-024(n) | 21-600724 | 1633854.01 | 1774306.05 |
| 21-024(n) | 21-600725 | 1633874.16 | 1774307.83 |
| 21-024(n) | 21-600726 | 1633891.83 | 1774312.45 |
| 21-024(n) | 21-600735 | 1633793.34 | 1774276.95 |
| 21-024(n) | 21-600736 | 1633874.78 | 1774280.37 |
| 21-024(n) | 21-600737 | 1633919.80 | 1774288.53 |
| 21-024(n) | 21-601304 | 1633855.74 | 1774174.23 |
| 21-024(n) | 21-601305 | 1633868.25 | 1774205.57 |
| 21-024(n) | 21-601306 | 1633912.86 | 1774284.99 |
| 21-024(n) | 21-601307 | 1633898.40 | 1774219.15 |
| 21-024(n) | 21-601308 | 1633777.66 | 1774191.61 |
| 21-024(n) | 21-601309 | 1633842.93 | 1774196.31 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-024(n) | 21-601310 | 1633792.52 | 1774244.71 |
| 21-024(n) | 21-601311 | 1633848.50 | 1774228.52 |
| 21-024(n) | 21-601312 | 1633853.90 | 1774255.40 |
| 21-024(n) | 21-601315 | 1633859.77 | 1774193.29 |
| 21-024(n) | 21-605251 | 1634025.18 | 1774444.13 |
| 21-024(n) | 21-605252 | 1633846.17 | 1774405.64 |
| 21-024(n) | 21-605253 | 1633877.82 | 1774400.83 |
| 21-024(n) | 21-605254 | 1633791.11 | 1774315.26 |
| 21-024(n) | 21-605255 | 1633759.71 | 1774306.83 |
| 21-024(n) | 21-608021 | 1633894.21 | 1774417.40 |
| 21-024(n) | 21-609833 | 1633879.72 | 1774419.77 |
| 21-024(o) | 21-27346 | 1631601.95 | 1774489.01 |
| 21-024(o) | 21-27347 | 1631610.89 | 1774490.09 |
| 21-024(o) | 21-27348 | 1631603.40 | 1774469.76 |
| 21-024(o) | 21-27349 | 1631612.09 | 1774467.69 |
| 21-024(o) | 21-27350 | 1631620.76 | 1774462.70 |
| 21-024(o) | 21-27351 | 1631590.93 | 1774386.76 |
| 21-024(o) | 21-27352 | 1631608.11 | 1774390.59 |
| 21-024(o) | 21-27353 | 1631619.14 | 1774372.21 |
| 21-024(o) | 21-27354 | 1631591.81 | 1774368.76 |
| 21-024(o) | 21-27355 | 1631606.33 | 1774355.76 |
| 21-024(o) | 21-27356 | 1631624.11 | 1774350.00 |
| 21-024(o) | 21-605201 | 1631630.68 | 1774463.23 |
| 21-024(o) | 21-605202 | 1631593.40 | 1774469.66 |
| 21-026(a)-99 | 21-27550 | 1635199.10 | 1773746.53 |
| 21-026(a)-99 | 21-27551 | 1635165.91 | 1773726.23 |
| 21-026(a)-99 | 21-27552 | 1635296.04 | 1773820.12 |
| 21-026(a)-99 | 21-27553 | 1635205.35 | 1773763.16 |
| 21-026(a)-99 | 21-27554 | 1635177.75 | 1773768.67 |
| 21-026(a)-99 | 21-27555 | 1635316.97 | 1773850.21 |
| 21-026(a)-99 | 21-27556 | 1635325.98 | 1773848.87 |
| 21-026(a)-99 | 21-27557 | 1635325.85 | 1773862.53 |
| 21-026(a)-99 | 21-27558 | 1635343.85 | 1773856.32 |
| 21-026(a)-99 | 21-27559 | 1635168.91 | 1773750.47 |
| 21-026(a)-99 | 21-27560 | 1635296.22 | 1773805.53 |
| 21-026(a)-99 | 21-27561 | 1635314.03 | 1773823.57 |
| 21-026(a)-99 | 21-27562 | 1635298.90 | 1773838.48 |
| 21-026(a)-99 | 21-27563 | 1635280.95 | 1773825.23 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-026(a)-99 | 21-27564 | 1635215.93 | 1773701.33 |
| 21-026(a)-99 | 21-27565 | 1635233.53 | 1773737.69 |
| 21-026(a)-99 | 21-27566 | 1635251.67 | 1773778.43 |
| 21-026(a)-99 | 21-27568 | 1635172.28 | 1773723.15 |
| 21-026(a)-99 | 21-27570 | 1635229.06 | 1773745.12 |
| 21-026(a)-99 | 21-27571 | 1635219.75 | 1773726.06 |
| 21-026(a)-99 | 21-27572 | 1635284.01 | 1773845.22 |
| 21-026(a)-99 | 21-27573 | 1635280.84 | 1773850.14 |
| 21-026(a)-99 | 21-27574 | 1635290.22 | 1773845.65 |
| 21-026(a)-99 | 21-27575 | 1635277.17 | 1773858.82 |
| 21-026(a)-99 | 21-27576 | 1635287.69 | 1773855.86 |
| 21-026(a)-99 | 21-27577 | 1635298.69 | 1773853.13 |
| 21-026(a)-99 | 21-27578 | 1635276.57 | 1773875.16 |
| 21-026(a)-99 | 21-27579 | 1635296.53 | 1773870.64 |
| 21-026(a)-99 | 21-27580 | 1635314.30 | 1773862.18 |
| 21-026(a)-99 | 21-27581 | 1635160.67 | 1773728.94 |
| 21-026(a)-99 | 21-605238 | 1635214.84 | 1773780.72 |
| 21-026(a)-99 | 21-605239 | 1635323.97 | 1773826.38 |
| 21-026(a)-99 | 21-605240 | 1635304.73 | 1773888.82 |
| 21-027(a) | 21-600861 | 1632180.97 | 1774056.11 |
| 21-027(a) | 21-600862 | 1632190.27 | 1774051.63 |
| 21-027(a) | 21-600863 | 1632168.30 | 1774037.52 |
| 21-027(a) | 21-600864 | 1632180.73 | 1774035.91 |
| 21-027(a) | 21-600865 | 1632189.46 | 1774036.21 |
| 21-027(a) | 21-600866 | 1632147.27 | 1774009.13 |
| 21-027(a) | 21-600867 | 1632158.04 | 1774005.26 |
| 21-027(a) | 21-600868 | 1632171.75 | 1774005.29 |
| 21-027(a) | 21-600872 | 1632184.82 | 1774053.36 |
| 21-027(a) | 21-601224 | 1632215.78 | 1774237.60 |
| 21-027(a) | 21-601225 | 1632211.18 | 1774213.81 |
| 21-027(a) | 21-601226 | 1632226.13 | 1774271.76 |
| 21-027(a) | 21-601227 | 1632221.12 | 1774259.60 |
| 21-027(a) | 21-601228 | 1632222.85 | 1774174.45 |
| 21-027(a) | 21-601229 | 1632216.41 | 1774198.88 |
| 21-027(a) | 21-605279 | 1632150.65 | 1774045.49 |
| 21-027(a) | 21-605280 | 1632193.27 | 1774006.75 |
| 21-027(a) | 21-608020 | 1632203.35 | 1773997.57 |
| 21-027(c) | 21-27399 | 1631999.66 | 1774228.27 |

**Table 3.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Location ID | X Coordinate* | Y Coordinate* |
|---|---|---|---|
| 21-027(c) | 21-27401 | 1631980.81 | 1774223.33 |
| 21-027(c) | 21-27402 | 1631993.72 | 1774220.39 |
| 21-027(c) | 21-27403 | 1632005.17 | 1774216.06 |
| 21-027(c) | 21-27404 | 1631969.33 | 1774219.03 |
| 21-027(c) | 21-27405 | 1631988.57 | 1774209.93 |
| 21-027(c) | 21-27406 | 1632009.26 | 1774207.12 |
| 21-027(c) | 21-27407 | 1631896.61 | 1774104.39 |
| 21-027(c) | 21-27408 | 1631927.06 | 1774085.16 |
| 21-027(c) | 21-27409 | 1631958.11 | 1774077.54 |
| 21-027(c) | 21-27410 | 1631881.50 | 1774085.28 |
| 21-027(c) | 21-27411 | 1631905.01 | 1774070.60 |
| 21-027(c) | 21-27412 | 1631938.14 | 1774051.21 |
| 21-027(c) | 21-27413 | 1632022.72 | 1774294.65 |
| 21-027(c) | 21-27414 | 1631994.27 | 1774230.77 |
| 21-027(c) | 21-27415 | 1632004.44 | 1774227.47 |
| 21-027(c) | 21-605232 | 1631971.93 | 1774063.09 |
| 21-027(c) | 21-605233 | 1631999.22 | 1774218.23 |
| 21-027(c) | 21-605234 | 1631951.69 | 1774045.46 |
| 21-027(c) | 21-605236 | 1631864.70 | 1774077.32 |
| 21-027(c) | 21-608017 | 1631961.84 | 1774045.76 |
| C-21-027 | 21-605337 | 1632226.99 | 1774203.44 |
| C-21-027 | 21-605338 | 1632245.87 | 1774196.48 |
| C-21-027 | 21-605339 | 1632186.53 | 1774140.93 |
| C-21-027 | 21-605340 | 1632176.89 | 1774105.72 |
| C-21-027 | 21-605341 | 1632170.86 | 1774106.71 |
| C-21-027 | 21-605342 | 1632157.25 | 1774063.12 |
| C-21-027 | 21-610682 | 1632186.04 | 1774110.52 |
| C-21-027 | 21-610683 | 1632251.43 | 1774196.08 |
| C-21-027 | 21-610684 | 1632225.32 | 1774225.37 |
| C-21-027 | 21-610686 | 1632158.29 | 1774030.05 |

* North American Datum, 1983; New Mexico State Plane Coordinate System, Central Zone (3002); U.S. Survey Feet.

**Table 3.1-2**
**DP Site Phase II Radioactivity Field-Screening Results**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| **AOC 21-002(b)** | | | | | | | |
| 21-604519 | 0 | 0.5 | 1 | 68 | 68 | 2850 | 2850 |
| 21-604520 | 7 | 8 | 2 | 30 | 20 | 2350 | 2280 |
| 21-25696 | 7 | 8 | 3 | 45 | 20 | 2510 | 2360 |
| 21-604521 | 0 | 0.5 | 4 | 82 | 82 | 2850 | 2850 |
| 21-604522 | 0 | 0.5 | 5 | 82 | 75 | 2850 | 3060 |
| 21-604524 | 0 | 0.5 | 6 | 82 | 54 | 2850 | 3090 |
| 21-25679 | 7 | 8 | 7 | 45 | 35 | 2510 | 2310 |
| 21-604525 | 0 | 0.5 | 8 | 82 | 54 | 2850 | 3110 |
| 21-604523 | 0 | 0.5 | 9 | 82 | 88 | 2850 | 3150 |
| 21-609834 | 0 | 0.5 | downslope of 6 | 25.2 | 22 | 2360 | 1100 |
| **Consolidated Unit 21-003-99 and SWMU 21-024(c)** | | | | | | | |
| 21-25719 | 9 | 10 | 1 | 28 | 77 | 1216 | 1083 |
| 21-25748 | 19 | 20 | 2 | 40 | 20 | 2568 | 1778 |
| 21-25748 | 26 | 27 | 2 | 40 | 15 | 2568 | 1828 |
| 21-25763 | 5 | 6 | 3 | 98 | 91 | 2970 | 2950 |
| 21-605289 | 0 | 0.5 | 4 | 7 | 65 | 2610 | 2120 |
| 21-605292 | 6.5 | 7.5 | 6 | 65 | 65 | 2930 | 2630 |
| 21-605292 | 1.5 | 2 | 6 | 65 | 77 | 2930 | 2620 |
| 21-25716 | 6.5 | 7.5 | 7 | 98 | 98 | 2970 | 2960 |
| 21-605293 | 0 | 0.5 | 8 | 98 | 65 | 2970 | 2770 |
| 21-605294 | 0 | 0.5 | 9 | 98 | 78 | 2970 | 2880 |
| 21-605295 | 0 | 0.5 | 10 | 71 | 95 | 2610 | 2460 |
| 21-25750 | 9 | 10 | 11 | 47 | 29 | 2530 | 2570 |
| 21-605290 | 0 | 0.5 | 12 | 77 | 29 | 2420 | 1792 |
| **Consolidated Unit 21-006(c)-99** | | | | | | | |
| 21-601211 | 8 | 9 | 1 | 88 | 50 | 3150 | 2340 |
| 21-601213 | 18 | 19 | 2 | 101 | 69 | 2700 | 2370 |
| 21-601213 | 23 | 24 | 2 | 101 | 101 | 2700 | 2560 |
| 21-605256 | 0 | 0.5 | 3 | 71 | 83 | 2610 | 2200 |
| 21-605257 | 0 | 0.5 | 4 | 71 | 95 | 2610 | 2090 |
| 21-605258 | 0 | 0.5 | 5 | 71 | 83 | 2610 | 2320 |
| 21-605259 | 3 | 4 | 6 | 88 | 30 | 3150 | 1979 |
| 21-605259 | 8 | 9 | 6 | 88 | 50 | 3150 | 2060 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| 21-605260 | 3 | 4 | 7 | 88 | 15 | 3150 | 2270 |
| 21-605260 | 8 | 9 | 7 | 88 | 65 | 3150 | 2470 |
| 21-605261 | 3 | 4 | 8 | 88 | 55 | 3150 | 2450 |
| 21-605261 | 8 | 9 | 8 | 88 | 45 | 3150 | 2300 |
| 21-600391 | 2 | 3 | 9 | 71 | 89 | 2610 | 2310 |
| 21-609835 | 3 | 4 | north of 7 | 25.2 | 16 | 2360 | 521 |
| 21-608018 | 3 | 4 | south of 6 | 48 | 48 | 2090 | 2640 |
| **SWMU 21-009** | | | | | | | |
| 21-25643 | 7 | 8 | 1 | 74 | 58 | 2440 | 2540 |
| 21-604497 | 0 | 0.5 | 2 | 74 | 47 | 2440 | 2180 |
| 21-25640 | 7 | 8 | 3 | 74 | 48 | 2440 | 2590 |
| 21-604498 | 0 | 0.5 | 4 | 74 | 85 | 2440 | 2300 |
| 21-604498 | 7 | 8 | 4 | 74 | 53 | 2440 | 2350 |
| 21-604499 | 0 | 0.5 | 5 | 74 | 31 | 2440 | 2310 |
| 21-604499 | 7 | 8 | 5 | 74 | 63 | 2440 | 2360 |
| 21-25636 | 7 | 8 | 6 | 74 | 95 | 2440 | 2700 |
| **SWMU 21-012(b)** | | | | | | | |
| 21-25800 | 10 | 11 | 1 | 45 | 30 | 2690 | 2440 |
| 21-604526 | 4 | 5 | 2 | 69 | 20 | 2750 | 2610 |
| 21-604527 | 4.5 | 5.5 | 3 | 69 | 20 | 2750 | 2160 |
| 21-604529 | 0 | 0.5 | 4 | 89 | 53 | 2660 | 2250 |
| 21-604529 | 2 | 3 | 4 | 89 | 53 | 2660 | 2720 |
| 21-604529 | 4 | 5 | 4 | 89 | 53 | 2660 | 2800 |
| 21-25783 | 7 | 8 | 5 | 65 | 30 | 2940 | 2560 |
| 21-25817 | 9.5 | 10.5 | 6 | 45 | 15 | 2690 | 2100 |
| 21-25797 | 10 | 11 | 7 | 65 | 25 | 2940 | 2470 |
| 21-25804 | 9 | 10 | 8 | 45 | 15 | 2690 | 2410 |
| 21-25810 | 10 | 11 | 9 | 65 | 20 | 2940 | 2380 |
| 21-604528 | 0 | 0.5 | 10 | 45 | 25 | 2690 | 2560 |
| **SWMU 21-013(c)** | | | | | | | |
| 21-25653 | 8 | 9 | 1 | 40 | 15 | 2568 | 3550 |
| 21-604500 | 0 | 0.5 | 2 | 65 | 5 | 2940 | 1986 |
| 21-604502 | 0 | 0.5 | 3 | 40 | 25 | 2568 | 2290 |
| 21-604502 | 8 | 9 | 3 | 40 | 35 | 2568 | 2240 |
| 21-604504 | 0 | 0.5 | 4 | 65 | 10 | 2940 | 2300 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| 21-604503 | 0 | 0.5 | 5 | 40 | 50 | 2568 | 2160 |
| 21-604503 | 8 | 9 | 5 | 40 | 10 | 2568 | 2280 |
| 21-604505 | 0 | 0.5 | 6 | 65 | 50 | 2940 | 1998 |
| 21-604501 | 0 | 0.5 | 7 | 65 | 30 | 2940 | 2230 |
| 21-25651 | 8 | 9 | 8 | 40 | 5 | 2568 | 2410 |
| 21-25664 | 8 | 9 | 9 | 40 | 65 | 2568 | 2240 |
| 21-604506 | 0 | 0.5 | 10 | 65 | 15 | 2940 | 2040 |
| 21-604507 | 0 | 0.5 | 11 | 65 | 35 | 2940 | 2470 |
| **SWMU 21-022(f)** | | | | | | | |
| 21-603145 | 13.5 | 14.5 | 1 | 75 | 20 | 2730 | 2560 |
| 21-603142 | 15.5 | 16.5 | 2 | 75 | 10 | 2730 | 2450 |
| **Consolidated Unit 21-022(h)-99** | | | | | | | |
| 21-600240 | 4 | 5 | 1 | 83 | 47 | 3130 | 2460 |
| 21-605282 | 0 | 0.5 | 2 | 83 | 59 | 3130 | 2650 |
| 21-605282 | 2 | 3 | 2 | 83 | 79 | 3130 | 2810 |
| 21-605282 | 4 | 5 | 2 | 83 | 41 | 3130 | 2460 |
| 21-605282 | 9 | 10 | 2 | 25.2 | 15 | 2360 | 480 |
| 21-605283 | 0 | 0.5 | 3 | 66 | 55 | 2480 | 2110 |
| 21-605284 | 14 | 15 | 4 | 55 | 30 | 2400 | 2270 |
| 21-605284 | 19 | 20 | 4 | 55 | 45 | 2400 | 2160 |
| 21-609837 | 0 | 0.5 | west of 3 | 25.2 | 22 | 2360 | 463 |
| **Consolidated Unit 21-023(a)-99** | | | | | | | |
| 21-603015 | 10.5 | 11.5 | 1 | 40 | 20 | 2420 | 2400 |
| 21-605271 | 21 | 22 | 2 | 25 | 10 | 2340 | 1973 |
| 21-601130 | 19 | 20 | 3 | 25 | 5 | 2340 | 2280 |
| 21-601120 | 9 | 10 | 4 | 40 | 15 | 2420 | 2320 |
| 21-601114 | 9 | 10 | 5 | 40 | 15 | 2420 | 2160 |
| 21-601114 | 19 | 20 | 5 | 55 | 69 | 2800 | 2720 |
| **SWMU 21-024(a)** | | | | | | | |
| 21-27325 | 4 | 5 | 1 | 49 | 71 | 2120 | 2570 |
| 21-27330 | 4 | 5 | 2 | 63 | 26 | 1940 | 2540 |
| 21-27322 | 9 | 10 | 3 | 95 | 58 | 2190 | 2670 |
| 21-27322 | 4 | 5 | 3 | 49 | 53 | 2120 | 2790 |
| 21-27329 | 4 | 5 | 4 | 63 | 53 | 1940 | 2330 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| **SWMU 21-024(b)** | | | | | | | |
| 21-605285 | 0 | 0.5 | 1 | 71 | 65 | 2610 | 2040 |
| **SWMU 21-024(d)** | | | | | | | |
| 19-601285 | 25 | 26 | 1 | 35 | 65 | 2640 | 2640 |
| 21-605286 | 0 | 0.5 | 2 | 89 | 23 | 2430 | 2130 |
| 21-605286 | 2 | 2.5 | 2 | 89 | 83 | 2430 | 2830 |
| 21-605286 | 4 | 5 | 2 | 89 | 77 | 2340 | 2790 |
| 21-27366 | 4 | 5 | 3 | 66 | 55 | 2480 | 2310 |
| 21-27366 | 9 | 10 | 3 | 39 | 64 | 2060 | 3330 |
| 21-601283 | 9 | 10 | 4 | 69 | 50 | 2750 | 2570 |
| 21-601281 | 9 | 10 | 5 | 69 | 40 | 2750 | 2630 |
| 21-27365 | 4 | 5 | 6 | 89 | 47 | 2430 | 2590 |
| **SWMU 21-024(e)** | | | | | | | |
| 21-27265 | 11.25 | 12.25 | 1 | 95 | 40 | 3470 | 2340 |
| 21-604508 | 2 | 3 | 2 | 200 | 470 | 3530 | 3380 |
| 21-604508 | 4 | 5 | 2 | 200 | 410 | 3530 | 3490 |
| 21-27250 | 4 | 5 | 3 | 200 | 60 | 3530 | 3620 |
| **SWMU 21-024(g)** | | | | | | | |
| 21-605245 | 0 | 0.5 | 1 | 20 | 20 | 2442 | 1929 |
| 21-27610 | 11 | 11.5 | 2 | 47 | 37 | 2570 | 1951 |
| 21-27599 | 4 | 5 | 3 | 20 | 35 | 2442 | 2440 |
| 21-605246 | 2 | 2.5 | 4 | 20 | 25 | 2442 | 2400 |
| 21-605246 | 4 | 5 | 4 | 20 | 25 | 2442 | 2256 |
| 21-605247 | 0 | 0.5 | 5 | 20 | 20 | 2442 | 2330 |
| 21-27614 | 9 | 10 | 6 | 20 | 30 | 2442 | 2430 |
| 21-605248 | 5 | 6 | 7 | 20 | 35 | 2442 | 1828 |
| 21-605249 | 0 | 0.5 | 8 | 20 | 40 | 2442 | 1973 |
| 21-27606 | 11 | 11.5 | 9 | 20 | 10 | 1639 | 2540 |
| 21-605250 | 0 | 0.5 | 10 | 20 | 28 | 2442 | 2360 |
| **SWMU 21-024(h)** | | | | | | | |
| 21-600080 | 4 | 5 | 1 | 47 | 35 | 2530 | 2420 |
| 21-600078 | 4 | 5 | 2 | 47 | 23 | 2530 | 2500 |
| 21-601098 | 10 | 11 | 3 | 40 | 35 | 2420 | 2030 |
| 21-600080 | 9 | 10 | 4 | 95 | 63 | 2190 | 2740 |
| 21-605241 | 2 | 3 | 4 | 65 | 53 | 2930 | 2370 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| 21-605241 | 4 | 5 | 4 | 65 | 65 | 2930 | 2280 |
| 21-605242 | 0 | 0.5 | 5 | 47 | 63 | 2530 | 2470 |
| 21-605243 | 0 | 0.5 | 6 | 47 | 29 | 2530 | 2180 |
| 21-600084 | 9 | 10 | 7 | 95 | 37 | 2190 | 2400 |
| 21-605244 | 0 | 0.5 | 7 | 47 | 47 | 2530 | 2450 |
| 21-605244 | 4 | 5 | 7 | 47 | 53 | 2530 | 2500 |
| 21-600084 | 4 | 5 | 8 | 47 | 41 | 2530 | 2450 |
| **SWMU 21-024(i)** | | | | | | | |
| 21-603025 | 14.5 | 15.5 | 1 | 88 | 75 | 3150 | 2840 |
| 21-603022 | 19 | 20 | 2 | 88 | 10 | 3150 | 2360 |
| **SWMU 21-024(j)** | | | | | | | |
| 21-605287 | 10 | 11 | 1 | 40 | 20 | 2420 | 2460 |
| **SWMU 21-024(k)** | | | | | | | |
| 21-600859 | 10 | 11 | 1 | 47 | 59 | 2530 | 2260 |
| 21-603054 | 25 | 26 | 2 | 40 | 25 | 2568 | 1639 |
| 21-603042 | 12.5 | 13.5 | 3 | 40 | 20 | 2568 | 2260 |
| 21-603038 | 13.5 | 14.5 | 4 | 75 | 30 | 2730 | 2200 |
| 21-603038 | 13.5 | 14.5 | 4 | 75 | 30 | 2730 | 2200 |
| **Consolidated Unit 21-024(l)-99** | | | | | | | |
| 21-27514 | 25 | 26 | 1 | 40 | 55 | 2800 | 2550 |
| 21-605272 | 0 | 0.5 | 2 | 85 | 30 | 2950 | 2210 |
| 21-605272 | 7 | 8 | 2 | 85 | 45 | 2950 | 2430 |
| 21-605273 | 0 | 0.5 | 3 | 20 | 15 | 2442 | 2130 |
| 21-605273 | 7 | 8 | 3 | 20 | 10 | 2442 | 2350 |
| 21-27517 | 7 | 8 | 4 | 20 | 5 | 2442 | 2160 |
| 21-605274 | 0 | 0.5 | 5 | 20 | 25 | 2442 | 2280 |
| 21-605275 | 0 | 0.5 | 6 | 20 | 20 | 2442 | 2150 |
| 21-27540 | 7 | 8 | 7 | 85 | 30 | 2950 | 2270 |
| 21-27522 | 12 | 13 | 8 | 45 | 10 | 2450 | 1942 |
| 21-27539 | 10 | 11 | 9 | 85 | 10 | 2950 | 2400 |
| 21-605276 | 0 | 0.5 | 10 | 45 | 30 | 2450 | 1797 |
| 21-27521 | 9.5 | 10.5 | 11 | 45 | 20 | 2450 | 2080 |
| 21-605277 | 5 | 6 | 12 | 45 | 15 | 2450 | 1891 |
| 21-605277 | 7 | 8 | 12 | 45 | 35 | 2450 | 2030 |
| 21-27530 | 10 | 11 | 13 | 85 | 15 | 2950 | 2080 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| 21-27547 | 7.5 | 8.5 | 14 | 25 | 10 | 2470 | 2110 |
| 21-605278 | 0 | 0.5 | 15 | 85 | 25 | 2950 | 2030 |
| 21-605278 | 10 | 11 | 15 | 85 | 25 | 2950 | 2130 |
| **SWMU 21-024(n)** | | | | | | | |
| 21-605251 | 0 | 0.5 | 1 | 63 | 41 | 2610 | 2380 |
| 21-600682 | 7 | 8 | 2 | 65 | 35 | 2580 | 2710 |
| 21-600695 | 7 | 8 | 3 | 63 | 65 | 2610 | 2360 |
| 21-605252 | 0 | 0.5 | 4 | 65 | 45 | 2580 | 2380 |
| 21-605252 | 4 | 5 | 4 | 65 | 17 | 2580 | 2570 |
| 21-600684 | 7 | 8 | 5 | 63 | 29 | 2610 | 2380 |
| 21-605253 | 0 | 0.5 | 6 | 65 | 35 | 2580 | 1918 |
| 21-600669 | 7 | 8 | 7 | 63 | 53 | 2610 | 2330 |
| 21-601305 | 10 | 11 | 8 | 40 | 40 | 2420 | 2530 |
| 21-605254 | 0 | 0.5 | 9 | 63 | 41 | 2610 | 2370 |
| 21-600735 | 7 | 8 | 10 | 65 | 59 | 2580 | 2770 |
| 21-600689 | 7 | 8 | 11 | 63 | 35 | 2610 | 2360 |
| 21-605255 | 7 | 8 | 12 | 63 | 59 | 2610 | 2670 |
| 21-601312 | 11 | 12 | 13 | 65 | 59 | 2580 | 2380 |
| 21-609333 | 0 | 0.5 | north of location 8 | 25.2 | 14 | 2360 | 745 |
| 21-608021 | 0 | 0.5 | east of 6 | 48 | 48 | 2090 | 2510 |
| **SWMU 21-024(o)** | | | | | | | |
| 21-605201 | 0 | 0.5 | 1 | 47 | 47 | 3330 | 3330 |
| 21-605202 | 0 | 0.5 | 2 | 47 | 95 | 3330 | 3560 |
| **Consolidated Unit 21-026(a)-99** | | | | | | | |
| 21-27575 | 4 | 5 | 1 | 75 | 35 | 3500 | 2860 |
| 21-27560 | 7 | 8 | 2 | 50 | 35 | 2520 | 2710 |
| 21-27561 | 7 | 8 | 3 | 50 | 25 | 2520 | 2990 |
| 21-27553 | 10 | 11 | 4 | 50 | 15 | 2520 | 2640 |
| 21-605238 | 5 | 6 | 5 | 50 | 45 | 2520 | 2810 |
| 21-605238 | 10 | 11 | 5 | 60 | 55 | 2790 | 2680 |
| 21-605238 | 19 | 20 | 5 | 84 | 62 | 3190 | 3000 |
| 21-605239 | 2 | 3 | 6 | 75 | 45 | 3500 | 3060 |
| 21-605239 | 7 | 8 | 6 | 75 | 40 | 3500 | 2780 |
| 21-605240 | 0 | 0.5 | 7 | 75 | 55 | 3500 | 2380 |
| 21-27571 | 10.5 | 11.5 | 8 | 50 | 25 | 2520 | 2210 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| 21-27550 | 14.3 | 15.3 | 9 | 40 | 20 | 2080 | 1475 |
| **SWMU 21-027(a)** | | | | | | | |
| 21-601227 | 8.5 | 9.5 | 1 | 69 | 25 | 2750 | 2640 |
| 21-601224 | 8 | 9 | 2 | 69 | 50 | 2750 | 2740 |
| 21-605279 | 0 | 0.5 | 3 | 71 | 77 | 2610 | 2410 |
| 21-605280 | 0 | 0.5 | 4 | 71 | 107 | 2610 | 2460 |
| 21-601229 | 11 | 12 | 5 | 69 | 35 | 2750 | 2400 |
| 21-601226 | 9.5 | 10.5 | 6 | 69 | 30 | 2750 | 2340 |
| 21-601225 | 7 | 8 | na | 48 | 55 | 2090 | 2730 |
| 21-608020 | 0 | 0.5 | south of 4 | 48 | 48 | 2090 | 3290 |
| **SWMU 21-027(c)** | | | | | | | |
| 21-605232 | 0 | 0.5 | 1 | 89 | 101 | 2660 | 2120 |
| 21-605233 | 4 | 5 | 2 | 71 | 47 | 2530 | 2570 |
| 21-605234 | 0 | 0.5 | 3 | 89 | 59 | 2660 | 2250 |
| 21-27412 | 4 | 5 | 4 | 66 | 65 | 2480 | 2530 |
| 21-27412 | 7 | 8 | 4 | 48 | 75 | 2090 | 3340 |
| 21-605236 | 0 | 0.5 | 5 | 66 | 48 | 2480 | 2380 |
| 21-27401 | 4 | 5 | 6 | 71 | 29 | 2530 | 2250 |
| **AOC C-21-027** | | | | | | | |
| 21-605339 | 0 | 0.5 | 1 | 38 | 0 | 1406 | 963 |
| 21-605339 | 2 | 3 | 1 | 51 | 80 | 5890 | 3440 |
| 21-605341 | 0 | 0.5 | 2 | 51 | 74 | 5890 | 2800 |
| 21-605341 | 2 | 3 | 2 | 51 | 85 | 5890 | 3300 |
| 21-605342 | 0 | 0.5 | 3 | 45 | 91 | 2890 | 3780 |
| 21-605342 | 2 | 3 | 3 | 45 | 48 | 2890 | 2810 |
| 21-610686 | 0 | 0.5 | 4 | 59 | 59 | 1806 | 2530 |
| 21-605337 | 0 | 0.5 | BH-1 | 98 | 44 | 2460 | 1745 |
| 21-605337 | 5 | 6 | BH-1 | 98 | 93 | 2460 | 2550 |
| 21-605337 | 10 | 11 | BH-1 | 98 | 98 | 2460 | 2430 |
| 21-610684 | 0 | 0.5 | BH-2 | 38 | 0 | 1406 | 488 |
| 21-610684 | 5 | 6 | BH-2 | 38 | 0 | 1406 | 665 |
| 21-610684 | 10 | 11 | BH-2 | 38 | 0 | 1406 | 143 |
| 21-605338 | 0 | 0.5 | BH-3 | 98 | 91 | 2460 | 2510 |
| 21-605338 | 5 | 6 | BH-3 | 98 | 93 | 2460 | 2500 |
| 21-605338 | 10 | 11 | BH-3 | 98 | 87 | 2460 | 2460 |

**Table 3.1-2 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Alpha Background (dpm) | Alpha (dpm) | Beta Background (dpm) | Beta/ Gamma (dpm) |
|---|---|---|---|---|---|---|---|
| 21-610683 | 0 | 1 | east of BH-3 | 38 | 0 | 1406 | 576 |
| 21-605340 | 0 | 0.5 | BH-4 | 51 | 97 | 5890 | 2960 |
| 21-605340 | 2 | 3 | BH-4 | 41 | 89 | 1789 | 2660 |
| 21-605340 | 5 | 6 | BH-4 | 38 | 0 | 1406 | 843 |
| 21-640682 | 0 | 0.5 | east of BH-4 | 38 | 4 | 1406 | 921 |

**Table 3.1-3**
**DP Site Phase II Organic Vapor Field-Screening Results at AOC C-21-027**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | PID Background (ppm) | PID (ppm) |
|---|---|---|---|---|---|
| 21-605339 | 0 | 0.5 | 1 | 1 | 1.4 |
| 21-605339 | 2 | 3 | 1 | 1 | 1.2 |
| 21-605341 | 0 | 0.5 | 2 | 1 | 4.8 |
| 21-605341 | 2 | 3 | 2 | 1 | 7 |
| 21-605342 | 0 | 0.5 | 3-northern end of bench | 0 | 0 |
| 21-605342 | 2 | 3 | 3 | 0 | 1.6 |
| 21-610686 | 0 | 0.5 | 4 | na* | na |
| 21-605337 | 0 | 0.5 | BH-1 | 0 | 0.4 |
| 21-605337 | 5 | 6 | BH-1 | 0.1 | 3.4 |
| 21-605337 | 10 | 11 | BH-1 | 0.1 | 8.3 |
| 21-610684 | 0 | 0.5 | BH-2 | na | na |
| 21-610684 | 5 | 6 | BH-2 | na | na |
| 21-610684 | 10 | 11 | BH-2 | na | na |
| 21-605338 | 0 | 0.5 | BH-3 | 0.2 | 2.6 |
| 21-605338 | 5 | 6 | BH-3 | 0.2 | 2.3 |
| 21-605338 | 10 | 11 | BH-3 | 0.2 | 0.7 |
| 21-610683 | 0 | 1 | east of BH-3 | na | na |
| 21-605340 | 0 | 0.5 | BH-4 | 1 | 8.1 |
| 21-605340 | 2 | 3 | BH-4 | 1 | 8.1 |
| 21-605340 | 5 | 6 | BH-4 | na | na |
| 21-640682 | 0 | 0.5 | east of BH-4 | na | na |

*na = Not available.

**Table 3.1-4**
**Crosswalk of Proposed and Sampled Phase II Locations**

| SWMU/AOC/ Consolidated Unit | Field Location ID | Work Plan Proposed Location ID |
|---|---|---|
| 21-002(b) | 21-604519 | Location 1 |
| 21-002(b) | 21-604520 | Location 2 |
| 21-002(b) | 21-25696 | Location 3 |
| 21-002(b) | 21-604521 | Location 4 |
| 21-002(b) | 21-604522 | Location 5 |
| 21-002(b) | 21-604524 | Location 6 |
| 21-002(b) | 21-25679 | Location 7 |
| 21-002(b) | 21-604525 | Location 8 |
| 21-002(b) | 21-604523 | Location 9 |
| 21-002(b) | 21-609834 | Added* |
| 21-003-99 and 21-024(c) | 21-25719 | Location 1 |
| 21-003-99 and 21-024(c) | 21-25748 | Location 2 |
| 21-003-99 and 21-024(c) | 21-25763 | Location 3 |
| 21-003-99 and 21-024(c) | 21-605289 | Location 4 |
| 21-003-99 and 21-024(c) | 21-605292 | Location 6 |
| 21-003-99 and 21-024(c) | 21-25716 | Location 7 |
| 21-003-99 and 21-024(c) | 21-605293 | Location 8 |
| 21-003-99 and 21-024(c) | 21-605294 | Location 9 |
| 21-003-99 and 21-024(c) | 21-605295 | Location 10 |
| 21-003-99 and 21-024(c) | 21-25750 | Location 11 |
| 21-003-99 and 21-024(c) | 21-605290 | Location 12 |
| 21-006(c)-99 | 21-601211 | Location 1 |
| 21-006(c)-99 | 21-601213 | Location 2 |
| 21-006(c)-99 | 21-605256 | Location 3 |
| 21-006(c)-99 | 21-605257 | Location 4 |
| 21-006(c)-99 | 21-605258 | Location 5 |
| 21-006(c)-99 | 21-605259 | Location 6 |
| 21-006(c)-99 | 21-605260 | Location 7 |
| 21-006(c)-99 | 21-605261 | Location 8 |
| 21-006(c)-99 | 21-600391 | Location 9 |
| 21-006(c)-99 | 21-608018 | Added |
| 21-006(c)-99 | 21-609835 | Added |
| 21-009 | 21-25643 | Location 1 |
| 21-009 | 21-604497 | Location 2 |
| 21-009 | 21-25640 | Location 3 |
| 21-009 | 21-604498 | Location 4 |
| 21-009 | 21-604499 | Location 5 |

**Table 3.1-4 (continued)**

| SWMU/AOC/ Consolidated Unit | Field Location ID | Work Plan Proposed Location ID |
|---|---|---|
| 21-009 | 21-25636 | Location 6 |
| 21-012(b) | 21-25800 | Location 1 |
| 21-012(b) | 21-604526 | Location 2 |
| 21-012(b) | 21-604527 | Location 3 |
| 21-012(b) | 21-604529 | Location 4 |
| 21-012(b) | 21-25783 | Location 5 |
| 21-012(b) | 21-25817 | Location 6 |
| 21-012(b) | 21-25797 | Location 7 |
| 21-012(b) | 21-25804 | Location 8 |
| 21-012(b) | 21-25810 | Location 9 |
| 21-012(b) | 21-604528 | Location 10 |
| 21-013(c) | 21-25653 | Location 1 |
| 21-013(c) | 21-604500 | Location 2 |
| 21-013(c) | 21-604502 | Location 3 |
| 21-013(c) | 21-604504 | Location 4 |
| 21-013(c) | 21-604503 | Location 5 |
| 21-013(c) | 21-604505 | Location 6 |
| 21-013(c) | 21-604501 | Location 7 |
| 21-013(c) | 21-25651 | Location 8 |
| 21-013(c) | 21-25664 | Location 9 |
| 21-013(c) | 21-604506 | Location 10 |
| 21-013(c) | 21-604507 | Location 11 |
| 21-022(f) | 21-603145 | Location 1 |
| 21-022(f) | 21-603142 | Location 2 |
| 21-022(h)-99 | 21-600240 | Location 1 |
| 21-022(h)-99 | 21-605282 | Location 2 |
| 21-022(h)-99 | 21-605283 | Location 3 |
| 21-022(h)-99 | 21-605284 | Location 4 |
| 21-022(h)-99 | 21-609837 | Added |
| 21-023(a)-99 | 21-603015 | Location 1 |
| 21-023(a)-99 | 21-605271 | Location 2 |
| 21-023(a)-99 | 21-601130 | Location 3 |
| 21-023(a)-99 | 21-601120 | Location 4 |
| 21-023(a)-99 | 21-601114 | Location 5 |
| 21-024(a) | 21-27325 | Location 1 |
| 21-024(a) | 21-27330 | Location 2 |
| 21-024(a) | 21-27322 | Location 3 |
| 21-024(a) | 21-27329 | Location 4 |

**Table 3.1-4 (continued)**

| SWMU/AOC/ Consolidated Unit | Field Location ID | Work Plan Proposed Location ID |
|---|---|---|
| 21-024(d) | 19-601285 | Location 1 |
| 21-024(d) | 21-605286 | Location 2 |
| 21-024(d) | 21-27366 | Location 3 |
| 21-024(d) | 21-601283 | Location 4 |
| 21-024(d) | 21-601281 | Location 5 |
| 21-024(d) | 21-27365 | Location 6 |
| 21-024(e) | 21-27265 | Location 1 |
| 21-024(e) | 21-604508 | Location 2 |
| 21-024(e) | 21-27250 | Location 3 |
| 21-024(g) | 21-605245 | Location 1 |
| 21-024(g) | 21-27610 | Location 2 |
| 21-024(g) | 21-27599 | Location 3 |
| 21-024(g) | 21-605246 | Location 4 |
| 21-024(g) | 21-605247 | Location 5 |
| 21-024(g) | 21-27614 | Location 6 |
| 21-024(g) | 21-605248 | Location 7 |
| 21-024(g) | 21-605249 | Location 8 |
| 21-024(g) | 21-27606 | Location 9 |
| 21-024(g) | 21-605250 | Location 10 |
| 21-024(h) | 21-600080 | Location 1 |
| 21-024(h) | 21-600078 | Location 2 |
| 21-024(h) | 21-601098 | Location 3 |
| 21-024(h) | 21-605241 | Location 4 |
| 21-024(h) | 21-605242 | Location 5 |
| 21-024(h) | 21-605243 | Location 6 |
| 21-024(h) | 21-605244 | Location 7 |
| 21-024(h) | 21-600084 | Location 8 |
| 21-024(i) | 21-603025 | Location 1 |
| 21-024(i) | 21-603022 | Location 2 |
| 21-024(j) | 21-605287 | Location 1 |
| 21-024(k) | 21-600859 | Location 1 |
| 21-024(k) | 21-603054 | Location 2 |
| 21-024(k) | 21-603042 | Location 3 |
| 21-024(k) | 21-603038 | Location 4 |
| 21-024(l)-99 | 21-27514 | Location 1 |
| 21-024(l)-99 | 21-605272 | Location 2 |
| 21-024(l)-99 | 21-605273 | Location 3 |
| 21-024(l)-99 | 21-27517 | Location 4 |

**Table 3.1-4 (continued)**

| SWMU/AOC/ Consolidated Unit | Field Location ID | Work Plan Proposed Location ID |
|---|---|---|
| 21-024(l)-99 | 21-605274 | Location 5 |
| 21-024(l)-99 | 21-605275 | Location 6 |
| 21-024(l)-99 | 21-27540 | Location 7 |
| 21-024(l)-99 | 21-27522 | Location 8 |
| 21-024(l)-99 | 21-27539 | Location 9 |
| 21-024(l)-99 | 21-605276 | Location 10 |
| 21-024(l)-99 | 21-27521 | Location 11 |
| 21-024(l)-99 | 21-605277 | Location 12 |
| 21-024(l)-99 | 21-27530 | Location 13 |
| 21-024(l)-99 | 21-27547 | Location 14 |
| 21-024(l)-99 | 21-605278 | Location 15 |
| 21-024(n) | 21-605251 | Location 1 |
| 21-024(n) | 21-600682 | Location 2 |
| 21-024(n) | 21-600695 | Location 3 |
| 21-024(n) | 21-605252 | Location 4 |
| 21-024(n) | 21-600684 | Location 5 |
| 21-024(n) | 21-605253 | Location 6 |
| 21-024(n) | 21-600669 | Location 7 |
| 21-024(n) | 21-601305 | Location 8 |
| 21-024(n) | 21-605254 | Location 9 |
| 21-024(n) | 21-600735 | Location 10 |
| 21-024(n) | 21-600689 | Location 11 |
| 21-024(n) | 21-605255 | Location 12 |
| 21-024(n) | 21-601312 | Location 13 |
| 21-024(n) | 21-608021 | Added |
| 21-024(n) | 21-609833 | Added |
| 21-024(o) | 21-605201 | Location 1 |
| 21-024(o) | 21-605202 | Location 2 |
| 21-026(a)-99 | 21-27575 | Location 1 |
| 21-026(a)-99 | 21-257560 | Location 2 |
| 21-026(a)-99 | 21-257561 | Location 3 |
| 21-026(a)-99 | 21-257553 | Location 4 |
| 21-026(a)-99 | 21-605238 | Location 5 |
| 21-026(a)-99 | 21-605239 | Location 6 |
| 21-026(a)-99 | 21-605240 | Location 7 |
| 21-026(a)-99 | 21-27571 | Location 8 |
| 21-026(a)-99 | 21-27550 | Location 9 |
| 21-027(a) | 21-601227 | Location 1 |

**Table 3.1-4 (continued)**

| SWMU/AOC/ Consolidated Unit | Field Location ID | Work Plan Proposed Location ID |
|---|---|---|
| 21-027(a) | 21-601224 | Location 2 |
| 21-027(a) | 21-605279 | Location 3 |
| 21-027(a) | 21-605280 | Location 4 |
| 21-027(a) | 21-601229 | Location 5 |
| 21-027(a) | 21-601226 | Location 6 |
| 21-027(a) | 21-608020 | Added |
| 21-027(a) | 21-601225 | Added |
| 21-027(c) | 21-605232 | Location 1 |
| 21-027(c) | 21-605233 | Location 2 |
| 21-027(c) | 21-605234 | Location 3 |
| 21-027(c) | 21-27412 | Location 4 |
| 21-027(c) | 21-605236 | Location 5 |
| 21-027(c) | 21-27401 | Location 6 |
| 21-027(c) | 21-608017 | Added |
| C21-027 | 21-605337 | BH-1 |
| C21-027 | 21-610684 | BH-2 |
| C21-027 | 21-605338 | BH-3 |
| C21-027 | 21-605340 | BH-4 |
| C21-027 | 21-605339 | Location 1 |
| C21-027 | 21-605341 | Location 2 |
| C21-027 | 21-605342 | Location 3 |
| C21-027 | 21-610686 | Location 4 |
| C21-027 | 21-610682 | Added |
| C21-027 | 21-610683 | Added |

*Sample was collected from this location based on Phase II sampling results.

**Table 4.2-1**
**Samples Collected and Analyses Requested at SWMU 21-002(b)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68368 | 21-25679 | 0.0000–0.5000 | SOIL | 5719S | 5717S | —[a] | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68369 | 21-25679 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | 5726S | 5719S | 5719S | 5716S | 5719S | 5719S | 5717S | 5715S | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-09-3629 | 21-25679 | 7.0000–8.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 09-1927 | — | — |
| RE21-06-68370 | 21-25680 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68371 | 21-25680 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68373 | 21-25681 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68374 | 21-25681 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68375 | 21-25682 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68376 | 21-25682 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68378 | 21-25683 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68379 | 21-25683 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | 5713S | 5719S | 5719S | 5717S | 5713S | 5717S | 5719S | 5713S | 5715S | 5717S, 5718S |
| RE21-06-68380 | 21-25684 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68381 | 21-25684 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68383 | 21-25685 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68384 | 21-25685 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68385 | 21-25686 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68386 | 21-25686 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68388 | 21-25687 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68389 | 21-25687 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68390 | 21-25688 | 0.0000–0.5000 | SOIL | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | — | 5717S, 5718S |
| RE21-06-68391 | 21-25688 | 2.5000–3.0000 | QBT3 | 5719S | 5717S | — | 5719S | 5719S | — | 5719S | 5719S | 5717S | — | 5717S | 5719S | 5715S | 5715S | 5717S, 5718S |
| RE21-06-68396 | 21-25689 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68397 | 21-25689 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68398 | 21-25690 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68399 | 21-25690 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68400 | 21-25691 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68401 | 21-25691 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68402 | 21-25692 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68403 | 21-25692 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68404 | 21-25693 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68405 | 21-25693 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68406 | 21-25694 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |

**Table 4.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68407 | 21-25694 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68408 | 21-25695 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68409 | 21-25695 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-06-68410 | 21-25696 | 0.0000–0.5000 | SOIL | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | — | 5709S, 5710S |
| RE21-06-68411 | 21-25696 | 2.5000–3.0000 | QBT3 | 5711S | 5709S | — | 5711S | 5711S | — | 5711S | 5711S | 5709S | — | 5709S | 5711S | 5707S | 5707S | 5709S, 5710S |
| RE21-09-3630 | 21-25696 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-1927[b] | — | — | — | — | — | — |
| RE21-09-3622 | 21-604519 | 0.0000–0.5000 | SOIL | 09-1775 | — | — | — | — | — | 09-1775 | — | — | — | — | — | 09-1775 | — | — |
| RE21-09-3623 | 21-604520 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-1917[b] | — | — | — | — | — | — |
| RE21-09-3624 | 21-604521 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-1775[c] | — | — | — | — | — | — |
| RE21-09-3625 | 21-604522 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-1775[c] | — | — | — | — | — | — |
| RE21-09-3626 | 21-604523 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-1775[d] | — | — | — | — | — | — |
| RE21-09-3627 | 21-604524 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-1775 | — | — | — | — | — | — | — | — |
| RE21-09-3628 | 21-604525 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-1775 | — | 09-1775[d] | — | — | — | — | — | — |
| MD21-10-4658 | 21-609834 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 10-743 | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only barium and selenium.

[c] Metals analysis included only lead and zinc.

[d] Metals analysis included only selenium.

**Table 4.2-2**
**Samples Collected and Analyses Requested at Consolidated Unit 21-003-99 and SWMU 21-024(c)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68434 | 21-25704 | 0.0000–0.5000 | SOIL | 5585S | 5583S | —[a] | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68435 | 21-25704 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68437 | 21-25705 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68438 | 21-25705 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68439 | 21-25705 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | — | 5583S, 5584S |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | — | 5583S, 5584S |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | — | 5583S, 5584S |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68449 | 21-25709 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | — | 5583S, 5584S |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | — | 5583S, 5584S |
| RE21-06-68453 | 21-25710 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68455 | 21-25711 | 0.0000–0.5000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | — | 5583S, 5584S |
| RE21-06-68456 | 21-25711 | 0.5000–1.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68457 | 21-25711 | 1.5000–2.0000 | SOIL | 5585S | 5583S | — | 5585S | 5585S | — | 5585S | 5585S | 5583S | 5582S | 5583S | 5585S | 5582S | 5582S | 5583S, 5584S |
| RE21-06-68458 | 21-25712 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68460 | 21-25712 | 1.5000–2.0000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68472 | 21-25716 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| MD21-09-8986 | 21-25716 | 6.5000–7.5000 | QBT3 | — | — | — | — | — | — | — | — | 10-107[b] | — | — | — | — | — | — |
| RE21-06-68473 | 21-25717 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68477 | 21-25718 | 0.5000–1.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| MD21-09-8978 | 21-25719 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 10-121 | — | — | — | — | — | — |
| MD21-10-7815 | 21-25719 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | 10-889[c] | — | — | — | — | — | — |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | — | 5588S |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | 5589S | 5588S | — | 5589S | 5589S | — | 5589S | 5589S | 5588S | 5587S | 5588S | 5589S | 5587S | 5587S | 5588S |
| RE21-06-68498 | 21-25721 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68499 | 21-25721 | 0.5000–1.0000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68500 | 21-25721 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68506 | 21-25723 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68510 | 21-25724 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | 5598S | 5598S | 5608S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S | 5598S |
| RE21-06-68538 | 21-25725 | 4.0000–4.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 5618S | — |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68520 | 21-25726 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | — | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68529 | 21-25729 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | — | 5619S, 5620S |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | 5621S | 5619S | — | 5621S | 5621S | 5618S | 5621S | 5621S | 5619S | 5618S | 5619S | 5621S | 5618S | 5618S | 5619S, 5620S |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68550 | 21-25732 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68561 | 21-25736 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68566 | 21-25738 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | — | 5631S, 5632S |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | 5633S | 5631S | — | 5633S | 5633S | — | 5633S | 5633S | 5631S | 5630S | 5631S | 5633S | 5630S | 5630S | 5631S, 5632S |
| MD21-07-74337 | 21-25748 | 4.0000–5.0000 | QBT3 | 6906S | 6905S | — | 6906S | 6906S | — | 6906S | 6906S | 6905S | 6904S | 6905S | 6906S | 6904S | 6904S | 6905S |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | 6906S | 6905S | — | 6906S | 6906S | — | 6906S | 6906S | 6905S | 6904S | 6905S | 6906S | 6904S | 6904S | 6905S |
| MD21-09-8979 | 21-25748 | 19.0000–20.0000 | QBT3 | 09-2101 | — | — | — | — | — | 09-2101 | — | 09-2101[d] | 09-2101 | — | — | 09-2101 | — | — |
| MD21-09-9768 | 21-25748 | 26.0000–27.0000 | QBT3 | 09-2101 | — | — | — | — | — | 09-2101 | — | 09-2101[d] | 09-2101 | — | — | 09-2101 | — | — |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | 6421S | 6420S | — | 6421S | 6421S | — | 6421S | 6421S | 6420S | 6418S | 6420S | 6421S | 6418S | 6418S | 6419S,6420S |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | 6421S | 6420S | — | 6421S | 6421S | — | 6421S | 6421S | 6420S | 6418S | 6420S | 6421S | 6418S | 6418S | 6419S,6420S |
| MD21-09-8990 | 21-25750 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2356[e] | — |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | 6421S | 6420S | — | 6421S | 6421S | — | 6421S | 6421S | 6420S | 6418S | 6420S | 6421S | 6418S | 6418S | 6419S,6420S |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | 6421S | 6420S | — | 6421S | 6421S | — | 6421S | 6421S | 6420S | 6418S | 6420S | 6421S | 6418S | 6418S | 6419S,6420S |
| MD21-07-142 | 21-25752 | 2.3300–3.3300 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-20 | — |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | 6717S | 6716S | — | 6717S | 6717S | — | 6717S | 6717S | 6716S | — | 6716S | 6717S | 6715S | — | 6716S |
| MD21-09-9860 | 21-25752 | 3.8000–4.8000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-07-74344 | 21-25752 | 3.8300–4.8300 | QBT3 | 6717S | 6716S | — | 6717S | 6717S | — | 6717S | 6717S | 6716S | — | 6716S | 6717S | 6715S | 6715S | 6716S |
| MD21-09-9861 | 21-25753 | 2.3000–3.3000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-07-143 | 21-25753 | 2.3300–3.3300 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-20 | — |
| MD21-07-74345 | 21-25753 | 2.3300–3.3300 | SOIL | 6728S | 6727S | — | 6728S | 6728S | — | 6728S | 6728S | 6727S | — | 6727S | 6728S | 6726S | — | 6727S |
| MD21-09-9862 | 21-25753 | 3.8000–4.8000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | 6728S | 6727S | — | 6728S | 6728S | — | 6728S | 6728S | 6727S | — | 6727S | 6728S | 6726S | 6726S | 6727S |
| MD21-07-144 | 21-25754 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-20 | — |
| MD21-07-74347 | 21-25754 | 2.0000–3.0000 | SOIL | 6741S | 6740S | — | 6741S | 6741S | — | 6741S | 6741S | 6740S | 6739S | 6740S | 6741S | 6739S | — | 6740S |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-07-74348 | 21-25754 | 4.0000–5.0000 | QBT3 | 6741S | 6740S | — | 6741S | 6741S | — | 6741S | 6741S | 6740S | 6739S | 6740S | 6741S | 6739S | 6739S | 6740S |
| MD21-07-145 | 21-25755 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-20 | — |
| MD21-07-74349 | 21-25755 | 2.0000–3.0000 | SOIL | 6741S | 6740S | — | 6741S | 6741S | — | 6741S | 6741S | 6740S | 6739S | 6740S | 6741S | 6739S | — | 6740S |
| MD21-07-74350 | 21-25755 | 4.0000–5.0000 | SOIL | 6741S | 6740S | — | 6741S | 6741S | — | 6741S | 6741S | 6740S | 6739S | 6740S | 6741S | 6739S | 6739S | 6740S |
| RE21-06-68637 | 21-25757 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68638 | 21-25757 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-72609 | 21-25757 | 3.0000–3.5000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68639 | 21-25758 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68641 | 21-25759 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68642 | 21-25759 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68643 | 21-25760 | 0.0000–0.5000 | SOIL | 5639S | 5637S | 5667S | 5639S | 5639S | 5636S | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68644 | 21-25760 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| MD21-07-74351 | 21-25760 | 5.0000–5.5000 | QBT3 | 6906S | 6905S | — | 6906S | 6906S | — | 6906S | 6906S | 6905S | 6904S | 6905S | 6906S | 6904S | 6904S | 6905S |
| RE21-06-68645 | 21-25761 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68647 | 21-25762 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68649 | 21-25763 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68650 | 21-25763 | 1.5000–2.0000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| MD21-09-8980 | 21-25763 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | — | — | 10-107[f] | — | — | — | — | — | — |
| RE21-06-68651 | 21-25764 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68664 | 21-25770 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | — | 5637S, 5638S |
| RE21-06-68666 | 21-25771 | 1.5000–2.0000 | QBT3 | 5639S | 5637S | — | 5639S | 5639S | — | 5639S | 5639S | 5637S | 5636S | 5637S | 5639S | 5636S | 5636S | 5637S, 5638S |
| RE21-09-2642 | 21-604461 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2643 | 21-604461 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2644 | 21-604461 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2645 | 21-604462 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2646 | 21-604462 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2647 | 21-604462 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2648 | 21-604463 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2649 | 21-604463 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2650 | 21-604463 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2651 | 21-604464 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2652 | 21-604464 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2653 | 21-604464 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2654 | 21-604465 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2655 | 21-604465 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2656 | 21-604465 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2657 | 21-604466 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2658 | 21-604466 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2659 | 21-604466 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2660 | 21-604467 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2661 | 21-604467 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2662 | 21-604467 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1561 | — | — | — | — | — |
| RE21-09-2663 | 21-604468 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2664 | 21-604468 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2665 | 21-604468 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2666 | 21-604469 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2669 | 21-604470 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2670 | 21-604470 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2671 | 21-604470 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2672 | 21-604471 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2673 | 21-604471 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2674 | 21-604471 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2675 | 21-604472 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2676 | 21-604472 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-09-2677 | 21-604472 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2678 | 21-604473 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2679 | 21-604473 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2680 | 21-604473 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2681 | 21-604474 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2682 | 21-604474 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2683 | 21-604474 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1586 | — | — | — | — | — |
| RE21-09-2684 | 21-604475 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2685 | 21-604475 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2686 | 21-604475 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2687 | 21-604476 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2688 | 21-604476 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2689 | 21-604476 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2690 | 21-604477 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2691 | 21-604477 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2692 | 21-604477 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2693 | 21-604478 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2696 | 21-604479 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2697 | 21-604479 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2698 | 21-604479 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2699 | 21-604480 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2700 | 21-604480 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2701 | 21-604480 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2702 | 21-604481 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2703 | 21-604481 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2704 | 21-604481 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2705 | 21-604482 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2706 | 21-604482 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2707 | 21-604482 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2708 | 21-604483 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2709 | 21-604483 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2710 | 21-604483 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1597 | — | — | — | — | — |
| RE21-09-2711 | 21-604484 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2712 | 21-604484 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2713 | 21-604485 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-09-2714 | 21-604485 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2715 | 21-604486 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2716 | 21-604486 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2717 | 21-604487 | 6.5000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2719 | 21-604488 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2720 | 21-604488 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2721 | 21-604489 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2722 | 21-604489 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2723 | 21-604490 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2724 | 21-604491 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2725 | 21-604491 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| RE21-09-2726 | 21-604491 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-1628 | — | — | — | — | — |
| MD21-09-8981 | 21-605289 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2488[g] | — | — | — | — | — | — |
| MD21-09-8982 | 21-605290 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2504[h] | — | — | — | — | — | — |
| MD21-09-8984 | 21-605292 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2356[b] | — | — | — | — | — | — |
| MD21-09-8985 | 21-605292 | 6.5000–7.5000 | QBT3 | — | — | — | — | — | — | — | — | 09-2356[b] | — | — | — | — | — | — |
| MD21-09-8987 | 21-605293 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 10-107 | 10-107[i] | — | — | — | — | — | — |
| MD21-09-8988 | 21-605294 | 0.0000–0.5000 | SOIL | — | 10-107 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8989 | 21-605295 | 0.0000–0.5000 | SOIL | — | 09-2488 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-9863 | 21-605366 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9864 | 21-605366 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9865 | 21-605366 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9866 | 21-605367 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9867 | 21-605367 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9868 | 21-605367 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9869 | 21-605368 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9870 | 21-605368 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9871 | 21-605368 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-10518 | 21-605368 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2411 | — | — | — | — | — |
| MD21-09-9872 | 21-605369 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9873 | 21-605369 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9874 | 21-605369 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9875 | 21-605370 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9876 | 21-605370 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2160 | — | — | — | — | — |
| MD21-09-9877 | 21-605370 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-9878 | 21-605370 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9879 | 21-605371 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9880 | 21-605371 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9881 | 21-605371 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9882 | 21-605372 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9883 | 21-605372 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9884 | 21-605372 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9885 | 21-605373 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9886 | 21-605373 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9887 | 21-605373 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9888 | 21-605374 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9889 | 21-605374 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9890 | 21-605374 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9891 | 21-605375 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9892 | 21-605375 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9893 | 21-605375 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2161 | — | — | — | — | — |
| MD21-09-9894 | 21-605376 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9895 | 21-605376 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9896 | 21-605376 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9897 | 21-605377 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9898 | 21-605377 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9899 | 21-605377 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9900 | 21-605378 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9901 | 21-605378 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9902 | 21-605378 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9903 | 21-605378 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9904 | 21-605379 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9905 | 21-605379 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9906 | 21-605379 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9907 | 21-605380 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9908 | 21-605380 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-9909 | 21-605380 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2163 | — | — | — | — | — |
| MD21-09-10519 | 21-605532 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2411 | — | — | — | — | — |
| MD21-09-10520 | 21-605532 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2411 | — | — | — | — | — |
| MD21-09-10521 | 21-605533 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2411 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-10522 | 21-605533 | 1.0000–1.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2411 | — | — | — | — | — |
| MD21-09-10523 | 21-605533 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2411 | — | — | — | — | — |
| MD21-09-9415 | 21-605617 | 10.0000–10.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2738 | — | — | — | — | — |
| MD21-09-9416 | 21-605618 | 10.0000–10.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2738 | — | — | — | — | — |
| MD21-09-9417 | 21-605619 | 10.0000–10.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2738 | — | — | — | — | — |
| MD21-09-9418 | 21-605620 | 4.7500–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2738 | — | — | — | — | — |
| MD21-09-10409 | 21-605698 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10410 | 21-605699 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10411 | 21-605700 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10412 | 21-605701 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10413 | 21-605702 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10414 | 21-605703 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10415 | 21-605704 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10416 | 21-605705 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10417 | 21-605706 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10418 | 21-605707 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10419 | 21-605708 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10420 | 21-605709 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10421 | 21-605710 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10422 | 21-605711 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10423 | 21-605712 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10424 | 21-605713 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10425 | 21-605714 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10426 | 21-605715 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10427 | 21-605716 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10428 | 21-605717 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10429 | 21-605718 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10430 | 21-605719 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10431 | 21-605720 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10432 | 21-605721 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10433 | 21-605722 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10434 | 21-605723 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10435 | 21-605724 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2747 | — | — | — | — | — |
| MD21-09-10436 | 21-605725 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10437 | 21-605726 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10438 | 21-605727 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10439 | 21-605728 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10440 | 21-605729 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10441 | 21-605730 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10442 | 21-605731 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10443 | 21-605732 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10444 | 21-605733 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10445 | 21-605734 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10446 | 21-605735 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10447 | 21-605736 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10448 | 21-605737 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10449 | 21-605738 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10450 | 21-605739 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10451 | 21-605740 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10452 | 21-605741 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10453 | 21-605742 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10454 | 21-605743 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10455 | 21-605744 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10456 | 21-605745 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10457 | 21-605746 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10458 | 21-605747 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10459 | 21-605748 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10460 | 21-605749 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10461 | 21-605750 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10462 | 21-605751 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10463 | 21-605752 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10464 | 21-605753 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10465 | 21-605754 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10466 | 21-605755 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10467 | 21-605756 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10468 | 21-605757 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10469 | 21-605758 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10470 | 21-605759 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10766 | 21-605759 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-10-1940 | 21-605759 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-156 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10471 | 21-605760 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10472 | 21-605761 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10473 | 21-605762 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10474 | 21-605763 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10475 | 21-605764 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10476 | 21-605765 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10477 | 21-605766 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10768 | 21-605766 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-10478 | 21-605767 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2763 | — | — | — | — | — |
| MD21-09-10479 | 21-605768 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10480 | 21-605769 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10481 | 21-605770 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10482 | 21-605771 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10483 | 21-605772 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10767 | 21-605772 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-13221 | 21-605772 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-155 | — | — | — | — | — |
| MD21-09-10484 | 21-605773 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10485 | 21-605774 | 1.5000–1.6600 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10486 | 21-605775 | 1.5000–1.6600 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10487 | 21-605776 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10488 | 21-605777 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-13202 | 21-605777 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-10489 | 21-605778 | 1.5000–1.6600 | SOIL | — | — | — | — | — | — | — | — | — | 09-2785 | — | — | — | — | — |
| MD21-09-10510 | 21-607149 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10511 | 21-607150 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10512 | 21-607151 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10513 | 21-607152 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10514 | 21-607153 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10528 | 21-607687 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10529 | 21-607688 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10530 | 21-607689 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10531 | 21-607690 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10532 | 21-607691 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10533 | 21-607692 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10534 | 21-607693 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10535 | 21-607694 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10536 | 21-607695 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10537 | 21-607696 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10538 | 21-607697 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10539 | 21-607698 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10540 | 21-607699 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10541 | 21-607700 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10542 | 21-607701 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10543 | 21-607702 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10544 | 21-607703 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10545 | 21-607704 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10546 | 21-607705 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10547 | 21-607706 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10548 | 21-607707 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10549 | 21-607708 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2784 | — | — | — | — | — |
| MD21-09-10550 | 21-607709 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10551 | 21-607710 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10773 | 21-607710 | 2.0000–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-13220 | 21-607710 | 3.1600–3.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-155 | — | — | — | — | — |
| MD21-09-10552 | 21-607711 | 1.6600–1.7600 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10553 | 21-607712 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10554 | 21-607713 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10555 | 21-607714 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10556 | 21-607715 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10557 | 21-607716 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10558 | 21-607717 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10559 | 21-607718 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10560 | 21-607719 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10561 | 21-607720 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10562 | 21-607721 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10563 | 21-607722 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2794 | — | — | — | — | — |
| MD21-09-10564 | 21-607723 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2833 | — | — | — | — | — |
| MD21-09-10565 | 21-607724 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2833 | — | — | — | — | — |
| MD21-09-10566 | 21-607725 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2833 | — | — | — | — | — |
| MD21-09-10567 | 21-607726 | 4.1600–4.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10568 | 21-607727 | 10.1600–10.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10569 | 21-607728 | 4.1600–4.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10570 | 21-607729 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10571 | 21-607730 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10572 | 21-607731 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10573 | 21-607732 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10574 | 21-607733 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10575 | 21-607734 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10576 | 21-607735 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10577 | 21-607736 | 4.6600–4.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10578 | 21-607737 | 4.6600–4.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10579 | 21-607738 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-13199 | 21-607738 | 5.1600–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-10580 | 21-607739 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2867 | — | — | — | — | — |
| MD21-09-10581 | 21-607740 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2934 | — | — | — | — | — |
| MD21-09-10582 | 21-607741 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2934 | — | — | — | — | — |
| MD21-09-10583 | 21-607742 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2934 | — | — | — | — | — |
| MD21-09-10584 | 21-607743 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10585 | 21-607744 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-10-1948 | 21-607744 | 5.1600–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-200 | — | — | — | — | — |
| MD21-09-10586 | 21-607745 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10587 | 21-607746 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10588 | 21-607747 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10589 | 21-607748 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10590 | 21-607749 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10591 | 21-607750 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10592 | 21-607751 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10593 | 21-607752 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10594 | 21-607753 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10595 | 21-607754 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-13210 | 21-607754 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |
| MD21-09-10596 | 21-607755 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10597 | 21-607756 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-13211 | 21-607756 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |
| MD21-09-10598 | 21-607757 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10599 | 21-607758 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10600 | 21-607759 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10601 | 21-607760 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10602 | 21-607761 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10603 | 21-607762 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2972 | — | — | — | — | — |
| MD21-09-10604 | 21-607763 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-2973 | — | — | — | — | — |
| MD21-10-1947 | 21-607763 | 5.1600–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-200 | — | — | — | — | — |
| MD21-09-10605 | 21-607764 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10606 | 21-607765 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10607 | 21-607766 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10608 | 21-607767 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10609 | 21-607768 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10610 | 21-607769 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10611 | 21-607770 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10612 | 21-607771 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10613 | 21-607772 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10614 | 21-607773 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3032 | — | — | — | — | — |
| MD21-09-10615 | 21-607774 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10616 | 21-607775 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10617 | 21-607776 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10618 | 21-607777 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10619 | 21-607778 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10620 | 21-607779 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10621 | 21-607780 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10622 | 21-607781 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10623 | 21-607782 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-13206 | 21-607782 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-3 | — | — | — | — | — |
| MD21-10-1946 | 21-607782 | 2.6600–2.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-200 | — | — | — | — | — |
| MD21-09-10624 | 21-607783 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10625 | 21-607784 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3034 | — | — | — | — | — |
| MD21-09-10626 | 21-607785 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10627 | 21-607786 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10628 | 21-607787 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10629 | 21-607788 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10630 | 21-607789 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10631 | 21-607790 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-13204 | 21-607790 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-3 | — | — | — | — | — |
| MD21-09-10632 | 21-607791 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10633 | 21-607792 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10634 | 21-607793 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10635 | 21-607794 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10636 | 21-607795 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10637 | 21-607796 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10638 | 21-607797 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10639 | 21-607798 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10640 | 21-607799 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10641 | 21-607800 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10642 | 21-607801 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10643 | 21-607802 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10644 | 21-607803 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10645 | 21-607804 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3064 | — | — | — | — | — |
| MD21-09-10653 | 21-607812 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-13215 | 21-607812 | 5.6600–5.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |
| MD21-09-10654 | 21-607813 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10655 | 21-607814 | 4.6600–4.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10656 | 21-607815 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10657 | 21-607816 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10658 | 21-607817 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10659 | 21-607818 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10660 | 21-607819 | 4.6600–4.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10661 | 21-607820 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10662 | 21-607821 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10663 | 21-607822 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10664 | 21-607823 | 4.6600–4.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10665 | 21-607824 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-13214 | 21-607824 | 5.6600–5.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |
| MD21-09-10666 | 21-607825 | 4.6600–4.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10667 | 21-607826 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10668 | 21-607827 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10669 | 21-607828 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10670 | 21-607829 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10671 | 21-607830 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3065 | — | — | — | — | — |
| MD21-09-10672 | 21-607831 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10673 | 21-607832 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10674 | 21-607833 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10675 | 21-607834 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10676 | 21-607835 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10677 | 21-607836 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10678 | 21-607837 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10679 | 21-607838 | 1.6600–1.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10680 | 21-607839 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10681 | 21-607840 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10682 | 21-607841 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10683 | 21-607842 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10684 | 21-607843 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3066 | — | — | — | — | — |
| MD21-09-10695 | 21-607844 | 0.6600–75.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3063 | — | — | — | — | — |
| MD21-09-10696 | 21-607845 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3063 | — | — | — | — | — |
| MD21-09-10697 | 21-607846 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10698 | 21-607847 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10699 | 21-607848 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10700 | 21-607849 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10701 | 21-607850 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10702 | 21-607851 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10703 | 21-607852 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10704 | 21-607853 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10705 | 21-607854 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10706 | 21-607855 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-13207 | 21-607855 | 1.1600–1.2500 | SOIL | — | — | — | — | — | — | — | — | — | 10-3 | — | — | — | — | — |
| MD21-09-10707 | 21-607856 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10708 | 21-607857 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10709 | 21-607858 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10710 | 21-607859 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10711 | 21-607860 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10712 | 21-607861 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10713 | 21-607862 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10714 | 21-607863 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10715 | 21-607864 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10716 | 21-607865 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3078 | — | — | — | — | — |
| MD21-09-10717 | 21-607866 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10718 | 21-607867 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10719 | 21-607868 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10720 | 21-607869 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10721 | 21-607870 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10722 | 21-607871 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10723 | 21-607872 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10724 | 21-607873 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10725 | 21-607874 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10726 | 21-607875 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10727 | 21-607876 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10728 | 21-607877 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10729 | 21-607878 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10730 | 21-607879 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10731 | 21-607880 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3079 | — | — | — | — | — |
| MD21-09-10732 | 21-607881 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10733 | 21-607882 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-10-1950 | 21-607882 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 10-253 | — | — | — | — | — |
| MD21-09-10734 | 21-607883 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10735 | 21-607884 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10736 | 21-607885 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10737 | 21-607886 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10738 | 21-607887 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10739 | 21-607888 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-13217 | 21-607888 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-80 | — | — | — | — | — |
| MD21-09-10740 | 21-607889 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10741 | 21-607890 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10742 | 21-607891 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10743 | 21-607892 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10744 | 21-607893 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10745 | 21-607894 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10746 | 21-607895 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
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| MD21-09-10747 | 21-607896 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10748 | 21-607897 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10749 | 21-607898 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10750 | 21-607899 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10751 | 21-607900 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3111 | — | — | — | — | — |
| MD21-09-10752 | 21-607901 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10753 | 21-607902 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10754 | 21-607903 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10755 | 21-607904 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10756 | 21-607905 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10757 | 21-607906 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10758 | 21-607907 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10759 | 21-607908 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10760 | 21-607909 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10761 | 21-607910 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10762 | 21-607911 | 0.6600–0.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10763 | 21-607912 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10764 | 21-607912 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10765 | 21-607912 | 4.0000–4.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-3112 | — | — | — | — | — |
| MD21-09-10769 | 21-607918 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-10770 | 21-607919 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-10771 | 21-607920 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-10772 | 21-607921 | 1.5000–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-10774 | 21-607923 | 1.0000–1.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3195 | — | — | — | — | — |
| MD21-09-13197 | 21-608084 | 5.1600–5.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-13198 | 21-608085 | 5.1600–5.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-13200 | 21-608087 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-13219 | 21-608087 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-155 | — | — | — | — | — |
| MD21-09-13201 | 21-608088 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-13203 | 21-608090 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 09-3295 | — | — | — | — | — |
| MD21-09-13205 | 21-608092 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-3 | — | — | — | — | — |
| MD21-09-13208 | 21-608095 | 1.1600–1.2500 | SOIL | — | — | — | — | — | — | — | — | — | 10-3 | — | — | — | — | — |
| MD21-09-13209 | 21-608096 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |
| MD21-09-13212 | 21-608099 | 3.6600–3.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |
| MD21-09-13213 | 21-608100 | 3.6600–3.7500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-36 | — | — | — | — | — |

**Table 4.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-13216 | 21-608103 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-80 | — | — | — | — | — |
| MD21-09-13218 | 21-608105 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-106 | — | — | — | — | — |
| MD21-10-1941 | 21-608835 | 0.6600–0.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-156 | — | — | — | — | — |
| MD21-10-1942 | 21-608836 | 2.6600–2.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-156 | — | — | — | — | — |
| MD21-10-1943 | 21-608837 | 5.1600–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-156 | — | — | — | — | — |
| MD21-10-1944 | 21-608838 | 2.1600–2.2500 | SOIL | — | — | — | — | — | — | — | — | — | 10-156 | — | — | — | — | — |
| MD21-10-1945 | 21-608839 | 1.6600–1.7500 | SOIL | — | — | — | — | — | — | — | — | — | 10-200 | — | — | — | — | — |
| MD21-10-1949 | 21-608843 | 5.1600–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-200 | — | — | — | — | — |
| MD21-10-1951 | 21-608845 | 5.1600–5.2500 | QBT3 | — | — | — | — | — | — | — | — | — | 10-263 | — | — | — | — | — |
| MD21-10-1952 | 21-608846 | 5.1600–5.2500 | SOIL | — | — | — | — | — | — | — | — | — | 10-263 | — | — | — | — | — |
| MD21-10-1953 | 21-608847 | 3.1600–3.2500 | SOIL | — | — | — | — | — | — | — | — | — | 10-353 | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only cobalt.

[c] Metals analysis included only chromium.

[d] Metals analysis included only chromium, copper, lead and mercury.

[e] VOC analysis included only tetrachloroethene.

[f] Metals analysis included only arsenic, chromium, cobalt, lead, mercury, silver, uranium, and zinc.

[g] Metals analysis included only barium.

[h] Metals analysis included only zinc.

[i] Metals analysis included only mercury, uranium, and zinc.

**Table 4.2-3**
**Samples Collected and Analyses Requested at Consolidated Unit 21-006(c)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-1584 | 21-600388 | 0.0000–0.5000 | SOIL | 07-85 | 07-86 | —[a] | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | — | 07-86 |
| RE21-07-1585 | 21-600388 | 2.0000–3.0000 | QBT3 | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | 07-86 | 07-86 |
| RE21-07-1586 | 21-600389 | 0.0000–0.5000 | SOIL | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | — | 07-86 |
| RE21-07-1587 | 21-600389 | 2.0000–3.0000 | QBT3 | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | 07-86 | 07-86 |
| RE21-07-1588 | 21-600390 | 0.0000–0.5000 | SOIL | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | — | 07-86 |
| RE21-07-1589 | 21-600390 | 2.0000–3.0000 | QBT3 | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | 07-86 | 07-86 |
| RE21-07-1590 | 21-600391 | 0.0000–0.5000 | SOIL | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | — | 07-86 |
| MD21-09-8783 | 21-600391 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2490 | — |
| RE21-07-1591 | 21-600391 | 2.0000–3.0000 | QBT3 | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | — | 07-86 |
| RE21-07-1592 | 21-600392 | 0.0000–0.5000 | SOIL | 07-85 | 07-86 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-86 | 07-85 | 07-86 | — | 07-86 |
| RE21-07-1646 | 21-600392 | 0.0000–0.5000 | SOIL | — | — | 07-144 | — | — | 07-143 | — | — | — | 07-143 | — | — | — | — | — |
| RE21-07-1593 | 21-600392 | 2.0000–3.0000 | QBT3 | 07-85 | 07-87 | — | 07-85 | 07-85 | — | 07-85 | 07-85 | 07-85 | — | 07-87 | 07-85 | 07-87 | 07-87 | 07-87 |
| RE21-07-1614 | 21-600403 | 0.0000–0.5000 | SOIL | 07-111 | 07-110 | — | 07-111 | 07-111 | — | 07-111 | 07-111 | 07-111 | — | 07-110 | 07-111 | 07-109 | — | 07-110 |
| RE21-07-1615 | 21-600403 | 2.0000–3.0000 | QBT3 | 07-111 | 07-110 | — | 07-111 | 07-111 | — | 07-111 | 07-111 | 07-111 | — | 07-110 | 07-111 | 07-109 | 07-109 | 07-110 |
| RE21-07-1616 | 21-600403 | 5.0000–6.0000 | QBT3 | 07-111 | 07-110 | — | 07-111 | 07-111 | — | 07-111 | 07-111 | 07-111 | — | 07-110 | 07-111 | 07-109 | 07-109 | 07-110 |
| RE21-07-5758 | 21-601199 | 3.0000–4.0000 | SOIL | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5759 | 21-601199 | 8.0000–9.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5760 | 21-601199 | 13.0000–14.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5761 | 21-601199 | 18.0000–19.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5762 | 21-601199 | 23.0000–24.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5763 | 21-601200 | 3.0000–4.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5764 | 21-601200 | 8.0000–9.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5765 | 21-601200 | 13.0000–14.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5766 | 21-601200 | 18.0000–19.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5767 | 21-601200 | 23.0000–24.0000 | QBT3 | 08-519 | 08-518 | — | 08-519 | 08-519 | — | 08-519 | 08-519 | 08-518 | — | 08-518 | 08-519 | 08-517 | 08-517 | 08-518 |
| RE21-07-5768 | 21-601201 | 3.0000–4.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5769 | 21-601201 | 8.0000–9.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5770 | 21-601201 | 13.0000–14.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5771 | 21-601201 | 18.0000–19.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5772 | 21-601201 | 23.0000–24.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5773 | 21-601202 | 12.0000–13.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |

**Table 4.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-5774 | 21-601202 | 17.0000–18.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5775 | 21-601202 | 22.0000–23.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5776 | 21-601202 | 27.0000–28.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5777 | 21-601202 | 32.0000–33.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5778 | 21-601203 | 12.0000–13.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5779 | 21-601203 | 17.0000–18.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5780 | 21-601203 | 22.0000–23.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5781 | 21-601203 | 27.0000–28.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5782 | 21-601203 | 32.0000–33.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5783 | 21-601204 | 12.0000–13.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5784 | 21-601204 | 17.0000–18.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5785 | 21-601204 | 22.0000–23.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5786 | 21-601204 | 27.0000–28.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5787 | 21-601204 | 32.0000–33.0000 | QBT3 | 08-538 | 08-537 | — | 08-538 | 08-538 | — | 08-538 | 08-538 | 08-537 | — | 08-537 | 08-538 | 08-536 | 08-536 | 08-537 |
| RE21-07-5805 | 21-601209 | 3.0000–4.0000 | SOIL | 08-479 | 08-479 | — | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | 08-479 | 08-479 |
| RE21-07-5806 | 21-601209 | 4.0000–5.0000 | QBT3 | 08-479 | 08-479 | — | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | 08-479 | 08-479 |
| RE21-07-5807 | 21-601210 | 3.0000–4.0000 | SOIL | 08-479 | 08-479 | — | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | 08-479 | 08-479 |
| RE21-07-5808 | 21-601210 | 4.0000–5.0000 | QBT3 | 08-479 | 08-479 | — | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | — | 08-479 | 08-479 | 08-479 | 08-479 | 08-479 |
| RE21-07-5809 | 21-601211 | 2.0000–3.0000 | SOIL | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| RE21-07-5810 | 21-601211 | 3.0000–4.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| MD21-09-8773 | 21-601211 | 8.0000–9.0000 | SOIL | 09-2011 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5811 | 21-601212 | 7.0000–8.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| RE21-07-5812 | 21-601212 | 8.0000–9.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| RE21-07-5813 | 21-601213 | 12.0000–13.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| RE21-07-5814 | 21-601213 | 13.0000–14.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| MD21-09-9016 | 21-601213 | 18.0000–19.0000 | QBT3 | 09-1887 | — | — | — | 09-1887 | — | 09-1887 | — | — | — | — | — | — | — | — |
| MD21-09-9017 | 21-601213 | 23.0000–24.0000 | QBT3 | 09-1887 | — | — | — | 09-1887 | — | 09-1887 | — | — | — | — | — | — | — | — |
| RE21-07-5817 | 21-601215 | 6.0000–7.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| RE21-07-5818 | 21-601215 | 8.0000–9.0000 | QBT3 | 08-490 | 08-489 | — | 08-490 | 08-490 | — | 08-490 | 08-490 | 08-489 | — | 08-489 | 08-490 | 08-488 | 08-488 | 08-489 |
| MD21-09-8774 | 21-605256 | 0.0000–0.5000 | SOIL | — | 09-2490 | — | 09-2490 | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8775 | 21-605257 | 0.0000–0.5000 | SOIL | — | 09-2490 | — | — | — | — | — | — | — | — | — | — | — | — | — |

**Table 4.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-8776 | 21-605258 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-2490 | 09-2490 | — | — | — | — | — | — | — |
| MD21-09-8777 | 21-605259 | 3.0000–4.0000 | SOIL | 09-2011 | — | — | 09-2011 | 09-2011 | — | 09-2011 | 09-2011 | — | — | — | 09-2011 | — | — | — |
| MD21-09-8778 | 21-605259 | 8.0000–9.0000 | SOIL | 09-2011 | — | — | 09-2011 | 09-2011 | — | 09-2011 | 09-2011 | — | — | — | 09-2011 | — | — | — |
| MD21-09-8779 | 21-605260 | 3.0000–4.0000 | QBT3 | — | — | — | — | 09-2011 | — | 09-2011 | 09-2011 | 09-2011[b] | — | — | — | — | — | — |
| MD21-09-8780 | 21-605260 | 8.0000–9.0000 | QBT3 | — | — | — | — | 09-2011 | — | 09-2011 | 09-2011 | 09-2011[b] | — | — | — | — | — | — |
| MD21-09-8781 | 21-605261 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | 09-2011 | 09-2011 | — | — | — | — | — | — | — |
| MD21-09-8782 | 21-605261 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | 09-2011 | 09-2011 | — | — | — | — | — | — | — |
| MD21-09-12454 | 21-608018 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | 09-3250 | — | — | — | — | — | — | — | — |
| MD21-10-4659 | 21-609835 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | 10-745 | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only copper.

**Table 4.2-4**
**Samples Collected and Analyses Requested at SWMU 21-009**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68252 | 21-25636 | 0.0000–0.5000 | SOIL | 5691S | 5689S | —* | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68253 | 21-25636 | 1.5000–2.0000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-09-3540 | 21-25636 | 7.0000–8.0000 | QBT3 | 09-1889 | — | — | — | — | — | 09-1889 | — | — | — | — | — | — | — | — |
| RE21-06-68254 | 21-25637 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68255 | 21-25637 | 1.5000–2.0000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-06-68256 | 21-25638 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68257 | 21-25638 | 1.5000–2.0000 | QBT3 | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-06-68258 | 21-25639 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68259 | 21-25639 | 1.5000–2.0000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-06-68260 | 21-25640 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68261 | 21-25640 | 1.5000–2.0000 | SOIL | 5686S | 5685S | 5737S | 5686S | 5686S | 5684S | 5686S | 5686S | 5685S | 5684S | 5685S | 5686S | 5684S | 5684S | 5685S |
| RE21-09-3539 | 21-25640 | 7.0000–8.0000 | QBT3 | — | 09-1888 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68262 | 21-25641 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68263 | 21-25641 | 1.5000–2.0000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-06-68264 | 21-25642 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68265 | 21-25642 | 1.5000–2.0000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-06-68266 | 21-25643 | 0.0000–0.5000 | SOIL | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | — | 5689S, 5690S |
| RE21-06-68267 | 21-25643 | 1.5000–2.0000 | QBT3 | 5691S | 5689S | — | 5691S | 5691S | — | 5691S | 5691S | 5689S | — | 5689S | 5691S | 5687S | 5687S | 5689S, 5690S |
| RE21-09-3538 | 21-25643 | 7.0000–8.0000 | QBT3 | 09-1889 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-09-3535 | 21-604497 | 0.0000–0.5000 | SOIL | 09-1889 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-09-3536 | 21-604498 | 0.0000–0.5000 | SOIL | — | 09-1888 | — | — | — | — | 09-1889 | — | — | — | — | — | — | — | — |
| RE21-09-3543 | 21-604498 | 7.0000–8.0000 | QBT3 | — | 09-1888 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-09-3537 | 21-604499 | 0.0000–0.5000 | SOIL | — | 09-1888 | — | — | — | — | 09-1889 | — | — | — | — | — | — | — | — |
| RE21-09-3544 | 21-604499 | 7.0000–8.0000 | SOIL | — | 09-1888 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

* — = Analysis not requested.

**Table 4.2-5**
**Samples Collected and Analyses Requested at SWMU 21-012(b)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-07-74366 | 21-25778 | 0.0000–0.5000 | SOIL | 6568S | 6567S | —[a] | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74367 | 21-25778 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74369 | 21-25779 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74370 | 21-25779 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74372 | 21-25780 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74373 | 21-25780 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74375 | 21-25781 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74376 | 21-25781 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74378 | 21-25782 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74379 | 21-25782 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74381 | 21-25783 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74382 | 21-25783 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| RE21-09-3640 | 21-25783 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | 09-2070 | — | 09-2070[b] | — | — | — | — | — | — |
| MD21-07-74384 | 21-25784 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74385 | 21-25784 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74387 | 21-25785 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74388 | 21-25785 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74390 | 21-25786 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74391 | 21-25786 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74393 | 21-25787 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74394 | 21-25787 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74396 | 21-25788 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74397 | 21-25788 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74399 | 21-25789 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74400 | 21-25789 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74402 | 21-25790 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74403 | 21-25790 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74405 | 21-25791 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74406 | 21-25791 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74408 | 21-25792 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |
| MD21-07-74409 | 21-25792 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74411 | 21-25793 | 0.0000–0.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | — | 6567S |

**Table 4.2-5 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-07-74412 | 21-25793 | 2.0000–2.5000 | SOIL | 6568S | 6567S | — | 6568S | 6568S | — | 6568S | 6568S | 6567S | — | 6567S | 6568S | 6569S | 6569S | 6567S |
| MD21-07-74414 | 21-25794 | 0.0000–0.5000 | SOIL | 6606S | 6605S | — | 6606S | 6606S | — | 6606S | 6606S | 6605S | — | 6605S | 6606S | 6604S | — | 6605S |
| MD21-07-74415 | 21-25794 | 2.0000–2.5000 | SOIL | 6606S | 6605S | — | 6606S | 6606S | — | 6606S | 6606S | 6605S | — | 6605S | 6606S | 6604S | 6604S | 6605S |
| MD21-07-74418 | 21-25795 | 0.0000–0.5000 | SOIL | 6606S | 6605S | — | 6606S | 6606S | — | 6606S | 6606S | 6605S | — | 6605S | 6606S | 6604S | — | 6605S |
| MD21-07-74419 | 21-25795 | 2.0000–2.5000 | SOIL | 6606S | 6605S | — | 6606S | 6606S | — | 6606S | 6606S | 6605S | — | 6605S | 6606S | 6604S | 6604S | 6605S |
| MD21-07-74416 | 21-25796 | 0.0000–0.5000 | SOIL | 6606S | 6605S | — | 6606S | 6606S | — | 6606S | 6606S | 6605S | — | 6605S | 6606S | 6604S | — | 6605S |
| MD21-07-74417 | 21-25796 | 2.0000–2.5000 | QBT3 | 6606S | 6605S | — | 6606S | 6606S | — | 6606S | 6606S | 6605S | — | 6605S | 6606S | 6604S | 6604S | 6605S |
| MD21-07-74436 | 21-25797 | 0.0000–0.5000 | SOIL | 6799S | 6798S | — | 6799S | 6799S | — | 6799S | 6799S | 6798S | 6797S | 6798S | 6799S | 6797S | — | 6798S |
| MD21-07-74437 | 21-25797 | 2.0000–3.0000 | QBT3 | 6799S | 6798S | — | 6799S | 6799S | — | 6799S | 6799S | 6798S | 6797S | 6798S | 6799S | 6797S | 6797S | 6798S |
| MD21-07-74438 | 21-25797 | 5.0000–6.0000 | QBT3 | 6799S | 6798S | — | 6799S | 6799S | — | 6799S | 6799S | 6798S | 6797S | 6798S | 6799S | 6797S | 6797S | 6798S |
| RE21-09-3642 | 21-25797 | 10.0000–11.0000 | SOIL | — | — | — | — | — | — | 09-2070 | — | 09-2070[c] | — | — | — | — | — | — |
| MD21-07-74439 | 21-25798 | 0.0000–0.5000 | SOIL | 6789S | 6788S | — | 6789S | 6789S | — | 6789S | 6789S | 6788S | 6787S | 6788S | 6789S | 6787S | — | 6788S |
| MD21-07-74440 | 21-25798 | 2.0000–3.0000 | QBT3 | 6789S | 6788S | — | 6789S | 6789S | — | 6789S | 6789S | 6788S | 6787S | 6788S | 6789S | 6787S | 6787S | 6788S |
| MD21-07-74441 | 21-25798 | 5.0000–6.0000 | QBT3 | 6789S | 6788S | — | 6789S | 6789S | — | 6789S | 6789S | 6788S | 6787S | 6788S | 6789S | 6787S | 6787S | 6788S |
| RE21-07-25 | 21-25800 | 2.3300–3.3300 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-63 | — |
| MD21-07-74445 | 21-25800 | 2.3300–3.3360 | QBT3 | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | — | 6675S |
| MD21-07-74446 | 21-25800 | 4.3300–5.3300 | QBT3 | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | 6674S | 6675S |
| RE21-09-3639 | 21-25800 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2070[d] | — | — | — | — | — | — |
| MD21-07-74447 | 21-25801 | 2.3300–3.3300 | QBT3 | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | — | 6675S |
| RE21-07-26 | 21-25801 | 2.3300–3.3300 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-63 | — |
| MD21-07-74448 | 21-25801 | 4.3300–5.3300 | QBT3 | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | 6674S | 6675S |
| RE21-07-28 | 21-25802 | 1.5000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-63 | — |
| MD21-07-74449 | 21-25802 | 2.0000–3.0000 | SOIL | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | — | 6675S |
| MD21-07-74450 | 21-25802 | 4.0000–5.0000 | QBT3 | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | 6674S | 6675S |
| MD21-07-74451 | 21-25803 | 2.3300–3.3300 | SOIL | 6810S | 6809S | — | 6810S | 6810S | — | 6810S | 6810S | 6809S | — | 6809S | 6810S | 6808S | — | 6809S |
| RE21-07-24 | 21-25803 | 2.3300–3.3300 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-63 | — |
| MD21-07-74452 | 21-25803 | 4.3300–5.3300 | QBT3 | 6810S | 6809S | — | 6810S | 6810S | — | 6810S | 6810S | 6809S | — | 6809S | 6810S | 6808S | 6808S | 6809S |
| MD21-07-74453 | 21-25804 | 2.0000–3.0000 | SOIL | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | — | 6675S |
| RE21-07-27 | 21-25804 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 07-63 | — |
| MD21-07-74454 | 21-25804 | 4.0000–5.0000 | QBT3 | 6676S | 6675S | — | 6676S | 6676S | — | 6676S | 6676S | 6675S | — | 6675S | 6676S | 6674S | 6674S | 6675S |
| RE21-09-3643 | 21-25804 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | 09-2070 | — | — | — | — | — | — | — | — |
| MD21-07-74455 | 21-25805 | 2.6700–3.6700 | SOIL | 6824S | 6823S | — | 6824S | 6824S | — | 6824S | 6824S | 6823S | — | 6823S | 6824S | 6822S | 6822S | 6823S |
| MD21-07-74456 | 21-25805 | 4.6700–5.6700 | QBT3 | 6824S | 6823S | — | 6824S | 6824S | — | 6824S | 6824S | 6823S | — | 6823S | 6824S | 6822S | 6822S | 6823S |
| MD21-07-74457 | 21-25806 | 2.0000–3.0000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | — | 6834S | 6835S | 6833S | 6833S | 6834S |

**Table 4.2-5 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-07-74458 | 21-25806 | 4.0000–5.0000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | — | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74459 | 21-25807 | 2.5000–3.5000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74460 | 21-25807 | 4.5000–5.5000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74461 | 21-25808 | 2.5000–3.5000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74462 | 21-25808 | 4.5000–5.5000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74463 | 21-25809 | 2.0000–3.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74464 | 21-25809 | 4.0000–5.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74433 | 21-25810 | 0.0000–0.5000 | SOIL | 6789S | 6788S | — | 6789S | 6789S | — | 6789S | 6789S | 6788S | 6787S | 6788S | 6789S | 6787S | — | 6788S |
| MD21-07-74434 | 21-25810 | 2.0000–3.0000 | QBT3 | 6789S | 6788S | — | 6789S | 6789S | — | 6789S | 6789S | 6788S | 6787S | 6788S | 6789S | 6787S | 6787S | 6788S |
| MD21-07-74435 | 21-25810 | 5.0000–6.0000 | QBT3 | 6789S | 6788S | — | 6789S | 6789S | — | 6789S | 6789S | 6788S | 6787S | 6788S | 6789S | 6787S | 6787S | 6788S |
| RE21-09-3644 | 21-25810 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2070[c] | — | — | — | — | — | — |
| MD21-07-74467 | 21-25811 | 3.0000–4.0000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74468 | 21-25811 | 5.0000–6.0000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74469 | 21-25812 | 2.0000–3.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74470 | 21-25812 | 4.0000–5.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74471 | 21-25813 | 3.0000–4.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74472 | 21-25813 | 5.0000–6.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74473 | 21-25814 | 1.6000–2.6000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74474 | 21-25814 | 3.5000–4.5000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74475 | 21-25815 | 2.0000–3.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74476 | 21-25815 | 4.0000–5.0000 | QBT3 | 6840S | 6839S | — | 6840S | 6840S | — | 6840S | 6840S | 6839S | — | 6839S | 6840S | 6838S | 6838S | 6839S |
| MD21-07-74478 | 21-25816 | 4.0000–5.0000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74477 | 21-25816 | 6.0000–7.0000 | QBT3 | 6835S | 6834S | — | 6835S | 6835S | — | 6835S | 6835S | 6834S | 6833S | 6834S | 6835S | 6833S | 6833S | 6834S |
| MD21-07-74479 | 21-25817 | 2.5000–3.5000 | QBT3 | 6850S | 6849S | — | 6850S | 6850S | — | 6850S | 6850S | 6849S | — | 6849S | 6850S | 6848S | 6848S | 6849S |
| MD21-07-74480 | 21-25817 | 4.5000–5.5000 | QBT3 | 6850S | 6849S | — | 6850S | 6850S | — | 6850S | 6850S | 6849S | — | 6849S | 6850S | 6848S | 6848S | 6849S |
| RE21-09-3641 | 21-25817 | 9.5000–10.5000 | QBT3 | — | 09-2070 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-76274 | 21-27671 | 55.0000–56.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76275 | 21-27671 | 60.0000–61.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76276 | 21-27671 | 65.0000–66.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76277 | 21-27671 | 70.0000–71.0000 | QBT3 | 7065S | 7063S | 7078S | 7065S | 7065S | 7064S | 7065S | 7065S | 7063S | 7064S | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76278 | 21-27671 | 75.0000–76.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76280 | 21-27672 | 5.0000–6.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76281 | 21-27672 | 10.0000–11.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76282 | 21-27672 | 15.0000–16.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |

**Table 4.2-5 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-76283 | 21-27672 | 20.0000–21.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76284 | 21-27672 | 25.0000–26.0000 | QBT3 | 7065S | 7063S | — | 7065S | 7065S | — | 7065S | 7065S | 7063S | — | 7063S | 7065S | 7064S | 7064S | 7063S |
| RE21-07-76286 | 21-27673 | 5.0000–6.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76287 | 21-27673 | 10.0000–11.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76288 | 21-27673 | 15.0000–16.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76289 | 21-27673 | 20.0000–21.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76290 | 21-27673 | 25.0000–26.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76292 | 21-27674 | 5.0000–6.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76293 | 21-27674 | 10.0000–11.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76294 | 21-27674 | 18.0000–19.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76295 | 21-27674 | 20.0000–21.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-07-76296 | 21-27674 | 25.0000–26.0000 | QBT3 | 7070S | 7069S | — | 7070S | 7070S | — | 7070S | 7070S | 7069S | — | 7069S | 7070S | 7068S | 7068S | 7069S |
| RE21-09-3633 | 21-604526 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2036[d] | — | — | — | — | — | — |
| RE21-09-3634 | 21-604527 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | — | — | 09-2036[e] | — | — | — | — | — | — |
| RE21-09-3635 | 21-604528 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2070[f] | — | — | — | — | — | — |
| RE21-09-3636 | 21-604529 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2440[g] | — | — | — | — | — | — |
| RE21-09-3637 | 21-604529 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2440[h] | — |
| RE21-09-3638 | 21-604529 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2440[h] | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only copper and lead.

[c] Metals analysis included only strontium.

[d] Metals analysis included only chromium.

[e] Metals analysis included only copper and zinc.

[f] Metals analysis included only zinc.

[g] Metals analysis included only copper, lead, strontium, and zinc.

[h] VOCs analysis included only toluene.

**Table 4.2-6**
**Samples Collected and Analyses Requested at SWMU 21-013(c)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Gross Gamma | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | Uranium | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | 5649S | 5647S | —[a] | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68285 | 21-25648 | 2.5000–3.0000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68288 | 21-25649 | 2.5000–3.0000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68290 | 21-25650 | 2.5000–3.0000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | 5643S | 5645S | 5669S | 5643S | — | — | 5643S | 5642S | 5643S | 5643S | 5645S | 5642S | 5645S | 5643S | 5642S | — | — | 5644S, 5645S |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | 5643S | 5645S | 5669S | 5643S | — | — | 5643S | 5642S | 5643S | 5643S | 5645S | 5642S | 5645S | 5643S | 5642S | — | 5642S | 5644S, 5645S |
| RE21-09-3570 | 21-25651 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 09-2100[b] | — | — | — | — | — | — | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68295 | 21-25652 | 2.5000–3.0000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-09-3569 | 21-25653 | 8.0000–9.0000 | QBT3 | 09-2100 | — | — | — | — | — | — | — | 09-2100 | — | — | — | — | — | — | — | — | — |
| RE21-06-68299 | 21-25654 | 0.0000–0.5000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68300 | 21-25654 | 2.5000–3.0000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68303 | 21-25655 | 2.5000–3.0000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | — | 5647S, 5648S |
| RE21-06-68305 | 21-25656 | 0.5000–1.0000 | QBT3 | 5649S | 5647S | — | 5649S | — | — | 5649S | 5646S | 5649S | 5649S | 5647S | 5646S | 5647S | 5649S | 5646S | — | 5646S | 5647S, 5648S |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | — | 5651S, 5652S |
| RE21-06-68313 | 21-25657 | 2.5000–3.0000 | QBT3 | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | 5650S | 5651S, 5652S |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | — | 5651S, 5652S |
| RE21-06-68315 | 21-25658 | 2.5000–3.0000 | QBT3 | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | 5650S | 5651S, 5652S |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | — | 5651S, 5652S |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | 5650S | 5651S, 5652S |
| RE21-06-68318 | 21-25660 | 0.0000–0.5000 | SOIL | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | — | 5651S, 5652S |

**Table 4.2-6 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Gross Gamma | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | Uranium | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-06-68319 | 21-25660 | 2.5000–3.0000 | QBT3 | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | 5650S | 5651S, 5652S |
| RE21-06-68320 | 21-25661 | 0.0000–0.5000 | SOIL | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | — | 5651S, 5652S |
| RE21-06-68321 | 21-25661 | 2.5000–3.0000 | QBT3 | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | 5650S | 5651S, 5652S |
| RE21-06-68322 | 21-25662 | 0.0000–0.5000 | SOIL | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | — | 5651S, 5652S |
| RE21-06-68323 | 21-25662 | 2.5000–3.0000 | QBT3 | 5653S | 5651S | — | 5653S | — | — | 5653S | 5650S | 5653S | 5653S | 5651S | 5650S | 5651S | 5653S | 5650S | — | 5650S | 5651S, 5652S |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68325 | 21-25663 | 2.5000–3.0000 | QBT3 | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68327 | 21-25664 | 2.5000–3.0000 | QBT3 | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-09-3571 | 21-25664 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2100 | — | — | — | — | — |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68329 | 21-25665 | 2.5000–3.0000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68333 | 21-25667 | 2.5000–3.0000 | QBT3 | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-06-68334 | 21-25668 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68335 | 21-25668 | 2.5000–3.0000 | QBT3 | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-06-68336 | 21-25669 | 0.0000–0.5000 | SOIL | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | — | 5655S, 5656S |
| RE21-06-68337 | 21-25669 | 2.5000–3.0000 | QBT3 | 5657S | 5655S | — | 5657S | — | — | 5657S | 5654S | 5657S | 5657S | 5655S | 5654S | 5655S | 5657S | 5654S | — | 5654S | 5655S, 5656S |
| RE21-09-3572 | 21-604500 | 0.0000–0.5000 | SOIL | 09-2068 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2068 | — | — | — |
| RE21-09-3573 | 21-604501 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2068 | — | — | — | — | — | 09-2068 | — | — | — |
| RE21-09-3574 | 21-604502 | 0.0000–0.5000 | SOIL | 09-2100 | — | — | — | — | — | — | — | — | — | — | — | 09-2100 | — | — | — | — | — |
| RE21-09-3576 | 21-604502 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2100 | — | — | — | — | — |
| RE21-09-3575 | 21-604503 | 0.0000–0.5000 | SOIL | 09-2100 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-09-3577 | 21-604503 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 09-2100[c] | — | — | — | — | — | — | — |
| RE21-09-3578 | 21-604504 | 0.0000–0.5000 | SOIL | 09-2068 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-09-3579 | 21-604505 | 0.0000–0.5000 | SOIL | 09-2068 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-09-3580 | 21-604506 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 09-2068[b] | — | — | — | — | — | — | — |
| RE21-09-3581 | 21-604507 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 09-2068[b] | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only selenium.

[c] Metals analysis included only barium.

**Table 4.2-7**
**Samples Collected and Analyses Requested at SWMU 21-022(f)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-08-8714 | 21-603138 | 13.5000–14.5000 | QBT3 | 08-521 | 08-521 | —[a] | 08-521 | 08-521 | — | 08-521 | 08-521 | 08-521 | — | 08-521 | 08-521 | 08-521 | 08-521 | 08-521 |
| RE21-08-8715 | 21-603138 | 18.5000–19.5000 | QBT3 | 08-521 | 08-521 | — | 08-521 | 08-521 | — | 08-521 | 08-521 | 08-521 | — | 08-521 | 08-521 | 08-521 | 08-521 | 08-521 |
| RE21-08-8716 | 21-603138 | 23.5000–24.5000 | QBT3 | 08-521 | 08-521 | — | 08-521 | 08-521 | — | 08-521 | 08-521 | 08-521 | — | 08-521 | 08-521 | 08-521 | 08-521 | 08-521 |
| RE21-08-8720 | 21-603140 | 7.0000–8.0000 | QBT3 | 08-346 | 08-345 | — | 08-346 | 08-346 | — | 08-346 | 08-346 | 08-345 | — | 08-345 | 08-346 | 08-344 | 08-344 | 08-345 |
| RE21-08-8721 | 21-603140 | 9.0000–10.0000 | QBT3 | 08-346 | 08-345 | — | 08-346 | 08-346 | — | 08-346 | 08-346 | 08-345 | — | 08-345 | 08-346 | 08-344 | 08-344 | 08-345 |
| RE21-08-8722 | 21-603141 | 8.5000–9.5000 | QBT3 | 08-346 | 08-345 | — | 08-346 | 08-346 | — | 08-346 | 08-346 | 08-345 | — | 08-345 | 08-346 | 08-344 | 08-344 | 08-345 |
| RE21-08-8744 | 21-603141 | 8.5000–9.5000 | QBT3 | — | — | 08-520 | — | — | 08-521 | — | — | — | 08-521 | — | — | — | — | — |
| RE21-08-8723 | 21-603141 | 10.5000–11.5000 | QBT3 | 08-346 | 08-345 | — | 08-346 | 08-346 | — | 08-346 | 08-346 | 08-345 | — | 08-345 | 08-346 | 08-344 | 08-344 | 08-345 |
| RE21-08-8724 | 21-603142 | 8.5000–9.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| RE21-08-8725 | 21-603142 | 10.5000–11.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| MD21-09-8725 | 21-603142 | 15.5000–16.5000 | QBT3 | — | — | — | — | — | — | — | 09-2113 | — | — | — | — | — | — | — |
| RE21-08-8726 | 21-603143 | 7.5000–8.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| RE21-08-8727 | 21-603143 | 9.5000–10.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| RE21-08-8728 | 21-603144 | 7.5000–8.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| RE21-08-8729 | 21-603144 | 9.5000–10.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| RE21-08-8730 | 21-603145 | 6.5000–7.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| RE21-08-8731 | 21-603145 | 8.5000–9.5000 | QBT3 | 08-451 | 08-450 | — | 08-451 | 08-451 | — | 08-451 | 08-451 | 08-450 | — | 08-450 | 08-451 | 08-449 | 08-449 | 08-450 |
| MD21-09-8724 | 21-603145 | 13.5000–14.5000 | QBT3 | — | — | — | — | 09-2113 | — | — | — | 09-2113[b] | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers.

[a] — = Analysis not requested.

[b] Metals analysis included only lead and selenium.

**Table 4.2-8**
**Samples Collected and Analyses Requested at Consolidated Unit 21-022(h)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | —[a] | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | 07-68 | 07-69 |
| RE21-07-991 | 21-600233 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-992 | 21-600233 | 2.0000–3.0000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | 07-68 | 07-69 |
| RE21-07-993 | 21-600234 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-994 | 21-600234 | 2.0000–3.0000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | 07-68 | 07-69 |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-996 | 21-600235 | 2.0000–3.0000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | 07-68 | 07-69 |
| RE21-07-997 | 21-600236 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-998 | 21-600236 | 2.0000–3.0000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | 07-68 | 07-69 |
| RE21-07-1021 | 21-600237 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | — | 07-69 |
| RE21-07-1000 | 21-600237 | 2.0000–3.0000 | QBT3 | 07-70 | 07-69 | — | 07-70 | 07-70 | — | 07-70 | 07-70 | 07-69 | — | 07-69 | 07-70 | 07-68 | 07-68 | 07-69 |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | — | 07-79 |
| RE21-07-1002 | 21-600238 | 2.0000–3.0000 | QBT3 | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | 07-78 | 07-79 |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | — | 07-79 |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | 07-78 | 07-79 |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | — | 07-79 |
| RE21-07-1006 | 21-600240 | 2.0000–3.0000 | QBT3 | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | 07-78 | 07-79 |
| MD21-09-8601 | 21-600240 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2589[b] | — | — | — | — | — | — |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | — | 07-79 |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | 07-78 | 07-79 |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | — | 07-79 |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | 07-80 | 07-79 | — | 07-80 | 07-80 | — | 07-80 | 07-80 | 07-79 | — | 07-79 | 07-80 | 07-78 | 07-78 | 07-79 |
| RE21-07-1121 | 21-600242 | 2.0000–3.0000 | QBT3 | — | — | 07-142 | — | — | 07-141 | — | — | — | 07-141 | — | — | — | — | — |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | 07-108 | 07-107 | — | 07-108 | 07-108 | — | 07-108 | 07-108 | 07-107 | — | 07-107 | 07-108 | 07-106 | — | 07-107 |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | 07-108 | 07-107 | — | 07-108 | 07-108 | — | 07-108 | 07-108 | 07-107 | — | 07-107 | 07-108 | 07-106 | 07-106 | 07-107 |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | 07-108 | 07-107 | — | 07-108 | 07-108 | — | 07-108 | 07-108 | 07-107 | — | 07-107 | 07-108 | 07-106 | 07-106 | 07-107 |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | 07-436 | 07-435 | — | 07-436 | 07-436 | — | 07-436 | 07-436 | 07-435 | — | 07-435 | 07-436 | 07-434 | 07-434 | 07-435 |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | 07-436 | 07-435 | — | 07-436 | 07-436 | — | 07-436 | 07-436 | 07-435 | — | 07-435 | 07-436 | 07-434 | 07-434 | 07-435 |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 07-436 | 07-435 | — | 07-436 | 07-436 | — | 07-436 | 07-436 | 07-435 | — | 07-435 | 07-436 | 07-434 | 07-434 | 07-435 |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | 07-436 | 07-435 | — | 07-436 | 07-436 | — | 07-436 | 07-436 | 07-435 | — | 07-435 | 07-436 | 07-434 | 07-434 | 07-435 |

**Table 4.2-8 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-5011 | 21-601059 | 13.5000–14.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5012 | 21-601059 | 15.5000–16.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5013 | 21-601060 | 13.5000–14.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5017 | 21-601062 | 13.5000–14.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5018 | 21-601062 | 18.5000–19.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5019 | 21-601062 | 23.5000–24.5000 | QBT3 | 07-477 | 07-476 | — | 07-477 | 07-477 | — | 07-477 | 07-477 | 07-476 | — | 07-476 | 07-477 | 07-475 | 07-475 | 07-476 |
| RE21-07-5020 | 21-601063 | 14.0000–15.0000 | QBT3 | 08-269 | 08-268 | — | 08-269 | 08-269 | — | 08-269 | 08-269 | 08-268 | — | 08-268 | 08-269 | 08-267 | 08-267 | 08-268 |
| RE21-07-5021 | 21-601063 | 19.0000–20.0000 | QBT3 | 08-269 | 08-268 | — | 08-269 | 08-269 | — | 08-269 | 08-269 | 08-268 | — | 08-268 | 08-269 | 08-267 | 08-267 | 08-268 |
| RE21-07-5022 | 21-601063 | 24.0000–25.0000 | QBT3 | 08-269 | 08-268 | — | 08-269 | 08-269 | — | 08-269 | 08-269 | 08-268 | — | 08-268 | 08-269 | 08-267 | 08-267 | 08-268 |
| RE21-07-5094 | 21-601063 | 24.0000–25.0000 | QBT3 | — | — | 08-270 | — | — | 08-267 | — | — | — | 08-267 | — | — | — | — | — |
| MD21-09-8841 | 21-605282 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2589[c] | — | — | — | — | — | — |
| MD21-09-8842 | 21-605282 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2589[b] | — | — | — | — | — | — |
| MD21-09-8843 | 21-605282 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2589[b] | — | — | — | — | — | — |
| MD21-10-4661 | 21-605282 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | 10-746[b] | — | — | — | — | — | — |
| MD21-09-8844 | 21-605283 | 0.0000–0.5000 | SOIL | — | 09-2467 | — | — | — | — | — | — | 09-2467[c] | — | 09-2467 | — | — | — | — |
| MD21-09-8845 | 21-605284 | 14.0000–15.0000 | QBT3 | 09-1951 | — | — | 09-1951 | 09-1951 | — | 09-1951 | — | 09-1951[d] | — | — | 09-1951 | — | — | — |
| MD21-09-8846 | 21-605284 | 19.0000–20.0000 | QBT3 | 09-1951 | — | — | 09-1951 | 09-1951 | — | 09-1951 | — | 09-1951[d] | — | — | 09-1951 | — | — | — |
| MD21-10-4664 | 21-609837 | 0.0000–0.5000 | SOIL | — | 10-746 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only barium.

[c] Metals analysis included only molybdenum.

[d] Metals analysis included only molybdenum and selenium.

**Table 4.2-9**
**Samples Collected and Analyses Requested at Consolidated Unit 21-023(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | 08-46 | 08-45 | —* | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5212 | 21-601106 | 4.0000–5.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5220 | 21-601110 | 4.0000–5.0000 | QBT3 | 08-46 | 08-45 | — | 08-46 | 08-46 | — | 08-46 | 08-46 | 08-45 | — | 08-45 | 08-46 | 08-44 | 08-44 | 08-45 |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| MD21-09-8818 | 21-601114 | 9.0000–10.0000 | SOIL | — | — | — | — | — | — | 09-2285 | — | — | — | — | — | 09-2285 | — | — |
| MD21-09-12421 | 21-601114 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | 09-3030 | — | — | — | — | — | 09-3030 | — | — |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5231 | 21-601116 | 2.5000–3.5000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5232 | 21-601116 | 4.5000–5.5000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5233 | 21-601117 | 2.5000–3.5000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5234 | 21-601117 | 4.5000–5.5000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5236 | 21-601118 | 4.0000–5.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-08-7066 | 21-601118 | 4.0000–5.0000 | QBT3 | — | — | 08-119 | — | — | 08-118 | — | — | — | 08-118 | — | — | — | — | — |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5239 | 21-601120 | 2.0000–3.0000 | SOIL | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| MD21-09-8817 | 21-601120 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | 09-2285 | — | — | — | — | — | — | — | — |
| RE21-07-5241 | 21-601121 | 2.0000–3.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5242 | 21-601121 | 4.0000–5.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5243 | 21-601122 | 2.0000–3.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5244 | 21-601122 | 4.0000–5.0000 | QBT3 | 08-72 | 08-71 | — | 08-72 | 08-72 | — | 08-72 | 08-72 | 08-71 | — | 08-71 | 08-72 | 08-70 | 08-70 | 08-71 |
| RE21-07-5245 | 21-601123 | 5.5000–6.5000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |

**Table 4.2-9 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-5246 | 21-601123 | 7.5000–8.5000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5247 | 21-601124 | 5.5000–6.5000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5248 | 21-601124 | 7.5000–8.5000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5249 | 21-601125 | 5.0000–6.0000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5250 | 21-601125 | 7.0000–8.0000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5251 | 21-601126 | 7.0000–8.0000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | 08-60 | 08-59 | — | 08-60 | 08-60 | — | 08-60 | 08-60 | 08-59 | — | 08-59 | 08-60 | 08-58 | 08-58 | 08-59 |
| RE21-07-5258 | 21-601129 | 6.0000–7.0000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5261 | 21-601130 | 4.0000–5.0000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5262 | 21-601130 | 9.0000–10.0000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| RE21-07-5263 | 21-601130 | 14.0000–15.0000 | QBT3 | 08-63 | 08-62 | — | 08-63 | 08-63 | — | 08-63 | 08-63 | 08-62 | — | 08-62 | 08-63 | 08-61 | 08-61 | 08-62 |
| MD21-09-8816 | 21-601130 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | 09-2067 | — | — | — | — | — | — | — | — |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | 08-83 | 08-82 | — | 08-83 | 08-83 | — | 08-83 | 08-83 | 08-82 | — | 08-82 | 08-83 | 08-81 | 08-81 | 08-82 |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7058 | 21-603012 | 4.0000–5.0000 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7059 | 21-603012 | 6.0000–7.0000 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7060 | 21-603013 | 5.2500–6.2500 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7061 | 21-603013 | 7.2500–8.2500 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7062 | 21-603014 | 6.0000–7.0000 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7063 | 21-603014 | 8.0000–9.0000 | QBT3 | 08-86 | 08-85 | — | 08-86 | 08-86 | — | 08-86 | 08-86 | 08-85 | — | 08-85 | 08-86 | 08-84 | 08-84 | 08-85 |
| RE21-08-7064 | 21-603015 | 3.5000–4.5000 | QBT3 | 08-89 | 08-88 | — | 08-89 | 08-89 | — | 08-89 | 08-89 | 08-88 | — | 08-88 | 08-89 | 08-87 | 08-87 | 08-88 |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | 08-89 | 08-88 | — | 08-89 | 08-89 | — | 08-89 | 08-89 | 08-88 | — | 08-88 | 08-89 | 08-87 | 08-87 | 08-88 |
| MD21-09-8814 | 21-603015 | 10.5000–11.5000 | QBT3 | 09-2285 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8815 | 21-605271 | 21.0000–22.0000 | QBT3 | 09-2067 | — | — | — | — | — | 09-2067 | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

*— = Analysis not requested.

**Table 4.2-10**
**Samples Collected and Analyses Requested at SWMU 21-024(a)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Gross Gamma | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | 6561S | 6559S | —[a] | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-09-3584 | 21-27322 | 4.0000–5.0000 | QBT3 | — | — | — | 09-2412 | — | — | — | — | 09-2412 | — | 09-2412[b] | — | — | — | — | — | — |
| MD21-09-12451 | 21-27322 | 9.0000–10.0000 | SOIL | — | — | — | — | — | — | — | — | 09-3142 | — | — | — | — | — | — | — | — |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74887 | 21-27325 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-09-3582 | 21-27325 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 09-2412[c] | — | — | — | — | — | — |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74891 | 21-27327 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-09-3585 | 21-27329 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2931[d] | — |
| RE21-07-74897 | 21-27330 | 0.0000–0.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-09-3583 | 21-27330 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 09-2931[e] | — | — | — | — | — | — |
| RE21-07-74899 | 21-27331 | 0.0000–0.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74901 | 21-27332 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |

**Table 4.2-10 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Gross Gamma | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74903 | 21-27333 | 0.0000–0.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | — | 6559S, 6560S |
| RE21-07-74904 | 21-27333 | 2.0000–2.5000 | SOIL | 6561S | 6559S | — | 6561S | — | — | 6561S | — | 6561S | 6561S | 6559S | — | 6559S | 6561S | 6558S | 6558S | 6559S, 6560S |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | 6768S | 6767S | — | 6768S | — | — | 6768S | — | 6768S | 6768S | 6767S | — | 6767S | 6768S | 6766S | — | 6767S |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | 6768S | 6767S | — | 6768S | — | — | 6768S | — | 6768S | 6768S | 6767S | — | 6767S | 6768S | 6766S | 6766S | 6767S |
| RE21-07-74909 | 21-27336 | 2.0000–3.0000 | QBT3 | 6768S | 6767S | — | 6768S | — | — | 6768S | — | 6768S | 6768S | 6767S | — | 6767S | 6768S | 6766S | — | 6767S |
| RE21-07-74910 | 21-27336 | 4.0000–5.0000 | QBT3 | 6768S | 6767S | — | 6768S | — | — | 6768S | — | 6768S | 6768S | 6767S | — | 6767S | 6768S | 6766S | 6766S | 6767S |
| RE21-07-74925 | 21-27338 | 2.6700–3.6700 | SOIL | 6772S | 6771S | — | 6772S | — | — | 6772S | — | 6772S | 6772S | 6771S | — | 6771S | 6772S | 6770S | — | 6771S |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | 6772S | 6771S | — | 6772S | — | — | 6772S | — | 6772S | 6772S | 6771S | — | 6771S | 6772S | 6770S | 6770S | 6771S |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | 6861S | 6860S | — | 6861S | — | — | 6861S | — | 6861S | 6861S | 6860S | — | 6860S | 6861S | 6859S | 6859S | 6860S |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | 6861S | 6860S | — | 6861S | — | — | 6861S | — | 6861S | 6861S | 6860S | — | 6860S | 6861S | 6859S | 6859S | 6860S |
| RE21-07-74929 | 21-27340 | 5.0000–6.0000 | QBT3 | 6861S | 6860S | — | 6861S | — | — | 6861S | — | 6861S | 6861S | 6860S | — | 6860S | 6861S | 6859S | 6859S | 6860S |
| RE21-07-515 | 21-27340 | 5.5000–6.5000 | QBT3 | — | — | 07-41 | — | — | — | — | 07-42 | — | — | — | 07-42 | — | — | — | — | — |
| RE21-07-74930 | 21-27340 | 7.0000–8.0000 | QBT3 | 6861S | 6860S | — | 6861S | — | — | 6861S | — | 6861S | 6861S | 6860S | — | 6860S | 6861S | 6859S | 6859S | 6860S |
| RE21-07-74931 | 21-27341 | 5.0000–6.0000 | QBT3 | 6955S | 6954S | — | 6955S | — | — | 6955S | — | 6955S | 6955S | 6954S | — | 6954S | 6955S | 6953S | 6953S | 6954S |
| RE21-07-74932 | 21-27341 | 10.0000–11.0000 | QBT3 | 6955S | 6954S | — | 6955S | — | — | 6955S | — | 6955S | 6955S | 6954S | — | 6954S | 6955S | 6953S | 6953S | 6954S |
| RE21-07-74933 | 21-27341 | 15.0000–16.0000 | QBT3 | 6955S | 6954S | — | 6955S | — | — | 6955S | — | 6955S | 6955S | 6954S | — | 6954S | 6955S | 6953S | 6953S | 6954S |
| RE21-07-74934 | 21-27342 | 0.0000–0.5000 | SOIL | 6786S | 6785S | — | 6786S | — | — | 6786S | — | 6786S | 6786S | 6785S | — | 6785S | 6786S | 6784S | — | 6785S |
| RE21-07-74935 | 21-27342 | 2.0000–3.0000 | QBT3 | 6786S | 6785S | — | 6786S | — | — | 6786S | — | 6786S | 6786S | 6785S | — | 6785S | 6786S | 6784S | 6784S | 6785S |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | 6786S | 6785S | — | 6786S | — | — | 6786S | — | 6786S | 6786S | 6785S | — | 6785S | 6786S | 6784S | 6784S | 6785S |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only copper.

[c] Metals analysis included only aluminum, barium, and chromium.

[d] VOCs analysis included only toluene and trichloroethene.

[e] Metals analysis included only chromium.

**Table 4.2-11**
**Samples Collected and Analyses Requested at SWMU 21-024(b)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-2202 | 21-600498 | 0.0000–0.5000 | SOIL | 07-122 | 07-121 | —* | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | — | 07-121 |
| RE21-07-2203 | 21-600498 | 2.0000–3.0000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | 07-120 | 07-121 |
| RE21-07-2204 | 21-600499 | 0.0000–0.5000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | — | 07-121 |
| RE21-07-2205 | 21-600499 | 2.0000–3.0000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | 07-120 | 07-121 |
| RE21-07-2206 | 21-600500 | 0.0000–0.5000 | SOIL | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | — | 07-121 |
| RE21-07-2207 | 21-600500 | 2.0000–3.0000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | 07-120 | 07-121 |
| RE21-07-2208 | 21-600501 | 0.0000–0.5000 | SOIL | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | — | 07-121 |
| RE21-07-2209 | 21-600501 | 2.0000–3.0000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | 07-120 | 07-121 |
| RE21-07-2210 | 21-600502 | 0.0000–0.5000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | — | 07-121 |
| RE21-07-2211 | 21-600502 | 2.0000–3.0000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | 07-120 | 07-121 |
| RE21-07-2212 | 21-600503 | 0.0000–0.5000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | — | 07-121 |
| RE21-07-2213 | 21-600503 | 2.0000–3.0000 | QBT3 | 07-122 | 07-121 | — | 07-122 | 07-122 | — | 07-122 | 07-122 | 07-122 | — | 07-121 | 07-122 | 07-120 | 07-120 | 07-121 |
| RE21-07-2214 | 21-600504 | 0.0000–0.5000 | SOIL | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | — | 07-125 |
| RE21-07-2215 | 21-600504 | 2.0000–3.0000 | SOIL | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | 07-124 | 07-125 |
| RE21-07-2216 | 21-600505 | 0.0000–0.5000 | SOIL | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | — | 07-125 |
| RE21-07-2217 | 21-600505 | 2.0000–3.0000 | QBT3 | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | 07-124 | 07-125 |
| RE21-07-2244 | 21-600512 | 0.0000–0.5000 | SOIL | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | — | 07-125 |
| RE21-07-2245 | 21-600512 | 2.0000–3.0000 | SOIL | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | 07-124 | 07-125 |
| RE21-07-2246 | 21-600512 | 5.0000–6.0000 | QBT3 | 07-125 | 07-125 | — | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-125 | — | 07-125 | 07-125 | 07-124 | 07-124 | 07-125 |
| RE21-07-5147 | 21-601086 | 5.3000–6.3000 | SOIL | 07-433 | 07-433 | — | 07-433 | 07-433 | — | 07-433 | 07-433 | 07-433 | — | 07-433 | 07-433 | 07-433 | 07-433 | 07-433 |
| RE21-07-5148 | 21-601086 | 7.3000–8.3000 | QBT3 | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5149 | 21-601087 | 5.5000–6.5000 | SOIL | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5150 | 21-601087 | 7.5000–8.5000 | QBT3 | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5151 | 21-601088 | 5.5000–6.5000 | SOIL | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5152 | 21-601088 | 7.5000–8.5000 | QBT3 | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5153 | 21-601089 | 3.3000–4.3000 | SOIL | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5176 | 21-601089 | 3.3000–4.3000 | SOIL | — | — | 07-989 | — | — | 07-990 | — | — | — | 07-990 | — | — | — | — | — |
| RE21-07-5154 | 21-601089 | 5.3000–6.3000 | QBT3 | 07-474 | 07-473 | — | 07-474 | 07-474 | — | 07-474 | 07-474 | 07-473 | — | 07-473 | 07-474 | 07-472 | 07-472 | 07-473 |
| RE21-07-5155 | 21-601090 | 1.5000–2.5000 | QBT3 | 07-521 | 07-520 | — | 07-521 | 07-521 | — | 07-521 | 07-521 | 07-520 | — | 07-520 | 07-521 | 07-519 | 07-519 | 07-520 |
| RE21-07-5156 | 21-601090 | 3.5000–4.5000 | QBT3 | 07-521 | 07-520 | — | 07-521 | 07-521 | — | 07-521 | 07-521 | 07-520 | — | 07-520 | 07-521 | 07-519 | 07-519 | 07-520 |
| RE21-07-5157 | 21-601091 | 5.0000–6.0000 | SOIL | 07-521 | 07-520 | — | 07-521 | 07-521 | — | 07-521 | 07-521 | 07-520 | — | 07-520 | 07-521 | 07-519 | 07-519 | 07-520 |
| RE21-07-5158 | 21-601091 | 7.0000–8.0000 | QBT3 | 07-521 | 07-520 | — | 07-521 | 07-521 | — | 07-521 | 07-521 | 07-520 | — | 07-520 | 07-521 | 07-519 | 07-519 | 07-520 |
| RE21-07-5161 | 21-601093 | 8.0000–9.0000 | QBT3 | 07-622 | 07-621 | — | 07-622 | 07-622 | — | 07-622 | 07-622 | 07-621 | — | 07-621 | 07-622 | 07-620 | 07-620 | 07-621 |
| RE21-07-5162 | 21-601093 | 13.0000–14.0000 | QBT3 | 07-622 | 07-621 | — | 07-622 | 07-622 | — | 07-622 | 07-622 | 07-621 | — | 07-621 | 07-622 | 07-620 | 07-620 | 07-621 |
| RE21-07-5163 | 21-601093 | 18.0000–19.0000 | QBT3 | 07-622 | 07-621 | — | 07-622 | 07-622 | — | 07-622 | 07-622 | 07-621 | — | 07-621 | 07-622 | 07-620 | 07-620 | 07-621 |
| MD21-09-8847 | 21-605285 | 0.0000–0.5000 | SOIL | — | 09-2491 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

* — = Analysis not requested.

**Table 4.2-12**
**Samples Collected and Analyses Requested at SWMU 21-024(d)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | 08-56 | 08-56 | —[a] | 08-56 | 08-56 | — | 08-56 | 08-56 | 08-56 | — | 08-56 | 08-56 | 08-56 | 08-56 | 08-56 |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | 08-56 | 08-56 | — | 08-56 | 08-56 | — | 08-56 | 08-56 | 08-56 | — | 08-56 | 08-56 | 08-56 | 08-56 | 08-56 |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | 08-56 | 08-56 | — | 08-56 | 08-56 | — | 08-56 | 08-56 | 08-56 | — | 08-56 | 08-56 | 08-56 | 08-56 | 08-56 |
| MD21-09-8609 | 19-601285 | 25.0000–26.0000 | QBT3 | 09-1977 | — | — | — | 09-1977 | — | — | — | 09-1977[b] | — | — | — | 09-1977 | — | — |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | — | 6539S, 6540S |
| RE21-08-10278 | 21-27365 | 0.0000–0.5000 | SOIL | — | — | 08-555 | — | — | 08-556 | — | — | — | 08-556 | — | — | — | — | — |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | 6538S | 6539S, 6540S |
| RE21-08-10279 | 21-27365 | 2.0000–2.5000 | SOIL | — | — | 08-555 | — | — | 08-556 | — | — | — | 08-556 | — | — | — | — | — |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | 6538S | 6539S, 6540S |
| MD21-09-8616 | 21-27365 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 09-2579 | — | — | — | — | — |
| RE21-07-75013 | 21-27366 | 0.0000–0.5000 | SOIL | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | — | 6527S, 6528S |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | 6526S | 6527S, 6528S |
| MD21-09-8613 | 21-27366 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2470[c] | — | — | 09-2470 | — | — | — |
| MD21-09-12448 | 21-27366 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-3248[c] | — | — | — | — | — | — |
| RE21-07-3012 | 21-27367 | 0.0000–0.5000 | SOIL | — | — | 07-264 | — | — | 07-263 | — | — | — | 07-263 | — | — | — | — | — |
| RE21-07-75015 | 21-27367 | 0.0000–0.5000 | SOIL | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | — | 6527S, 6528S |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | 6526S | 6527S, 6528S |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | — | 6527S, 6528S |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | 6526S | 6527S, 6528S |
| RE21-07-75019 | 21-27369 | 0.0000–0.5000 | SOIL | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | — | 6527S, 6528S |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | 6526S | 6527S, 6528S |
| RE21-07-75021 | 21-27370 | 0.0000–0.5000 | SOIL | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | — | 6527S, 6528S |
| RE21-08-10281 | 21-27370 | 0.0000–0.5000 | SOIL | — | — | 08-555 | — | — | 08-556 | — | — | — | 08-556 | — | — | — | — | — |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | 6526S | 6527S, 6528S |
| RE21-08-10282 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | 08-555 | — | — | 08-556 | — | — | — | 08-556 | — | — | — | — | — |
| RE21-07-75023 | 21-27371 | 0.0000–0.5000 | SOIL | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | — | 6527S, 6528S |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | 6529S | 6527S | — | 6529S | 6529S | — | 6529S | 6529S | 6527S | — | 6527S | 6529S | 6526S | 6526S | 6527S, 6528S |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | — | 6539S, 6540S |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | 6538S | 6539S, 6540S |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | — | 6539S, 6540S |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | 6541S | 6539S | — | 6541S | 6541S | — | 6541S | 6541S | 6539S | — | 6539S | 6541S | 6538S | 6538S | 6539S, 6540S |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | 07-1143 | 07-1143 |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | 07-1143 | 07-1143 |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | 07-1143 | 07-1143 |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | — | 07-1143 | 07-1143 | 07-1143 | 07-1143 | 07-1143 |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | 08-67 | 08-67 | — | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-66 | 08-66 | 08-67 |

**Table 4.2-12 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | 08-67 | 08-67 | — | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-66 | 08-66 | 08-67 |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | 08-67 | 08-67 | — | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-66 | 08-66 | 08-67 |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | 08-67 | 08-67 | — | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-67 | — | 08-67 | 08-67 | 08-66 | 08-66 | 08-67 |
| RE21-07-6098 | 21-601274 | 2.0000–3.0000 | SOIL | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6099 | 21-601274 | 4.0000–5.0000 | QBT3 | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6100 | 21-601275 | 2.0000–3.0000 | QBT3 | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6101 | 21-601275 | 4.0000–5.0000 | QBT3 | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6102 | 21-601276 | 2.0000–3.0000 | QBT3 | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6103 | 21-601276 | 4.0000–5.0000 | QBT3 | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6104 | 21-601277 | 2.0000–3.0000 | SOIL | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6105 | 21-601277 | 4.0000–5.0000 | SOIL | 08-75 | 08-74 | — | 08-75 | 08-75 | — | 08-75 | 08-75 | 08-74 | — | 08-74 | 08-75 | 08-73 | 08-73 | 08-74 |
| RE21-07-6106 | 21-601278 | 2.0000–3.0000 | SOIL | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6107 | 21-601278 | 4.0000–5.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6108 | 21-601279 | 2.0000–3.0000 | SOIL | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6109 | 21-601279 | 4.0000–5.0000 | SOIL | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6110 | 21-601280 | 2.0000–3.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6111 | 21-601280 | 4.0000–5.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| MD21-09-8615 | 21-601281 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2039 | — | — |
| RE21-07-6114 | 21-601282 | 2.0000–3.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6115 | 21-601282 | 4.0000–5.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6116 | 21-601283 | 2.0000–3.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6117 | 21-601283 | 4.0000–5.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6138 | 21-601283 | 4.0000–5.0000 | QBT3 | — | — | 08-123 | — | — | 08-122 | — | — | — | 08-122 | — | — | — | — | — |
| MD21-09-8614 | 21-601283 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | 09-2039 | — | — | — | — | — | — | — | — |
| RE21-07-6118 | 21-601284 | 2.0000–3.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| RE21-07-6119 | 21-601284 | 4.0000–5.0000 | QBT3 | 08-78 | 08-77 | — | 08-78 | 08-78 | — | 08-78 | 08-78 | 08-77 | — | 08-77 | 08-78 | 08-76 | 08-76 | 08-77 |
| MD21-09-8848 | 21-605286 | 0.0000–0.5000 | SOIL | 09-2579 | 09-2579 | — | — | 09-2579 | — | 09-2579 | 09-2579 | 09-2579[d] | — | — | — | — | — | 09-2579[e] |
| MD21-09-8849 | 21-605286 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2579[f] | — |
| MD21-09-8850 | 21-605286 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-2579[f] | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only copper, lead, and selenium.

[c] Metals analysis included only lead.

[d] Metals analysis included only cadmium, chromium, copper, lead, mercury, silver, uranium, and zinc.

[e] Wet chemistry analysis included only cyanide (total).

[f] VOCs analysis included only toluene and trichloroethene.

**Table 4.2-13**
**Samples Collected and Analyses Requested at SWMU 21-024(e)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-74568 | 21-27242 | 0.0000–0.5000 | SOIL | 6435S | 6433S | —[a] | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74582 | 21-27242 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74569 | 21-27243 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74583 | 21-27243 | 2.0000–3.0000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74572 | 21-27244 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74577 | 21-27244 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74571 | 21-27245 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74580 | 21-27245 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74570 | 21-27246 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74581 | 21-27246 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74575 | 21-27247 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74578 | 21-27247 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74574 | 21-27248 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74579 | 21-27248 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74573 | 21-27249 | 0.0000–0.5000 | SOIL | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74576 | 21-27249 | 2.0000–3.0000 | QBT3 | 6435S | 6433S | — | 6435S | 6435S | — | 6435S | 6435S | 6433S | — | 6433S | 6435S | 6432S | 6432S | 6433S, 6434S |
| RE21-07-74584 | 21-27250 | 0.0000–0.5000 | SOIL | 6450S | 6448S | — | 6450S | 6450S | — | 6450S | 6450S | 6448S | — | 6448S | 6450S | 6447S | — | 6448S, 6449S |
| RE21-07-74585 | 21-27250 | 2.0000–2.5000 | QBT3 | 6494S | 6493S | — | 6494S | 6494S | — | 6494S | 6494S | 6493S | — | 6493S | 6494S | 6492S | 6492S | 6493S |
| RE21-09-3593 | 21-27250 | 4.0000–5.0000 | QBT3 | — | — | — | 09-1774 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74586 | 21-27251 | 0.0000–0.5000 | SOIL | 6450S | 6448S | — | 6450S | 6450S | — | 6450S | 6450S | 6448S | — | 6448S | 6450S | 6447S | — | 6448S, 6449S |
| RE21-07-74587 | 21-27251 | 2.0000–2.5000 | QBT3 | 6494S | 6493S | — | 6494S | 6494S | — | 6494S | 6494S | 6493S | — | 6493S | 6494S | 6492S | 6492S | 6493S |
| RE21-07-74588 | 21-27252 | 0.0000–0.5000 | SOIL | 6450S | 6448S | — | 6450S | 6450S | — | 6450S | 6450S | 6448S | — | 6448S | 6450S | 6447S | — | 6448S, 6449S |
| RE21-07-74589 | 21-27252 | 2.0000–2.5000 | QBT3 | 6494S | 6493S | — | 6494S | 6494S | — | 6494S | 6494S | 6493S | — | 6493S | 6494S | 6492S | 6492S | 6493S |
| RE21-07-74590 | 21-27253 | 0.0000–0.5000 | SOIL | 6450S | 6448S | — | 6450S | 6450S | — | 6450S | 6450S | 6448S | — | 6448S | 6450S | 6447S | — | 6448S, 6449S |
| RE21-07-4045 | 21-27253 | 1.0000–1.5000 | QBT3 | — | — | 07-296 | — | — | 07-297 | — | — | — | 07-297 | — | — | — | — | — |
| RE21-07-74591 | 21-27253 | 1.0000–1.5000 | QBT3 | 6494S | 6493S | — | 6494S | 6494S | — | 6494S | 6494S | 6493S | — | 6493S | 6494S | 6492S | 6492S | 6493S |
| RE21-07-74592 | 21-27254 | 0.0000–0.5000 | SOIL | 6450S | 6448S | — | 6450S | 6450S | — | 6450S | 6450S | 6448S | — | 6448S | 6450S | 6447S | — | 6448S, 6449S |
| RE21-07-74593 | 21-27254 | 2.0000–2.5000 | QBT3 | 6494S | 6493S | — | 6494S | 6494S | — | 6494S | 6494S | 6493S | — | 6493S | 6494S | 6492S | 6492S | 6493S |
| RE21-07-74594 | 21-27255 | 0.0000–0.5000 | SOIL | 6450S | 6448S | — | 6450S | 6450S | — | 6450S | 6450S | 6448S | — | 6448S | 6450S | 6447S | — | 6448S, 6449S |
| RE21-07-74595 | 21-27255 | 2.0000–2.5000 | QBT3 | 6494S | 6493S | — | 6494S | 6494S | — | 6494S | 6494S | 6493S | — | 6493S | 6494S | 6492S | 6492S | 6493S |
| RE21-07-74615 | 21-27259 | 10.0000–11.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74616 | 21-27259 | 15.0000–16.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |

**Table 4.2-13 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-74617 | 21-27259 | 20.0000–21.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74618 | 21-27260 | 0.0000–0.5000 | SOIL | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | — | 7098S |
| RE21-07-74619 | 21-27260 | 2.0000–3.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74620 | 21-27260 | 5.0000–6.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74627 | 21-27263 | 3.0000–4.0000 | SOIL | 7066S | 7066S | — | 7066S | 7066S | — | 7066S | 7066S | 7066S | — | 7066S | 7066S | 7066S | 7066S | 7066S |
| RE21-07-74628 | 21-27263 | 5.0000–6.0000 | SOIL | 7066S | 7066S | — | 7066S | 7066S | — | 7066S | 7066S | 7066S | — | 7066S | 7066S | 7066S | 7066S | 7066S |
| RE21-07-74629 | 21-27264 | 4.0000–5.0000 | SOIL | 7066S | 7066S | — | 7066S | 7066S | — | 7066S | 7066S | 7066S | — | 7066S | 7066S | 7066S | 7066S | 7066S |
| RE21-07-74630 | 21-27264 | 6.0000–7.0000 | SOIL | 7066S | 7066S | — | 7066S | 7066S | — | 7066S | 7066S | 7066S | — | 7066S | 7066S | 7066S | 7066S | 7066S |
| RE21-07-74631 | 21-27265 | 4.2500–5.2500 | SOIL | 7066S | 7066S | — | 7066S | 7066S | — | 7066S | 7066S | 7066S | — | 7066S | 7066S | 7066S | 7066S | 7066S |
| RE21-07-74632 | 21-27265 | 6.2500–7.2500 | QBT3 | 7066S | 7066S | — | 7066S | 7066S | — | 7066S | 7066S | 7066S | — | 7066S | 7066S | 7066S | 7066S | 7066S |
| RE21-09-3592 | 21-27265 | 11.2500–12.2500 | QBT3 | — | — | — | — | — | — | — | — | 09-1915[b] | — | — | — | — | — | — |
| RE21-07-74633 | 21-27266 | 4.5000–5.5000 | SOIL | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74634 | 21-27266 | 6.5000–7.5000 | QBT3 | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74635 | 21-27267 | 5.0000–6.0000 | SOIL | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74636 | 21-27267 | 7.0000–8.0000 | QBT3 | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74637 | 21-27268 | 3.7500–4.7500 | SOIL | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74638 | 21-27268 | 5.7500–6.7500 | QBT3 | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74639 | 21-27269 | 1.2500–2.2500 | SOIL | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74640 | 21-27269 | 3.2500–4.2500 | QBT3 | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74641 | 21-27270 | 2.0000–3.0000 | SOIL | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74642 | 21-27270 | 4.0000–5.0000 | SOIL | 7073S | 7072S | — | 7073S | 7073S | — | 7073S | 7073S | 7072S | — | 7072S | 7073S | 7071S | 7071S | 7072S |
| RE21-07-74643 | 21-27271 | 6.0000–7.0000 | SOIL | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74644 | 21-27271 | 8.0000–9.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74645 | 21-27272 | 6.0000–7.0000 | SOIL | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74646 | 21-27272 | 9.0000–10.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74647 | 21-27273 | 3.5000–4.0000 | SOIL | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-07-74648 | 21-27273 | 5.0000–6.0000 | QBT3 | 7097S | 7098S | — | 7097S | 7097S | — | 7097S | 7097S | 7098S | — | 7098S | 7097S | 7096S | 7096S | 7098S |
| RE21-09-3594 | 21-604508 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-1774[c] | — |
| RE21-09-3595 | 21-604508 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 09-1774[c] | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only lead.

[c] VOCs analysis included only toluene.

**Table 4.2-14**
**Samples Collected and Analyses Requested at SWMU 21-024(g)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75871 | 21-27592 | 0.0000–0.5000 | SOIL | 6626S | 6625S | —[a] | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75872 | 21-27592 | 2.0000–2.5000 | QBT3 | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-75873 | 21-27593 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75874 | 21-27593 | 2.0000–2.5000 | QBT3 | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-75875 | 21-27594 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75876 | 21-27594 | 2.0000–2.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-75877 | 21-27595 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75878 | 21-27595 | 2.0000–2.5000 | QBT3 | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-75879 | 21-27596 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75880 | 21-27596 | 2.0000–2.5000 | QBT3 | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-582 | 21-27596 | 2.0000–3.0000 | QBT3 | — | — | 07-102 | — | — | 07-84 | — | — | — | 07-84 | — | — | — | — | — |
| RE21-07-75881 | 21-27597 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75882 | 21-27597 | 2.0000–2.5000 | QBT3 | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-75883 | 21-27598 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75884 | 21-27598 | 2.0000–2.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| RE21-07-75885 | 21-27599 | 0.0000–0.5000 | SOIL | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | — | 6625S |
| RE21-07-75886 | 21-27599 | 2.0000–2.5000 | QBT3 | 6626S | 6625S | — | 6626S | 6626S | — | 6626S | 6626S | 6625S | — | 6625S | 6626S | 6624S | 6624S | 6625S |
| MD21-09-8749 | 21-27599 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-1978[b] | — | — | — | — | — | — |
| RE21-07-75887 | 21-27600 | 0.0000–0.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | — | 6630S |
| RE21-07-75888 | 21-27600 | 2.0000–2.5000 | QBT3 | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | 6629S | 6630S |
| RE21-07-75889 | 21-27601 | 0.0000–0.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | — | 6630S |
| RE21-07-75890 | 21-27601 | 2.0000–2.5000 | QBT3 | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | 6629S | 6630S |
| RE21-07-75891 | 21-27602 | 0.0000–0.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | — | 6630S |
| RE21-07-75892 | 21-27602 | 2.0000–2.5000 | QBT3 | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | 6629S | 6630S |
| RE21-07-75893 | 21-27603 | 0.0000–0.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | — | 6630S |
| RE21-07-75894 | 21-27603 | 2.0000–2.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | 6629S | 6630S |
| RE21-07-75895 | 21-27604 | 0.0000–0.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | — | 6630S |
| RE21-07-75896 | 21-27604 | 2.0000–2.5000 | SOIL | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | 6629S | 6630S |
| RE21-07-75897 | 21-27605 | 0.0000–0.5000 | QBT3 | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | — | 6630S |
| RE21-07-75898 | 21-27605 | 2.0000–2.5000 | QBT3 | 6631S | 6630S | — | 6631S | 6631S | — | 6631S | 6631S | 6630S | — | 6630S | 6631S | 6629S | 6629S | 6630S |
| RE21-07-75911 | 21-27606 | 0.0000–1.0000 | SOIL | 6976S | 6975S | — | 6976S | 6976S | — | 6976S | 6976S | 6975S | — | 6975S | 6976S | 6974S | — | 6975S |
| RE21-07-75912 | 21-27606 | 5.0000–6.0000 | SOIL | 6976S | 6975S | — | 6976S | 6976S | — | 6976S | 6976S | 6975S | — | 6975S | 6976S | 6974S | 6974S | 6975S |
| RE21-07-75913 | 21-27606 | 10.0000–11.0000 | QBT3 | 6976S | 6975S | — | 6976S | 6976S | — | 6976S | 6976S | 6975S | — | 6975S | 6976S | 6974S | 6974S | 6975S |
| MD21-09-8756 | 21-27606 | 11.0000–11.5000 | SOIL | — | — | — | — | — | — | 09-1916 | — | — | — | — | — | — | — | — |

**Table 4.2-14 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75914 | 21-27607 | 0.0000–1.0000 | SOIL | 6976S | 6975S | — | 6976S | 6976S | — | 6976S | 6976S | 6975S | — | 6975S | 6976S | 6974S | — | 6975S |
| RE21-07-75915 | 21-27607 | 5.0000–6.0000 | QBT3 | 6976S | 6975S | — | 6976S | 6976S | — | 6976S | 6976S | 6975S | — | 6975S | 6976S | 6974S | 6974S | 6975S |
| RE21-07-75916 | 21-27607 | 10.0000–11.0000 | QBT3 | 6976S | 6975S | — | 6976S | 6976S | — | 6976S | 6976S | 6975S | — | 6975S | 6976S | 6974S | 6974S | 6975S |
| RE21-07-75917 | 21-27608 | 0.0000–0.5000 | SOIL | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | — | 6978S |
| RE21-07-75918 | 21-27608 | 2.0000–3.0000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75919 | 21-27608 | 5.0000–6.0000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75920 | 21-27609 | 3.2000–4.2000 | SOIL | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75921 | 21-27609 | 8.2000–9.2000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75922 | 21-27609 | 13.2000–14.2000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75923 | 21-27610 | 0.0000–0.5000 | SOIL | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75924 | 21-27610 | 5.0000–6.0000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75925 | 21-27610 | 10.0000–11.0000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| MD21-09-8748 | 21-27610 | 11.0000–11.5000 | SOIL | — | — | — | — | — | — | — | — | 09-1886[b] | — | — | — | — | — | — |
| RE21-07-75926 | 21-27611 | 0.0000–0.5000 | SOIL | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | — | 6978S |
| RE21-07-75927 | 21-27611 | 2.0000–3.0000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75928 | 21-27611 | 5.0000–6.0000 | QBT3 | 6979S | 6978S | — | 6979S | 6979S | — | 6979S | 6979S | 6978S | — | 6978S | 6979S | 6977S | 6977S | 6978S |
| RE21-07-75929 | 21-27612 | 0.0000–0.5000 | SOIL | 6634S | 6633S | — | 6634S | 6634S | — | 6634S | 6634S | 6633S | — | 6633S | 6634S | 6632S | — | 6633S |
| RE21-07-75930 | 21-27612 | 2.0000–2.5000 | QBT3 | 6634S | 6633S | — | 6634S | 6634S | — | 6634S | 6634S | 6633S | — | 6633S | 6634S | 6632S | 6632S | 6633S |
| RE21-07-75931 | 21-27613 | 0.0000–0.5000 | SOIL | 6634S | 6633S | — | 6634S | 6634S | — | 6634S | 6634S | 6633S | — | 6633S | 6634S | 6632S | — | 6633S |
| RE21-07-75932 | 21-27613 | 2.0000–2.5000 | SOIL | 6634S | 6633S | — | 6634S | 6634S | — | 6634S | 6634S | 6633S | — | 6633S | 6634S | 6632S | 6632S | 6633S |
| RE21-07-75933 | 21-27614 | 1.8000–2.8000 | QBT3 | 6872S | 6871S | — | 6872S | 6872S | — | 6872S | 6872S | 6871S | — | 6871S | 6872S | 6870S | 6870S | 6871S |
| RE21-07-75934 | 21-27614 | 3.8000–4.8000 | QBT3 | 6872S | 6871S | — | 6872S | 6872S | — | 6872S | 6872S | 6871S | — | 6871S | 6872S | 6870S | 6870S | 6871S |
| MD21-09-8753 | 21-27614 | 9.0000–10.0000 | SOIL | — | — | — | 09-1978 | — | — | — | — | 09-1978[c] | — | — | — | — | — | — |
| RE21-07-75935 | 21-27615 | 2.5000–3.5000 | QBT3 | 6875S | 6874S | — | 6875S | 6875S | — | 6875S | 6875S | 6874S | — | 6874S | 6875S | 6873S | 6873S | 6874S |
| RE21-07-75936 | 21-27615 | 4.5000–5.5000 | QBT3 | 6875S | 6874S | — | 6875S | 6875S | — | 6875S | 6875S | 6874S | — | 6874S | 6875S | 6873S | 6873S | 6874S |
| RE21-07-75937 | 21-27616 | 0.0000–0.5000 | SOIL | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75938 | 21-27616 | 2.0000–3.0000 | QBT3 | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75939 | 21-27617 | 0.0000–1.0000 | QBT3 | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75940 | 21-27617 | 2.0000–3.0000 | QBT3 | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75941 | 21-27618 | 0.0000–1.0000 | QBT3 | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75942 | 21-27618 | 2.0000–3.0000 | QBT3 | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75943 | 21-27619 | 4.0000–5.0000 | SOIL | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75944 | 21-27619 | 6.0000–7.0000 | QBT3 | 6880S | 6879S | — | 6880S | 6880S | — | 6880S | 6880S | 6879S | — | 6879S | 6880S | 6878S | 6878S | 6879S |
| RE21-07-75945 | 21-27620 | 4.6000–5.6000 | QBT3 | 6886S | 6885S | — | 6886S | 6886S | — | 6886S | 6886S | 6885S | — | 6885S | 6886S | 6884S | 6884S | 6885S |
| RE21-07-75946 | 21-27620 | 6.6000–7.6000 | QBT3 | 6886S | 6885S | — | 6886S | 6886S | — | 6886S | 6886S | 6885S | — | 6885S | 6886S | 6884S | 6884S | 6885S |

**Table 4.2-14 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75947 | 21-27621 | 3.6000–4.6000 | QBT3 | 6886S | 6885S | — | 6886S | 6886S | — | 6886S | 6886S | 6885S | — | 6885S | 6886S | 6884S | 6884S | 6885S |
| RE21-07-75948 | 21-27621 | 5.6000–6.6000 | QBT3 | 6886S | 6885S | — | 6886S | 6886S | — | 6886S | 6886S | 6885S | — | 6885S | 6886S | 6884S | 6884S | 6885S |
| RE21-07-75949 | 21-27622 | 4.0000–5.0000 | QBT3 | 6914S | 6913S | — | 6914S | 6914S | — | 6914S | 6914S | 6913S | — | 6913S | 6914S | 6912S | 6912S | 6913S |
| RE21-07-75950 | 21-27622 | 6.0000–7.0000 | QBT3 | 6914S | 6913S | — | 6914S | 6914S | — | 6914S | 6914S | 6913S | — | 6913S | 6914S | 6912S | 6912S | 6913S |
| RE21-07-75951 | 21-27623 | 4.0000–5.0000 | QBT3 | 6917S | 6916S | — | 6917S | 6917S | — | 6917S | 6917S | 6916S | — | 6916S | 6917S | 6915S | 6915S | 6916S |
| RE21-07-75952 | 21-27623 | 6.0000–7.0000 | QBT3 | 6917S | 6916S | — | 6917S | 6917S | — | 6917S | 6917S | 6916S | — | 6916S | 6917S | 6915S | 6915S | 6916S |
| RE21-07-75970 | 21-27625 | 0.0000–0.5000 | QBT3 | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | — | 6951S |
| RE21-07-75971 | 21-27625 | 5.0000–6.0000 | QBT3 | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | 6950S | 6951S |
| RE21-07-75972 | 21-27625 | 10.0000–11.0000 | QBT3 | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | 6950S | 6951S |
| RE21-07-75973 | 21-27626 | 0.0000–0.5000 | SOIL | 6958S | 6957S | — | 6958S | 6958S | — | 6958S | 6958S | 6957S | — | 6957S | 6958S | 6956S | — | 6957S |
| RE21-07-75974 | 21-27626 | 5.0000–6.0000 | QBT3 | 6958S | 6957S | — | 6958S | 6958S | — | 6958S | 6958S | 6957S | — | 6957S | 6958S | 6956S | 6956S | 6957S |
| RE21-07-75975 | 21-27626 | 10.0000–11.0000 | QBT3 | 6958S | 6957S | — | 6958S | 6958S | — | 6958S | 6958S | 6957S | — | 6957S | 6958S | 6956S | 6956S | 6957S |
| RE21-07-75976 | 21-27627 | 10.0000–11.0000 | QBT3 | 7076S | 7075S | — | 7076S | 7076S | — | 7076S | 7076S | 7075S | — | 7075S | 7076S | 7074S | 7074S | 7075S |
| RE21-07-75977 | 21-27627 | 15.0000–16.0000 | QBT3 | 7076S | 7075S | — | 7076S | 7076S | — | 7076S | 7076S | 7075S | — | 7075S | 7076S | 7074S | 7074S | 7075S |
| RE21-07-75978 | 21-27627 | 20.0000–21.0000 | QBT3 | 7076S | 7075S | — | 7076S | 7076S | — | 7076S | 7076S | 7075S | — | 7075S | 7076S | 7074S | 7074S | 7075S |
| RE21-07-75979 | 21-27628 | 0.0000–0.5000 | SOIL | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | — | 6951S |
| RE21-07-75980 | 21-27628 | 2.0000–3.0000 | QBT3 | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | 6950S | 6951S |
| RE21-07-75981 | 21-27629 | 0.0000–0.5000 | SOIL | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | — | 6951S |
| RE21-07-75982 | 21-27629 | 2.0000–3.0000 | QBT3 | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | 6950S | 6951S |
| RE21-07-75983 | 21-27630 | 0.0000–0.5000 | SOIL | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | — | 6951S |
| RE21-07-75984 | 21-27630 | 2.0000–3.0000 | QBT3 | 6952S | 6951S | — | 6952S | 6952S | — | 6952S | 6952S | 6951S | — | 6951S | 6952S | 6950S | 6950S | 6951S |
| RE21-08-10263 | 21-603268 | 3.0000–4.0000 | QBT3 | 08-542 | 08-542 | — | 08-542 | 08-542 | — | 08-542 | 08-542 | 08-542 | — | 08-542 | 08-542 | 08-542 | 08-542 | 08-542 |
| RE21-08-10264 | 21-603268 | 5.0000–6.0000 | QBT3 | 08-542 | 08-542 | — | 08-542 | 08-542 | — | 08-542 | 08-542 | 08-542 | — | 08-542 | 08-542 | 08-542 | 08-542 | 08-542 |
| MD21-09-8747 | 21-605245 | 0.0000–0.5000 | SOIL | 09-1978 | — | — | — | — | — | 09-1978 | — | — | — | — | — | 09-1978 | — | — |
| MD21-09-8750 | 21-605246 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | 09-1978[b] | — | — | — | — | — | — |
| MD21-09-8751 | 21-605246 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-1978[b] | — | — | — | — | — | — |
| MD21-09-8752 | 21-605247 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-1978[b] | — | — | — | — | — | — |
| MD21-09-8754 | 21-605248 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 09-1978 | — | — |
| MD21-09-8755 | 21-605249 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-1978 | — | — |
| MD21-09-8757 | 21-605250 | 0.0000–0.5000 | SOIL | 09-1978 | — | — | — | — | — | 09-1978 | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis only included chromium.

[c] Metals analysis only included lead.

**Table 4.2-15**
**Samples Collected and Analyses Requested at SWMU 21-024(h)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Ph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | 07-37 | 07-36 | —[a] | 07-37 | 07-37 | — | 07-37 | 07-37 | 07-36 | — | 07-36 | 07-37 | 07-35 | 07-35 | 07-36 |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | 07-37 | 07-36 | — | 07-37 | 07-37 | — | 07-37 | 07-37 | 07-36 | — | 07-36 | 07-37 | 07-35 | 07-35 | 07-36 |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | 07-37 | 07-36 | — | 07-37 | 07-37 | — | 07-37 | 07-37 | 07-36 | — | 07-36 | 07-37 | 07-35 | 07-35 | 07-36 |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | 07-37 | 07-36 | — | 07-37 | 07-37 | — | 07-37 | 07-37 | 07-36 | — | 07-36 | 07-37 | 07-35 | 07-35 | 07-36 |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | 07-37 | 07-36 | — | 07-37 | 07-37 | — | 07-37 | 07-37 | 07-36 | — | 07-36 | 07-37 | 07-35 | 07-35 | 07-36 |
| RE21-07-251 | 21-600061 | 5.0000–6.0000 | QBT3 | 07-37 | 07-36 | — | 07-37 | 07-37 | — | 07-37 | 07-37 | 07-36 | — | 07-36 | 07-37 | 07-35 | 07-35 | 07-36 |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | 07-73 | 07-72 | — | 07-73 | 07-73 | — | 07-73 | 07-73 | 07-72 | — | 07-72 | 07-73 | 07-71 | 07-71 | 07-72 |
| RE21-07-253 | 21-600062 | 2.0000–3.0000 | QBT3 | 07-73 | 07-72 | — | 07-73 | 07-73 | — | 07-73 | 07-73 | 07-72 | — | 07-72 | 07-73 | 07-71 | 07-71 | 07-72 |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | 07-123 | 07-123 | — | 07-123 | 07-123 | — | 07-123 | 07-123 | 07-123 | — | 07-123 | 07-123 | 07-123 | 07-123 | 07-123 |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-379 | 21-600076 | 0.0000–0.5000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-380 | 21-600076 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-3345 | 21-600077 | 2.0000–3.0000 | SOIL | — | — | 07-146 | — | — | 07-145 | — | — | — | 07-145 | — | — | — | — | — |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| MD21-09-8738 | 21-600078 | 4.0000–5.0000 | QBT3 | 09-2336 | — | — | 09-2336 | — | — | — | — | 09-2336 | — | — | — | — | — | — |
| RE21-07-385 | 21-600079 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| MD21-09-8737 | 21-600080 | 4.0000–5.0000 | QBT3 | 09-2336 | — | — | — | 09-2336 | — | 09-2336 | — | — | — | — | — | 09-2336 | — | — |
| MD21-09-12449 | 21-600080 | 9.0000–10.0000 | SOIL | — | — | — | — | — | — | 09-3141 | — | — | — | — | — | — | — | — |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-390 | 21-600081 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-393 | 21-600083 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-394 | 21-600083 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-395 | 21-600084 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |

**Table 4.2-15 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Ph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-396 | 21-600084 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| MD21-09-8746 | 21-600084 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | 09-2336 | — | — | — | — | — | — | — | — |
| MD21-09-12450 | 21-600084 | 9.0000–10.0000 | SOIL | — | — | — | — | — | — | 09-3141 | — | — | — | — | — | — | — | — |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | — | 07-104 |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | 07-105 | 07-104 | — | 07-105 | 07-105 | — | 07-105 | 07-105 | 07-104 | — | 07-104 | 07-105 | 07-103 | 07-103 | 07-104 |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | 08-202 | 08-201 | — | 08-202 | 08-202 | — | 08-202 | 08-202 | 08-201 | — | 08-201 | 08-202 | 08-200 | 08-200 | 08-201 |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | 08-202 | 08-201 | — | 08-202 | 08-202 | — | 08-202 | 08-202 | 08-201 | — | 08-201 | 08-202 | 08-200 | 08-200 | 08-201 |
| RE21-07-5179 | 21-601096 | 8.5000–9.5000 | SOIL | 08-202 | 08-201 | — | 08-202 | 08-202 | — | 08-202 | 08-202 | 08-201 | — | 08-201 | 08-202 | 08-200 | 08-200 | 08-201 |
| RE21-07-5180 | 21-601096 | 10.5000–11.5000 | SOIL | 08-202 | 08-201 | — | 08-202 | 08-202 | — | 08-202 | 08-202 | 08-201 | — | 08-201 | 08-202 | 08-200 | 08-200 | 08-201 |
| RE21-07-5181 | 21-601097 | 5.0000–6.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| RE21-07-5182 | 21-601097 | 7.0000–8.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| RE21-07-5183 | 21-601098 | 3.0000–4.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| MD21-09-8739 | 21-601098 | 10.0000–11.0000 | SOIL | — | — | — | — | — | — | — | — | 09-2284[b] | — | — | — | — | — | — |
| RE21-07-5185 | 21-601099 | 8.0000–9.0000 | SOIL | 08-255 | 08-254 | — | 08-255 | 08-255 | — | 08-255 | 08-255 | 08-254 | — | 08-254 | 08-255 | 08-253 | 08-253 | 08-254 |
| RE21-07-5186 | 21-601099 | 10.0000–11.0000 | SOIL | 08-255 | 08-254 | — | 08-255 | 08-255 | — | 08-255 | 08-255 | 08-254 | — | 08-254 | 08-255 | 08-253 | 08-253 | 08-254 |
| RE21-07-5187 | 21-601100 | 3.5000–4.5000 | QBT3 | 08-255 | 08-254 | — | 08-255 | 08-255 | — | 08-255 | 08-255 | 08-254 | — | 08-254 | 08-255 | 08-253 | 08-253 | 08-254 |
| RE21-07-5188 | 21-601100 | 5.5000–6.5000 | QBT3 | 08-255 | 08-254 | — | 08-255 | 08-255 | — | 08-255 | 08-255 | 08-254 | — | 08-254 | 08-255 | 08-253 | 08-253 | 08-254 |
| RE21-07-5189 | 21-601101 | 3.5000–4.5000 | SOIL | 08-316 | 08-315 | — | 08-316 | 08-316 | — | 08-316 | 08-316 | 08-315 | — | 08-315 | 08-316 | 08-314 | 08-314 | 08-315 |
| RE21-07-5190 | 21-601101 | 5.5000–6.5000 | QBT3 | 08-316 | 08-315 | — | 08-316 | 08-316 | — | 08-316 | 08-316 | 08-315 | — | 08-315 | 08-316 | 08-314 | 08-314 | 08-315 |
| RE21-07-5191 | 21-601102 | 2.7500–3.7500 | QBT3 | 08-316 | 08-315 | — | 08-316 | 08-316 | — | 08-316 | 08-316 | 08-315 | — | 08-315 | 08-316 | 08-314 | 08-314 | 08-315 |
| RE21-07-5192 | 21-601102 | 4.7500–5.7500 | QBT3 | 08-316 | 08-315 | — | 08-316 | 08-316 | — | 08-316 | 08-316 | 08-315 | — | 08-315 | 08-316 | 08-314 | 08-314 | 08-315 |
| RE21-07-5195 | 21-601104 | 9.0000–10.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| RE21-07-5196 | 21-601104 | 14.0000–15.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | 08-252 | 08-251 | — | 08-252 | 08-252 | — | 08-252 | 08-252 | 08-251 | — | 08-251 | 08-252 | 08-250 | 08-250 | 08-251 |
| MD21-09-8740 | 21-605241 | 2.0000–3.0000 | QBT3 | 09-2355 | — | — | — | 09-2355 | — | 09-2355 | — | — | — | — | — | 09-2355 | — | — |
| MD21-09-8741 | 21-605241 | 4.0000–5.0000 | QBT3 | — | — | — | — | 09-2355 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8742 | 21-605242 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-2336 | — | — | — | — | — | — | — | — |
| MD21-09-8743 | 21-605243 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-2336 | — | — | — | — | — | — | — | — |
| MD21-09-8744 | 21-605244 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-2336 | — | — | — | — | — | — | — | — |
| MD21-09-8745 | 21-605244 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | 09-2336 | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only mercury and selenium.

**Table 4.2-16**
**Samples Collected and Analyses Requested at SWMU 21-024(i)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic TH | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AAA4033 | 21-01604 | 1.0000–2.1667 | QBT3 | 15278 | —[a] | — | 15278, 15281 | 15278 | — | 15278 | — | 15278 |
| AAA4037 | 21-01605 | 1.0000–1.5000 | QBT3 | 15278 | — | — | 15278, 15281 | 15278 | — | 15278 | — | 15278 |
| AAA4040 | 21-01606 | 1.0000–1.3333 | QBT3 | 15278 | — | — | 15278, 15281 | 15278 | — | 15278 | — | 15278 |
| AAA4129 | 21-01672 | 0.0000–5.0000 | QBT3 | 15413 | — | — | 15413, 15414 | 15413 | — | 15413 | 15413 | 15413 |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | 15413 | — | — | 15413, 15414 | 15413 | — | 15413 | 15413 | 15413 |
| AAA4132 | 21-01672 | 10.0000–15.0000 | QBT3 | 15413 | — | — | 15413, 15414 | 15413 | — | 15413 | 15413 | 15413 |
| AAA4133 | 21-01672 | 15.0000–20.0000 | QBT3 | 15413 | — | — | 15413, 15414 | 15413 | — | 15413 | 15413 | 15413 |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| MD21-02-49587 | 21-02-21262 | 0.0000–0.5000 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | 1290S | 1289S | — | — | — | — | 1290S | — | — |
| 0121-97-1236 | 21-05355 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1238 | 21-05355 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1226 | 21-05357 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1231 | 21-05357 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1221 | 21-05362 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1223 | 21-05362 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1224 | 21-05379 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1225 | 21-05379 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1230 | 21-05389 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1229 | 21-05389 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1228 | 21-05404 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1235 | 21-05404 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1239 | 21-05404 | 1.0000–1.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1237 | 21-05418 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1241 | 21-05418 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1227 | 21-05422 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1240 | 21-05422 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1232 | 21-05425 | 0.0000–0.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1234 | 21-05425 | 0.5000–1.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1233 | 21-05425 | 1.0000–1.5000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |
| 0121-97-1222 | 21-05425 | 1.5000–2.0000 | SOIL | — | — | — | 3035R | 3035R | — | — | 3035R | 3035R |

**Table 4.2-16 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic TH | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0121-97-1453 | 21-05512 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — |
| 0121-97-1454 | 21-05513 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — |
| MD21-98-0049 | 21-10501 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0047 | 21-10503 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0045 | 21-10504 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0046 | 21-10505 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0044 | 21-10506 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0043 | 21-10507 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0041 | 21-10509 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0040 | 21-10510 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0039 | 21-10511 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0038 | 21-10512 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0037 | 21-10513 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0036 | 21-10514 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-98-0034 | 21-10516 | 0.0000–0.5000 | SOIL | — | — | — | 4855R | 4855R | — | — | 4855R | 4855R, 4855R-1 |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | 8296R | — | — | 8296R | 8296R | — | 8296R | 8296R | 8296R |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | 8306R | — | — | 8306R | 8306R | — | 8306R | 8306R | 8306R |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | 8296R | — | — | 8296R | 8296R | — | 8296R | 8296R | 8296R |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | 8306R | — | — | 8306R | 8306R | — | 8306R | 8306R | 8306R |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | 8306R | — | — | 8306R | 8306R | — | 8306R | 8306R | 8306R |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | 8355R | — | — | 8355R | 8355R | — | 8355R | 8355R | 8355R |
| MD21-01-0008 | 21-11194 | 0.8333–1.3333 | FILL | 8355R | — | — | 8355R | 8355R | — | 8355R | 8355R | 8355R |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | 8355R | — | — | 8355R | 8355R | — | 8355R | 8355R | 8355R |
| MD21-01-0011 | 21-11195 | 2.6667–4.0000 | FILL | 8368R | — | — | 8368R | 8368R | — | 8368R | 8368R | 8368R |
| MD21-01-0012 | 21-11195 | 5.6667–6.6667 | FILL | 8368R | — | — | 8368R | 8368R | — | 8368R | 8368R | 8368R |
| MD21-01-0526 | 21-11195 | 12.0000–13.0000 | QBT3 | 133S | — | — | 133S | 133S | — | 133S | 133S | 133S |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | 8368R | — | — | 8368R | 8368R | — | 8368R | 8368R | 8368R |
| MD21-01-0014 | 21-11196 | 4.5000–5.5000 | QBT3 | 8368R | — | — | 8368R | 8368R | — | 8368R | 8368R | 8368R |
| MD21-01-0015 | 21-11197 | 2.3333–3.3333 | QBT3 | 8376R | — | — | 8376R | 8376R | — | 8376R | 8376R | 8376R |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | 8376R | — | — | 8376R | 8376R | — | 8376R | 8376R | 8376R |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | 8376R | — | — | 8376R | 8376R | — | 8376R | 8376R | 8376R |
| MD21-01-0018 | 21-11198 | 5.3333–6.3333 | QBT3 | 8376R | — | — | 8376R | 8376R | — | 8376R | 8376R | 8376R |

**Table 4.2-16 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic TH | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-01-0019 | 21-11199 | 8.0000–9.0000 | QBT3 | 8376R | — | — | 8376R | 8376R | — | 8376R | 8376R | 8376R |
| MD21-01-0020 | 21-11199 | 12.0000–13.0000 | QBT3 | 8376R | — | — | 8376R | 8376R | — | 8376R | 8376R | 8376R |
| MD21-01-0522 | 21-11199 | 17.0000–18.0000 | QBT3 | 133S | — | — | 133S | 133S | — | 133S | 133S | 133S |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | 8390R | — | — | 8390R | 8390R | — | 8390R | 8390R | 8390R |
| MD21-01-0055 | 21-11200 | 12.0000–13.0000 | QBT3 | 8390R | — | — | 8390R | 8390R | — | 8390R | 8390R | 8390R |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | 8390R | — | — | 8390R | 8390R | — | 8390R | 8390R | 8390R |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | 9638R | — | — | 9638R | 9638R | — | 9638R | 9638R | 9638R |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | 9638R | — | — | 9638R | 9638R | — | 9638R | 9638R | 9638R |
| MD21-01-0309 | 21-11216 | 17.1700–18.0000 | QBT3 | 9645R | — | — | 9645R | 9645R | — | 9645R | 9645R | 9645R |
| MD21-01-0308 | 21-11217 | 8.0000–9.1700 | QBT3 | 9645R | — | — | 9645R | 9645R | — | 9645R | 9645R | 9645R |
| MD21-01-0313 | 21-11217 | 12.0000–13.0000 | QBT3 | 9645R | — | — | 9645R | 9645R | — | 9645R | 9645R | 9645R |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | 9667R | — | — | 9667R, 9667R-1 | 9667R | — | 9667R, 9667R-1 | 9667R | 9667R, 9667R-1 |
| MD21-01-0314 | 21-11218 | 8.0000–9.0000 | QBT3 | 9645R | — | — | 9645R | 9645R | — | 9645R | 9645R | 9645R |
| MD21-01-0315 | 21-11218 | 12.0000–13.0000 | QBT3 | 9645R | — | — | 9645R | 9645R | — | 9645R | 9645R | 9645R |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | 9667R | — | — | 9667R | 9667R | — | 9667R, 9667R-1 | 9667R | 9667R, 9667R-1 |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | 9667R | — | — | 9667R | 9667R | — | 9667R | 9667R | 9667R |
| MD21-01-0301 | 21-11219 | 12.0000–13.0000 | QBT3 | 9667R | — | — | 9667R, 9667R-1 | 9667R | — | 9667R | 9667R | 9667R, 9667R-1 |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | 9667R | — | — | 9667R | 9667R | — | 9667R | 9667R | 9667R |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | 9667R | — | — | 9667R | 9667R | — | 9667R | 9667R | 9667R |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | 9667R | — | — | 9667R | 9667R | — | 9667R | 9667R | 9667R |
| MD21-01-0311 | 21-11221 | 4.0000–5.0000 | QBT3 | 9667R | — | — | 9667R | 9667R | — | 9667R | 9667R | 9667R |
| MD21-01-0304 | 21-11221 | 7.0000–8.0000 | QBT3 | 9667R | — | — | 9667R | 9667R | — | 9667R | 9667R | 9667R |
| MD21-01-0523 | 21-11222 | 12.0000–15.0000 | FILL | 133S | — | — | 133S | 133S | — | 133S | 133S | 133S |
| MD21-01-0525 | 21-11222 | 17.0000–18.0000 | FILL | 133S | — | — | 133S | 133S | — | 133S | 133S | 133S |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7190 | 21-603023 | 8.5000–9.5000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7191 | 21-603023 | 10.5000–11.5000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7192 | 21-603024 | 7.5000–8.5000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7208 | 21-603024 | 7.5000–8.5000 | QBT3 | — | — | 08-152 | — | — | 08-151 | — | — | — |
| RE21-08-7193 | 21-603024 | 9.5000–10.5000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7194 | 21-603025 | 7.5000–8.5000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| RE21-08-7195 | 21-603025 | 9.5000–10.5000 | QBT3 | 08-110 | 08-109 | — | 08-110 | 08-110 | — | 08-110 | — | 08-110 |
| MD21-09-8723 | 21-603022 | 19.0000–20.0000 | QBT3 | — | — | — | — | 09-2012 | — | — | — | — |
| MD21-09-8722 | 21-603025 | 14.5000–15.5000 | QBT3 | — | — | — | — | 08-110 | — | — | — | — |

**Table 4.2-16 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TAL Metals | PCBs | Perchlorate | PCBs | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AAA4033 | 21-01604 | 1.0000–2.1667 | QBT3 | — | — | — | — | — | — | — | — |
| AAA4037 | 21-01605 | 1.0000–1.5000 | QBT3 | — | — | — | — | — | — | — | — |
| AAA4040 | 21-01606 | 1.0000–1.3333 | QBT3 | — | — | — | — | — | — | — | — |
| AAA4129 | 21-01672 | 0.0000–5.0000 | QBT3 | 15412 | — | — | — | — | 15406 | 15410 | — |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | 15412 | — | — | — | — | 15406 | 15410 | — |
| AAA4132 | 21-01672 | 10.0000–15.0000 | QBT3 | 15412 | — | — | — | — | 15406 | 15410 | — |
| AAA4133 | 21-01672 | 15.0000–20.0000 | QBT3 | 15412 | — | — | — | — | 15406 | 15410 | — |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| MD21-02-49587 | 21-02-21262 | 0.0000–0.5000 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | 1289S | 1288S | — | — | — | 1288S | — | — |
| 0121-97-1236 | 21-05355 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1238 | 21-05355 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1226 | 21-05357 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1231 | 21-05357 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1221 | 21-05362 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1223 | 21-05362 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1224 | 21-05379 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1225 | 21-05379 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1230 | 21-05389 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1229 | 21-05389 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1228 | 21-05404 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1235 | 21-05404 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1239 | 21-05404 | 1.0000–1.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1237 | 21-05418 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1241 | 21-05418 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1227 | 21-05422 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1240 | 21-05422 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1232 | 21-05425 | 0.0000–0.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1234 | 21-05425 | 0.5000–1.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1233 | 21-05425 | 1.0000–1.5000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1222 | 21-05425 | 1.5000–2.0000 | SOIL | 3036R | — | — | — | — | — | — | — |
| 0121-97-1453 | 21-05512 | 0.0000–0.5000 | SOIL | 3896R | — | — | — | — | — | — | — |

**Table 4.2-16 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TAL Metals | PCBs | Perchlorate | PCBs | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0121-97-1454 | 21-05513 | 0.0000–0.5000 | SOIL | 3896R | — | — | — | — | — | — | — |
| MD21-98-0049 | 21-10501 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0047 | 21-10503 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0045 | 21-10504 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0046 | 21-10505 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0044 | 21-10506 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0043 | 21-10507 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0041 | 21-10509 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0040 | 21-10510 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0039 | 21-10511 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0038 | 21-10512 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0037 | 21-10513 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0036 | 21-10514 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-98-0034 | 21-10516 | 0.0000–0.5000 | SOIL | 4854R | 4853R | — | — | — | 4853R | — | — |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | 8295R | — | — | 8294R | 8296R | 8294R | 8294R | — |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | 8305R | — | — | 8304R | 8306R | 8304R | 8304R | — |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | 8295R | — | — | 8294R | 8296R | 8294R | 8294R | — |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | 8305R | — | — | 8304R | 8306R | 8304R | 8304R | — |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | 8305R | — | — | 8304R | 8306R | 8304R | 8304R | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | 8354R | — | — | 8353R | 8355R | 8353R | 8353R | — |
| MD21-01-0008 | 21-11194 | 0.8333–1.3333 | FILL | 8354R | — | — | 8353R | 8355R | 8353R | 8353R | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | 8354R | — | — | 8353R | 8355R | 8353R | 8353R | — |
| MD21-01-0011 | 21-11195 | 2.6667–4.0000 | FILL | 8367R | — | — | 8366R | 8368R | 8366R | 8366R | — |
| MD21-01-0012 | 21-11195 | 5.6667–6.6667 | FILL | 8367R | — | — | 8366R | 8368R | 8366R | 8366R | — |
| MD21-01-0526 | 21-11195 | 12.0000–13.0000 | QBT3 | 132S | 131S | — | — | 133S | 131S | 131S | — |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | 8367R | — | — | 8366R | 8368R | 8366R | 8366R | — |
| MD21-01-0014 | 21-11196 | 4.5000–5.5000 | QBT3 | 8367R | — | — | 8366R | 8368R | 8366R | 8366R | — |
| MD21-01-0015 | 21-11197 | 2.3333–3.3333 | QBT3 | 8375R | — | — | 8374R | 8376R | 8374R | 8374R | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | 8375R | — | — | 8374R | 8376R | 8374R | 8374R | — |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | 8375R | — | — | 8374R | 8376R | 8374R | 8374R | — |
| MD21-01-0018 | 21-11198 | 5.3333–6.3333 | QBT3 | 8375R | — | — | 8374R | 8376R | 8374R | 8374R | — |
| MD21-01-0019 | 21-11199 | 8.0000–9.0000 | QBT3 | 8375R | — | — | 8374R | 8376R | 8374R | 8374R | — |
| MD21-01-0020 | 21-11199 | 12.0000–13.0000 | QBT3 | 8375R | — | — | 8374R | 8376R | 8374R | 8374R | — |

**Table 4.2-16 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TAL Metals | PCBs | Perchlorate | PCBs | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-01-0522 | 21-11199 | 17.0000–18.0000 | QBT3 | 132S | 131S | — | — | 133S | 131S | 131S | — |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | 8389R | — | — | 8388R | 8390R | 8388R | 8388R | — |
| MD21-01-0055 | 21-11200 | 12.0000–13.0000 | QBT3 | 8389R | — | — | 8388R | 8390R | 8388R | 8388R | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | 8389R | — | — | 8388R | 8390R | 8388R | 8388R | — |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | 9637R | 9636R | — | — | 9638R | 9636R | 9636R | — |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | 9637R | 9636R | — | — | 9638R | 9636R | 9636R | — |
| MD21-01-0309 | 21-11216 | 17.1700–18.0000 | QBT3 | 9644R | 9643R | — | — | 9645R | 9643R | 9643R | — |
| MD21-01-0308 | 21-11217 | 8.0000–9.1700 | QBT3 | 9644R | 9643R | — | — | 9645R | 9643R | 9643R | — |
| MD21-01-0313 | 21-11217 | 12.0000–13.0000 | QBT3 | 9644R | 9643R | — | — | 9645R | 9643R | 9643R | — |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0314 | 21-11218 | 8.0000–9.0000 | QBT3 | 9644R | 9643R | — | — | 9645R | 9643R | 9643R | — |
| MD21-01-0315 | 21-11218 | 12.0000–13.0000 | QBT3 | 9644R | 9643R | — | — | 9645R | 9643R | 9643R | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0301 | 21-11219 | 12.0000–13.0000 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0311 | 21-11221 | 4.0000–5.0000 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0304 | 21-11221 | 7.0000–8.0000 | QBT3 | 9666R | 9665R | — | — | 9667R | 9665R | 9665R | — |
| MD21-01-0523 | 21-11222 | 12.0000–15.0000 | FILL | 132S | 131S | — | — | 133S | 131S | 131S | — |
| MD21-01-0525 | 21-11222 | 17.0000–18.0000 | FILL | 132S | 131S | — | — | 133S | 131S | 131S | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7190 | 21-603023 | 8.5000–9.5000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7191 | 21-603023 | 10.5000–11.5000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7192 | 21-603024 | 7.5000–8.5000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7208 | 21-603024 | 7.5000–8.5000 | QBT3 | — | 08-151 | — | — | — | — | — | — |
| RE21-08-7193 | 21-603024 | 9.5000–10.5000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7194 | 21-603025 | 7.5000–8.5000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| RE21-08-7195 | 21-603025 | 9.5000–10.5000 | QBT3 | 08-109 | — | 08-109 | — | 08-110 | 08-108 | 08-108 | 08-109 |
| MD21-09-8723 | 21-603022 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | — | — |
| MD21-09-8722 | 21-603025 | 14.5000–15.5000 | QBT3 | 09-2012[b] | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only calcium and selenium.

**Table 4.2-17**
**Samples Collected and Analyses Requested at SWMU 21-024(j)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | 07-226 | 07-225 | —[a] | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | — | 07-225 |
| RE21-07-2286 | 21-600514 | 2.0000–3.0000 | QBT3 | 07-226 | 07-225 | — | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | 07-224 | 07-225 |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | 07-226 | 07-225 | — | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | — | 07-225 |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | 07-226 | 07-225 | — | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | 07-224 | 07-225 |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | — | 07-250 |
| RE21-08-10292 | 21-600516 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2290 | 21-600516 | 2.0000–3.0000 | QBT3 | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | 07-249 | 07-250 |
| RE21-08-10293 | 21-600516 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | — | 07-250 |
| RE21-08-10294 | 21-600517 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2292 | 21-600517 | 2.0000–3.0000 | QBT3 | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | 07-249 | 07-250 |
| RE21-08-10295 | 21-600517 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2293 | 21-600518 | 0.0000–0.5000 | SOIL | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | — | 07-250 |
| RE21-08-10296 | 21-600518 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2294 | 21-600518 | 2.0000–3.0000 | QBT3 | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | 07-249 | 07-250 |
| RE21-08-10297 | 21-600518 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2295 | 21-600519 | 0.0000–0.5000 | SOIL | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | — | 07-250 |
| RE21-08-10298 | 21-600519 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2296 | 21-600519 | 2.0000–3.0000 | QBT3 | 07-251 | 07-250 | — | 07-251 | 07-251 | — | 07-251 | 07-251 | 07-251 | — | 07-250 | 07-251 | 07-249 | 07-249 | 07-250 |
| RE21-08-10299 | 21-600519 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | 07-226 | 07-225 | — | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | — | 07-225 |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | 07-226 | 07-225 | — | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | 07-224 | 07-225 |
| RE21-07-2253 | 21-600524 | 5.0000–6.0000 | QBT3 | — | — | 07-284 | — | — | 07-283 | — | — | — | 07-283 | — | — | — | — | — |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | 07-226 | 07-225 | — | 07-226 | 07-226 | — | 07-226 | 07-226 | 07-226 | — | 07-225 | 07-226 | 07-224 | 07-224 | 07-225 |
| RE21-08-10300 | 21-600524 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-573 | — | — | — | — | — |
| RE21-07-6180 | 21-601290 | 12.0000–13.0000 | QBT3 | 08-94 | 08-94 | — | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | 08-94 | 08-94 |
| RE21-07-6181 | 21-601290 | 14.0000–15.0000 | QBT3 | 08-94 | 08-94 | — | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | 08-94 | 08-94 |
| RE21-07-6182 | 21-601291 | 12.0000–13.0000 | QBT3 | 08-94 | 08-94 | — | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | 08-94 | 08-94 |
| RE21-07-6183 | 21-601291 | 14.0000–15.0000 | QBT3 | 08-94 | 08-94 | — | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | — | 08-94 | 08-94 | 08-94 | 08-94 | 08-94 |

**Table 4.2-17 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | 08-97 | 08-96 | — | 08-97 | 08-97 | — | 08-97 | 08-97 | 08-96 | — | 08-96 | 08-97 | 08-95 | 08-95 | 08-96 |
| RE21-08-10286 | 21-601292 | 1.0000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | 08-541 | — | — | — | — | — |
| RE21-07-6185 | 21-601292 | 3.0000–4.0000 | QBT3 | 08-97 | 08-96 | — | 08-97 | 08-97 | — | 08-97 | 08-97 | 08-96 | — | 08-96 | 08-97 | 08-95 | 08-95 | 08-96 |
| RE21-08-10287 | 21-601292 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-541 | — | — | — | — | — |
| RE21-07-6186 | 21-601293 | 1.0000–2.0000 | QBT3 | 08-97 | 08-96 | — | 08-97 | 08-97 | — | 08-97 | 08-97 | 08-96 | — | 08-96 | 08-97 | 08-95 | 08-95 | 08-96 |
| RE21-07-6187 | 21-601293 | 3.0000–4.0000 | QBT3 | 08-97 | 08-96 | — | 08-97 | 08-97 | — | 08-97 | 08-97 | 08-96 | — | 08-96 | 08-97 | 08-95 | 08-95 | 08-96 |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | 08-97 | 08-96 | — | 08-97 | 08-97 | — | 08-97 | 08-97 | 08-96 | — | 08-96 | 08-97 | 08-95 | 08-95 | 08-96 |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | 08-97 | 08-96 | — | 08-97 | 08-97 | — | 08-97 | 08-97 | 08-96 | — | 08-96 | 08-97 | 08-95 | 08-95 | 08-96 |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-07-6192 | 21-601296 | 5.0000–6.0000 | QBT3 | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-07-6193 | 21-601296 | 7.0000–8.0000 | QBT3 | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-08-10288 | 21-601297 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | — | — | — | 08-541 | — | — | — | — | — |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-08-10289 | 21-601297 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-541 | — | — | — | — | — |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-08-10290 | 21-601298 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-541 | — | — | — | — | — |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-08-10291 | 21-601298 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-541 | — | — | — | — | — |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | 08-104 | 08-103 | — | 08-104 | 08-104 | — | 08-104 | 08-104 | 08-103 | — | 08-103 | 08-104 | 08-102 | 08-102 | 08-103 |
| RE21-07-6200 | 21-601300 | 2.0000–3.0000 | SOIL | 08-107 | 08-106 | — | 08-107 | 08-107 | — | 08-107 | 08-107 | 08-106 | — | 08-106 | 08-107 | 08-105 | 08-105 | 08-106 |
| RE21-07-6201 | 21-601300 | 4.0000–5.0000 | QBT3 | 08-107 | 08-106 | — | 08-107 | 08-107 | — | 08-107 | 08-107 | 08-106 | — | 08-106 | 08-107 | 08-105 | 08-105 | 08-106 |
| RE21-07-6202 | 21-601301 | 2.0000–3.0000 | SOIL | 08-107 | 08-106 | — | 08-107 | 08-107 | — | 08-107 | 08-107 | 08-106 | — | 08-106 | 08-107 | 08-105 | 08-105 | 08-106 |
| RE21-07-6203 | 21-601301 | 4.0000–5.0000 | SOIL | 08-107 | 08-106 | — | 08-107 | 08-107 | — | 08-107 | 08-107 | 08-106 | — | 08-106 | 08-107 | 08-105 | 08-105 | 08-106 |
| RE21-07-6204 | 21-601302 | 12.0000–13.0000 | QBT3 | 08-92 | 08-91 | — | 08-92 | 08-92 | — | 08-92 | 08-92 | 08-91 | — | 08-91 | 08-92 | 08-90 | 08-90 | 08-91 |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | 08-92 | 08-91 | — | 08-92 | 08-92 | — | 08-92 | 08-92 | 08-91 | — | 08-91 | 08-92 | 08-90 | 08-90 | 08-91 |
| RE21-07-6206 | 21-601302 | 22.0000–23.0000 | QBT3 | 08-92 | 08-91 | — | 08-92 | 08-92 | — | 08-92 | 08-92 | 08-91 | — | 08-91 | 08-92 | 08-90 | 08-90 | 08-91 |
| MD21-09-8851 | 21-605287 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2283[b] | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only lead and zinc.

**Table 4.2-18**
**Samples Collected and Analyses Requested at SWMU 21-024(k)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Ph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | 07-243 | 07-242 | —* | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | — | 07-242 |
| RE21-07-3840 | 21-600843 | 2.0000–3.0000 | QBT3 | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | 07-241 | 07-242 |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | — | 07-242 |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | 07-241 | 07-242 |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | — | 07-242 |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | 07-241 | 07-242 |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | — | 07-242 |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | 07-243 | 07-242 | — | 07-243 | 07-243 | — | 07-243 | 07-243 | 07-242 | — | — | 07-243 | 07-241 | 07-241 | 07-242 |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-08-10365 | 21-600847 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 08-572 | — | — | — | — | — |
| RE21-07-3848 | 21-600847 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-08-10366 | 21-600847 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 08-572 | — | — | — | — | — |
| RE21-07-3849 | 21-600848 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-07-3850 | 21-600848 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-07-3852 | 21-600849 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-08-10367 | 21-600851 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 08-572 | — | — | — | — | — |
| RE21-07-3856 | 21-600851 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3893 | 21-600851 | 2.0000–3.0000 | QBT3 | — | — | 07-294 | — | — | 07-293 | — | — | — | 07-293 | — | — | — | — | — |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-07-3858 | 21-600852 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-07-3860 | 21-600853 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | — | 07-253 |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | 07-254 | 07-253 | — | 07-254 | 07-254 | — | 07-254 | 07-254 | 07-253 | — | 07-253 | 07-254 | 07-252 | 07-252 | 07-253 |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | 07-246 | 07-245 | — | 07-246 | 07-246 | — | 07-246 | 07-246 | 07-245 | — | 07-245 | 07-246 | 07-244 | — | 07-245 |
| RE21-07-3873 | 21-600859 | 2.0000–3.0000 | SOIL | 07-246 | 07-245 | — | 07-246 | 07-246 | — | 07-246 | 07-246 | 07-245 | — | 07-245 | 07-246 | 07-244 | 07-244 | 07-245 |
| RE21-07-3874 | 21-600859 | 5.0000–6.0000 | QBT3 | 07-246 | 07-245 | — | 07-246 | 07-246 | — | 07-246 | 07-246 | 07-245 | — | 07-245 | 07-246 | 07-244 | 07-244 | 07-245 |

**Table 4.2-18 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Ph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-8718 | 21-600859 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2335 | — | — | — | — | — | — |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | 07-257 | 07-256 | — | 07-257 | 07-257 | — | 07-257 | 07-257 | 07-256 | — | 07-256 | 07-257 | 07-255 | — | 07-256 |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | 07-257 | 07-256 | — | 07-257 | 07-257 | — | 07-257 | 07-257 | 07-256 | — | 07-256 | 07-257 | 07-255 | 07-255 | 07-256 |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | 07-257 | 07-256 | — | 07-257 | 07-257 | — | 07-257 | 07-257 | 07-256 | — | 07-256 | 07-257 | 07-255 | 07-255 | 07-256 |
| RE21-08-7241 | 21-603037 | 8.5000–9.5000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| MD21-09-8721 | 21-603038 | 13.5000–14.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2114 | — | — |
| RE21-08-7245 | 21-603039 | 7.5000–8.5000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7246 | 21-603039 | 9.5000–10.5000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7247 | 21-603040 | 5.0000–6.0000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7248 | 21-603040 | 7.0000–8.0000 | QBT3 | 08-236 | 08-235 | — | 08-236 | 08-236 | — | 08-236 | 08-236 | 08-235 | — | 08-235 | 08-236 | 08-234 | 08-234 | 08-235 |
| RE21-08-7249 | 21-603041 | 5.5000–6.5000 | SOIL | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| MD21-09-8720 | 21-603042 | 12.5000–13.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2102 | — | — |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | 08-239 | 08-238 | — | 08-239 | 08-239 | — | 08-239 | 08-239 | 08-238 | — | 08-238 | 08-239 | 08-237 | 08-237 | 08-238 |
| RE21-08-7257 | 21-603045 | 11.0000–12.0000 | QBT3 | 08-249 | 08-248 | — | 08-249 | 08-249 | — | 08-249 | 08-249 | 08-248 | — | 08-248 | 08-249 | 08-247 | 08-247 | 08-248 |
| RE21-08-7258 | 21-603045 | 13.0000–14.0000 | QBT3 | 08-249 | 08-248 | — | 08-249 | 08-249 | — | 08-249 | 08-249 | 08-248 | — | 08-248 | 08-249 | 08-247 | 08-247 | 08-248 |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | 08-464 | 08-464 | — | 08-464 | 08-464 | — | 08-464 | 08-464 | 08-464 | — | 08-464 | 08-464 | 08-464 | 08-464 | 08-464 |
| RE21-08-7260 | 21-603046 | 4.0000–5.0000 | QBT3 | 08-464 | 08-464 | — | 08-464 | 08-464 | — | 08-464 | 08-464 | 08-464 | — | 08-464 | 08-464 | 08-464 | 08-464 | 08-464 |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | 08-480 | 08-480 | — | 08-480 | 08-480 | — | 08-480 | 08-480 | 08-480 | — | 08-480 | 08-480 | 08-480 | 08-480 | 08-480 |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | 08-480 | 08-480 | — | 08-480 | 08-480 | — | 08-480 | 08-480 | 08-480 | — | 08-480 | 08-480 | 08-480 | 08-480 | 08-480 |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | 08-470 | 08-469 | — | 08-470 | 08-470 | — | 08-470 | 08-470 | 08-469 | — | 08-469 | 08-470 | 08-468 | 08-468 | 08-469 |
| RE21-08-7276 | 21-603054 | 15.0000–16.0000 | QBT3 | 08-470 | 08-469 | — | 08-470 | 08-470 | — | 08-470 | 08-470 | 08-469 | — | 08-469 | 08-470 | 08-468 | 08-468 | 08-469 |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | 08-470 | 08-469 | — | 08-470 | 08-470 | — | 08-470 | 08-470 | 08-469 | — | 08-469 | 08-470 | 08-468 | 08-468 | 08-469 |
| MD21-09-8719 | 21-603054 | 25.0000–26.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2102 | — | — |
| RE21-08-7281 | 21-603056 | 11.0000–12.0000 | QBT3 | 08-286 | 08-285 | — | 08-286 | 08-286 | — | 08-286 | 08-286 | 08-285 | — | 08-285 | 08-286 | 08-284 | 08-284 | 08-285 |
| RE21-08-7282 | 21-603056 | 16.0000–17.0000 | QBT3 | 08-286 | 08-285 | — | 08-286 | 08-286 | — | 08-286 | 08-286 | 08-285 | — | 08-285 | 08-286 | 08-284 | 08-284 | 08-285 |

**Table 4.2-18 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Ph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-08-7283 | 21-603056 | 21.0000–22.0000 | QBT3 | 08-286 | 08-285 | — | 08-286 | 08-286 | — | 08-286 | 08-286 | 08-285 | — | 08-285 | 08-286 | 08-284 | 08-284 | 08-285 |
| RE21-08-7284 | 21-603056 | 26.0000–27.0000 | QBT3 | 08-286 | 08-285 | — | 08-286 | 08-286 | — | 08-286 | 08-286 | 08-285 | — | 08-285 | 08-286 | 08-284 | 08-284 | 08-285 |
| RE21-08-7285 | 21-603056 | 31.0000–32.0000 | QBT3 | 08-286 | 08-285 | — | 08-286 | 08-286 | — | 08-286 | 08-286 | 08-285 | — | 08-285 | 08-286 | 08-284 | 08-284 | 08-285 |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.
* — = Analysis not requested.

**Table 4.2-19**
**Samples Collected and Analyses Requested at Consolidated Unit 21-024(l)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | 6575S | 6575S | —[a] | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75345 | 21-27441 | 5.0000–5.5000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | 6575S | 6575S | — | 6575S | 6575S | — | 6575S | 6575S | 6575S | — | 6575S | 6575S | 6574S | 6574S | 6575S |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| MD21-09-8819 | 21-27514 | 25.0000–26.0000 | QBT3 | 09-1914 | — | — | — | — | — | 09-1914 | — | — | — | — | — | 09-1914 | — | — |
| RE21-07-75619 | 21-27515 | 10.0000–11.0000 | QBT3 | 7061S | 7060S | — | 7061S | 7061S | — | 7061S | 7061S | 7060S | — | 7060S | 7061S | 7059S | 7059S | 7060S |
| RE21-07-3963 | 21-27515 | 15.0000–16.0000 | QBT3 | — | — | 07-259 | — | — | 07-258 | — | — | — | 07-258 | — | — | — | — | — |
| RE21-07-75620 | 21-27515 | 15.0000–16.0000 | QBT3 | 7061S | 7060S | — | 7061S | 7061S | — | 7061S | 7061S | 7060S | — | 7060S | 7061S | 7059S | 7059S | 7060S |
| RE21-07-75621 | 21-27515 | 20.0000–21.0000 | QBT3 | 7061S | 7060S | — | 7061S | 7061S | — | 7061S | 7061S | 7060S | — | 7060S | 7061S | 7059S | 7059S | 7060S |

**Table 4.2-19 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | 7061S | 7060S | — | 7061S | 7061S | — | 7061S | 7061S | 7060S | — | 7060S | 7061S | 7059S | 7059S | 7060S |
| RE21-07-75623 | 21-27516 | 4.0000–5.0000 | QBT3 | 7061S | 7060S | — | 7061S | 7061S | — | 7061S | 7061S | 7060S | — | 7060S | 7061S | 7059S | 7059S | 7060S |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | 7061S | 7060S | — | 7061S | 7061S | — | 7061S | 7061S | 7060S | — | 7060S | 7061S | 7059S | 7059S | 7060S |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | 6603S | 6602S | — | 6603S | 6603S | — | 6603S | 6603S | 6602S | — | 6602S | 6603S | 6601S | — | 6602S |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | 6603S | 6602S | — | 6603S | 6603S | — | 6603S | 6603S | 6602S | — | 6602S | 6603S | 6601S | 6601S | 6602S |
| MD21-09-8824 | 21-27517 | 7.0000–8.0000 | QBT3 | 09-1979 | — | — | 09-1979 | — | — | 09-1979 | — | 09-1979[b] | — | — | — | — | — | — |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | 6603S | 6602S | — | 6603S | 6603S | — | 6603S | 6603S | 6602S | — | 6602S | 6603S | 6601S | — | 6602S |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | 6603S | 6602S | — | 6603S | 6603S | — | 6603S | 6603S | 6602S | — | 6602S | 6603S | 6601S | 6601S | 6602S |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | 6603S | 6602S | — | 6603S | 6603S | — | 6603S | 6603S | 6602S | — | 6602S | 6603S | 6601S | — | 6602S |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | 6603S | 6602S | — | 6603S | 6603S | — | 6603S | 6603S | 6602S | — | 6602S | 6603S | 6601S | 6601S | 6602S |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | 7043S | 7042S | — | 7043S | 7043S | — | 7043S | 7043S | 7042S | — | 7042S | 7043S | 7041S | 7041S | 7042S |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | 7043S | 7042S | — | 7043S | 7043S | — | 7043S | 7043S | 7042S | — | 7042S | 7043S | 7041S | 7041S | 7042S |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | 7049S | 7048S | — | 7049S | 7049S | — | 7049S | 7049S | 7048S | — | 7048S | 7049S | 7047S | 7047S | 7048S |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | 7049S | 7048S | — | 7049S | 7049S | — | 7049S | 7049S | 7048S | — | 7048S | 7049S | 7047S | 7047S | 7048S |
| MD21-09-8831 | 21-27521 | 9.5000–10.5000 | SOIL | — | — | — | — | — | — | — | — | 09-1926[c] | — | — | — | — | — | — |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | 7046S | 7045S | — | 7046S | 7046S | — | 7046S | 7046S | 7045S | — | 7045S | 7046S | 7044S | 7044S | 7045S |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | 7046S | 7045S | — | 7046S | 7046S | — | 7046S | 7046S | 7045S | — | 7045S | 7046S | 7044S | 7044S | 7045S |
| MD21-09-8828 | 21-27522 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-1926[d] | — | — | — | — | — | — |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | 7043S | 7042S | — | 7043S | 7043S | — | 7043S | 7043S | 7042S | — | 7042S | 7043S | 7041S | 7041S | 7042S |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | 7043S | 7042S | — | 7043S | 7043S | — | 7043S | 7043S | 7042S | — | 7042S | 7043S | 7041S | 7041S | 7042S |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | 7046S | 7045S | — | 7046S | 7046S | — | 7046S | 7046S | 7045S | — | 7045S | 7046S | 7044S | 7044S | 7045S |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | 7046S | 7045S | — | 7046S | 7046S | — | 7046S | 7046S | 7045S | — | 7045S | 7046S | 7044S | 7044S | 7045S |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | 7055S | 7054S | — | 7055S | 7055S | — | 7055S | 7055S | 7054S | — | 7054S | 7055S | 7053S | 7053S | 7054S |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | 7058S | 7057S | — | 7058S | 7058S | — | 7058S | 7058S | 7057S | — | 7057S | 7058S | 7056S | — | 7057S |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | 7058S | 7057S | — | 7058S | 7058S | — | 7058S | 7058S | 7057S | — | 7057S | 7058S | 7056S | 7056S | 7057S |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | 7058S | 7057S | — | 7058S | 7058S | — | 7058S | 7058S | 7057S | — | 7057S | 7058S | 7056S | 7056S | 7057S |
| MD21-09-8834 | 21-27530 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-1950 | — | — |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |
| RE21-07-75673 | 21-27533 | 2.0000–3.0000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75674 | 21-27534 | 0.0000–0.5000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |

**Table 4.2-19 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | 7040S | 7039S | — | 7040S | 7040S | — | 7040S | 7040S | 7039S | — | 7039S | 7040S | 7038S | — | 7039S |
| RE21-07-75679 | 21-27536 | 2.0000–3.0000 | QBT3 | 7040S | 7039S | — | 7040S | 7040S | — | 7040S | 7040S | 7039S | — | 7039S | 7040S | 7038S | 7038S | 7039S |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | 7040S | 7039S | — | 7040S | 7040S | — | 7040S | 7040S | 7039S | — | 7039S | 7040S | 7038S | — | 7039S |
| RE21-07-75681 | 21-27537 | 2.0000–3.0000 | QBT3 | 7040S | 7039S | — | 7040S | 7040S | — | 7040S | 7040S | 7039S | — | 7039S | 7040S | 7038S | 7038S | 7039S |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | 7035S | 7035S | — | 7035S | 7035S | — | 7035S | 7035S | 7035S | — | 7035S | 7035S | 7035S | 7035S | 7035S |
| RE21-07-75685 | 21-27539 | 5.0000–6.0000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| MD21-09-8829 | 21-27539 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-1950[e] | — | — | — | — | — | — |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| MD21-09-8827 | 21-27540 | 7.0000–8.0000 | SOIL | — | — | — | 09-1950 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |
| RE21-07-75691 | 21-27542 | 2.0000–3.0000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | — | 7033S |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75695 | 21-27544 | 4.0000–5.0000 | QBT3 | 7034S | 7033S | — | 7034S | 7034S | — | 7034S | 7034S | 7033S | — | 7033S | 7034S | 7032S | 7032S | 7033S |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | 7052S | 7051S | — | 7052S | 7052S | — | 7052S | 7052S | 7051S | — | 7051S | 7052S | 7050S | 7050S | 7051S |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | 7052S | 7051S | — | 7052S | 7052S | — | 7052S | 7052S | 7051S | — | 7051S | 7052S | 7050S | 7050S | 7051S |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | 7052S | 7051S | — | 7052S | 7052S | — | 7052S | 7052S | 7051S | — | 7051S | 7052S | 7050S | 7050S | 7051S |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | 7052S | 7051S | — | 7052S | 7052S | — | 7052S | 7052S | 7051S | — | 7051S | 7052S | 7050S | 7050S | 7051S |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | 7052S | 7051S | — | 7052S | 7052S | — | 7052S | 7052S | 7051S | — | 7051S | 7052S | 7050S | 7050S | 7051S |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | 7052S | 7051S | — | 7052S | 7052S | — | 7052S | 7052S | 7051S | — | 7051S | 7052S | 7050S | 7050S | 7051S |
| MD21-09-8835 | 21-27547 | 7.5000–8.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 09-1926 | — | — |
| MD21-09-8820 | 21-605272 | 0.0000–0.5000 | SOIL | 09-1950 | — | — | 09-1950 | — | — | 09-1950 | — | — | — | — | 09-1950 | — | — | — |
| MD21-09-8821 | 21-605272 | 7.0000–8.0000 | QBT3 | 09-1950 | — | — | 09-1950 | — | — | 09-1950 | — | — | — | — | 09-1950 | — | — | — |
| MD21-09-8822 | 21-605273 | 0.0000–0.5000 | SOIL | 09-1979 | — | — | 09-1979 | — | — | 09-1979 | — | 09-1979[b] | — | — | — | — | — | — |
| MD21-09-8823 | 21-605273 | 7.0000–8.0000 | QBT3 | 09-1979 | — | — | 09-1979 | — | — | 09-1979 | — | 09-1979[b] | — | — | — | — | — | — |
| MD21-09-8825 | 21-605274 | 0.0000–0.5000 | SOIL | 09-1979 | — | — | — | — | — | 09-1979 | — | 09-1979[f] | — | — | — | — | — | — |

**Table 4.2-19 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-8826 | 21-605275 | 0.0000–0.5000 | QBT3 | 09-1979 | — | — | — | — | — | 09-1979 | — | 09-1979[f] | — | — | — | — | — | — |
| MD21-09-8830 | 21-605276 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-1926 | — | — | — | — | — | — | — | — |
| MD21-09-8832 | 21-605277 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | — | — | 09-1926[c] | — | — | — | — | — | — |
| MD21-09-8833 | 21-605277 | 7.0000–8.0000 | SOIL | — | — | — | — | — | — | — | — | 09-1926[c] | — | — | — | — | — | — |
| MD21-09-8836 | 21-605278 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 09-1950 | — | — |
| MD21-09-8837 | 21-605278 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-1950 | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only lead, mercury, and zinc.

[c] Metals analysis included only zinc.

[d] Metals analysis included only lead.

[e] Metals analysis included only lead and zinc.

[f] Metals analysis included only selenium.

**Table 4.2-20**
**Samples Collected and Analyses Requested at SWMU 21-024(n)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-3114 | 21-600667 | 0.0000–0.5000 | SOIL | 07-179 | 07-178 | —[a] | 07-179 | 07-179 | — | 07-179 | 07-179 | 07-178 | — | 07-178 | 07-179 | 07-177 | — | 07-178 |
| RE21-07-3115 | 21-600667 | 2.0000–3.0000 | QBT3 | 07-179 | 07-178 | — | 07-179 | 07-179 | — | 07-179 | 07-179 | 07-178 | — | 07-178 | 07-179 | 07-177 | 07-177 | 07-178 |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | 07-179 | 07-178 | — | 07-179 | 07-179 | — | 07-179 | 07-179 | 07-178 | — | 07-178 | 07-179 | 07-177 | — | 07-178 |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | 07-179 | 07-178 | — | 07-179 | 07-179 | — | 07-179 | 07-179 | 07-178 | — | 07-178 | 07-179 | 07-177 | 07-177 | 07-178 |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | 07-179 | 07-178 | — | 07-179 | 07-179 | — | 07-179 | 07-179 | 07-178 | — | 07-178 | 07-179 | 07-177 | — | 07-178 |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | 07-179 | 07-178 | — | 07-179 | 07-179 | — | 07-179 | 07-179 | 07-178 | — | 07-178 | 07-179 | 07-177 | 07-177 | 07-178 |
| MD21-09-8765 | 21-600669 | 7.0000–8.0000 | SOIL | — | — | — | — | — | — | 09-2286 | — | — | — | — | — | — | 09-2286 | — |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | — | 07-181 |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | 07-180 | 07-181 |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | — | 07-181 |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | 07-180 | 07-181 |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | — | 07-181 |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | 07-180 | 07-181 |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | — | 07-181 |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | 07-180 | 07-181 |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | — | 07-181 |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | 07-182 | 07-181 | — | 07-182 | 07-182 | — | 07-182 | 07-182 | 07-181 | — | 07-181 | 07-182 | 07-180 | 07-180 | 07-181 |
| RE21-07-3130 | 21-600675 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3188 | 21-600676 | 2.0000–3.0000 | QBT3 | — | — | 07-248 | — | — | 07-247 | — | — | — | 07-247 | — | — | — | — | — |
| RE21-07-3134 | 21-600677 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | — | 07-183 | 07-184 |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3136 | 21-600678 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3140 | 21-600680 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3142 | 21-600681 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |

**Table 4.2-20 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| MD21-09-8759 | 21-600682 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2317[b] | — | — | — | — | — | — |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| MD21-09-8763 | 21-600684 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2286[c] | — | — | — | 09-2286 | — | — |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | — | 07-184 |
| RE21-07-3151 | 21-600685 | 2.0000–3.0000 | QBT3 | 07-185 | 07-184 | — | 07-185 | 07-185 | — | 07-185 | 07-185 | 07-184 | — | 07-184 | 07-185 | 07-183 | 07-183 | 07-184 |
| RE21-07-3152 | 21-600686 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3155 | 21-600687 | 2.0000–3.0000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| RE21-07-3156 | 21-600688 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3157 | 21-600688 | 2.0000–3.0000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| MD21-09-8769 | 21-600689 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2286 | — | — |
| RE21-07-3160 | 21-600690 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3161 | 21-600690 | 2.0000–3.0000 | QBT3 | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | — | 07-190 |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | 07-191 | 07-190 | — | 07-191 | 07-191 | — | 07-191 | 07-191 | 07-190 | — | 07-190 | 07-191 | 07-189 | 07-189 | 07-190 |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | 07-222 | 07-221 | — | 07-222 | 07-222 | — | 07-222 | 07-222 | 07-221 | — | 07-221 | 07-222 | 07-220 | — | 07-221 |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | 07-222 | 07-221 | — | 07-222 | 07-222 | — | 07-222 | 07-222 | 07-221 | — | 07-221 | 07-222 | 07-220 | 07-220 | 07-221 |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | 07-222 | 07-221 | — | 07-222 | 07-222 | — | 07-222 | 07-222 | 07-221 | — | 07-221 | 07-222 | 07-220 | 07-220 | 07-221 |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | 07-222 | 07-221 | — | 07-222 | 07-222 | — | 07-222 | 07-222 | 07-221 | — | 07-221 | 07-222 | 07-220 | — | 07-221 |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | 07-222 | 07-221 | — | 07-222 | 07-222 | — | 07-222 | 07-222 | 07-221 | — | 07-221 | 07-222 | 07-220 | 07-220 | 07-221 |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | 07-222 | 07-221 | — | 07-222 | 07-222 | — | 07-222 | 07-222 | 07-221 | — | 07-221 | 07-222 | 07-220 | 07-220 | 07-221 |
| MD21-09-8760 | 21-600695 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | 09-2286 | 09-2286[b] | — | — | — | — | — | — |

**Table 4.2-20 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | 07-194 | 07-193 | — | 07-194 | 07-194 | — | 07-194 | 07-194 | 07-193 | — | 07-193 | 07-194 | 07-192 | — | 07-193 |
| RE21-07-3266 | 21-600710 | 2.0000–3.0000 | QBT3 | 07-194 | 07-193 | — | 07-194 | 07-194 | — | 07-194 | 07-194 | 07-193 | — | 07-193 | 07-194 | 07-192 | 07-192 | 07-193 |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | — | 07-208 |
| RE21-07-3268 | 21-600711 | 2.0000–3.0000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | 07-197 | 07-196 | — | 07-197 | 07-197 | — | 07-197 | 07-197 | 07-196 | — | 07-196 | 07-197 | 07-195 | — | 07-196 |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | 07-197 | 07-196 | — | 07-197 | 07-197 | — | 07-197 | 07-197 | 07-196 | — | 07-196 | 07-197 | 07-195 | 07-195 | 07-196 |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | — | 07-208 |
| RE21-07-3272 | 21-600713 | 2.0000–3.0000 | QBT3 | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | 07-197 | 07-196 | — | 07-197 | 07-197 | — | 07-197 | 07-197 | 07-196 | — | 07-196 | 07-197 | 07-195 | — | 07-196 |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | 07-197 | 07-196 | — | 07-197 | 07-197 | — | 07-197 | 07-197 | 07-196 | — | 07-196 | 07-197 | 07-195 | 07-195 | 07-196 |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | 07-197 | 07-196 | — | 07-197 | 07-197 | — | 07-197 | 07-197 | 07-196 | — | 07-196 | 07-197 | 07-195 | — | 07-196 |
| RE21-07-3276 | 21-600715 | 2.0000–3.0000 | QBT3 | 07-197 | 07-196 | — | 07-197 | 07-197 | — | 07-197 | 07-197 | 07-196 | — | 07-196 | 07-197 | 07-195 | 07-195 | 07-196 |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | — | 07-208 |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | — | 07-208 |
| RE21-07-3280 | 21-600717 | 2.0000–3.0000 | QBT3 | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | — | 07-208 |
| RE21-07-3282 | 21-600718 | 2.0000–3.0000 | QBT3 | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3286 | 21-600720 | 2.0000–3.0000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3288 | 21-600721 | 2.0000–3.0000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3294 | 21-600724 | 2.0000–3.0000 | QBT3 | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3296 | 21-600725 | 2.0000–3.0000 | QBT3 | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |

**Table 4.2-20 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-3297 | 21-600726 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3298 | 21-600726 | 2.0000–3.0000 | QBT3 | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | — | 07-208 |
| RE21-07-3318 | 21-600735 | 2.0000–3.0000 | QBT3 | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | 07-209 | 07-208 | — | 07-209 | 07-209 | — | 07-209 | 07-209 | 07-208 | — | 07-208 | 07-209 | 07-207 | 07-207 | 07-208 |
| MD21-09-8768 | 21-600735 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2317 | — | — |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | — | 07-213 |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | 07-214 | 07-213 | — | 07-214 | 07-214 | — | 07-214 | 07-214 | 07-213 | — | 07-213 | 07-214 | 07-212 | 07-212 | 07-213 |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | 07-219 | 07-218 | — | 07-219 | 07-219 | — | 07-219 | 07-219 | 07-218 | — | 07-218 | 07-219 | 07-217 | — | 07-218 |
| RE21-07-3324 | 21-600737 | 2.0000–3.0000 | QBT3 | 07-219 | 07-218 | — | 07-219 | 07-219 | — | 07-219 | 07-219 | 07-218 | — | 07-218 | 07-219 | 07-217 | 07-217 | 07-218 |
| RE21-07-3325 | 21-600737 | 5.0000–6.0000 | QBT3 | 07-219 | 07-218 | — | 07-219 | 07-219 | — | 07-219 | 07-219 | 07-218 | — | 07-218 | 07-219 | 07-217 | 07-217 | 07-218 |
| RE21-07-6248 | 21-601304 | 2.5000–3.5000 | SOIL | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6249 | 21-601304 | 4.5000–5.5000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6250 | 21-601305 | 3.0000–4.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6251 | 21-601305 | 5.0000–6.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| MD21-09-8766 | 21-601305 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2282[d] | — | — | — | — | — | — |
| RE21-07-6252 | 21-601306 | 1.0000–2.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6253 | 21-601306 | 3.0000–4.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6254 | 21-601307 | 3.5000–4.5000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6255 | 21-601307 | 5.5000–6.5000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | 08-491 | 08-491 | — | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | 08-491 | 08-491 |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | 08-491 | 08-491 | — | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | 08-491 | 08-491 |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | 08-491 | 08-491 | — | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | 08-491 | 08-491 |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | 08-491 | 08-491 | — | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | — | 08-491 | 08-491 | 08-491 | 08-491 | 08-491 |
| RE21-07-6260 | 21-601310 | 6.0000–7.0000 | QBT3 | 08-545 | 08-544 | — | 08-545 | 08-545 | — | 08-545 | 08-545 | 08-544 | — | 08-544 | 08-545 | 08-543 | 08-543 | 08-544 |
| RE21-07-6261 | 21-601310 | 8.0000–9.0000 | QBT3 | 08-545 | 08-544 | — | 08-545 | 08-545 | — | 08-545 | 08-545 | 08-544 | — | 08-544 | 08-545 | 08-543 | 08-543 | 08-544 |
| RE21-07-6262 | 21-601311 | 6.0000–7.0000 | QBT3 | 08-545 | 08-544 | — | 08-545 | 08-545 | — | 08-545 | 08-545 | 08-544 | — | 08-544 | 08-545 | 08-543 | 08-543 | 08-544 |
| RE21-07-6263 | 21-601311 | 8.0000–9.0000 | QBT3 | 08-545 | 08-544 | — | 08-545 | 08-545 | — | 08-545 | 08-545 | 08-544 | — | 08-544 | 08-545 | 08-543 | 08-543 | 08-544 |
| RE21-07-6264 | 21-601312 | 4.0000–5.0000 | QBT3 | 08-545 | 08-544 | — | 08-545 | 08-545 | — | 08-545 | 08-545 | 08-544 | — | 08-544 | 08-545 | 08-543 | 08-543 | 08-544 |
| RE21-07-6265 | 21-601312 | 6.0000–7.0000 | QBT3 | 08-545 | 08-544 | — | 08-545 | 08-545 | — | 08-545 | 08-545 | 08-544 | — | 08-544 | 08-545 | 08-543 | 08-543 | 08-544 |
| MD21-09-8771 | 21-601312 | 11.0000–12.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2317[e] | — | — | — | — | — | — |

**Table 4.2-20 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-6270 | 21-601315 | 3.0000–4.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6271 | 21-601315 | 8.0000–9.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| RE21-07-6272 | 21-601315 | 13.0000–14.0000 | QBT3 | 08-483 | 08-482 | — | 08-483 | 08-483 | — | 08-483 | 08-483 | 08-482 | — | 08-482 | 08-483 | 08-481 | 08-481 | 08-482 |
| MD21-09-8758 | 21-605251 | 0.0000–0.5000 | SOIL | 09-2286 | — | — | — | — | — | 09-2286 | — | — | — | — | — | — | — | — |
| MD21-09-8761 | 21-605252 | 0.0000–0.5000 | SOIL | 09-2317 | — | — | — | — | — | — | 09-2317 | 09-2317[f] | — | — | — | — | — | — |
| MD21-09-8762 | 21-605252 | 4.0000–5.0000 | QBT3 | 09-2317 | — | — | — | — | — | — | 09-2317 | 09-2317[f] | — | — | — | — | — | — |
| MD21-09-8764 | 21-605253 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-2317 | — | — | — | — | — | — | — | — |
| MD21-09-8767 | 21-605254 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2286[d] | — | — | — | — | — | — |
| MD21-09-8770 | 21-605255 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2286 | — | — |
| MD21-09-12458 | 21-608021 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-3253 | — | — | — | — | — | — | — | — |
| MD21-10-4657 | 21-609833 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 10-744 | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only chromium.

[c] Metals analysis included only copper and lead.

[d] Metals analysis included only zinc.

[e] Metals analysis included only lead.

[f] Metals analysis included only chromium, copper, lead, and zinc.

**Table 4.2-21**
**Samples Collected and Analyses Requested at SWMU 21-024(o)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-74952 | 21-27346 | 0.0000–0.5000 | SOIL | 6521S | 6519S | —[a] | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74953 | 21-27346 | 2.0000–2.5000 | QBT3 | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74955 | 21-27347 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74956 | 21-27347 | 2.0000–2.5000 | QBT3 | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74958 | 21-27348 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74959 | 21-27348 | 2.0000–2.5000 | QBT3 | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74960 | 21-27349 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74961 | 21-27349 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74962 | 21-27350 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74963 | 21-27350 | 2.0000–2.5000 | QBT3 | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74964 | 21-27351 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74965 | 21-27351 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74966 | 21-27352 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74967 | 21-27352 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74968 | 21-27353 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74969 | 21-27353 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74970 | 21-27354 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74971 | 21-27354 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74972 | 21-27355 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-4030 | 21-27355 | 2.0000–2.5000 | QBT3 | — | — | 07-266 | — | — | 07-265 | — | — | — | 07-265 | — | — | — | — | — |
| RE21-07-74973 | 21-27355 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| RE21-07-74974 | 21-27356 | 0.0000–0.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | — | 6519S, 6520S |
| RE21-07-74975 | 21-27356 | 2.0000–2.5000 | SOIL | 6521S | 6519S | — | 6521S | 6521S | — | 6521S | 6521S | 6519S | — | 6519S | 6521S | 6518S | 6518S | 6519S, 6520S |
| MD21-09-7573 | 21-605201 | 0.0000–0.5000 | SOIL | 09-1776 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-7574 | 21-605202 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 09-1776 | — | 09-1776[b] | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only zinc.

**Table 4.2-22**
**Samples Collected and Analyses Requested at Consolidated Unit 21-026(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Tritium | Herbicides | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-584 | 21-27340 | 0.0000–0.0000 | SOIL | 07-52 | 07-51 | —[a] | 07-52 | 07-52 | 07-52 | 07-50 | — | 07-52 | 07-52 |
| RE21-07-585 | 21-27340 | 0.0000–0.0000 | SOIL | 07-52 | 07-51 | — | 07-52 | 07-52 | 07-52 | 07-50 | — | 07-52 | 07-52 |
| RE21-07-586 | 21-27340 | 0.0000–0.0000 | SOIL | 07-56 | 07-56 | — | 07-56 | 07-56 | 07-56 | — | — | 07-56 | 07-56 |
| RE21-07-587 | 21-27340 | 0.0000–0.0000 | QBT3 | 07-61 | 07-60 | — | 07-61 | 07-61 | 07-61 | — | — | 07-61 | 07-61 |
| RE21-07-588 | 21-27340 | 0.0000–0.0000 | QBT3 | 07-61 | 07-60 | — | 07-61 | 07-61 | 07-61 | — | — | 07-61 | 07-61 |
| RE21-07-589 | 21-27340 | 0.0000–0.0000 | QBT3 | 07-61 | 07-60 | — | 07-61 | 07-61 | 07-61 | — | — | 07-61 | 07-61 |
| RE21-07-590 | 21-27340 | 0.0000–0.0000 | SOIL | 07-140 | 07-139 | — | 07-140 | 07-140 | 07-140 | — | — | 07-140 | 07-140 |
| RE21-07-591 | 21-27340 | 0.0000–0.0000 | SOIL | 07-176 | 07-175 | — | 07-176 | 07-176 | 07-176 | — | — | 07-176 | 07-176 |
| RE21-07-592 | 21-27340 | 0.0000–0.0000 | SOIL | 07-176 | 07-175 | — | 07-176 | 07-176 | 07-176 | — | — | 07-176 | 07-176 |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | 7010S | 7009S | — | 7010S | — | 7010S | — | — | 7010S | 7010S |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | 7010S | 7009S | — | 7010S | — | 7010S | — | — | 7010S | 7010S |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | 7010S | 7009S | — | 7010S | — | 7010S | — | — | 7010S | 7010S |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | 7010S | 7009S | — | 7010S | — | 7010S | — | — | 7010S | 7010S |
| MD21-09-8736 | 21-27550 | 14.3000–15.3000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75730 | 21-27551 | 10.0000–11.0000 | QBT3 | 7027S | 7026S | — | 7027S | — | 7027S | — | — | 7027S | 7027S |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | 7027S | 7026S | — | 7027S | — | 7027S | — | — | 7027S | 7027S |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | 7027S | 7026S | — | 7027S | — | 7027S | — | — | 7027S | 7027S |
| RE21-07-75734 | 21-27552 | 0.0000–0.5000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75736 | 21-27552 | 5.0000–6.0000 | QBT3 | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75737 | 21-27553 | 0.0000–0.5000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75739 | 21-27553 | 5.0000–6.0000 | QBT3 | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| MD21-09-8729 | 21-27553 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75752 | 21-27554 | 0.0000–0.5000 | SOIL | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75753 | 21-27554 | 2.5000–3.5000 | QBT3 | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75754 | 21-27554 | 4.5000–5.5000 | QBT3 | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-75744 | 21-27555 | 2.0000–2.5000 | QBT3 | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-75746 | 21-27556 | 2.0000–2.5000 | QBT3 | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |

**Table 4.2-22 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Tritium | Herbicides | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75748 | 21-27557 | 2.0000–2.5000 | QBT3 | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-75749 | 21-27558 | 0.0000–0.5000 | SOIL | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | 6651S | 6650S | — | 6651S | — | 6651S | — | — | 6651S | 6651S |
| RE21-07-583 | 21-27558 | 2.0000–3.0000 | QBT3 | — | — | 07-292 | — | — | — | — | 07-291 | — | — |
| RE21-07-75755 | 21-27559 | 0.0000–0.5000 | SOIL | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75756 | 21-27559 | 2.5000–3.5000 | QBT3 | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75757 | 21-27559 | 4.5000–5.5000 | QBT3 | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75765 | 21-27560 | 0.0000–0.5000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75766 | 21-27560 | 2.0000–3.0000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| MD21-09-8727 | 21-27560 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2184 | — |
| RE21-07-75767 | 21-27561 | 0.0000–0.5000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75768 | 21-27561 | 2.0000–3.0000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| MD21-09-8728 | 21-27561 | 7.0000–8.0000 | SOIL | — | — | — | 09-2184 | — | — | — | — | — | — |
| RE21-07-75769 | 21-27562 | 0.0000–0.5000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75770 | 21-27562 | 2.0000–3.0000 | QBT3 | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75772 | 21-27563 | 2.0000–3.0000 | SOIL | 6990S | 6989S | — | 6990S | — | 6990S | — | — | 6990S | 6990S |
| RE21-07-75773 | 21-27564 | 9.5000–10.5000 | QBT3 | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75774 | 21-27564 | 11.5000–12.5000 | QBT3 | 6993S | 6992S | — | 6993S | — | 6993S | — | — | 6993S | 6993S |
| RE21-07-75775 | 21-27565 | 12.0000–13.0000 | QBT3 | 7004S | 7003S | — | 7004S | — | 7004S | — | — | 7004S | 7004S |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | 7004S | 7003S | — | 7004S | — | 7004S | — | — | 7004S | 7004S |
| RE21-07-75777 | 21-27566 | 12.0000–13.0000 | QBT3 | 7004S | 7003S | — | 7004S | — | 7004S | — | — | 7004S | 7004S |
| RE21-07-75778 | 21-27566 | 14.0000–15.0000 | QBT3 | 7004S | 7003S | — | 7004S | — | 7004S | — | — | 7004S | 7004S |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | 7027S | 7026S | — | 7027S | — | 7027S | — | — | 7027S | 7027S |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | 7027S | 7026S | — | 7027S | — | 7027S | — | — | 7027S | 7027S |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | 7007S | 7006S | — | 7007S | — | 7007S | — | — | 7007S | 7007S |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | 7007S | 7006S | — | 7007S | — | 7007S | — | — | 7007S | 7007S |
| RE21-07-75806 | 21-27570 | 5.5000–6.5000 | QBT3 | 7007S | 7006S | — | 7007S | — | 7007S | — | — | 7007S | 7007S |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | 7007S | 7006S | — | 7007S | — | 7007S | — | — | 7007S | 7007S |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | 7007S | 7006S | — | 7007S | — | 7007S | — | — | 7007S | 7007S |
| RE21-07-75809 | 21-27571 | 5.5000–6.5000 | QBT3 | 7007S | 7006S | — | 7007S | — | 7007S | — | — | 7007S | 7007S |
| MD21-09-8735 | 21-27571 | 10.5000–11.5000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75810 | 21-27572 | 0.0000–0.5000 | QBT3 | 7021S | 7020S | — | 7021S | — | 7021S | — | — | 7021S | 7021S |

**Table 4.2-22 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Gross Alpha/Beta | Tritium | Herbicides | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75811 | 21-27572 | 2.0000–3.0000 | QBT3 | 7021S | 7020S | — | 7021S | — | 7021S | — | — | 7021S | 7021S |
| RE21-07-75812 | 21-27572 | 5.0000–6.0000 | QBT3 | 7021S | 7020S | — | 7021S | — | 7021S | — | — | 7021S | 7021S |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75814 | 21-27573 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75815 | 21-27574 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75816 | 21-27574 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| MD21-09-8726 | 21-27575 | 4.0000–5.0000 | QBT3 | 09-2240 | — | — | — | — | — | — | — | 09-2240 | — |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75821 | 21-27577 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75822 | 21-27577 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75823 | 21-27578 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75824 | 21-27578 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75827 | 21-27580 | 0.0000–0.5000 | SOIL | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75828 | 21-27580 | 2.0000–3.0000 | QBT3 | 7015S | 7014S | — | 7015S | — | 7015S | — | — | 7015S | 7015S |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | 7030S | 7029S | — | 7030S | — | 7030S | — | — | 7030S | 7030S |
| RE21-07-75830 | 21-27581 | 12.0000–13.0000 | QBT3 | 7030S | 7029S | — | 7030S | — | 7030S | — | — | 7030S | 7030S |
| MD21-09-8730 | 21-605238 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8731 | 21-605238 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-12422 | 21-605238 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8732 | 21-605239 | 2.0000–3.0000 | QBT3 | — | — | — | 09-2240 | — | — | — | — | — | — |
| MD21-09-8733 | 21-605239 | 7.0000–8.0000 | QBT3 | — | — | — | 09-2240 | — | — | — | — | — | — |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2240 |

**Table 4.2-22 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TALMetals | PCBs | Perchlorate | Pesticides | Strontium-90 | SVOCs | TPH-DRO | TPH-GRO | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-584 | 21-27340 | 0.0000–0.0000 | SOIL | 07-51 | 07-50 | 07-50 | 07-50 | 07-52 | 07-50 | — | — | 07-50 | — |
| RE21-07-585 | 21-27340 | 0.0000–0.0000 | SOIL | 07-51 | 07-50 | 07-50 | 07-50 | 07-52 | 07-50 | — | — | 07-50 | — |
| RE21-07-586 | 21-27340 | 0.0000–0.0000 | SOIL | 07-56 | 07-55 | 07-55 | 07-55 | 07-56 | 07-55 | — | — | 07-55 | — |
| RE21-07-587 | 21-27340 | 0.0000–0.0000 | QBT3 | 07-60 | 07-61 | 07-60 | 07-61 | 07-61 | 07-61 | — | — | 07-61 | — |
| RE21-07-588 | 21-27340 | 0.0000–0.0000 | QBT3 | 07-60 | 07-61 | 07-60 | 07-61 | 07-61 | 07-61 | — | — | 07-61 | — |
| RE21-07-589 | 21-27340 | 0.0000–0.0000 | QBT3 | 07-60 | 07-61 | 07-60 | 07-61 | 07-61 | 07-61 | — | — | 07-61 | — |
| RE21-07-590 | 21-27340 | 0.0000–0.0000 | SOIL | 07-139 | 07-138 | — | 07-138 | 07-140 | 07-138 | 07-138 | 07-138 | 07-138 | — |
| RE21-07-591 | 21-27340 | 0.0000–0.0000 | SOIL | 07-175 | 07-174 | 07-175 | 07-174 | 07-176 | 07-174 | — | — | 07-174 | — |
| RE21-07-592 | 21-27340 | 0.0000–0.0000 | SOIL | 07-175 | 07-174 | 07-175 | 07-174 | 07-176 | 07-174 | — | — | 07-174 | — |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | 7009S | — | 7009S | — | 7010S | 7008S | — | — | — | 7009S |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | 7009S | — | 7009S | — | 7010S | 7008S | — | — | 7008S | 7009S |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | 7009S | — | 7009S | — | 7010S | 7008S | — | — | 7008S | 7009S |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | 7009S | — | 7009S | — | 7010S | 7008S | — | — | 7008S | 7009S |
| MD21-09-8736 | 21-27550 | 14.3000–15.3000 | QBT3 | — | — | — | — | — | 09-2035 | — | — | — | — |
| RE21-07-75730 | 21-27551 | 10.0000–11.0000 | QBT3 | 7026S | — | 7026S | — | 7027S | 7025S | — | — | 7025S | 7026S |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | 7026S | — | 7026S | — | 7027S | 7025S | — | — | 7025S | 7026S |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | 7026S | — | 7026S | — | 7027S | 7025S | — | — | 7025S | 7026S |
| RE21-07-75734 | 21-27552 | 0.0000–0.5000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | — | 6989S |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| RE21-07-75736 | 21-27552 | 5.0000–6.0000 | QBT3 | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| RE21-07-75737 | 21-27553 | 0.0000–0.5000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | — | 6989S |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| RE21-07-75739 | 21-27553 | 5.0000–6.0000 | QBT3 | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| MD21-09-8729 | 21-27553 | 10.0000–11.0000 | QBT3 | 09-2184[b] | — | — | — | — | — | — | — | — | — |
| RE21-07-75752 | 21-27554 | 0.0000–0.5000 | SOIL | 6992S | — | 6992S | — | 6993S | 6991S | — | — | — | 6992S |
| RE21-07-75753 | 21-27554 | 2.5000–3.5000 | QBT3 | 6992S | — | 6992S | — | 6993S | 6991S | — | — | 6991S | 6992S |
| RE21-07-75754 | 21-27554 | 4.5000–5.5000 | QBT3 | 6992S | — | 6992S | — | 6993S | 6991S | — | — | 6991S | 6992S |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | 6650S | — | 6650S | — | 6651S | 6649S | — | — | — | 6650S |
| RE21-07-75744 | 21-27555 | 2.0000–2.5000 | QBT3 | 6650S | — | 6650S | — | 6651S | 6649S | — | — | 6649S | 6650S |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | 6650S | — | 6650S | — | 6651S | 6649S | — | — | — | 6650S |
| RE21-07-75746 | 21-27556 | 2.0000–2.5000 | QBT3 | 6650S | — | 6650S | — | 6651S | 6649S | — | — | 6649S | 6650S |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | 6650S | — | 6650S | — | 6651S | 6649S | — | — | — | 6650S |

**Table 4.2-22 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TALMetals | PCBs | Perchlorate | Pesticides | Strontium-90 | SVOCs | TPH-DRO | TPH-GRO | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75748 | 21-27557 | 2.0000–2.5000 | QBT3 | 6650S | — | 6650S | — | 6651S | 6649S | — | — | 6649S | 6650S |
| RE21-07-75749 | 21-27558 | 0.0000–0.5000 | SOIL | 6650S | — | 6650S | — | 6651S | 6649S | — | — | — | 6650S |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | 6650S | — | 6650S | — | 6651S | 6649S | — | — | 6649S | 6650S |
| RE21-07-583 | 21-27558 | 2.0000–3.0000 | QBT3 | — | 07-291 | — | — | — | — | — | — | — | — |
| RE21-07-75755 | 21-27559 | 0.0000–0.5000 | SOIL | 6992S | — | 6992S | — | 6993S | 6991S | — | — | — | 6992S |
| RE21-07-75756 | 21-27559 | 2.5000–3.5000 | QBT3 | 6992S | — | 6992S | — | 6993S | 6991S | — | — | 6991S | 6992S |
| RE21-07-75757 | 21-27559 | 4.5000–5.5000 | QBT3 | 6992S | — | 6992S | — | 6993S | 6991S | — | — | 6991S | 6992S |
| RE21-07-75765 | 21-27560 | 0.0000–0.5000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | — | 6989S |
| RE21-07-75766 | 21-27560 | 2.0000–3.0000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| MD21-09-8727 | 21-27560 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75767 | 21-27561 | 0.0000–0.5000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | — | 6989S |
| RE21-07-75768 | 21-27561 | 2.0000–3.0000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| MD21-09-8728 | 21-27561 | 7.0000–8.0000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75769 | 21-27562 | 0.0000–0.5000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | — | 6989S |
| RE21-07-75770 | 21-27562 | 2.0000–3.0000 | QBT3 | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | — | 6989S |
| RE21-07-75772 | 21-27563 | 2.0000–3.0000 | SOIL | 6989S | — | 6989S | — | 6990S | 6988S | — | — | 6988S | 6989S |
| RE21-07-75773 | 21-27564 | 9.5000–10.5000 | QBT3 | 6992S | — | 6992S | — | 6993S | 6991S | — | — | 6991S | 6992S |
| RE21-07-75774 | 21-27564 | 11.5000–12.5000 | QBT3 | 6992S | — | 6992S | — | 6993S | 6991S | — | — | 6991S | 6992S |
| RE21-07-75775 | 21-27565 | 12.0000–13.0000 | QBT3 | 7003S | — | 7003S | — | 7004S | 7002S | — | — | 7002S | 7003S |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | 7003S | — | 7003S | — | 7004S | 7002S | — | — | 7002S | 7003S |
| RE21-07-75777 | 21-27566 | 12.0000–13.0000 | QBT3 | 7003S | — | 7003S | — | 7004S | 7002S | — | — | 7002S | 7003S |
| RE21-07-75778 | 21-27566 | 14.0000–15.0000 | QBT3 | 7003S | — | 7003S | — | 7004S | 7002S | — | — | 7002S | 7003S |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | 7026S | — | 7026S | — | 7027S | 7025S | — | — | 7025S | 7026S |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | 7026S | — | 7026S | — | 7027S | 7025S | — | — | 7025S | 7026S |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | 7006S | — | 7006S | — | 7007S | 7005S | — | — | — | 7006S |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | 7006S | — | 7006S | — | 7007S | 7005S | — | — | 7005S | 7006S |
| RE21-07-75806 | 21-27570 | 5.5000–6.5000 | QBT3 | 7006S | — | 7006S | — | 7007S | 7005S | — | — | 7005S | 7006S |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | 7006S | — | 7006S | — | 7007S | 7005S | — | — | — | 7006S |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | 7006S | — | 7006S | — | 7007S | 7005S | — | — | 7005S | 7006S |
| RE21-07-75809 | 21-27571 | 5.5000–6.5000 | QBT3 | 7006S | — | 7006S | — | 7007S | 7005S | — | — | 7005S | 7006S |
| MD21-09-8735 | 21-27571 | 10.5000–11.5000 | SOIL | 09-2184[c] | — | — | — | — | — | — | — | — | — |
| RE21-07-75810 | 21-27572 | 0.0000–0.5000 | QBT3 | 7020S | — | 7020S | — | 7021S | 7019S | — | — | — | 7020S |

**Table 4.2-22 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TALMetals | PCBs | Perchlorate | Pesticides | Strontium-90 | SVOCs | TPH-DRO | TPH-GRO | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75811 | 21-27572 | 2.0000–3.0000 | QBT3 | 7020S | — | 7020S | — | 7021S | 7019S | — | — | 7019S | 7020S |
| RE21-07-75812 | 21-27572 | 5.0000–6.0000 | QBT3 | 7020S | — | 7020S | — | 7021S | 7019S | — | — | 7019S | 7020S |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75814 | 21-27573 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75815 | 21-27574 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75816 | 21-27574 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| MD21-09-8726 | 21-27575 | 4.0000–5.0000 | QBT3 | 09-2240[d] | — | — | — | — | — | — | — | — | — |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75821 | 21-27577 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75822 | 21-27577 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75823 | 21-27578 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75824 | 21-27578 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75827 | 21-27580 | 0.0000–0.5000 | SOIL | 7014S | — | 7014S | — | 7015S | 7013S | — | — | — | 7014S |
| RE21-07-75828 | 21-27580 | 2.0000–3.0000 | QBT3 | 7014S | — | 7014S | — | 7015S | 7013S | — | — | 7013S | 7014S |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | 7029S | — | 7029S | — | 7030S | 7028S | — | — | 7028S | 7029S |
| RE21-07-75830 | 21-27581 | 12.0000–13.0000 | QBT3 | 7029S | — | 7029S | — | 7030S | 7028S | — | — | 7028S | 7029S |
| MD21-09-8730 | 21-605238 | 5.0000–6.0000 | QBT3 | 09-2184[b] | — | — | — | — | — | — | — | — | — |
| MD21-09-8731 | 21-605238 | 10.0000–11.0000 | QBT3 | 09-2209[b] | — | — | — | — | — | — | — | — | — |
| MD21-09-12422 | 21-605238 | 19.0000–20.0000 | QBT3 | 09-3031[b] | — | — | — | — | — | — | — | — | — |
| MD21-09-8732 | 21-605239 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8733 | 21-605239 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | 09-2240[e] | — | — | — | — | 09-2240 | — | — | — | 09-2240[f] |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only calcium.

[c] Metals analysis included only lead.

[d] Metals analysis included only silver.

[e] Metals analysis included only silver and uranium.

[f] Wet chemistry analysis included only cyanide (total).

**Table 4.2-23**
**Samples Collected and Analyses Requested at SWMU 21-027(a)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Thorium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | 07-267 | 07-267 | —[a] | 07-267 | 07-267 | — | 07-267 | — | 07-267 | 07-267 | — | 07-267 | 07-267 | 07-267 | — | 07-267 |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | 07-267 | 07-267 | — | 07-267 | 07-267 | — | 07-267 | — | 07-267 | 07-267 | — | 07-267 | 07-267 | 07-267 | 07-267 | 07-267 |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | 07-267 | 07-267 | — | 07-267 | 07-267 | — | 07-267 | — | 07-267 | 07-267 | — | 07-267 | 07-267 | 07-267 | — | 07-267 |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | 07-267 | 07-267 | — | 07-267 | 07-267 | — | 07-267 | — | 07-267 | 07-267 | — | 07-267 | 07-267 | 07-267 | 07-267 | 07-267 |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | 07-267 | 07-267 | — | 07-267 | 07-267 | — | 07-267 | — | 07-267 | 07-267 | — | 07-267 | 07-267 | 07-267 | — | 07-267 |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | 07-267 | 07-267 | — | 07-267 | 07-267 | — | 07-267 | — | 07-267 | 07-267 | — | 07-267 | 07-267 | 07-267 | 07-267 | 07-267 |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | — | 07-270 |
| RE21-08-10373 | 21-600864 | 0.0000–0.5000 | SOIL | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3901 | 21-600864 | 2.0000–3.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-08-10374 | 21-600864 | 2.0000–3.0000 | QBT3 | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | — | 07-270 |
| RE21-07-3903 | 21-600865 | 2.0000–3.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | — | 07-270 |
| RE21-07-3905 | 21-600866 | 2.0000–3.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | — | 07-270 |
| RE21-08-10375 | 21-600867 | 0.0000–0.5000 | SOIL | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3907 | 21-600867 | 2.0000–3.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-08-10376 | 21-600867 | 2.0000–3.0000 | QBT3 | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | — | 07-270 |
| RE21-07-3909 | 21-600868 | 2.0000–3.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | — | 07-270 |
| RE21-07-3925 | 21-600872 | 0.0000–0.5000 | SOIL | — | — | 07-286 | — | — | 07-285 | — | — | — | — | 07-285 | — | — | — | — | — |
| RE21-07-3917 | 21-600872 | 2.0000–3.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-08-10371 | 21-600872 | 2.0000–3.0000 | QBT3 | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3918 | 21-600872 | 5.0000–6.0000 | QBT3 | 07-271 | 07-270 | — | 07-271 | 07-271 | — | 07-271 | — | 07-271 | 07-270 | — | 07-270 | 07-271 | 07-269 | 07-269 | 07-270 |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | 07-735 | 07-734 | — | 07-735 | 07-735 | — | 07-735 | — | 07-735 | 07-734 | — | 07-734 | 07-735 | 07-733 | 07-733 | 07-734 |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | 07-735 | 07-734 | — | 07-735 | 07-735 | — | 07-735 | — | 07-735 | 07-734 | — | 07-734 | 07-735 | 07-733 | 07-733 | 07-734 |
| MD21-09-8594 | 21-601224 | 8.0000–9.0000 | QBT3 | 09-2038 | — | — | — | — | — | 09-2038 | — | — | — | — | — | — | — | — | — |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | 07-735 | 07-734 | — | 07-735 | 07-735 | — | 07-735 | — | 07-735 | 07-734 | — | 07-734 | 07-735 | 07-733 | 07-733 | 07-734 |
| RE21-08-10372 | 21-601225 | 1.0000–2.0000 | QBT3 | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | 07-735 | 07-734 | — | 07-735 | 07-735 | — | 07-735 | — | 07-735 | 07-734 | — | 07-734 | 07-735 | 07-733 | 07-733 | 07-734 |
| RE21-07-5893 | 21-601225 | 3.0000–4.0000 | QBT3 | — | — | 08-347 | — | — | 08-348 | — | — | — | — | 08-348 | — | — | — | — | — |

**Table 4.2-23 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Thorium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-12457 | 21-601225 | 7.0000–8.0000 | QBT3 | — | — | 09-3252 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | 07-735 | 07-734 | — | 07-735 | 07-735 | — | 07-735 | — | 07-735 | 07-734 | — | 07-734 | 07-735 | 07-733 | 07-733 | 07-734 |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | 07-735 | 07-734 | — | 07-735 | 07-735 | — | 07-735 | — | 07-735 | 07-734 | — | 07-734 | 07-735 | 07-733 | 07-733 | 07-734 |
| MD21-09-8599 | 21-601226 | 9.5000–10.5000 | QBT3 | — | — | — | — | 09-2038 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | 07-745 | 07-745 | — | 07-745 | 07-745 | — | 07-745 | — | 07-745 | 07-745 | — | 07-745 | 07-745 | 07-745 | 07-745 | 07-745 |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | 07-745 | 07-745 | — | 07-745 | 07-745 | — | 07-745 | — | 07-745 | 07-745 | — | 07-745 | 07-745 | 07-745 | 07-745 | 07-745 |
| MD21-09-8593 | 21-601227 | 8.5000–9.5000 | QBT3 | 09-2038 | — | — | — | — | — | 09-2038 | — | — | 09-2038[b] | — | — | — | — | 09-2038[c] | — |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | 07-910 | 07-910 | — | 07-910 | 07-910 | — | 07-910 | 07-910 | 07-910 | 07-910 | — | 07-910 | 07-910 | 07-910 | 07-910 | 07-910 |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | 07-910 | 07-910 | — | 07-910 | 07-910 | — | 07-910 | 07-910 | 07-910 | 07-910 | — | 07-910 | 07-910 | 07-910 | 07-910 | 07-910 |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | 08-273 | 08-272 | — | 08-273 | 08-273 | — | 08-273 | — | 08-273 | 08-272 | — | 08-272 | 08-273 | 08-271 | 08-271 | 08-272 |
| RE21-08-10369 | 21-601229 | 1.0000–2.0000 | SOIL | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5871 | 21-601229 | 6.0000–7.0000 | QBT3 | 08-273 | 08-272 | — | 08-273 | 08-273 | — | 08-273 | — | 08-273 | 08-272 | — | 08-272 | 08-273 | 08-271 | 08-271 | 08-272 |
| RE21-08-10370 | 21-601229 | 6.0000–7.0000 | SOIL | — | — | 08-557 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8597 | 21-601229 | 11.0000–12.0000 | QBT3 | — | — | 09-2037 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5872 | 21-601229 | 11.0000–12.0000 | QBT3 | 08-273 | 08-272 | — | 08-273 | 08-273 | — | 08-273 | — | 08-273 | 08-272 | — | 08-272 | 08-273 | 08-271 | 08-271 | 08-272 |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | 08-273 | 08-272 | — | 08-273 | 08-273 | — | 08-273 | — | 08-273 | 08-272 | — | 08-272 | 08-273 | 08-271 | 08-271 | 08-272 |
| RE21-07-5876 | 21-601229 | 21.0000–22.0000 | QBT3 | 08-273 | 08-272 | — | 08-273 | 08-273 | — | 08-273 | — | 08-273 | 08-272 | — | 08-272 | 08-273 | 08-271 | 08-271 | 08-272 |
| MD21-09-8838 | 21-605279 | 0.0000–0.5000 | QBT3 | 09-2489 | — | — | — | — | — | 09-2489 | — | 09-2489 | 09-2489[d] | — | — | — | 09-2489 | — | — |
| MD21-09-8839 | 21-605280 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-2489[e] | — | — | — | — | — | — |
| MD21-09-12456 | 21-608020 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 09-3251[e] | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only zinc.

[c] VOCs analysis included only tetrachloroethene.

[d] Metals analysis included only chromium, copper, lead, mercury, and zinc.

[e] Metals analysis included only chromium.

**Table 4.2-24**
**Samples Collected and Analyses Requested at SWMU 21-027(c)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75115 | 21-27399 | 3.0000–4.0000 | SOIL | 7104S | 7103S | —[a] | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | 7102S | 7103S |
| RE21-07-75116 | 21-27399 | 5.0000–6.0000 | SOIL | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | 7102S | 7103S |
| RE21-07-75117 | 21-27399 | 8.0000–9.0000 | QBT3 | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | 7102S | 7103S |
| RE21-07-75121 | 21-27401 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75122 | 21-27401 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| MD21-09-8717 | 21-27401 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 09-2377 | — | — |
| RE21-07-75123 | 21-27402 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75124 | 21-27402 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75125 | 21-27403 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75126 | 21-27403 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75127 | 21-27404 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75128 | 21-27404 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75129 | 21-27405 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75130 | 21-27405 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75131 | 21-27406 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75132 | 21-27406 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75133 | 21-27407 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75134 | 21-27407 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75135 | 21-27408 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75136 | 21-27408 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75137 | 21-27409 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75138 | 21-27409 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75139 | 21-27410 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75140 | 21-27410 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-5087 | 21-27411 | 0.0000–0.5000 | SOIL | — | — | 07-308 | — | — | 07-309 | — | — | — | 07-309 | — | — | — | — | — |
| RE21-07-75141 | 21-27411 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75142 | 21-27411 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| RE21-07-75143 | 21-27412 | 0.0000–0.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | — | 6576S |
| RE21-07-75144 | 21-27412 | 2.0000–2.5000 | SOIL | 6577S | 6576S | — | 6577S | 6577S | — | 6577S | 6577S | 6576S | — | 6576S | 6577S | 6578S | 6578S | 6576S |
| MD21-09-8715 | 21-27412 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-2466[b] | — | — | — | — | — | — |
| MD21-09-12452 | 21-27412 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | 09-3249[b] | — | — | — | — | — | — |
| RE21-07-75145 | 21-27413 | 2.5000–3.5000 | SOIL | 7099S | 7099S | — | 7099S | 7099S | — | 7099S | 7099S | 7099S | — | 7099S | 7099S | 7099S | 7099S | 7099S |

**Table 4.2-24 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOCs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-07-75146 | 21-27413 | 4.5000–5.5000 | SOIL | 7099S | 7099S | — | 7099S | 7099S | — | 7099S | 7099S | 7099S | — | 7099S | 7099S | 7099S | 7099S | 7099S |
| RE21-07-75147 | 21-27414 | 0.0000–0.5000 | SOIL | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | — | 7103S |
| RE21-07-75148 | 21-27414 | 3.0000–4.0000 | SOIL | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | 7102S | 7103S |
| RE21-07-75151 | 21-27414 | 5.0000–6.0000 | SOIL | 7108S | 7107S | — | 7108S | 7108S | — | 7108S | 7108S | 7107S | — | 7107S | 7108S | 7106S | 7106S | 7107S |
| RE21-07-75149 | 21-27415 | 0.0000–0.5000 | SOIL | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | — | 7103S |
| RE21-07-75150 | 21-27415 | 3.0000–4.0000 | SOIL | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | 7102S | 7103S |
| RE21-07-75153 | 21-27415 | 5.0000–6.0000 | SOIL | 7104S | 7103S | — | 7104S | 7104S | — | 7104S | 7104S | 7103S | — | 7103S | 7104S | 7102S | 7102S | 7103S |
| MD21-09-8712 | 21-605232 | 0.0000–0.5000 | SOIL | 09-2441 | — | — | — | — | — | 09-2441 | — | — | — | — | — | — | — | — |
| MD21-09-8713 | 21-605233 | 4.0000–5.0000 | QBT3 | 09-2377 | — | — | 09-2377 | — | — | 09-2377 | — | — | — | — | — | — | — | — |
| MD21-09-8714 | 21-605234 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-2441[b] | — | — | — | — | — | — |
| MD21-09-8716 | 21-605236 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | 09-2466 | — | — | — |
| MD21-09-12453 | 21-608017 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 09-3249[b] | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.

[a] — = Analysis not requested.

[b] Metals analysis included only lead.

**Table 4.2-25**
**Samples Collected and Analyses Requested at AOC C-21-027**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Anions | Dioxins/Furans | Gamma Spectroscopy | Tritium | Hexavalent Chromium | Explosive Compounds | Isotopic Plutonium | Isotopic Uranium | TAL Metals | PCBs | Perchlorate | Strontium-90 | SVOSs | VOCs | Wet Chemistry |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | 09-3186 | 09-3185 | —* | 09-3186 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3185 | 09-3186 | 09-3184 | 09-3184 | 09-3185 |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3185 | 09-3186 | 09-3184 | 09-3184 | 09-3185 |
| MD21-09-9092 | 21-605337 | 10.0000–11.0000 | QBT3 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3185 | 09-3186 | 09-3184 | 09-3184 | 09-3185 |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3185 | 09-3186 | 09-3184 | 09-3184 | 09-3185 |
| MD21-10-7825 | 21-605338 | 0.0000–0.5000 | SOIL | — | — | 10-855 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-9094 | 21-605338 | 5.0000–6.0000 | SOIL | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3185 | 09-3186 | 09-3184 | 09-3184 | 09-3185 |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3186 | 09-3186 | 09-3185 | — | 09-3185 | 09-3186 | 09-3184 | 09-3184 | 09-3185 |
| MD21-10-7826 | 21-605339 | 0.0000–0.5000 | SOIL | — | — | 10-855 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3193 | 09-3194 | 09-3194 | 09-3194, 09-3199 | 09-3193 |
| MD21-09-9097 | 21-605339 | 2.0000–3.0000 | QBT3 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3193 | 09-3194 | 09-3194 | 09-3199 | 09-3193 |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3193 | 09-3194 | 09-3194 | 09-3199 | 09-3193 |
| MD21-09-12897 | 21-605340 | 2.0000–3.0000 | SOIL | — | — | 09-3311 | — | — | — | 09-3310 | — | — | — | 09-3310 | — | — | — | — | — |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3193 | 09-3194 | 09-3194 | 09-3199 | 09-3193 |
| MD21-10-7816 | 21-605340 | 5.0000–6.0000 | QBT3 | 10-857 | — | 10-855 | — | — | — | — | 10-857 | — | — | — | — | — | — | — | — |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3193 | 09-3194 | 09-3194 | 09-3199 | 09-3193 |
| MD21-09-9103 | 21-605341 | 2.0000–3.0000 | SOIL | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3194 | 09-3194 | 09-3193 | — | 09-3193 | 09-3194 | 09-3194 | 09-3199 | 09-3193 |
| MD21-09-9105 | 21-605342 | 0.0000–0.5000 | QBT3 | 09-3263 | 09-3263 | — | 09-3263 | 09-3263 | 09-3263 | — | 09-3263 | 09-3263 | 09-3263 | — | 09-3263 | 09-3263 | 09-3263 | — | 09-3263 |
| MD21-10-7832 | 21-605342 | 0.0000–0.5000 | QBT3 | — | — | 10-1058 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-9106 | 21-605342 | 2.0000–3.0000 | QBT3 | 09-3263 | 09-3263 | — | 09-3263 | 09-3263 | 09-3263 | — | 09-3263 | 09-3263 | 09-3263 | — | 09-3263 | 09-3263 | 09-3263 | 09-3263 | 09-3263 |
| MD21-10-7817 | 21-610682 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 10-857 | — | — | — | — | — | — | — | — |
| MD21-10-7818 | 21-610683 | 0.0000–1.0000 | SOIL | — | — | — | — | — | — | — | 10-857 | — | — | — | — | — | — | — | — |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | 10-857 | 10-856 | 10-855 | 10-857 | 10-857 | 10-856 | — | 10-857 | 10-857 | 10-856 | — | 10-856 | 10-857 | 10-856 | — | 10-856 |
| MD21-10-7820 | 21-610684 | 5.0000–6.0000 | QBT3 | 10-857 | 10-856 | — | 10-857 | 10-857 | 10-856 | — | 10-857 | 10-857 | 10-856 | — | 10-856 | 10-857 | 10-856 | 10-856 | 10-856 |
| MD21-10-7821 | 21-610684 | 10.0000–11.0000 | QBT3 | 10-857 | 10-856 | — | 10-857 | 10-857 | 10-856 | — | 10-857 | 10-857 | 10-856 | — | 10-856 | 10-857 | 10-856 | 10-856 | 10-856 |
| MD21-10-7833 | 21-610686 | 0.0000–0.5000 | SOIL | — | — | 10-1058 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.
* — = Analysis not requested.

**Table 6.1-1**
**Summary of Inorganic Chemicals above BVs at AOC 21-002(b)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Magnesium | Nitrate | Perchlorate | Selenium | Silver | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **1690** | **na**[a] | **na** | **0.3** | **1** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **4610** | **na** | **na** | **1.52** | **1** | **1.82** | **48.8** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **na** | **125000** | **54.8** | **391** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **na** | **1820000** | **795** | **5680** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **na** | **496000** | **217** | **1550** | **1550** | **929** | **92900** |
| RE21-06-68368 | 21-25679 | 0.0000–0.5000 | SOIL | —[c] | — | — | 0.685 | 8590 (J) | 28.6 | — | 1.14 | 140 | — | 4.68 (J-) | — | 1.74 (U) | 2.15 | — | 195 |
| RE21-06-68369 | 21-25679 | 2.5000–3.0000 | QBT3 | 10400 (J+) | 2.93 | 82.3 | — | — | 11.3 | — | — | — | — | 1.17 (J-) | — | 1.54 (U) | — | — | — |
| RE21-06-68370 | 21-25680 | 0.0000–0.5000 | SOIL | — | — | — | 0.497 (J) | — | — | — | 0.913 | 66.4 | — | 7.74 (J-) | — | 1.64 (U) | — | — | 93.5 |
| RE21-06-68371 | 21-25680 | 2.5000–3.0000 | QBT3 | 7390 (J+) | 3.38 | — | — | — | 17.2 | — | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-06-68373 | 21-25681 | 0.0000–0.5000 | SOIL | — | — | — | 0.474 (J) | — | — | — | — | 40.6 | — | 2.68 (J-) | — | 1.67 (U) | — | 2.29 (J) | 75.3 |
| RE21-06-68374 | 21-25681 | 2.5000–3.0000 | QBT3 | — | 3.3 | — | — | — | 19.7 | — | — | — | — | — | — | 1.54 (U) | — | — | — |
| RE21-06-68375 | 21-25682 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 29.9 | — | 2.19 (J-) | — | 1.71 (U) | — | — | 48.9 |
| RE21-06-68376 | 21-25682 | 2.5000–3.0000 | QBT3 | 12500 (J+) | 3.55 | 138 | — | 2760 (J) | 12.2 | — | — | — | 1880 | — | 0.000696 (J) | 1.64 (U) | — | — | — |
| RE21-06-68378 | 21-25683 | 0.0000–0.5000 | SOIL | — | — | — | 0.984 | — | — | — | 1.49 | 267 | — | 10.1 (J-) | 0.00127 (J) | 1.7 (U) | — | — | 262 |
| RE21-06-68379 | 21-25683 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 7.55 | — | — | — | — | 1.37 (J-) | — | 1.56 (U) | — | — | — |
| RE21-06-68380 | 21-25684 | 0.0000–0.5000 | SOIL | — | — | — | 0.494 (J) | — | — | — | — | 63.6 | — | 4.36 (J-) | — | 1.67 (U) | — | — | 88.1 |
| RE21-06-68381 | 21-25684 | 2.5000–3.0000 | QBT3 | 7590 (J+) | — | 75.2 | — | — | 15.4 | — | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-06-68383 | 21-25685 | 0.0000–0.5000 | SOIL | — | — | — | 0.523 (J) | — | — | — | — | 28.9 | — | 1.71 (J-) | — | 1.62 (U) | — | — | 67.5 |
| RE21-06-68384 | 21-25685 | 2.5000–3.0000 | QBT3 | — | 9.49 | — | — | — | 15.4 | — | — | 14.9 | — | — | — | 1.59 (U) | — | — | — |
| RE21-06-68385 | 21-25686 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 1.58 (U) | — | — | — |
| RE21-06-68386 | 21-25686 | 2.5000–3.0000 | QBT3 | — | — | 58.6 | — | — | 25.1 | — | — | — | — | — | — | 1.61 (U) | — | — | — |
| RE21-06-68388 | 21-25687 | 0.0000–0.5000 | SOIL | — | — | — | 0.891 | — | — | — | — | 451 | — | 1.87 (J-) | 0.000785 (J) | 1.6 (U) | — | — | 221 |
| RE21-06-68389 | 21-25687 | 2.5000–3.0000 | QBT3 | 11000 (J+) | — | 67.1 | — | — | 22.5 | — | — | — | 1730 | — | — | 1.66 (U) | — | — | — |
| RE21-06-68390 | 21-25688 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 13.8 | — | 1.81 (U) | — | — | — |
| RE21-06-68391 | 21-25688 | 2.5000–3.0000 | QBT3 | — | — | 79.8 | — | 3810 (J) | 9.06 | — | — | — | — | 2.19 | — | 1.59 (U) | — | — | — |
| RE21-06-68396 | 21-25689 | 0.0000–0.5000 | SOIL | — | — | — | 0.557 (U) | — | — | — | — | 58.4 (J-) | — | 1.71 | — | 8.27 | — | — | 61.8 |
| RE21-06-68397 | 21-25689 | 2.5000–3.0000 | QBT3 | 12700 | — | 61.7 | 2.62 (U) | — | 10.6 | — | 0.547 | — | 1990 (J+) | 0.77 (J) | — | 6.93 | — | — | — |
| RE21-06-68398 | 21-25690 | 0.0000–0.5000 | SOIL | — | — | — | 0.52 (U) | — | — | — | — | — | — | 0.726 (J) | — | 3.12 | — | — | — |
| RE21-06-68399 | 21-25690 | 2.5000–3.0000 | QBT3 | 7390 | 3.06 | — | — | — | 20.5 | — | — | — | — | 0.761 (J) | 0.00125 (J) | 4.81 | — | — | — |
| RE21-06-68400 | 21-25691 | 0.0000–0.5000 | SOIL | — | — | — | 0.531 (U) | — | — | — | — | — | — | 1.64 | — | 7.21 | — | — | — |
| RE21-06-68401 | 21-25691 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 8.69 | — | — | — | — | 0.753 (J) | — | 2.3 | — | — | — |
| RE21-06-68402 | 21-25692 | 0.0000–0.5000 | SOIL | — | — | — | 0.583 (U) | — | — | — | — | 69.9 (J-) | — | 3.75 | — | 7.35 | — | — | 100 |

**Table 6.1-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Magnesium | Nitrate | Perchlorate | Selenium | Silver | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **1690** | **na**[a] | **na** | **0.3** | **1** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **4610** | **na** | **na** | **1.52** | **1** | **1.82** | **48.8** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **na** | **125000** | **54.8** | **391** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **na** | **1820000** | **795** | **5680** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **na** | **496000** | **217** | **1550** | **1550** | **929** | **92900** |
| RE21-06-68403 | 21-25692 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 15.9 | — | — | — | — | 0.953 (J) | — | 3.38 | — | — | — |
| RE21-06-68404 | 21-25693 | 0.0000–0.5000 | SOIL | — | — | — | 0.573 (U) | — | — | — | 0.749 | 155 (J-) | — | 10.6 | 0.000862 (J) | 6.58 | — | — | 182 |
| RE21-06-68405 | 21-25693 | 2.5000–3.0000 | QBT3 | 8930 | 4.87 | 61.4 | — | — | 13.2 | — | — | 20.4 (J-) | — | 0.751 (J) | — | 6 | — | — | — |
| RE21-06-68406 | 21-25694 | 0.0000–0.5000 | SOIL | — | — | — | 0.566 (U) | — | — | — | — | 66.9 (J-) | — | 3.29 | — | 6.91 | — | — | 73.1 |
| RE21-06-68407 | 21-25694 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 18.1 | — | — | — | — | 0.762 (J) | — | 3.6 | — | — | — |
| RE21-06-68408 | 21-25695 | 0.0000–0.5000 | SOIL | — | — | — | 0.546 (U) | — | — | — | — | 25.7 (J-) | — | — | — | 5.85 | — | — | — |
| RE21-06-68409 | 21-25695 | 2.5000–3.0000 | QBT3 | — | 3.43 | — | — | — | 10.8 | — | — | — | — | — | — | 3.9 | — | — | — |
| RE21-06-68410 | 21-25696 | 0.0000–0.5000 | SOIL | — | — | — | 0.524 (U) | — | — | — | — | 36.7 (J-) | — | 0.75 (J) | — | 7.69 | — | — | 55.7 |
| RE21-06-68411 | 21-25696 | 2.5000–3.0000 | QBT3 | 13600 | 3.26 | 146 | 2.69 (U) | 2500 | 13.1 | 4.8 | — | 16.6 (J-) | 2420 (J+) | — | 0.00114 (J) | 8.01 | — | — | — |
| RE21-09-3625 | 21-604522 | 0.0000–0.5000 | SOIL | NA[d] | NA | NA | NA | NA | NA | NA | NA | 31 | NA | NA | NA | NA | NA | NA | 92 |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] — = Not detected or not detected above BV.
[d] NA = Not Analyzed.

**Table 6.1-2**
**Summary of Organic Chemicals Detected at AOC 21-002(b)**

| Sample ID | Location ID | Depth (ft) | Media | Acetone | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Chrysene | Di-n-butylphthalate | Dimethyl Phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **67500** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **621** | **6110** | **611000** |
| **Industrial SSL** | | | | **851000** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **2340** | **68400** | **6840000** |
| **Construction Worker SSL** | | | | **263000** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **20600** | **23800** | **2380000** |
| RE21-06-68368 | 21-25679 | 0.0000–0.5000 | SOIL | NA[b] | —[c] | NA | NA | 0.0654 | 0.076 (J) | 0.152 (J) | — | — | — | — | — | — |
| RE21-06-68369 | 21-25679 | 2.5000–3.0000 | QBT3 | 0.00598 (J) | — | 0.0418 | 0.017 | — | 0.0807 | 0.335 | 0.172 | — | — | 0.099 | — | — |
| RE21-09-3629 | 21-25679 | 7.0000–8.0000 | SOIL | NA | — | NA | NA | — | — | — | — | — | 0.085 (J) | — | 0.12 (J) | — |
| RE21-06-68371 | 21-25680 | 2.5000–3.0000 | QBT3 | 0.0123 (J) | — | NA | NA | — | — | — | — | — | — | — | — | — |
| RE21-06-68373 | 21-25681 | 0.0000–0.5000 | SOIL | NA | 0.0075 (J) | NA | NA | — | — | — | — | 0.41 | — | 0.174 | 0.0433 (J) | 0.12 (J) |
| RE21-06-68375 | 21-25682 | 0.0000–0.5000 | SOIL | NA | 0.0076 (J) | NA | NA | — | 0.0627 | 0.155 | 0.139 | — | — | 0.0544 | — | — |
| RE21-06-68378 | 21-25683 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | — | 0.0388 | — | — |
| RE21-06-68379 | 21-25683 | 2.5000–3.0000 | QBT3 | — | — | 0.0394 | 0.0148 | — | — | — | — | — | — | — | — | — |
| RE21-06-68380 | 21-25684 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | 0.0625 | — | 0.0352 (J) | — | — |
| RE21-06-68383 | 21-25685 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | — | 0.052 | — | — |
| RE21-06-68388 | 21-25687 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | — | — | — | — |
| RE21-06-68396 | 21-25689 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | 0.795 | — | — | — |
| RE21-06-68398 | 21-25690 | 0.0000–0.5000 | SOIL | NA | 0.0149 (J) | NA | NA | — | — | 0.0559 | — | — | — | — | — | — |
| RE21-06-68400 | 21-25691 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | — | — | — | — |
| RE21-06-68402 | 21-25692 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | — | — | 0.47 (J) | — |
| RE21-06-68404 | 21-25693 | 0.0000–0.5000 | SOIL | NA | 0.00992 (J) | NA | NA | — | — | 0.172 (J) | — | 0.0757 (J) | — | — | — | — |
| RE21-06-68406 | 21-25694 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | 0.358 | — | — | — | — | — | — |
| RE21-06-68408 | 21-25695 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | 0.073 (J) | — | — | 1.99 | — | — | — |
| RE21-06-68410 | 21-25696 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | — | — | — | — | — | — | — | — | — |

**Table 6.1-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Methyl-2-pentanone[4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** | **5950** |
| **Industrial SSL** | | | | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** | **73300** |
| **Construction Worker SSL** | | | | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **213** | **23100** |
| RE21-06-68368 | 21-25679 | 0.0000–0.5000 | SOIL | 0.06 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.144 (J) | NA |
| RE21-06-68369 | 21-25679 | 2.5000–3.0000 | QBT3 | 0.0637 | 2.63E-06 | 6.02E-06 | 0.00000107 (J) | 0.00000264 (J) | 6.41E-07 | 1.96E-07 | 0.000000124 (J) | 0.0000000943 (J) | 1.36E-06 | 0.166 | — |
| RE21-09-3629 | 21-25679 | 7.0000–8.0000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68371 | 21-25680 | 2.5000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | 0.00171 (J) |
| RE21-06-68373 | 21-25681 | 0.0000–0.5000 | SOIL | 0.119 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68375 | 21-25682 | 0.0000–0.5000 | SOIL | 0.0363 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.14 | NA |
| RE21-06-68378 | 21-25683 | 0.0000–0.5000 | SOIL | 0.0421 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68379 | 21-25683 | 2.5000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | — |
| RE21-06-68380 | 21-25684 | 0.0000–0.5000 | SOIL | 0.0534 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68383 | 21-25685 | 0.0000–0.5000 | SOIL | 0.0403 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68388 | 21-25687 | 0.0000–0.5000 | SOIL | 0.0224 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68396 | 21-25689 | 0.0000–0.5000 | SOIL | 0.0909 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68398 | 21-25690 | 0.0000–0.5000 | SOIL | 0.0336 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68400 | 21-25691 | 0.0000–0.5000 | SOIL | 0.0231 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68402 | 21-25692 | 0.0000–0.5000 | SOIL | 0.0686 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68404 | 21-25693 | 0.0000–0.5000 | SOIL | 0.143 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68406 | 21-25694 | 0.0000–0.5000 | SOIL | 0.118 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68408 | 21-25695 | 0.0000–0.5000 | SOIL | 0.0164 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |
| RE21-06-68410 | 21-25696 | 0.0000–0.5000 | SOIL | 0.05 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA |

**Table 6.1-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Total) | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **na** | **na** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **1090**[e] |
| **Industrial SSL** | | | | **1090** | **na** | **na** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **3610**[e] |
| **Construction Worker SSL** | | | | **10600** | **na** | **na** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **3130**[e] |
| RE21-06-68368 | 21-25679 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.0329 (J) | 0.0659 | NA | NA | NA |
| RE21-06-68369 | 21-25679 | 2.5000–3.0000 | QBT3 | 0.00531 (J) | 0.000025 | 0.00000278 (J) | 0.0000000852 (J) | 8.52E-08 | 0.000000204 (J) | 1.37E-06 | — | 0.066 | 0.000000466 (J) | 1.59E-06 | 0.000502 (J) |
| RE21-09-3629 | 21-25679 | 7.0000–8.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-06-68371 | 21-25680 | 2.5000–3.0000 | QBT3 | 0.00547 (J) | NA | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-06-68373 | 21-25681 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.0368 (J) | 0.116 | NA | NA | NA |
| RE21-06-68375 | 21-25682 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0287 (J) | NA | NA | NA |
| RE21-06-68378 | 21-25683 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0471 | NA | NA | NA |
| RE21-06-68379 | 21-25683 | 2.5000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-06-68380 | 21-25684 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0474 | NA | NA | NA |
| RE21-06-68383 | 21-25685 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-06-68388 | 21-25687 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.0124 (J) | 0.0218 (J) | NA | NA | NA |
| RE21-06-68396 | 21-25689 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0745 (J) | NA | NA | NA |
| RE21-06-68398 | 21-25690 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0292 (J) | NA | NA | NA |
| RE21-06-68400 | 21-25691 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0168 (J) | NA | NA | NA |
| RE21-06-68402 | 21-25692 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0767 (J) | NA | NA | NA |
| RE21-06-68404 | 21-25693 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.155 | NA | NA | NA |
| RE21-06-68406 | 21-25694 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.102 (J) | NA | NA | NA |
| RE21-06-68408 | 21-25695 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | 0.0181 (J) | NA | NA | NA |
| RE21-06-68410 | 21-25696 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as a surrogate based on structural similarity.

[b] NA= Not analyzed.

[c] — = Not detected.

[d] na= Not available.

[e] SSLs for xylenes used as a surrogate based on structural similarity.

**Table 6.1-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at AOC 21-002(b)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Plutonium-238 | Plutonium-239/240 | Tritium |
|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** |
| **SOIL Background Value** | | | | **0.013**[b] | **0.023**[b] | **0.054**[b] | **na** |
| **Residential SAL** | | | | **30** | **37** | **33** | **750** |
| **Industrial SAL** | | | | **180** | **240** | **210** | **440000** |
| **Construction Worker SAL** | | | | **34** | **40** | **36** | **320000** |
| RE21-06-68368 | 21-25679 | 0.0000–0.5000 | SOIL | 0.0478 | —[c] | 1.66 | — |
| RE21-06-68369 | 21-25679 | 2.5000–3.0000 | QBT3 | — | — | 0.0751 | 0.018013 |
| RE21-06-68370 | 21-25680 | 0.0000–0.5000 | SOIL | 0.0491 | 0.0244 | 0.553 | 0.030528 |
| RE21-06-68371 | 21-25680 | 2.5000–3.0000 | QBT3 | — | — | — | 0.020465 |
| RE21-06-68373 | 21-25681 | 0.0000–0.5000 | SOIL | — | 0.0849 | 0.354 | — |
| RE21-06-68375 | 21-25682 | 0.0000–0.5000 | SOIL | 0.0426 | — | 1.15 | — |
| RE21-06-68378 | 21-25683 | 0.0000–0.5000 | SOIL | 0.1 | 0.0356 | 2.9 | 0.042295 |
| RE21-06-68379 | 21-25683 | 2.5000–3.0000 | QBT3 | — | — | 0.0256 | — |
| RE21-06-68380 | 21-25684 | 0.0000–0.5000 | SOIL | 0.0383 | 0.027 | 0.478 | — |
| RE21-06-68381 | 21-25684 | 2.5000–3.0000 | QBT3 | — | — | — | 0.025745 |
| RE21-06-68383 | 21-25685 | 0.0000–0.5000 | SOIL | 0.0371 | 0.14 | 0.228 | — |
| RE21-06-68384 | 21-25685 | 2.5000–3.0000 | QBT3 | — | 0.103 | — | 0.02483 |
| RE21-06-68385 | 21-25686 | 0.0000–0.5000 | SOIL | — | 0.0523 | — | — |

**Table 6.1-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Plutonium-238 | Plutonium-239/240 | Tritium |
|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** |
| **SOIL Background Value** | | | | **0.013**[b] | **0.023**[b] | **0.054**[b] | **na** |
| **Residential SAL** | | | | **30** | **37** | **33** | **750** |
| **Industrial SAL** | | | | **180** | **240** | **210** | **440000** |
| **Construction Worker SAL** | | | | **34** | **40** | **36** | **320000** |
| RE21-06-68386 | 21-25686 | 2.5000–3.0000 | QBT3 | — | 0.0596 | — | — |
| RE21-06-68388 | 21-25687 | 0.0000–0.5000 | SOIL | — | — | 0.352 | — |
| RE21-06-68389 | 21-25687 | 2.5000–3.0000 | QBT3 | — | — | — | 0.038746 |
| RE21-06-68390 | 21-25688 | 0.0000–0.5000 | SOIL | 0.0457 | — | 0.589 (J-) | — |
| RE21-06-68396 | 21-25689 | 0.0000–0.5000 | SOIL | — | — | 0.474 (J-) | — |
| RE21-06-68398 | 21-25690 | 0.0000–0.5000 | SOIL | 0.0996 | — | 0.595 (J-) | — |
| RE21-06-68399 | 21-25690 | 2.5000–3.0000 | QBT3 | — | — | — | 0.023189 |
| RE21-06-68400 | 21-25691 | 0.0000–0.5000 | SOIL | — | — | 0.411 (J-) | — |
| RE21-06-68401 | 21-25691 | 2.5000–3.0000 | QBT3 | — | — | 0.0585 (J-) | — |
| RE21-06-68402 | 21-25692 | 0.0000–0.5000 | SOIL | — | — | 1.6 (J-) | — |
| RE21-06-68403 | 21-25692 | 2.5000–3.0000 | QBT3 | — | — | — | 0.015348 |
| RE21-06-68404 | 21-25693 | 0.0000–0.5000 | SOIL | 0.133 | 0.0319 | 5.2 (J-) | — |
| RE21-06-68405 | 21-25693 | 2.5000–3.0000 | QBT3 | — | — | 0.0518 (J-) | — |
| RE21-06-68406 | 21-25694 | 0.0000–0.5000 | SOIL | 0.0851 | — | 1.34 (J-) | — |
| RE21-06-68407 | 21-25694 | 2.5000–3.0000 | QBT3 | — | — | — | 0.014609 |
| RE21-06-68408 | 21-25695 | 0.0000–0.5000 | SOIL | — | — | 0.195 (J-) | — |
| RE21-06-68409 | 21-25695 | 2.5000–3.0000 | QBT3 | — | — | 0.0419 (J-) | 0.011096 |
| RE21-06-68410 | 21-25696 | 0.0000–0.5000 | SOIL | — | — | 0.66 (J-) | — |
| RE21-06-68411 | 21-25696 | 2.5000–3.0000 | QBT3 | — | — | 0.0229 (J-) | 0.01827 |
| RE21-09-3622 | 21-604519 | 0.0000–0.5000 | SOIL | 0.072 | — | 0.981 | NA |
| RE21-09-3627 | 21-604524 | 0.0000–0.5000 | SOIL | NA[d] | — | 0.192 | NA |
| RE21-09-3628 | 21-604525 | 0.0000–0.5000 | SOIL | NA | — | 1.97 | NA |
| MD21-10-4658 | 21-609834 | 0.0000–0.5000 | SOIL | NA | — | 0.718 | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.2-1**
**Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-003-99 and SWMU 21-024(c)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | —[e] | — | — | — | — | — | 39.8 | — | — | — | — |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.15 | — | — | — | 17 | — | 28.6 (J) |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | — | — | — | — | 0.987 | — | — | — | — | — | — |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | — | — | — | — | 0.757 | — | — | — | — | — | — |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | — | — | — | — | 0.53 (U) | — | — | — | — | — | — |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68453 | 21-25710 | 0.5000–1.0000 | SOIL | — | — | — | — | 0.545 (U) | — | — | — | — | — | — |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | — | — | — | — | 0.548 (U) | — | 23.3 | — | — | — | — |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | — | — | — | — | 0.522 (U) | — | — | — | — | — | — |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 17.7 | — | — | — | — |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 24.4 | — | — | — | — |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 16.4 | — | 29.1 |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | — | — | — | — | 0.554 (U) | — | 20.1 | — | — | — | — |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | — | — | 54.5 | — | — | — | 14.6 | — | — | — | — |
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.548 | — | — | — | — | — | 60.1 |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | 26.8 |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | 8480 (J+) | — | 46.9 | — | — | — | 14 | — | — | — | 16.1 |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 39.9 |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 13.6 | — | — | — | — |
| RE21-06-68472 | 21-25716 | 1.5000–2.0000 | QBT3 | 7380 (J+) | — | 107 | — | — | — | 10.8 | 22.3 | — | — | — |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | 8540 (J+) | — | 58.4 | — | — | — | 8.53 | — | 6.47 | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 19.6 | — | — | — | — |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.522 (U) | — | — | — | — | — | — |
| RE21-06-68477 | 21-25718 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 7.8 | — | — | — | — |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | 11500 (J+) | — | 59 | — | — | — | 10.8 | — | — | — | — |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | 34400 (J+) | 3.98 | 197 | 2.29 | — | 4530 (J+) | 23.6 | 4.27 | 10.1 | 21600 | 13.5 |
| MD21-09-8978 | 21-25719 | 7.0000–8.0000 | QBT3 | — | — | 57 | — | — | — | 29 | — | — | — | — |
| MD21-10-7815 | 21-25719 | 9.0000–10.0000 | QBT3 | NA[f] | NA | NA | NA | NA | NA | 38.7 | NA | NA | NA | NA |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 18.4 | — | — |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | 14100 (J+) | — | 84.5 | — | — | — | 14 | — | 5.14 | — | — |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | 15800 (J+) | 2.99 | 94.9 | — | — | 2570 (J+) | 11.5 | 3.36 | 20.1 | — | 21.4 |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 24.3 |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | 8930 | — | 64.6 | — | — | — | — | — | — | — | — |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | 10500 | 4.65 | 99.2 | — | — | 3420 | 8.64 | 3.16 | 51.2 | — | 18 |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | 9.05 | — | — |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 15.7 |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 7.79 | — | — | — | — |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 29.1 |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | — | — | — | — | — | 11700 | — | — | — | — | — |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68520 | 21-25726 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.567 (U) | — | — | — | — | — | — |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | 10700 (J+) | 4.15 | 74 | — | — | 2560 | — | — | 4.68 | — | — |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | 11600 (J+) | 5 | 97 | — | — | 8280 | — | — | 5.47 | — | — |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.584 (U) | — | — | — | — | — | 30.4 |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | 13300 (J+) | 3.43 | 152 | — | — | 49000 | 8.28 | — | 8.48 | — | 12.3 |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | 11800 (J+) | 5.32 | 111 | — | — | 19700 | 7.65 | — | 9.11 | — | 15.5 |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.503 (U) | — | — | — | — | — | — |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | 15700 (J+) | 4.75 | 69.8 | 1.69 | — | 2320 | 9.46 | — | 5.2 | — | — |
| RE21-06-68529 | 21-25729 | 1.5000–2.0000 | QBT3 | 13500 (J+) | 5.74 | 72.6 | 1.94 | — | 3850 | 15.5 | — | 5.32 | — | — |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.505 (U) | — | — | — | — | — | — |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | — | 4.03 | — | — | — | — | — | — | — | — | — |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | — | 4.31 | — | — | — | 2850 | 11 | — | — | — | — |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.522 (U) | — | — | — | — | — | — |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | 10600 (J+) | 7.04 | 65 | — | — | 3740 | 8.92 | — | 6.12 | — | 12.1 |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | — | 3.61 | — | — | — | — | — | — | — | — | — |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 18.8 | — | — |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | 10500 | — | 74.2 (J+) | — | — | — | 8.26 | — | — | — | — |
| RE21-06-68550 | 21-25732 | 1.5000–2.0000 | QBT3 | 10700 | — | 73.2 (J+) | — | — | 2740 | 8.76 | — | 4.9 | — | 16.5 |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.763 | — | — | — | 25.3 | — | 58.4 |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | 9.25 | — | 12.2 |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 9.67 | — | — | — | — |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 22.2 | — | — |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | 12400 | — | 91 (J+) | — | — | 3220 | 9.97 | — | 6.51 | — | — |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.524 (U) | — | — | — | 18.8 | — | — |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | 8560 | — | 55 (J+) | — | — | — | 21.6 | — | — | — | — |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68561 | 21-25736 | 0.5000–1.0000 | QBT3 | 10500 | — | 102 (J+) | — | — | 2400 | 13.8 | 3.62 | 6.87 | — | 15.4 |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | 14000 | — | 109 (J+) | — | — | — | 16.2 | — | 5.3 | — | — |
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | 30000 | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | 30200 | 4.36 | 237 (J+) | — | — | 2990 | 23.9 | — | 8.18 | 17200 | — |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | 11400 | — | 159 (J+) | — | — | — | 7.38 | — | — | — | — |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | 14700 | 2.9 | 95.9 (J+) | — | — | 2240 | 11.3 | — | 6.89 | — | 11.6 |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | — | — | 85.1 (J+) | — | — | 10600 (J) | 22.9 | — | — | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.513 (U) | — | — | — | — | — | — |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | — | — | — | — | 0.586 (U) | — | — | — | — | — | — |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | 15.2 | — | 23 |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | — | — | 67.7 | — | — | 10400 | 18.4 | — | 30.8 (J) | — | 35.9 (J) |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | 23.6 (J+) |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | 7680 (J+) | 2.88 | 135 | — | — | 3010 (J) | 7.42 | — | 24.3 | 15400 | 32.4 (J+) |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | — | — | 80.2 | — | — | 3600 (J) | — | — | 11.2 | — | 14 (J+) |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | — | — | — | — | — | 12700 (J) | — | — | — | — | — |
| MD21-07-74344 | 21-25752 | 3.8300–4.8300 | QBT3 | — | — | — | — | — | 5290 (J) | — | — | — | — | — |
| MD21-07-74345 | 21-25753 | 2.3300–3.3300 | SOIL | — | — | — | — | — | — | — | — | — | — | 41.4 (J-) |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | — | — | — | — | — | — | 12 | — | — | — | — |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 8.58 | — | — | — | — |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | 9820 (J+) | — | 51.8 | — | — | — | 13.8 | — | 7 | — | — |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8980 | 21-25763 | 5.0000–6.0000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | — | — | — | — | 0.542 (U) | — | — | — | — | — | — |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | 11200 (J+) | 3.01 (J-) | 50.8 | — | — | 2380 | 11.6 | — | 5.86 | — | 11.5 |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 4900 | 7.28 | — | — | — | — |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 2500 | 9.91 | — | — | — | 11.5 |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68664 | 21-25770 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68666 | 21-25771 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8982 | 21-605290 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8987 | 21-605293 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8988 | 21-605294 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8989 | 21-605295 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **7.71** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **49.9** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **63.6** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | — | — | — | 4.86 | — | 1.56 (U) | — | — | — | — |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | — | — | — | 2.02 (J-) | — | 1.65 (U) | — | — | — | — |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | — | — | — | 0.991 (J-) | — | 1.55 (U) | — | — | — | — |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 1.6 (U) | — | — | — | — |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | — | 0.219 (J-) | — | 1.77 (J-) | — | 1.6 (U) | — | — | — | — |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | — | — | — | 1.78 (J-) | — | — | — | — | — | — |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | — | — | — | 1.82 (J-) | — | 1.83 (U) | — | — | — | — |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | — | 3.77 (J-) | — | 2.29 (J-) | — | — | — | 26.1 | — | 141 |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | — | 1.09 (J-) | — | 1.4 (J-) | — | 1.62 (U) | — | 9.81 | — | 140 |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | — | 0.358 (J-) | — | 1.2 (J-) | — | 1.7 (U) | — | 3.89 | — | 114 |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | — | — | — | — | — | 1.6 (U) | — | — | — | — |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 1.59 (U) | — | — | — | — |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.57 (U) | — | — | — | — |
| RE21-06-68453 | 21-25710 | 0.5000–1.0000 | SOIL | — | — | — | 0.958 (J-) | — | 1.64 (U) | — | — | — | — |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 1.64 (U) | — | — | — | — |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | — | — | — | — | — | 1.57 (U) | — | — | — | — |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.59 (U) | — | — | — | — |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 1.65 (U) | — | — | — | — |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 1.66 (U) | — | — | — | — |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | — | 0.289 | — | 2.06 | — | — | — | 5.09 | — | 187 |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | — | — | — | 1.11 (J) | — | 1.66 (U) | — | — | — | — |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 1.52 (U) | — | — | — | — |
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | — | 0.176 | — | 1.7 | — | — | — | — | — | 146 |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | — | 0.108 | — | 1.47 | — | 1.76 (U) | — | — | — | 62.1 |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 1.64 (U) | — | — | — | — |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | — | — | — | 2.86 | 0.000792 (J) | 1.62 (U) | — | — | — | 74.7 |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | — | — | — | 0.857 (J) | — | 1.52 (U) | — | — | — | — |
| RE21-06-68472 | 21-25716 | 1.5000–2.0000 | QBT3 | — | — | 6.62 | 0.881 (J) | — | 1.53 (U) | — | — | — | — |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | — | — | — | 0.798 (J) | — | 1.52 (U) | — | — | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **7.71** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **49.9** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **63.6** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 1.51 (U) | — | — | — | — |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | — | — | — | 2.46 | 0.00105 (J) | 1.57 (U) | — | — | — | — |
| RE21-06-68477 | 21-25718 | 0.5000–1.0000 | QBT3 | — | — | — | 2.02 | 0.00141 (J) | 1.55 (U) | — | — | — | — |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | — | — | — | 2.44 | 0.000742 (J) | 1.51 (U) | — | — | — | — |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | — | — | — | 1.11 | — | — | — | — | — | 62.3 |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | — | — | — | 1.54 | — | 0.703 (J) | — | — | — | — |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | 5520 | — | 16 | — | 0.00238 | 1.65 (U) | — | — | 31.8 | — |
| MD21-09-8978 | 21-25719 | 7.0000–8.0000 | QBT3 | — | NA | 13 | NA | NA | 0.51 (U) | — | NA | — | — |
| MD21-10-7815 | 21-25719 | 9.0000–10.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | — | 0.117 | — | 5.29 | 0.00102 (J) | — | — | 2.68 (J) | — | 51.2 |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | 1940 | — | — | 1.46 | — | 1.67 (U) | — | — | — | — |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | 2200 | 0.111 | 6.72 | 6.24 | 0.00235 | 0.674 (J) | — | 3.66 (J) | 20.5 | — |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | — | 0.159 | — | 10.7 | 0.00279 | — | — | 2.41 | — | — |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | — | — | — | 3.26 | 0.00102 (J) | 1.62 (U) | — | — | — | — |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | — | — | — | 2.32 | 0.00159 (J) | 1.58 (U) | — | — | — | — |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | 1820 (J+) | — | — | 3.33 | 0.000611 (J) | 1.6 (U) | — | 2.42 | 21.2 | 70.3 |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | — | — | — | 1.28 | — | 1.48 (U) | — | — | — | — |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | — | 0.446 | — | 1.83 | — | 1.55 (U) | — | 5.37 | — | — |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | — | — | — | 1.14 | — | 1.52 (U) | — | — | — | — |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | — | — | — | 9.66 | 0.000608 (J) | 1.76 (U) | — | 2.72 | — | — |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | — | — | — | 1.44 | — | 1.58 (U) | — | — | — | — |
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | — | — | 16.3 | — | 0.00323 | 1.57 (U) | — | — | — | — |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | — | — | — | 85.2 | 0.00148 (J) | 1.69 (U) | — | — | — | — |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | — | — | — | 17.2 | 0.00116 (J) | 1.62 (U) | — | — | — | — |
| RE21-06-68520 | 21-25726 | 1.5000–2.0000 | QBT3 | — | — | — | 2.46 | — | 1.46 (U) | — | — | — | — |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | — | — | — | 6.24 | 0.00086 (J) | 2.29 | — | — | — | — |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | 1700 | — | — | 3.14 | 0.00141 (J) | 2.25 | — | — | — | — |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | 1900 | — | 6.82 | 2.99 | 0.00159 (J) | 0.995 (J) | — | — | — | — |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | — | — | — | 24.3 | 0.0022 (J) | 3.27 | — | 2.14 | — | 50.9 |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | 2660 | — | 10.4 | 6.4 | 0.0038 | 1.62 (U) | — | — | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **7.71** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **49.9** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **63.6** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | 2260 | — | 7.27 | 24.6 | 0.00347 | 1.58 (U) | — | — | — | — |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | — | — | — | 7.22 | 0.000951 (J) | 2.89 | — | — | — | — |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | 2370 | — | 7.82 | 2.43 | 0.00104 (J) | 4.22 | — | — | — | — |
| RE21-06-68529 | 21-25729 | 1.5000–2.0000 | QBT3 | 2200 | — | 10.1 | 1.68 | 0.000911 (J) | 2.93 | — | — | — | — |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | — | — | — | 3.64 | 0.000771 (J) | 3.35 | — | — | — | 62.7 |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | — | — | — | 1.83 | — | 1.97 | — | — | — | — |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | — | — | 11.5 | 1.27 | — | 1.03 (J) | — | — | — | — |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | — | — | — | 1.27 | — | 3.63 | — | — | — | — |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | — | — | — | 1.37 | — | 1.49 (J) | — | — | — | — |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | — | — | — | 1.2 | — | 2.13 | — | — | — | — |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | — | — | — | 2.82 | — | — | — | — | — | 57.5 |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | — | — | — | 1.48 | — | 1.56 (U) | — | — | — | — |
| RE21-06-68550 | 21-25732 | 1.5000–2.0000 | QBT3 | — | — | — | 1.11 | — | 1.55 (U) | — | — | — | — |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | — | 0.69 | — | 3.31 | 0.000912 (J) | — | — | 26.2 | — | 93.5 |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | — | 0.304 | — | 1.29 | — | 1.57 (U) | — | 5.16 | — | — |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | — | — | — | 1.33 (J-) | — | 1.64 (U) | — | — | — | — |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | — | — | — | 17.7 (J-) | 0.00136 (J) | 1.58 (U) | — | 2.02 | — | 52.6 |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | — | — | — | 5.84 (J-) | 0.000584 (J) | 1.65 (U) | — | — | — | — |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | 1730 (J+) | — | — | 5.25 (J-) | 0.000742 (J) | 1.56 (U) | — | — | — | — |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | — | — | — | 3.2 (J-) | — | 1.57 (U) | — | — | — | — |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | — | — | — | 0.865 (J-) | — | 1.59 (U) | — | — | — | — |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | — | — | — | 0.854 (J-) | — | 1.57 (U) | — | — | — | — |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | — | — | — | 1.11 (J-) | — | 1.55 (U) | — | — | — | — |
| RE21-06-68561 | 21-25736 | 0.5000–1.0000 | QBT3 | 1850 (J+) | — | — | 0.996 (J-) | — | 1.55 (U) | — | — | 20.1 | — |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | 2040 (J+) | — | 7.5 | 0.985 (J-) | — | 1.69 (U) | — | — | — | — |
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | — | — | — | 1.57 (J-) | — | 1.68 (U) | — | 2.5 | — | 50.7 |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | 3650 (J+) | — | 8 | 0.99 (J-) | — | 1.7 (U) | — | — | 25.7 | — |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | 1930 (J+) | — | — | 0.947 (J-) | — | 1.57 (U) | — | — | — | — |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | 1780 (J+) | — | — | 1.67 (J-) | — | 1.6 (U) | — | — | 19.9 | — |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | — | — | NA | 3.23 | — | 1.56 (U) | — | — | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **7.71** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **49.9** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **63.6** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | — | — | NA | 1.09 | — | 1.56 (U) | — | — | — | — |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | — | — | NA | 1.02 (J) | 0.000896 (J) | 1.59 (U) | — | — | — | — |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | — | — | NA | 0.948 (J) | — | 1.59 (U) | — | — | — | — |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | — | — | NA | 0.982 (J) | — | — | — | — | — | — |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | — | — | NA | 0.985 (J) | — | — | — | — | — | — |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | — | — | NA | 1.03 (J) | — | 1.76 (U) | — | — | — | — |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | — | — | NA | 2.02 | — | — | — | 2.07 | — | 55 |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | — | 0.11 | NA | 1.47 | — | — | — | 2.44 | — | 99.9 |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | — | — | NA | 1.09 | — | 1.68 (U) | — | — | — | 63.1 |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | 1980 (J+) | 1.77 (J) | — | 2.35 | 0.000568 (J) | 1.53 (U) | 1.22 | 8.56 | — | — |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | — | 0.111 | — | — | 0.000882 (J) | 1.72 (U) | — | — | — | 64 |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | — | — | — | — | 0.000821 (J) | — | — | — | — | 49.9 |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | — | 1.7 | — | 1.47 | 0.000885 (J) | 0.897 (J) | — | 9.56 (J+) | — | 105 |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | — | 1.64 | — | 1.18 | 0.000978 (J) | 1.61 (U) | — | 10.2 (J+) | — | 69.3 |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | — | 0.399 | — | 0.611 (J) | 0.000799 (J) | 1.96 | — | 4.88 (J-) | — | — |
| MD21-07-74344 | 21-25752 | 3.8300–4.8300 | QBT3 | — | — | — | 0.535 (J) | — | 0.838 (J) | — | 2.93 (J-) | — | — |
| MD21-07-74345 | 21-25753 | 2.3300–3.3300 | SOIL | — | 0.315 | — | 0.652 (J) | 0.000569 (J) | 1.63 (U) | — | — | — | 49.2 (J-) |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | — | — | — | — | — | 1.47 (U) | — | — | — | — |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | — | — | — | 1.11 | — | NA | — | — | — | — |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | — | — | — | 4.37 | 0.000728 (J) | NA | — | — | — | — |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | — | 0.119 | — | 4.9 | 0.00111 (J) | NA | — | — | — | — |
| MD21-09-8980 | 21-25763 | 5.0000–6.0000 | SOIL | NA | — | NA | NA | NA | NA | 1.1 (U) | — | NA | — |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | — | — | — | 3.73 | — | NA | — | 2.01 | — | — |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | — | 0.147 | — | 12.7 | — | NA | — | — | — | — |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | — | — | — | 3.54 | — | NA | — | — | — | — |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | — | — | — | 26.4 | 0.00184 (J) | NA | — | 4.27 | — | — |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | — | — | — | 3.83 | 0.000608 (J) | NA | — | — | — | — |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | — | — | — | 24.8 | — | 1.58 (U) | — | 2.05 (J) | — | — |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | — | — | — | 3.54 | 0.000937 (J) | 1.48 (U) | — | — | — | — |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | — | — | — | 31.5 | 0.00224 | — | — | 2.1 (J) | — | — |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | — | — | — | 8.41 | 0.000607 (J) | 1.49 (U) | — | — | — | — |

**Table 6.2-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **7.71** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **49.9** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **63.6** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | — | — | — | 8 | 0.000557 (J) | — | — | — | — | — |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | — | — | — | 2.08 | — | 1.47 (U) | — | — | — | — |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | — | — | — | 3.92 | — | — | — | — | — | — |
| RE21-06-68664 | 21-25770 | 1.5000–2.0000 | QBT3 | — | — | — | 0.939 (J) | — | 1.49 (U) | — | — | — | — |
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | — | — | — | 6.87 | 0.000562 (J) | — | — | 2.54 (J) | — | — |
| RE21-06-68666 | 21-25771 | 1.5000–2.0000 | QBT3 | — | — | — | 0.995 (J) | — | 1.53 (U) | — | — | — | — |
| MD21-09-8982 | 21-605290 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | 57 |
| MD21-09-8987 | 21-605293 | 0.0000–0.5000 | SOIL | NA | 3 | NA | NA | NA | NA | NA | — | NA | — |
| MD21-09-8988 | 21-605294 | 0.0000–0.5000 | SOIL | NA | NA | NA | 20 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-8989 | 21-605295 | 0.0000–0.5000 | SOIL | NA | NA | NA | 5.4 | NA | NA | NA | NA | NA | NA |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] Used EPA Region 6 2009 SSL (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL not available. Used EPA Region 6 2009 industrial outdoor worker SSL (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

**Table 6.2-2**
**Organic Chemicals Detected at Consolidated Unit 21-003-99 and SWMU 21-024(c)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | —[c] | 0.00956 (J+) | — | — | — | — | 0.007 (J-) | 0.0114 (J-) | — | — | — | — | — | — |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | — | NA[d] | — | — | — | — | 0.0056 | 0.0071 | NA | — | — | — | — | — |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | — | 0.0273 (J+) | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0744 | 0.104 | NA | — | — | — | — | — |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | — | 0.00928 (J+) | — | — | — | — | 0.0047 (J-) | 0.0068 (J-) | — | — | — | — | — | — |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | — | 0.0228 (J+) | — | — | 0.254 (J) | — | — | — | — | — | — | — | — | — |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.104 | 0.268 | NA | — | — | — | — | — |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | — | 0.00936 (J+) | — | — | — | — | 0.0204 (J-) | 0.0605 (J-) | — | — | — | — | — | — |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | — | 0.0291 (J+) | — | — | — | — | 0.0053 (J-) | 0.0142 (J-) | — | — | — | — | — | — |
| RE21-06-68449 | 21-25709 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0097 | 0.0378 | NA | — | — | — | — | — |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | — | 0.0089 (J+) | — | — | — | — | 0.0052 (J-) | 0.0134 (J-) | — | — | — | — | — | — |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | 0.0029 (J-) | 0.0032 (J-) | — | — | — | — | — | — |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.009 | 0.0394 | NA | — | — | — | — | — |
| RE21-06-68453 | 21-25710 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | 0.0074 (J-) | — | — | — | — | — | — |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | — | 0.0144 (J+) | — | — | — | — | — | 0.0068 (J-) | — | — | — | — | — | — |
| RE21-06-68458 | 21-25712 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0506 | 0.0669 | NA | — | — | — | — | — |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | 0.0103 | 0.0183 | — | — | — | — | — | — |
| RE21-06-68460 | 21-25712 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | 0.0051 (J-) | 0.0098 (J-) | — | — | — | — | — | — |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.13 | 0.143 | NA | — | — | — | — | — |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | — | — | — | — | 0.00336 (J) | — | 0.0076 | 0.0091 | — | — | — | — | — | — |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0028 (J) | — | — | — | — | — | — |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.269 | 0.356 | NA | — | — | — | — | — |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | 0.0528 | 0.082 | — | — | — | — | — | — |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0024 (J) | — | — | — | — | — | — |
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.107 | 0.102 | NA | — | — | — | — | — |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | 0.0103 | 0.0114 | — | — | — | — | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0049 | 0.0036 (J) | — | — | — | — | — | — |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | — | NA | 0.00761 (J) | — | 0.138 | — | 0.0545 | 0.0638 | NA | — | — | — | — | — |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0017 (J) | 0.002 (J) | — | — | — | — | — | — |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.12 | 0.172 | — | — | — | — | — | — |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.023 | 0.033 | — | — | — | — | — | — |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | 0.381 | NA | — | — | — | — | — | 0.0029 (J) | NA | — | — | — | — | — |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0034 (J) | 0.002 (J) | — | — | — | — | — | — |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | — | NA | 0.00863 (J) | — | — | — | 0.344 | 0.583 | NA | 0.0452 | — | — | — | — |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0159 | 0.0402 | — | — | — | — | — | — |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0031 (J) | 0.0087 | — | — | — | — | — | — |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.293 | 0.401 | NA | — | — | — | — | — |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0026 (J) | 0.0069 | — | — | — | — | — | — |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.301 | 0.61 | — | 0.0108 (J) | — | 0.0439 | — | — |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | NA | — | — | — | — | — |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.058 | 0.118 | — | — | — | — | — | — |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0227 | 0.0393 | — | — | — | 0.026 (J) | — | — |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.167 | 0.235 | — | — | — | — | — | — |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0184 | 0.0277 | — | — | — | — | — | — |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0478 | 0.0571 | NA | — | — | — | — | — |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0169 | 0.0235 | NA | — | — | — | — | — |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | 0.259 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0094 | 0.0096 | NA | — | — | — | — | — |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0042 | 0.0062 | — | — | — | — | — | — |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0033 (J) | 0.0055 | — | — | — | — | — | — |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0397 | 0.0365 | NA | — | — | — | — | — |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0064 | 0.0066 | — | — | — | — | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0106 | 0.0094 | — | — | — | — | — | — |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.005 | 0.0043 | NA | — | — | — | — | — |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | 0.0024 (J) | — | — | — | — | — | — |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | 0.0407 | NA | — | — | — | — | 0.0699 | 0.1 | NA | — | — | — | — | — |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0092 | 0.0158 | — | — | — | — | — | — |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0048 | 0.0081 | — | — | — | — | — | — |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0241 | 0.0363 | NA | — | — | — | — | — |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0043 | 0.0067 | — | — | — | — | — | — |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0023 (J) | 0.0029 (J) | — | — | — | — | — | — |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0065 | 0.0155 | NA | — | — | — | — | — |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0026 (J) | 0.0019 (J) | — | — | — | — | — | — |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.203 | 0.646 | NA | — | 0.087 (J) | — | — | — |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0068 | 0.0209 | — | — | — | — | — | — |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0056 | 0.0176 | — | — | — | — | — | — |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0136 | 0.0563 | NA | — | — | — | — | 0.459 (J) |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | 0.0029 (J) | 0.0038 | 0.000662 (J) | — | — | — | — | — |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0029 (J) | — | — | — | — | — | — |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0943 | 0.236 | NA | — | — | — | — | — |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0273 | 0.0118 | — | — | — | — | — | — |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0042 | — | — | — | — | — | — |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0024 (J) | 0.0038 | NA | — | — | — | — | — |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0019 (J) | — | — | — | — | — | — |
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0678 | 0.257 | NA | — | 0.0126 (J) | 0.0297 (J) | — | — |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.0142 | 0.0631 | — | — | — | — | — | — |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0039 | — | — | — | — | — | — |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 0.157 | 0.267 | — | — | — | — | — | — |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0394 | 0.0551 | — | — | — | — | — | — |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | — | NA | — | — | — | 0.0985 | 0.0622 | 0.0168 | NA | — | — | — | — | — |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 0.0197 | 0.0111 | 0.002 (J) | — | — | — | — | — | — |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.0073 | 0.0037 | — | — | — | — | — | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0788 | 0.0392 | NA | — | — | — | — | — |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | 0.195 | 0.209 | — | — | — | — | — | — |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | 0.0796 | 0.0887 | — | — | — | — | — | — |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.167 | 0.194 | 0.277 | NA | — | — | — | — | — |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | — | — | — | — | — | 0.157 | 0.191 | 0.275 | — | — | — | — | — | — |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | 0.094 | 0.106 | — | — | — | — | — | — |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | — | 2.98 | 1.16 | — | — | — | — | — | — |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | — | — | 0.0196 (J) | — | 0.0532 (J-) | — | 0.0801 (J) | 0.041 (J-) | — | — | 0.0384 | 0.039 | 0.0317 (J) | — |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | — | — | — | — | — | — | 0.0553 (J) | 0.095 (J-) | — | — | — | — | — | — |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | — | — | — | — | — | — | 0.0621 (J) | 0.0674 (J-) | — | — | — | — | — | — |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | — | NA | — | NA | NA | NA | NA | NA | NA | — | — | — | — | — |
| MD21-09-9860 | 21-25752 | 3.8000–4.8000 | SOIL | NA | NA | NA | — | — | — | — | 0.071 | NA | NA | NA | NA | NA | NA |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | — | — | 0.00737 (J) | NA | NA | NA | NA | NA | — | — | — | — | — | — |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.166 | 0.0906 | — | — | — | — | — | — |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0752 | 0.057 | — | — | — | — | — | — |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | 0.506 | 0.0718 | — | — | — | — | — | — |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | 0.169 | 0.0644 | — | — | — | — | — | — |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0999 | 0.0631 | NA | — | — | — | — | — |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.01 | 0.0098 | — | — | — | — | — | — |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0356 | 0.0213 | NA | — | — | — | — | — |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0027 (J) | — | — | — | — | — | — | — |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0952 | 0.0828 | NA | — | — | — | — | — |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0037 | 0.0026 (J) | — | — | — | — | — | — |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0204 | 0.0194 | NA | — | — | — | — | — |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | 0.0064 | 0.0073 | — | — | — | — | — | — |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | 0.0151 | 0.0238 | NA | — | — | — | — | — |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.0023 (J) | — | — | — | — | — | — |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | 0.002 (J) | NA | — | — | — | — | — |
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | 0.0075 | NA | — | — | — | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| RE21-09-2642 | 21-604461 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | 0.23 | 0.44 | NA | NA | NA | NA | NA | NA |
| RE21-09-2643 | 21-604461 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | 0.081 | 0.15 | NA | NA | NA | NA | NA | NA |
| RE21-09-2644 | 21-604461 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.059 | NA | NA | NA | NA | NA | NA |
| RE21-09-2645 | 21-604462 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | 0.15 | — | 0.26 | NA | NA | NA | NA | NA | NA |
| RE21-09-2646 | 21-604462 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | 0.021 (J) | — | 0.047 | NA | NA | NA | NA | NA | NA |
| RE21-09-2648 | 21-604463 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | 0.1 | 0.15 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2649 | 21-604463 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | 0.53 (J-) | 0.32 (J-) | NA | NA | NA | NA | NA | NA |
| RE21-09-2650 | 21-604463 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | 0.1 | 0.069 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2651 | 21-604464 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.049 | NA | NA | NA | NA | NA | NA |
| RE21-09-2652 | 21-604464 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.023 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2655 | 21-604465 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | 0.51 | 0.33 | NA | NA | NA | NA | NA | NA |
| RE21-09-2656 | 21-604465 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | 0.092 | 0.18 | NA | NA | NA | NA | NA | NA |
| RE21-09-2662 | 21-604467 | 1.5000–2.0000 | SOIL | NA | NA | NA | — | — | — | 0.13 | 0.28 | NA | NA | NA | NA | NA | NA |
| RE21-09-2665 | 21-604468 | 1.5000–2.0000 | SOIL | NA | NA | NA | — | — | — | 0.087 | 0.16 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2669 | 21-604470 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.083 | NA | NA | NA | NA | NA | NA |
| RE21-09-2672 | 21-604471 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | 0.059 | 0.11 | NA | NA | NA | NA | NA | NA |
| RE21-09-2673 | 21-604471 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.52 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2674 | 21-604471 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.015 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2675 | 21-604472 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.11 | NA | NA | NA | NA | NA | NA |
| RE21-09-2676 | 21-604472 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | 0.036 (J) | 0.023 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2677 | 21-604472 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.0086 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2680 | 21-604473 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | 0.23 | 0.44 | NA | NA | NA | NA | NA | NA |
| RE21-09-2681 | 21-604474 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.95 | NA | NA | NA | NA | NA | NA |
| RE21-09-2682 | 21-604474 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.31 | NA | NA | NA | NA | NA | NA |
| RE21-09-2683 | 21-604474 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.14 | NA | NA | NA | NA | NA | NA |
| RE21-09-2685 | 21-604475 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | 0.3 | 0.58 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2686 | 21-604475 | 1.5000–2.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.02 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2687 | 21-604476 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.1 | NA | NA | NA | NA | NA | NA |
| RE21-09-2699 | 21-604480 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.43 | NA | NA | NA | NA | NA | NA |
| RE21-09-2700 | 21-604480 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.064 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| RE21-09-2701 | 21-604480 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.018 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2702 | 21-604481 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.13 | NA | NA | NA | NA | NA | NA |
| RE21-09-2703 | 21-604481 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.03 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2704 | 21-604481 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.016 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2705 | 21-604482 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.061 | NA | NA | NA | NA | NA | NA |
| RE21-09-2706 | 21-604482 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.017 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2708 | 21-604483 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.25 | NA | NA | NA | NA | NA | NA |
| RE21-09-2709 | 21-604483 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.16 | NA | NA | NA | NA | NA | NA |
| RE21-09-2710 | 21-604483 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.079 | NA | NA | NA | NA | NA | NA |
| RE21-09-2711 | 21-604484 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.15 | NA | NA | NA | NA | NA | NA |
| RE21-09-2712 | 21-604484 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.044 | NA | NA | NA | NA | NA | NA |
| RE21-09-2713 | 21-604485 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.48 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2714 | 21-604485 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.03 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2721 | 21-604489 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.038 | NA | NA | NA | NA | NA | NA |
| MD21-09-9864 | 21-605366 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.85 | NA | NA | NA | NA | NA | NA |
| MD21-09-9865 | 21-605366 | 1.5000–2.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-9867 | 21-605367 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.35 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-9868 | 21-605367 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.19 | NA | NA | NA | NA | NA | NA |
| MD21-09-9869 | 21-605368 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.061 | NA | NA | NA | NA | NA | NA |
| MD21-09-9870 | 21-605368 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.1 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10518 | 21-605368 | 3.0000–3.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.044 | NA | NA | NA | NA | NA | NA |
| MD21-09-9872 | 21-605369 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.19 | NA | NA | NA | NA | NA | NA |
| MD21-09-9873 | 21-605369 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.054 | NA | NA | NA | NA | NA | NA |
| MD21-09-9876 | 21-605370 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-9877 | 21-605370 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-9879 | 21-605371 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.041 | NA | NA | NA | NA | NA | NA |
| MD21-09-9884 | 21-605372 | 1.5000–2.0000 | SOIL | NA | NA | NA | — | — | — | 0.17 | 0.082 | NA | NA | NA | NA | NA | NA |
| MD21-09-9885 | 21-605373 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | 0.14 (J) | 0.39 | NA | NA | NA | NA | NA | NA |
| MD21-09-9886 | 21-605373 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.087 | NA | NA | NA | NA | NA | NA |
| MD21-09-9888 | 21-605374 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.12 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-9891 | 21-605375 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | 0.31 | 0.65 | NA | NA | NA | NA | NA | NA |
| MD21-09-9892 | 21-605375 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.86 | NA | NA | NA | NA | NA | NA |
| MD21-09-9893 | 21-605375 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | 0.22 | 0.43 | NA | NA | NA | NA | NA | NA |
| MD21-09-9895 | 21-605376 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | 0.12 | 0.2 | NA | NA | NA | NA | NA | NA |
| MD21-09-9896 | 21-605376 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | 0.13 | 0.22 | NA | NA | NA | NA | NA | NA |
| MD21-09-9897 | 21-605377 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-9900 | 21-605378 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.17 | NA | NA | NA | NA | NA | NA |
| MD21-09-9901 | 21-605378 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.019 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-9902 | 21-605378 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.072 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-9903 | 21-605378 | 3.0000–3.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.018 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-9904 | 21-605379 | 0.0000–0.5000 | QBT3 | NA | NA | NA | — | — | — | — | 0.81 | NA | NA | NA | NA | NA | NA |
| MD21-09-9905 | 21-605379 | 0.5000–1.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.078 | NA | NA | NA | NA | NA | NA |
| MD21-09-9906 | 21-605379 | 1.5000–2.0000 | QBT3 | NA | NA | NA | — | — | — | — | 0.09 (J-) | NA | NA | NA | NA | NA | NA |
| MD21-09-9907 | 21-605380 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.042 | NA | NA | NA | NA | NA | NA |
| MD21-09-9909 | 21-605380 | 1.5000–2.0000 | SOIL | NA | NA | NA | — | — | — | 0.12 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10519 | 21-605532 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | — | — | 0.77 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10521 | 21-605533 | 0.5000–1.0000 | SOIL | NA | NA | NA | — | — | — | — | 0.02 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-9415 | 21-605617 | 10.0000–10.5000 | QBT3 | NA | NA | NA | — | — | — | 0.095 | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-9416 | 21-605618 | 10.0000–10.5000 | QBT3 | NA | NA | NA | — | — | — | 0.23 | 0.24 | NA | NA | NA | NA | NA | NA |
| MD21-09-9417 | 21-605619 | 10.0000–10.5000 | QBT3 | NA | NA | NA | — | — | — | 0.26 | 0.33 | NA | NA | NA | NA | NA | NA |
| MD21-09-9418 | 21-605620 | 4.7500–5.2500 | QBT3 | NA | NA | NA | — | — | — | 0.066 | 0.15 | NA | NA | NA | NA | NA | NA |
| MD21-09-10409 | 21-605698 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.071 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10410 | 21-605699 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.1 | 0.23 | NA | NA | NA | NA | NA | NA |
| MD21-09-10411 | 21-605700 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.076 | 0.15 | NA | NA | NA | NA | NA | NA |
| MD21-09-10412 | 21-605701 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.068 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10413 | 21-605702 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.061 | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-10414 | 21-605703 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | 0.032 (J) | 0.063 | NA | NA | NA | NA | NA | NA |
| MD21-09-10415 | 21-605704 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.071 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10418 | 21-605707 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.025 (J) | 0.061 | NA | NA | NA | NA | NA | NA |
| MD21-09-10419 | 21-605708 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.03 (J) | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10420 | 21-605709 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.065 | 0.11 | NA | NA | NA | NA | NA | NA |
| MD21-09-10421 | 21-605710 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.033 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10422 | 21-605711 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | 0.046 | 0.068 | NA | NA | NA | NA | NA | NA |
| MD21-09-10423 | 21-605712 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | — | 0.041 | NA | NA | NA | NA | NA | NA |
| MD21-09-10424 | 21-605713 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.012 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10425 | 21-605714 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | — | 0.014 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10426 | 21-605715 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.051 | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-10427 | 21-605716 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | 0.022 (J) | 0.041 | NA | NA | NA | NA | NA | NA |
| MD21-09-10428 | 21-605717 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.039 | NA | NA | NA | NA | NA | NA |
| MD21-09-10429 | 21-605718 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.023 (J) | 0.08 | NA | NA | NA | NA | NA | NA |
| MD21-09-10430 | 21-605719 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.088 | NA | NA | NA | NA | NA | NA |
| MD21-09-10431 | 21-605720 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.096 | NA | NA | NA | NA | NA | NA |
| MD21-09-10432 | 21-605721 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.011 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10433 | 21-605722 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.046 | 0.14 | NA | NA | NA | NA | NA | NA |
| MD21-09-10434 | 21-605723 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.084 | 0.092 | NA | NA | NA | NA | NA | NA |
| MD21-09-10435 | 21-605724 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.39 | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-10438 | 21-605727 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.59 | 0.34 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10439 | 21-605728 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.045 (J) | 0.023 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10440 | 21-605729 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.3 | 0.48 | NA | NA | NA | NA | NA | NA |
| MD21-09-10443 | 21-605732 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.031 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10445 | 21-605734 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.018 (J) | 0.053 | NA | NA | NA | NA | NA | NA |
| MD21-09-10446 | 21-605735 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.036 | NA | NA | NA | NA | NA | NA |
| MD21-09-10448 | 21-605737 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.093 | 0.098 | NA | NA | NA | NA | NA | NA |
| MD21-09-10449 | 21-605738 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.087 | NA | NA | NA | NA | NA | NA |
| MD21-09-10450 | 21-605739 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10451 | 21-605740 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.025 (J) | 0.052 | NA | NA | NA | NA | NA | NA |
| MD21-09-10452 | 21-605741 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-10453 | 21-605742 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.088 | NA | NA | NA | NA | NA | NA |
| MD21-09-10454 | 21-605743 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.057 | 0.15 | NA | NA | NA | NA | NA | NA |
| MD21-09-10455 | 21-605744 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.48 | 0.29 (J) | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10456 | 21-605745 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.11 | 0.2 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10457 | 21-605746 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.33 | NA | NA | NA | NA | NA | NA |
| MD21-09-10458 | 21-605747 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.24 | NA | NA | NA | NA | NA | NA |
| MD21-09-10459 | 21-605748 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.55 | NA | NA | NA | NA | NA | NA |
| MD21-09-10460 | 21-605749 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.057 | NA | NA | NA | NA | NA | NA |
| MD21-09-10462 | 21-605751 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.17 | NA | NA | NA | NA | NA | NA |
| MD21-09-10463 | 21-605752 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.47 | NA | NA | NA | NA | NA | NA |
| MD21-09-10464 | 21-605753 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.027 (J) | 0.072 | NA | NA | NA | NA | NA | NA |
| MD21-09-10465 | 21-605754 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.23 | NA | NA | NA | NA | NA | NA |
| MD21-09-10466 | 21-605755 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.043 | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-10467 | 21-605756 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.022 (J) | 0.082 | NA | NA | NA | NA | NA | NA |
| MD21-10-1940 | 21-605759 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | 0.0523 | 0.132 | 0.244 | NA | NA | NA | NA | NA | NA |
| MD21-09-10475 | 21-605764 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.79 | NA | NA | NA | NA | NA | NA |
| MD21-09-10476 | 21-605765 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.31 (J) | 0.44 | NA | NA | NA | NA | NA | NA |
| MD21-09-10768 | 21-605766 | 1.5000–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.17 (J) | 0.24 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10479 | 21-605768 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.3 (J-) | 0.49 (J-) | NA | NA | NA | NA | NA | NA |
| MD21-09-10480 | 21-605769 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.2 | 0.21 | NA | NA | NA | NA | NA | NA |
| MD21-09-10481 | 21-605770 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.11 (J) | 0.18 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10482 | 21-605771 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.17 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-13221 | 21-605772 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | 0.12 | 0.214 | NA | NA | NA | NA | NA | NA |
| MD21-09-10487 | 21-605776 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.13 (J) | 0.4 | NA | NA | NA | NA | NA | NA |
| MD21-09-10488 | 21-605777 | 2.1600–2.2500 | SOIL | NA | NA | NA | — | — | — | 0.29 | 0.62 | NA | NA | NA | NA | NA | NA |
| MD21-09-13202 | 21-605777 | 2.1600–2.2500 | SOIL | NA | NA | NA | — | — | — | 0.11 (J) | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-10510 | 21-607149 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.027 (J) | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-10511 | 21-607150 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.12 | 0.24 | NA | NA | NA | NA | NA | NA |
| MD21-09-10512 | 21-607151 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.16 (J) | 0.43 | NA | NA | NA | NA | NA | NA |
| MD21-09-10514 | 21-607153 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.03 (J) | 0.064 | NA | NA | NA | NA | NA | NA |
| MD21-09-10528 | 21-607687 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.048 (J) | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10529 | 21-607688 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.15 | 0.29 | NA | NA | NA | NA | NA | NA |
| MD21-09-10530 | 21-607689 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.047 (J) | 0.17 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10531 | 21-607690 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.056 (J) | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-10532 | 21-607691 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.047 | 0.13 | NA | NA | NA | NA | NA | NA |
| MD21-09-10533 | 21-607692 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.31 | NA | NA | NA | NA | NA | NA |
| MD21-09-10534 | 21-607693 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.02 (J) | 0.051 | NA | NA | NA | NA | NA | NA |
| MD21-09-10535 | 21-607694 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.021 (J) | 0.072 | NA | NA | NA | NA | NA | NA |
| MD21-09-10536 | 21-607695 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | — | 0.28 | NA | NA | NA | NA | NA | NA |
| MD21-09-10540 | 21-607699 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.14 | 0.22 | NA | NA | NA | NA | NA | NA |
| MD21-09-10541 | 21-607700 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.2 (J) | 0.69 | NA | NA | NA | NA | NA | NA |
| MD21-09-10546 | 21-607705 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.11 (J) | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10547 | 21-607706 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.1 (J) | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10548 | 21-607707 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.22 | 0.59 | NA | NA | NA | NA | NA | NA |
| MD21-09-10550 | 21-607709 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | 0.03 (J) | — | 0.13 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13220 | 21-607710 | 3.1600–3.2500 | QBT3 | NA | NA | NA | — | — | 0.0233 | 0.044 | 0.0732 | NA | NA | NA | NA | NA | NA |
| MD21-09-10552 | 21-607711 | 1.6600–1.7600 | SOIL | NA | NA | NA | — | — | — | 0.069 (J) | 0.12 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10553 | 21-607712 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | 0.051 | — | 0.15 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10554 | 21-607713 | 1.6600–1.7500 | SOIL | NA | NA | NA | 0.43 (J) | — | — | — | — | NA | NA | NA | NA | NA | NA |
| MD21-09-10555 | 21-607714 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | 0.16 (J) | — | 0.053 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10556 | 21-607715 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | 0.037 (J) | — | 0.17 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10559 | 21-607718 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.27 (J) | 0.18 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10560 | 21-607719 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.12 (J) | 0.15 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10563 | 21-607722 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.059 (J) | 0.21 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10564 | 21-607723 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.084 (J) | 0.19 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10565 | 21-607724 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.16 (J) | 0.38 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10566 | 21-607725 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.31 | 0.64 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10567 | 21-607726 | 4.1600–4.2500 | QBT3 | NA | NA | NA | — | — | — | 0.15 (J) | — | NA | NA | NA | NA | NA | NA |
| MD21-09-10568 | 21-607727 | 10.1600–10.2500 | QBT3 | NA | NA | NA | — | — | — | 0.79 (J) | 0.19 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10569 | 21-607728 | 4.1600–4.2500 | SOIL | NA | NA | NA | — | — | — | 0.44 (J) | 0.19 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10570 | 21-607729 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.042 (J) | 0.095 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10571 | 21-607730 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.11 (J) | 0.21 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10572 | 21-607731 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.16 (J) | 0.3 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10574 | 21-607733 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.29 (J) | 0.61 (J) | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-13199 | 21-607738 | 5.1600–5.2500 | QBT3 | NA | NA | NA | — | — | — | 0.15 (J) | 0.33 | NA | NA | NA | NA | NA | NA |
| MD21-09-10582 | 21-607741 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.41 | 0.18 | NA | NA | NA | NA | NA | NA |
| MD21-09-10583 | 21-607742 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.24 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-10-1948 | 21-607744 | 5.1600–5.2500 | QBT3 | NA | NA | NA | — | — | — | 0.0387 | 0.0404 | NA | NA | NA | NA | NA | NA |
| MD21-09-10586 | 21-607745 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.042 | 0.034 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10587 | 21-607746 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.11 | 0.1 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10588 | 21-607747 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.091 | 0.12 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10589 | 21-607748 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.12 | 0.075 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10590 | 21-607749 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.2 | 0.13 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10591 | 21-607750 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.092 | 0.038 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10592 | 21-607751 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.24 | 0.17 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10594 | 21-607753 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.23 | 0.17 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13210 | 21-607754 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.33 (J) | 0.49 | NA | NA | NA | NA | NA | NA |
| MD21-09-13211 | 21-607756 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | 0.17 (J) | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-10-1947 | 21-607763 | 5.1600–5.2500 | QBT3 | NA | NA | NA | — | — | — | 0.0562 | 0.0672 | NA | NA | NA | NA | NA | NA |
| MD21-09-10605 | 21-607764 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.14 | 0.3 | NA | NA | NA | NA | NA | NA |
| MD21-09-10606 | 21-607765 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.22 | 0.3 | NA | NA | NA | NA | NA | NA |
| MD21-09-10607 | 21-607766 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.063 | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-10608 | 21-607767 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.05 (J) | 0.087 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10609 | 21-607768 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.075 | 0.18 | NA | NA | NA | NA | NA | NA |
| MD21-09-10610 | 21-607769 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.2 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-10611 | 21-607770 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.1 | 0.18 | NA | NA | NA | NA | NA | NA |
| MD21-09-10612 | 21-607771 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.22 (J) | 0.46 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10613 | 21-607772 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.19 | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10614 | 21-607773 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.52 | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10615 | 21-607774 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.04 | 0.065 | NA | NA | NA | NA | NA | NA |
| MD21-09-10616 | 21-607775 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.043 | 0.07 | NA | NA | NA | NA | NA | NA |
| MD21-09-10617 | 21-607776 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.077 | 0.13 | NA | NA | NA | NA | NA | NA |
| MD21-09-10618 | 21-607777 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.13 | 0.18 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10620 | 21-607779 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.35 | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10621 | 21-607780 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.14 (J) | 0.39 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10622 | 21-607781 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.58 | 0.4 | NA | NA | NA | NA | NA | NA |
| MD21-10-1946 | 21-607782 | 2.6600–2.7500 | QBT3 | NA | NA | NA | — | — | — | 0.134 | 0.124 | NA | NA | NA | NA | NA | NA |
| MD21-09-10625 | 21-607784 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.31 | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10628 | 21-607787 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.19 | 0.26 | NA | NA | NA | NA | NA | NA |
| MD21-09-10629 | 21-607788 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.18 | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-13204 | 21-607790 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.12 (J) | 0.18 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10633 | 21-607792 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.33 | 0.54 | NA | NA | NA | NA | NA | NA |
| MD21-09-10636 | 21-607795 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.29 | 0.46 | NA | NA | NA | NA | NA | NA |
| MD21-09-10637 | 21-607796 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.27 | 0.35 | NA | NA | NA | NA | NA | NA |
| MD21-09-10638 | 21-607797 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.21 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-10639 | 21-607798 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.16 | 0.22 | NA | NA | NA | NA | NA | NA |
| MD21-09-10640 | 21-607799 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.15 | 0.2 | NA | NA | NA | NA | NA | NA |
| MD21-09-10641 | 21-607800 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.078 | 0.1 | NA | NA | NA | NA | NA | NA |
| MD21-09-10642 | 21-607801 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.069 | 0.052 | NA | NA | NA | NA | NA | NA |
| MD21-09-10643 | 21-607802 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.057 | 0.071 | NA | NA | NA | NA | NA | NA |
| MD21-09-10644 | 21-607803 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.26 | 0.54 | NA | NA | NA | NA | NA | NA |
| MD21-09-10645 | 21-607804 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.02 (J) | 0.019 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13215 | 21-607812 | 5.6600–5.7500 | QBT3 | NA | NA | NA | — | — | — | 0.099 (J) | 0.22 | NA | NA | NA | NA | NA | NA |
| MD21-09-10654 | 21-607813 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.12 | 0.21 | NA | NA | NA | NA | NA | NA |
| MD21-09-10655 | 21-607814 | 4.6600–4.7500 | SOIL | NA | NA | NA | — | — | — | 0.079 | 0.074 | NA | NA | NA | NA | NA | NA |
| MD21-09-10656 | 21-607815 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.04 | 0.042 | NA | NA | NA | NA | NA | NA |
| MD21-09-10657 | 21-607816 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.026 (J) | 0.026 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10658 | 21-607817 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.059 | 0.057 | NA | NA | NA | NA | NA | NA |
| MD21-09-10659 | 21-607818 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.058 | 0.054 | NA | NA | NA | NA | NA | NA |
| MD21-09-10660 | 21-607819 | 4.6600–4.7500 | SOIL | NA | NA | NA | — | — | — | 0.22 | 0.32 | NA | NA | NA | NA | NA | NA |
| MD21-09-10661 | 21-607820 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.21 | 0.32 | NA | NA | NA | NA | NA | NA |
| MD21-09-10663 | 21-607822 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.03 (J) | 0.03 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13214 | 21-607824 | 5.6600–5.7500 | QBT3 | NA | NA | NA | — | — | — | 0.027 (J) | 0.044 | NA | NA | NA | NA | NA | NA |
| MD21-09-10666 | 21-607825 | 4.6600–4.7500 | QBT3 | NA | NA | NA | — | — | — | 0.21 | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-10667 | 21-607826 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.084 | 0.12 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10668 | 21-607827 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.17 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-10669 | 21-607828 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.25 | 0.39 | NA | NA | NA | NA | NA | NA |
| MD21-09-10670 | 21-607829 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.28 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-10671 | 21-607830 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.058 | 0.066 | NA | NA | NA | NA | NA | NA |
| MD21-09-10672 | 21-607831 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.068 | 0.062 | NA | NA | NA | NA | NA | NA |
| MD21-09-10673 | 21-607832 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.056 | 0.06 | NA | NA | NA | NA | NA | NA |
| MD21-09-10674 | 21-607833 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.085 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10675 | 21-607834 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.14 | 0.14 | NA | NA | NA | NA | NA | NA |
| MD21-09-10676 | 21-607835 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.069 | 0.068 | NA | NA | NA | NA | NA | NA |
| MD21-09-10677 | 21-607836 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.059 | 0.081 | NA | NA | NA | NA | NA | NA |
| MD21-09-10678 | 21-607837 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.12 | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-10679 | 21-607838 | 1.6600–1.7500 | QBT3 | NA | NA | NA | — | — | — | 0.076 | 0.068 | NA | NA | NA | NA | NA | NA |
| MD21-09-10680 | 21-607839 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.25 | 0.51 | NA | NA | NA | NA | NA | NA |
| MD21-09-10681 | 21-607840 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.25 | 0.53 | NA | NA | NA | NA | NA | NA |
| MD21-09-10682 | 21-607841 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.12 | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-10683 | 21-607842 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.016 (J) | 0.024 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10684 | 21-607843 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.034 (J) | 0.05 | NA | NA | NA | NA | NA | NA |
| MD21-09-10695 | 21-607844 | 0.6600–75.0000 | QBT3 | NA | NA | NA | — | — | — | 0.062 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10696 | 21-607845 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.036 | 0.078 | NA | NA | NA | NA | NA | NA |
| MD21-09-10697 | 21-607846 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.086 | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-10698 | 21-607847 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.1 | 0.2 | NA | NA | NA | NA | NA | NA |
| MD21-09-10699 | 21-607848 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.12 | 0.23 | NA | NA | NA | NA | NA | NA |
| MD21-09-10700 | 21-607849 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.08 | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-10701 | 21-607850 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.16 | 0.29 | NA | NA | NA | NA | NA | NA |
| MD21-09-10702 | 21-607851 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.19 | 0.33 | NA | NA | NA | NA | NA | NA |
| MD21-09-10703 | 21-607852 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.18 | 0.29 | NA | NA | NA | NA | NA | NA |
| MD21-09-10704 | 21-607853 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.43 | 0.52 | NA | NA | NA | NA | NA | NA |
| MD21-09-13207 | 21-607855 | 1.1600–1.2500 | SOIL | NA | NA | NA | — | — | — | 0.14 (J) | 0.25 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10707 | 21-607856 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.18 | 0.28 | NA | NA | NA | NA | NA | NA |
| MD21-09-10708 | 21-607857 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.11 | 0.17 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10709 | 21-607858 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.15 | 0.2 | NA | NA | NA | NA | NA | NA |
| MD21-09-10710 | 21-607859 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.27 | 0.34 | NA | NA | NA | NA | NA | NA |
| MD21-09-10711 | 21-607860 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.13 | 0.21 | NA | NA | NA | NA | NA | NA |
| MD21-09-10712 | 21-607861 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.091 | 0.13 | NA | NA | NA | NA | NA | NA |
| MD21-09-10713 | 21-607862 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.21 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-10714 | 21-607863 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.34 | 0.48 | NA | NA | NA | NA | NA | NA |
| MD21-09-10715 | 21-607864 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.3 | 0.37 | NA | NA | NA | NA | NA | NA |
| MD21-09-10716 | 21-607865 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.16 | 0.24 | NA | NA | NA | NA | NA | NA |
| MD21-09-10717 | 21-607866 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.17 | 0.23 | NA | NA | NA | NA | NA | NA |
| MD21-09-10718 | 21-607867 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.098 | 0.13 | NA | NA | NA | NA | NA | NA |
| MD21-09-10719 | 21-607868 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.19 | 0.23 | NA | NA | NA | NA | NA | NA |
| MD21-09-10721 | 21-607870 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.26 | 0.38 | NA | NA | NA | NA | NA | NA |
| MD21-09-10722 | 21-607871 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.15 | 0.27 | NA | NA | NA | NA | NA | NA |
| MD21-09-10723 | 21-607872 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.073 | 0.11 | NA | NA | NA | NA | NA | NA |
| MD21-09-10724 | 21-607873 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.11 | 0.17 | NA | NA | NA | NA | NA | NA |
| MD21-09-10725 | 21-607874 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.19 | 0.4 | NA | NA | NA | NA | NA | NA |
| MD21-09-10726 | 21-607875 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.23 | 0.3 | NA | NA | NA | NA | NA | NA |
| MD21-09-10727 | 21-607876 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.14 | 0.25 | NA | NA | NA | NA | NA | NA |
| MD21-09-10730 | 21-607879 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.12 | 0.15 | NA | NA | NA | NA | NA | NA |
| MD21-09-10737 | 21-607886 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.3 | 0.34 | NA | NA | NA | NA | NA | NA |
| MD21-09-10738 | 21-607887 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.36 | 0.43 | NA | NA | NA | NA | NA | NA |
| MD21-09-13217 | 21-607888 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.24 | 0.34 | NA | NA | NA | NA | NA | NA |
| MD21-09-10740 | 21-607889 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.25 | 0.31 | NA | NA | NA | NA | NA | NA |
| MD21-09-10741 | 21-607890 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.28 | 0.39 | NA | NA | NA | NA | NA | NA |
| MD21-09-10742 | 21-607891 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.25 | 0.34 | NA | NA | NA | NA | NA | NA |
| MD21-09-10744 | 21-607893 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.13 | 0.18 | NA | NA | NA | NA | NA | NA |
| MD21-09-10745 | 21-607894 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.074 | 0.14 | NA | NA | NA | NA | NA | NA |
| MD21-09-10746 | 21-607895 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.27 | 0.2 | NA | NA | NA | NA | NA | NA |
| MD21-09-10748 | 21-607897 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.095 | 0.16 | NA | NA | NA | NA | NA | NA |
| MD21-09-10749 | 21-607898 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.2 | 0.19 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1016 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzoic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **3.93** | **2.22** | **2.22** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **62.1** | **240000**[a] |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **41.3** | **8.26** | **8.26** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **234** | **2500000**[a] |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **15.3** | **75.8** | **75.8** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **2060** | **952000**[b] |
| MD21-09-10752 | 21-607901 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.41 | 0.18 | NA | NA | NA | NA | NA | NA |
| MD21-09-10753 | 21-607902 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.019 (J) | 0.01 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10755 | 21-607904 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.43 | 0.22 | NA | NA | NA | NA | NA | NA |
| MD21-09-10756 | 21-607905 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.2 | 0.13 | NA | NA | NA | NA | NA | NA |
| MD21-09-10757 | 21-607906 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.037 | 0.043 | NA | NA | NA | NA | NA | NA |
| MD21-09-10758 | 21-607907 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.11 | 0.085 | NA | NA | NA | NA | NA | NA |
| MD21-09-10759 | 21-607908 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.018 (J) | 0.012 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10760 | 21-607909 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.08 | 0.044 | NA | NA | NA | NA | NA | NA |
| MD21-09-10761 | 21-607910 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | — | 0.096 | 0.099 | NA | NA | NA | NA | NA | NA |
| MD21-09-10762 | 21-607911 | 0.6600–0.7500 | QBT3 | NA | NA | NA | — | — | — | 0.32 | 0.12 | NA | NA | NA | NA | NA | NA |
| MD21-09-10765 | 21-607912 | 4.0000–4.5000 | QBT3 | NA | NA | NA | — | — | — | 0.31 | 0.68 | NA | NA | NA | NA | NA | NA |
| MD21-09-10769 | 21-607918 | 1.5000–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.046 (J) | 0.08 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10771 | 21-607920 | 1.5000–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.18 (J) | 0.35 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10772 | 21-607921 | 1.5000–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.17 (J) | 0.36 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-10774 | 21-607923 | 1.0000–1.2500 | SOIL | NA | NA | NA | — | — | — | 0.11 (J) | 0.19 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13197 | 21-608084 | 5.1600–5.2500 | SOIL | NA | NA | NA | — | — | — | 0.32 (J) | 0.57 | NA | NA | NA | NA | NA | NA |
| MD21-09-13219 | 21-608087 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.164 | 0.351 | NA | NA | NA | NA | NA | NA |
| MD21-09-13201 | 21-608088 | 2.1600–2.2500 | SOIL | NA | NA | NA | — | — | — | 0.16 (J) | 0.35 | NA | NA | NA | NA | NA | NA |
| MD21-09-13205 | 21-608092 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.21 (J) | 0.16 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13208 | 21-608095 | 1.1600–1.2500 | SOIL | NA | NA | NA | — | — | — | 0.22 (J) | 0.47 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-13209 | 21-608096 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | — | 0.046 (J) | 0.057 | NA | NA | NA | NA | NA | NA |
| MD21-09-13216 | 21-608103 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.087 | 0.11 | NA | NA | NA | NA | NA | NA |
| MD21-09-13218 | 21-608105 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.031 (J) | 0.039 (J) | NA | NA | NA | NA | NA | NA |
| MD21-10-1941 | 21-608835 | 0.6600–0.7500 | SOIL | NA | NA | NA | — | — | 0.167 | 0.343 | 0.354 | NA | NA | NA | NA | NA | NA |
| MD21-10-1942 | 21-608836 | 2.6600–2.7500 | SOIL | NA | NA | NA | — | — | 0.0266 | 0.0636 | 0.132 | NA | NA | NA | NA | NA | NA |
| MD21-10-1943 | 21-608837 | 5.1600–5.2500 | QBT3 | NA | NA | NA | — | — | 0.008 | 0.0192 | 0.0394 | NA | NA | NA | NA | NA | NA |
| MD21-10-1945 | 21-608839 | 1.6600–1.7500 | SOIL | NA | NA | NA | — | — | — | 0.0574 | 0.0502 | NA | NA | NA | NA | NA | NA |
| MD21-10-1949 | 21-608843 | 5.1600–5.2500 | QBT3 | NA | NA | NA | — | — | — | 0.0381 | 0.0278 | NA | NA | NA | NA | NA | NA |
| MD21-10-1951 | 21-608845 | 5.1600–5.2500 | QBT3 | NA | NA | NA | — | — | — | 0.0145 | 0.0176 | NA | NA | NA | NA | NA | NA |
| MD21-10-1953 | 21-608847 | 3.1600–3.2500 | SOIL | NA | NA | NA | — | — | — | 0.33 (J) | 0.5 | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | 0.000648 (J) | — | NA | NA | NA | NA |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 0.0579 (J) | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.205 (J) | NA | NA | NA | NA |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | 0.000367 (J) | — | NA | NA | NA | NA |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | 0.000325 (J) | — | NA | NA | NA | NA |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.813 (J) | NA | NA | NA | NA |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | 0.000268 (J) | 0.216 (J) | NA | NA | NA | NA |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | 0.000281 (J) | 0.219 (J) | NA | NA | NA | NA |
| RE21-06-68449 | 21-25709 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68453 | 21-25710 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68458 | 21-25712 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68460 | 21-25712 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | — | — | NA | NA | 0.15 (J+) | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0919 | NA | NA | NA | NA |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | — | 0.231 | NA | NA | — | 0.0507 (J) | — | NA | NA | 0.0445 | NA | NA | NA | NA |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | — | — | NA | NA | 0.0208 (J) | — | — | NA | NA | 0.0377 | NA | NA | NA | NA |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | — | — | — | — | 0.0301 (J) | — | — | — | — | 0.0643 | NA | NA | NA | NA |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.905 (J) | NA | NA | NA | NA |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | — | — | 0.000246 (J) | — | — | — | — | 0.00118 | — | — | NA | NA | NA | NA |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | — | — | 0.000245 (J) | — | — | — | — | 0.00109 (J) | — | 0.213 (J) | NA | NA | NA | NA |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | 0.00115 (J) | — | 0.225 (J) | NA | NA | NA | NA |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | 0.000411 (J) | — | 0.218 (J) | NA | NA | NA | NA |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | 0.000582 (J) | — | — | NA | NA | NA | NA |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | — | 0.232 (J) | — | — | — | — | — | — | — | 0.211 (J) | NA | NA | NA | NA |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.342 (J) | NA | NA | NA | NA |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | 0.000862 (J) | — | — | NA | NA | NA | NA |
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 3.67E-06 | 6.83E-06 | 0.00000175 (J) | 1.75E-06 |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.219 (J) | NA | NA | NA | NA |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | 0.000706 (J) | — | — | NA | NA | NA | NA |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.229 (J) | NA | NA | NA | NA |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.214 (J) | NA | NA | NA | NA |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.244 (J) | NA | NA | NA | NA |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | — | — | 0.000293 (J) | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | — | — | 0.000485 (J) | — | — | — | — | — | — | 0.207 (J) | NA | NA | NA | NA |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.208 (J) | NA | NA | NA | NA |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.204 (J) | NA | NA | NA | NA |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.226 (J) | NA | NA | NA | NA |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | — | — | NA | NA | 0.017 (J) | — | — | NA | NA | 0.0268 (J) | NA | NA | NA | NA |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | — | — | NA | NA | 0.42 | — | — | NA | NA | 0.723 | NA | NA | NA | NA |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0223 (J) | NA | NA | NA | NA |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | 0.00122 | 0.00248 | — | NA | NA | NA | NA |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | 0.232 (J) | — | NA | NA | 0.0167 (J) | — | — | NA | NA | 0.0295 (J) | NA | NA | NA | NA |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 0.137 (J) | NA | NA | NA | NA |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0257 (J) | NA | NA | NA | NA |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | 0.0154 (J) | NA | NA | NA | NA |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | — | 0.252 | — | — | — | 0.0592 (J) | — | — | — | — | NA | NA | NA | NA |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | — | — | — | 0.000394 (J) | 0.0355 (J) | — | 0.0248 | — | — | 0.114 | NA | NA | NA | NA |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | — | — | — | 0.000443 (J) | — | — | 0.162 (J) | — | — | 0.0127 (J) | NA | NA | NA | NA |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | — | — | — | — | — | — | 0.007 | — | — | 0.0344 (J) | NA | NA | NA | NA |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | — | — | — | — | — | — | 0.00882 | — | — | 0.0244 (J) | NA | NA | NA | NA |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0173 (J) | NA | NA | NA | NA |
| MD21-09-9860 | 21-25752 | 3.8000–4.8000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | — | — | — | — | — | — | — | — | — | 0.0112 (J) | NA | NA | NA | NA |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.026 (J) | NA | NA | NA | NA |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0207 (J) | NA | NA | NA | NA |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0183 (J) | NA | NA | NA | NA |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | — | NA | NA | NA | NA |
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | NA | NA | 0.0227 (J) | NA | NA | NA | NA |
| RE21-09-2642 | 21-604461 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2643 | 21-604461 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2644 | 21-604461 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| RE21-09-2645 | 21-604462 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2646 | 21-604462 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2648 | 21-604463 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2649 | 21-604463 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2650 | 21-604463 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2651 | 21-604464 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2652 | 21-604464 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2655 | 21-604465 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2656 | 21-604465 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2662 | 21-604467 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2665 | 21-604468 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2669 | 21-604470 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2672 | 21-604471 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2673 | 21-604471 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2674 | 21-604471 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2675 | 21-604472 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2676 | 21-604472 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2677 | 21-604472 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2680 | 21-604473 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2681 | 21-604474 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2682 | 21-604474 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2683 | 21-604474 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2685 | 21-604475 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2686 | 21-604475 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2687 | 21-604476 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2699 | 21-604480 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2700 | 21-604480 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2701 | 21-604480 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2702 | 21-604481 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2703 | 21-604481 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| RE21-09-2704 | 21-604481 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2705 | 21-604482 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2706 | 21-604482 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2708 | 21-604483 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2709 | 21-604483 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2710 | 21-604483 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2711 | 21-604484 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2712 | 21-604484 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2713 | 21-604485 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2714 | 21-604485 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2721 | 21-604489 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9864 | 21-605366 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9865 | 21-605366 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9867 | 21-605367 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9868 | 21-605367 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9869 | 21-605368 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9870 | 21-605368 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10518 | 21-605368 | 3.0000–3.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9872 | 21-605369 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9873 | 21-605369 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9876 | 21-605370 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9877 | 21-605370 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9879 | 21-605371 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9884 | 21-605372 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9885 | 21-605373 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9886 | 21-605373 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9888 | 21-605374 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9891 | 21-605375 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9892 | 21-605375 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9893 | 21-605375 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-9895 | 21-605376 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9896 | 21-605376 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9897 | 21-605377 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9900 | 21-605378 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9901 | 21-605378 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9902 | 21-605378 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9903 | 21-605378 | 3.0000–3.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9904 | 21-605379 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9905 | 21-605379 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9906 | 21-605379 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9907 | 21-605380 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9909 | 21-605380 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10519 | 21-605532 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10521 | 21-605533 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9415 | 21-605617 | 10.0000–10.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9416 | 21-605618 | 10.0000–10.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9417 | 21-605619 | 10.0000–10.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9418 | 21-605620 | 4.7500–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10409 | 21-605698 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10410 | 21-605699 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10411 | 21-605700 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10412 | 21-605701 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10413 | 21-605702 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10414 | 21-605703 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10415 | 21-605704 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10418 | 21-605707 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10419 | 21-605708 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10420 | 21-605709 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10421 | 21-605710 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10422 | 21-605711 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10423 | 21-605712 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10424 | 21-605713 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10425 | 21-605714 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10426 | 21-605715 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10427 | 21-605716 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10428 | 21-605717 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10429 | 21-605718 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10430 | 21-605719 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10431 | 21-605720 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10432 | 21-605721 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10433 | 21-605722 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10434 | 21-605723 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10435 | 21-605724 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10438 | 21-605727 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10439 | 21-605728 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10440 | 21-605729 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10443 | 21-605732 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10445 | 21-605734 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10446 | 21-605735 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10448 | 21-605737 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10449 | 21-605738 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10450 | 21-605739 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10451 | 21-605740 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10452 | 21-605741 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10453 | 21-605742 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10454 | 21-605743 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10455 | 21-605744 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10456 | 21-605745 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10457 | 21-605746 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10458 | 21-605747 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10459 | 21-605748 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10460 | 21-605749 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10462 | 21-605751 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10463 | 21-605752 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10464 | 21-605753 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10465 | 21-605754 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10466 | 21-605755 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10467 | 21-605756 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1940 | 21-605759 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10475 | 21-605764 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10476 | 21-605765 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10768 | 21-605766 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10479 | 21-605768 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10480 | 21-605769 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10481 | 21-605770 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10482 | 21-605771 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13221 | 21-605772 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10487 | 21-605776 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10488 | 21-605777 | 2.1600–2.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13202 | 21-605777 | 2.1600–2.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10510 | 21-607149 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10511 | 21-607150 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10512 | 21-607151 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10514 | 21-607153 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10528 | 21-607687 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10529 | 21-607688 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10530 | 21-607689 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10531 | 21-607690 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10532 | 21-607691 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10533 | 21-607692 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10534 | 21-607693 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10535 | 21-607694 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10536 | 21-607695 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10540 | 21-607699 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10541 | 21-607700 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10546 | 21-607705 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10547 | 21-607706 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10548 | 21-607707 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10550 | 21-607709 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13220 | 21-607710 | 3.1600–3.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10552 | 21-607711 | 1.6600–1.7600 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10553 | 21-607712 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10554 | 21-607713 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10555 | 21-607714 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10556 | 21-607715 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10559 | 21-607718 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10560 | 21-607719 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10563 | 21-607722 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10564 | 21-607723 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10565 | 21-607724 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10566 | 21-607725 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10567 | 21-607726 | 4.1600–4.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10568 | 21-607727 | 10.1600–10.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10569 | 21-607728 | 4.1600–4.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10570 | 21-607729 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10571 | 21-607730 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10572 | 21-607731 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10574 | 21-607733 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13199 | 21-607738 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10582 | 21-607741 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10583 | 21-607742 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1948 | 21-607744 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10586 | 21-607745 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10587 | 21-607746 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10588 | 21-607747 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10589 | 21-607748 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10590 | 21-607749 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10591 | 21-607750 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10592 | 21-607751 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10594 | 21-607753 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13210 | 21-607754 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13211 | 21-607756 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1947 | 21-607763 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10605 | 21-607764 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10606 | 21-607765 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10607 | 21-607766 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10608 | 21-607767 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10609 | 21-607768 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10610 | 21-607769 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10611 | 21-607770 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10612 | 21-607771 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10613 | 21-607772 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10614 | 21-607773 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10615 | 21-607774 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10616 | 21-607775 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10617 | 21-607776 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10618 | 21-607777 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10620 | 21-607779 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10621 | 21-607780 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10622 | 21-607781 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1946 | 21-607782 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10625 | 21-607784 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10628 | 21-607787 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10629 | 21-607788 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13204 | 21-607790 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10633 | 21-607792 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10636 | 21-607795 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10637 | 21-607796 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10638 | 21-607797 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10639 | 21-607798 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10640 | 21-607799 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10641 | 21-607800 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10642 | 21-607801 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10643 | 21-607802 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10644 | 21-607803 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10645 | 21-607804 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13215 | 21-607812 | 5.6600–5.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10654 | 21-607813 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10655 | 21-607814 | 4.6600–4.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10656 | 21-607815 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10657 | 21-607816 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10658 | 21-607817 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10659 | 21-607818 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10660 | 21-607819 | 4.6600–4.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10661 | 21-607820 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10663 | 21-607822 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13214 | 21-607824 | 5.6600–5.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10666 | 21-607825 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10667 | 21-607826 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10668 | 21-607827 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10669 | 21-607828 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10670 | 21-607829 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10671 | 21-607830 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10672 | 21-607831 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10673 | 21-607832 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10674 | 21-607833 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10675 | 21-607834 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10676 | 21-607835 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10677 | 21-607836 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10678 | 21-607837 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10679 | 21-607838 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10680 | 21-607839 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10681 | 21-607840 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10682 | 21-607841 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10683 | 21-607842 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10684 | 21-607843 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10695 | 21-607844 | 0.6600–75.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10696 | 21-607845 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10697 | 21-607846 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10698 | 21-607847 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10699 | 21-607848 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10700 | 21-607849 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10701 | 21-607850 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10702 | 21-607851 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10703 | 21-607852 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10704 | 21-607853 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13207 | 21-607855 | 1.1600–1.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10707 | 21-607856 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10708 | 21-607857 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10709 | 21-607858 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10710 | 21-607859 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10711 | 21-607860 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10712 | 21-607861 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10713 | 21-607862 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10714 | 21-607863 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10715 | 21-607864 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10716 | 21-607865 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10717 | 21-607866 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10718 | 21-607867 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10719 | 21-607868 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10721 | 21-607870 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10722 | 21-607871 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10723 | 21-607872 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10724 | 21-607873 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10725 | 21-607874 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10726 | 21-607875 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10727 | 21-607876 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10730 | 21-607879 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10737 | 21-607886 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10738 | 21-607887 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13217 | 21-607888 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10740 | 21-607889 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10741 | 21-607890 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10742 | 21-607891 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10744 | 21-607893 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10745 | 21-607894 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10746 | 21-607895 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10748 | 21-607897 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10749 | 21-607898 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10752 | 21-607901 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzyl Alcohol | Bis(2-ethylhexyl)phthalate | Butylbenzene[sec-] | Chlorobenzene | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dichloroethene[1,1-] | Ethylbenzene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6100**[a] | **347** | **110**[e] | **508** | **621** | **6110** | **32.2** | **618** | **69.7** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **62000**[a] | **1370** | **2200**[e] | **2140** | **2340** | **68400** | **180** | **2220** | **385** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **31000**[b] | **4760** | **18000**[g] | **1580** | **20600** | **23800** | **3780** | **1830** | **6630** | **8910** | **na** | **na** | **na** | **na** |
| MD21-09-10753 | 21-607902 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10755 | 21-607904 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10756 | 21-607905 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10757 | 21-607906 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10758 | 21-607907 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10759 | 21-607908 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10760 | 21-607909 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10761 | 21-607910 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10762 | 21-607911 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10765 | 21-607912 | 4.0000–4.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10769 | 21-607918 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10771 | 21-607920 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10772 | 21-607921 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10774 | 21-607923 | 1.0000–1.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13197 | 21-608084 | 5.1600–5.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13219 | 21-608087 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13201 | 21-608088 | 2.1600–2.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13205 | 21-608092 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13208 | 21-608095 | 1.1600–1.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13209 | 21-608096 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13216 | 21-608103 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13218 | 21-608105 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1941 | 21-608835 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1942 | 21-608836 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1943 | 21-608837 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1945 | 21-608839 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1949 | 21-608843 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1951 | 21-608845 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1953 | 21-608847 | 3.1600–3.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.00654 | — | 0.000935 (J) | 0.00253 |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.0038 | — | 0.000512 (J) | 0.00135 (J) |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.00329 | — | 0.000462 (J) | 0.00114 (J) |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | NA | 0.0219 | — | NA | NA | NA | — | 0.013 (J) | — | — | 0.00194 | — | — | 0.000961 (J) |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.00366 | — | — | 0.00104 (J) |
| RE21-06-68449 | 21-25709 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | 0.00178 | — | — | — | 0.000405 (J) |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68453 | 21-25710 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.000469 (J) | — | — | — |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.000595 (J) | — | — | 0.000454 (J) |
| RE21-06-68458 | 21-25712 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68460 | 21-25712 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.113 (J+) | NA | NA | NA | NA | NA | NA |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0452 | 0.0941 | NA | NA | NA | NA | NA | NA |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | 0.000489 (J) | — | — |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0251 (J) | 0.087 | NA | NA | NA | NA | NA | NA |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.019 (J) | 0.0365 | NA | NA | NA | NA | NA | NA |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | 0.0399 | 0.0561 | — | — | — | — | — | — |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | NA | — | 0.00296 (J) | NA | NA | NA | — | — | 0.000538 (J) | — | — | — | — | — |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | NA | — | 0.00301 (J) | NA | NA | NA | — | 0.0191 (J) | 0.000631 (J) | — | — | — | — | — |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | 0.045 | — | — | — | 0.000842 (J) | — | — |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | 0.0413 | 0.000373 (J) | — | — | — | — | — |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | 0.000404 (J) | — | — | — | — | — |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | 0.0758 | — | — | — | — | — | — |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0438 (J) | 0.119 | NA | NA | NA | NA | NA | NA |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | 0.000326 (J) | — | — | — | — | — |
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | 4.38E-07 | 0.0217 | — | 1.97E-05 | 0.00000331 (J) | 2.71E-07 | — | — | — | — | — | — | — | — |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0146 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0163 (J) | 0.0284 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | 0.000598 (J) | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0433 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | 0.0013 (J) | — | — |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | 0.000494 (J) | — | — |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0173 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | 0.000345 (J) | — | — |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0216 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0111 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | 0.0331 (J) | 0.0247 (J) | — | — | — | — | — | — |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0115 (J) | 0.0229 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.132 (J) | 0.753 | NA | NA | NA | NA | NA | NA |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0266 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | NA | — | 0.0132 | NA | NA | NA | — | — | — | — | — | 0.00381 | 0.00199 | 0.00682 |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | NA | — | 0.0106 | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0122 (J) | 0.0244 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | 0.0123 (J) | — | — | — | — | — | — |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | 0.14 (J) | — | — | — | — | — | — |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0126 (J) | 0.0331 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | NA | — | — | NA | NA | NA | — | 0.0204 (J) | — | — | — | — | — | — |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | 0.0144 (J) | — | — | — | — | — | — |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | NA | — | 0.00735 | NA | NA | NA | — | — | — | — | 0.000321 (J) | 0.00323 | — | — |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | NA | — | — | NA | NA | NA | 0.102 | 0.0888 | — | — | 0.00587 | 0.0383 | — | — |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | NA | 0.00085 (J) | — | NA | NA | NA | — | — | — | — | 0.0159 | 0.0496 | — | — |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | NA | 0.00047 (J) | — | NA | NA | NA | — | 0.0318 (J) | — | — | 0.00467 | 0.012 | — | — |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | NA | 0.000524 (J) | — | NA | NA | NA | — | 0.0194 (J) | — | — | 0.00396 | 0.0106 | — | — |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | NA | NA | NA | NA | NA | NA | — | 0.0198 (J) | NA | NA | NA | NA | NA | NA |
| MD21-09-9860 | 21-25752 | 3.8000–4.8000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.000673 (J) | — | — | — |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | NA | — | — | NA | NA | NA | — | — | — | — | 0.000679 (J) | — | — | — |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0125 (J) | 0.0201 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0131 (J) | — | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0105 (J) | 0.027 (J) | NA | NA | NA | NA | NA | NA |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | 0.000344 (J) | — | — | — |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | NA | — | — | NA | NA | NA | — | — | — | — | — | — | — | — |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0118 (J) | 0.0318 (J) | NA | NA | NA | NA | NA | NA |
| RE21-09-2642 | 21-604461 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2643 | 21-604461 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2644 | 21-604461 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2645 | 21-604462 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2646 | 21-604462 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2648 | 21-604463 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2649 | 21-604463 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2650 | 21-604463 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2651 | 21-604464 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2652 | 21-604464 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2655 | 21-604465 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2656 | 21-604465 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2662 | 21-604467 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2665 | 21-604468 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2669 | 21-604470 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2672 | 21-604471 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2673 | 21-604471 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2674 | 21-604471 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2675 | 21-604472 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2676 | 21-604472 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2677 | 21-604472 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| RE21-09-2680 | 21-604473 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2681 | 21-604474 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2682 | 21-604474 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2683 | 21-604474 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2685 | 21-604475 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2686 | 21-604475 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2687 | 21-604476 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2699 | 21-604480 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2700 | 21-604480 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2701 | 21-604480 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2702 | 21-604481 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2703 | 21-604481 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2704 | 21-604481 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2705 | 21-604482 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2706 | 21-604482 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2708 | 21-604483 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2709 | 21-604483 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2710 | 21-604483 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2711 | 21-604484 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2712 | 21-604484 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2713 | 21-604485 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2714 | 21-604485 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-2721 | 21-604489 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9864 | 21-605366 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9865 | 21-605366 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9867 | 21-605367 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9868 | 21-605367 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9869 | 21-605368 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-9870 | 21-605368 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10518 | 21-605368 | 3.0000–3.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9872 | 21-605369 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9873 | 21-605369 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9876 | 21-605370 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9877 | 21-605370 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9879 | 21-605371 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9884 | 21-605372 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9885 | 21-605373 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9886 | 21-605373 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9888 | 21-605374 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9891 | 21-605375 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9892 | 21-605375 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9893 | 21-605375 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9895 | 21-605376 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9896 | 21-605376 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9897 | 21-605377 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9900 | 21-605378 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9901 | 21-605378 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9902 | 21-605378 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9903 | 21-605378 | 3.0000–3.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9904 | 21-605379 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9905 | 21-605379 | 0.5000–1.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9906 | 21-605379 | 1.5000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9907 | 21-605380 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9909 | 21-605380 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10519 | 21-605532 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10521 | 21-605533 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9415 | 21-605617 | 10.0000–10.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9416 | 21-605618 | 10.0000–10.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9417 | 21-605619 | 10.0000–10.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9418 | 21-605620 | 4.7500–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10409 | 21-605698 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10410 | 21-605699 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10411 | 21-605700 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10412 | 21-605701 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10413 | 21-605702 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10414 | 21-605703 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10415 | 21-605704 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10418 | 21-605707 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10419 | 21-605708 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10420 | 21-605709 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10421 | 21-605710 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10422 | 21-605711 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10423 | 21-605712 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10424 | 21-605713 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10425 | 21-605714 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10426 | 21-605715 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10427 | 21-605716 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10428 | 21-605717 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10429 | 21-605718 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10430 | 21-605719 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10431 | 21-605720 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10432 | 21-605721 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10433 | 21-605722 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10434 | 21-605723 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10435 | 21-605724 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10438 | 21-605727 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10439 | 21-605728 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10440 | 21-605729 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10443 | 21-605732 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10445 | 21-605734 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10446 | 21-605735 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10448 | 21-605737 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10449 | 21-605738 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10450 | 21-605739 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10451 | 21-605740 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10452 | 21-605741 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10453 | 21-605742 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10454 | 21-605743 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10455 | 21-605744 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10456 | 21-605745 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10457 | 21-605746 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10458 | 21-605747 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10459 | 21-605748 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10460 | 21-605749 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10462 | 21-605751 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10463 | 21-605752 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10464 | 21-605753 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10465 | 21-605754 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10466 | 21-605755 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10467 | 21-605756 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1940 | 21-605759 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10475 | 21-605764 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10476 | 21-605765 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10768 | 21-605766 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10479 | 21-605768 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10480 | 21-605769 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10481 | 21-605770 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10482 | 21-605771 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13221 | 21-605772 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10487 | 21-605776 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10488 | 21-605777 | 2.1600–2.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13202 | 21-605777 | 2.1600–2.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10510 | 21-607149 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10511 | 21-607150 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10512 | 21-607151 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10514 | 21-607153 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10528 | 21-607687 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10529 | 21-607688 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10530 | 21-607689 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10531 | 21-607690 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10532 | 21-607691 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10533 | 21-607692 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10534 | 21-607693 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10535 | 21-607694 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10536 | 21-607695 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10540 | 21-607699 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10541 | 21-607700 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10546 | 21-607705 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10547 | 21-607706 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10548 | 21-607707 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10550 | 21-607709 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13220 | 21-607710 | 3.1600–3.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10552 | 21-607711 | 1.6600–1.7600 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10553 | 21-607712 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10554 | 21-607713 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10555 | 21-607714 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10556 | 21-607715 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10559 | 21-607718 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10560 | 21-607719 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10563 | 21-607722 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10564 | 21-607723 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10565 | 21-607724 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10566 | 21-607725 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10567 | 21-607726 | 4.1600–4.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10568 | 21-607727 | 10.1600–10.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10569 | 21-607728 | 4.1600–4.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10570 | 21-607729 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10571 | 21-607730 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10572 | 21-607731 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10574 | 21-607733 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13199 | 21-607738 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10582 | 21-607741 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10583 | 21-607742 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1948 | 21-607744 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10586 | 21-607745 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10587 | 21-607746 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10588 | 21-607747 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10589 | 21-607748 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10590 | 21-607749 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10591 | 21-607750 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10592 | 21-607751 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10594 | 21-607753 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13210 | 21-607754 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13211 | 21-607756 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1947 | 21-607763 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10605 | 21-607764 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10606 | 21-607765 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10607 | 21-607766 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10608 | 21-607767 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10609 | 21-607768 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10610 | 21-607769 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10611 | 21-607770 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10612 | 21-607771 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10613 | 21-607772 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10614 | 21-607773 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10615 | 21-607774 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10616 | 21-607775 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10617 | 21-607776 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10618 | 21-607777 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10620 | 21-607779 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10621 | 21-607780 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10622 | 21-607781 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1946 | 21-607782 | 2.6600–2.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10625 | 21-607784 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10628 | 21-607787 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10629 | 21-607788 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13204 | 21-607790 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10633 | 21-607792 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10636 | 21-607795 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10637 | 21-607796 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10638 | 21-607797 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10639 | 21-607798 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10640 | 21-607799 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10641 | 21-607800 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10642 | 21-607801 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10643 | 21-607802 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10644 | 21-607803 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10645 | 21-607804 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13215 | 21-607812 | 5.6600–5.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10654 | 21-607813 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10655 | 21-607814 | 4.6600–4.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10656 | 21-607815 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10657 | 21-607816 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10658 | 21-607817 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10659 | 21-607818 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10660 | 21-607819 | 4.6600–4.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10661 | 21-607820 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10663 | 21-607822 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13214 | 21-607824 | 5.6600–5.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10666 | 21-607825 | 4.6600–4.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10667 | 21-607826 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10668 | 21-607827 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10669 | 21-607828 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10670 | 21-607829 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10671 | 21-607830 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10672 | 21-607831 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10673 | 21-607832 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10674 | 21-607833 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10675 | 21-607834 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10676 | 21-607835 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10677 | 21-607836 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10678 | 21-607837 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10679 | 21-607838 | 1.6600–1.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10680 | 21-607839 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10681 | 21-607840 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10682 | 21-607841 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10683 | 21-607842 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10684 | 21-607843 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10695 | 21-607844 | 0.6600–75.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10696 | 21-607845 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10697 | 21-607846 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10698 | 21-607847 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10699 | 21-607848 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10700 | 21-607849 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10701 | 21-607850 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10702 | 21-607851 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10703 | 21-607852 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10704 | 21-607853 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13207 | 21-607855 | 1.1600–1.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10707 | 21-607856 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10708 | 21-607857 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10709 | 21-607858 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10710 | 21-607859 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10711 | 21-607860 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10712 | 21-607861 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10713 | 21-607862 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10714 | 21-607863 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10715 | 21-607864 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10716 | 21-607865 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10717 | 21-607866 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10718 | 21-607867 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10719 | 21-607868 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10721 | 21-607870 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10722 | 21-607871 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10723 | 21-607872 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10724 | 21-607873 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10725 | 21-607874 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10726 | 21-607875 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10727 | 21-607876 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10730 | 21-607879 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10737 | 21-607886 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10738 | 21-607887 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13217 | 21-607888 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10740 | 21-607889 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10741 | 21-607890 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10742 | 21-607891 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-09-10744 | 21-607893 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10745 | 21-607894 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10746 | 21-607895 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10748 | 21-607897 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10749 | 21-607898 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10752 | 21-607901 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10753 | 21-607902 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10755 | 21-607904 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10756 | 21-607905 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10757 | 21-607906 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10758 | 21-607907 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10759 | 21-607908 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10760 | 21-607909 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10761 | 21-607910 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10762 | 21-607911 | 0.6600–0.7500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10765 | 21-607912 | 4.0000–4.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10769 | 21-607918 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10771 | 21-607920 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10772 | 21-607921 | 1.5000–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-10774 | 21-607923 | 1.0000–1.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13197 | 21-608084 | 5.1600–5.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13219 | 21-608087 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13201 | 21-608088 | 2.1600–2.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13205 | 21-608092 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13208 | 21-608095 | 1.1600–1.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13209 | 21-608096 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13216 | 21-608103 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-13218 | 21-608105 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1941 | 21-608835 | 0.6600–0.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.2-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachloroethene | Toluene | Trichloroethene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **3210**[h] | **199** | **na** | **na** | **na** | **1830** | **1720** | **8970** | **6.99** | **5570** | **45.7** | **9550** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **14900**[h] | **1090** | **na** | **na** | **na** | **20500** | **18300** | **51200** | **36.4** | **57900** | **253** | **31500** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **10300**[h] | **10600** | **na** | **na** | **na** | **7150** | **6680** | **30300** | **338** | **21100** | **4600** | **27500** | **3130**[i] |
| MD21-10-1942 | 21-608836 | 2.6600–2.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1943 | 21-608837 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1945 | 21-608839 | 1.6600–1.7500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1949 | 21-608843 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1951 | 21-608845 | 5.1600–5.2500 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-1953 | 21-608847 | 3.1600–3.2500 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] EPA Regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] — = Not detected.

[d] NA= Not analyzed.

[e] EPA Region 6 2007 SSL (EPA 2007, 099314).

[f] na = Not available.

[g] Construction worker SSL calculated using toxicity value for EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[h] Isopropylbenzene SSL used as surrogate based on structural similarity.

[I] Xylenes SSL used as surrogate based on structural similarity.

**Table 6.2-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-003-99 and SWMU 21-024(c)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68436 | 21-25704 | 1.5000–2.0000 | SOIL | —[c] | — | — | — | — | 0.079341 | — | — | — |
| RE21-06-68440 | 21-25706 | 0.0000–0.5000 | SOIL | — | — | — | 0.0758 | — | 0.321127 | — | — | — |
| RE21-06-68441 | 21-25706 | 0.5000–1.0000 | SOIL | — | — | — | 0.171 | — | 0.118589 | — | — | — |
| RE21-06-68442 | 21-25706 | 1.5000–2.0000 | SOIL | — | — | — | 0.426 | — | 0.2063 | — | — | — |
| RE21-06-68443 | 21-25707 | 0.0000–0.5000 | SOIL | — | — | — | 0.536 | — | 0.181239 | — | — | — |
| RE21-06-68444 | 21-25707 | 0.5000–1.0000 | SOIL | — | — | — | 0.0505 | — | 0.132321 | — | — | — |
| RE21-06-68445 | 21-25707 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 0.29705 | — | — | — |
| RE21-06-68446 | 21-25708 | 0.0000–0.5000 | SOIL | 0.0665 | — | — | 0.212 | — | 0.097382 | 26.6 | 2.29 | 14.4 |
| RE21-06-68447 | 21-25708 | 0.5000–1.0000 | SOIL | — | — | — | 0.201 | — | 0.082549 | 6.79 | 0.497 | 6.72 |
| RE21-06-68448 | 21-25708 | 1.5000–2.0000 | SOIL | — | — | — | 0.0364 | — | 0.080527 | 2.65 | 0.211 | 2.74 |
| RE21-06-68449 | 21-25709 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.053071 | — | — | — |
| RE21-06-68450 | 21-25709 | 0.5000–1.0000 | SOIL | — | — | — | — | — | 0.033175 | — | — | — |
| RE21-06-68451 | 21-25709 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 0.052043 | — | — | — |
| RE21-06-68452 | 21-25710 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.024624 | — | — | — |
| RE21-06-68454 | 21-25710 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 0.067234 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68458 | 21-25712 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.087209 | — | — | — |
| RE21-06-68459 | 21-25712 | 0.5000–1.0000 | SOIL | — | — | — | — | — | 0.101592 | — | — | — |
| RE21-06-68460 | 21-25712 | 1.5000–2.0000 | SOIL | — | — | — | 0.207 | — | 0.153756 | — | — | — |
| RE21-06-68461 | 21-25713 | 0.0000–0.5000 | SOIL | 0.0641 | — | — | 0.081 | — | 0.296557 | — | — | — |
| RE21-06-68462 | 21-25713 | 0.5000–1.0000 | QBT3 | 0.138 | — | — | — | — | 0.122101 | — | 0.103 | — |
| RE21-06-68463 | 21-25713 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.16576 | — | — | — |
| RE21-06-68464 | 21-25714 | 0.0000–0.5000 | SOIL | 0.113 | — | — | 0.266 | — | 0.220646 | — | — | — |
| RE21-06-68465 | 21-25714 | 0.5000–1.0000 | SOIL | — | — | — | 0.0402 | — | 0.120489 | — | — | — |
| RE21-06-68466 | 21-25714 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.036195 | — | — | — |
| RE21-06-68467 | 21-25715 | 0.0000–0.5000 | SOIL | 0.192 | — | — | 0.666 | — | 0.306107 | — | — | — |
| RE21-06-68468 | 21-25715 | 0.5000–1.0000 | SOIL | 0.0662 | — | — | 0.116 | — | 0.167294 | — | — | — |
| RE21-06-68469 | 21-25715 | 1.5000–2.0000 | QBT3 | 0.0461 | — | — | 0.0702 | — | 0.099649 | — | — | — |
| RE21-06-68470 | 21-25716 | 0.0000–0.5000 | SOIL | 0.232 | — | 0.0246 | 0.565 | — | 0.419949 | — | — | — |
| RE21-06-68471 | 21-25716 | 0.5000–1.0000 | QBT3 | 0.0955 | — | — | 0.019 | — | 0.111754 | — | — | — |
| RE21-06-68472 | 21-25716 | 1.5000–2.0000 | QBT3 | 0.0929 | — | — | — | — | 0.099399 | — | — | — |
| RE21-06-68474 | 21-25717 | 0.5000–1.0000 | QBT3 | 0.0666 | 0.166 | — | 0.105 | — | 0.101517 | — | — | — |
| RE21-06-68475 | 21-25717 | 1.5000–2.0000 | QBT3 | — | — | — | 0.0242 | — | 0.019349 | — | — | — |
| RE21-06-68476 | 21-25718 | 0.0000–0.5000 | SOIL | 0.0832 | — | — | 0.118 | — | 0.445733 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68477 | 21-25718 | 0.5000–1.0000 | QBT3 | — | — | — | 0.202 | 0.0896 (J-) | 0.450444 | — | — | — |
| RE21-06-68478 | 21-25718 | 1.5000–2.0000 | QBT3 | — | — | — | 0.321 | — | 1.69556 | — | 0.099 | — |
| RE21-06-68479 | 21-25719 | 0.0000–0.5000 | SOIL | 0.11 | — | — | 0.552 | — | 0.268696 | — | — | — |
| RE21-06-68480 | 21-25719 | 0.5000–1.0000 | QBT3 | — | NA[d] | — | — | — | 0.551549 | — | — | — |
| RE21-06-68481 | 21-25719 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 1.4738 | — | — | — |
| RE21-06-68482 | 21-25720 | 0.0000–0.5000 | SOIL | 0.0704 | — | 0.038 | 0.291 | — | 0.669906 | — | — | — |
| RE21-06-68483 | 21-25720 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 0.406479 | — | — | — |
| RE21-06-68484 | 21-25720 | 1.5000–2.0000 | QBT3 | 0.104 | 0.426 | — | 0.32 | — | 0.746333 | 2.15 | 0.191 | 2.21 |
| RE21-06-68502 | 21-25722 | 0.0000–0.5000 | SOIL | 0.217 | — | — | 1.48 (J) | — | 1.58874 | — | — | — |
| RE21-06-68503 | 21-25722 | 0.5000–1.0000 | SOIL | — | — | — | 0.125 (J) | — | 0.238539 | — | — | — |
| RE21-06-68504 | 21-25722 | 1.5000–2.0000 | QBT3 | — | 0.087 | — | 0.105 (J) | — | 0.146198 | — | 0.096 | — |
| RE21-06-68507 | 21-25723 | 0.5000–1.0000 | QBT3 | 0.102 | 0.299 | — | 0.546 (J) | — | 0.073995 | — | — | — |
| RE21-06-68508 | 21-25723 | 1.5000–2.0000 | QBT3 | — | — | — | 0.0823 (J) | — | 0.06063 | — | — | — |
| RE21-06-68511 | 21-25724 | 0.5000–1.0000 | QBT3 | — | 0.0679 | — | 0.0762 (J) | — | 0.075513 | 6.79 | 0.393 | 6.78 |
| RE21-06-68512 | 21-25724 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.544607 | — | — | — |
| RE21-06-68514 | 21-25725 | 0.0000–0.5000 | SOIL | 0.321 | — | — | 1.57 (J) | — | 0.195438 | — | — | — |
| RE21-06-68515 | 21-25725 | 0.5000–1.0000 | SOIL | — | — | — | 0.0789 (J) | — | 0.64224 | — | — | — |
| RE21-06-72611 | 21-25725 | 3.0000–3.5000 | SOIL | — | — | 0.0219 | 0.0512 | — | 0.10475 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68518 | 21-25726 | 0.0000–0.5000 | SOIL | 0.0528 | — | — | 0.4 (J) | — | 0.167748 | — | — | — |
| RE21-06-68519 | 21-25726 | 0.5000–1.0000 | QBT3 | — | — | — | 0.0372 (J) | — | 0.278858 | — | — | — |
| RE21-06-68520 | 21-25726 | 1.5000–2.0000 | QBT3 | — | — | — | 0.0149 (J) | — | 0.046833 | — | — | — |
| RE21-06-68521 | 21-25727 | 0.0000–0.5000 | SOIL | 0.136 | — | — | 0.933 (J) | — | 0.535111 | — | — | — |
| RE21-06-68522 | 21-25727 | 0.5000–1.0000 | QBT3 | 0.0629 | 0.194 | — | 0.306 (J) | — | 0.147968 | — | — | — |
| RE21-06-68523 | 21-25727 | 1.5000–2.0000 | QBT3 | 0.0335 | — | — | 0.156 (J) | — | 0.167339 | — | — | — |
| RE21-06-68524 | 21-25728 | 0.0000–0.5000 | SOIL | 0.219 | — | — | 1.77 (J) | — | 1.25197 | — | — | — |
| RE21-06-68525 | 21-25728 | 0.5000–1.0000 | QBT3 | — | — | — | 0.209 (J) | — | 0.150471 | — | — | — |
| RE21-06-68526 | 21-25728 | 1.5000–2.0000 | QBT3 | 0.0501 | 0.259 | — | 0.457 (J) | — | 0.211308 | — | — | — |
| RE21-06-68527 | 21-25729 | 0.0000–0.5000 | SOIL | 0.121 | — | — | 0.606 (J) | — | 0.347256 | — | — | — |
| RE21-06-68528 | 21-25729 | 0.5000–1.0000 | QBT3 | — | — | — | 0.0322 (J) | — | 0.102864 | — | — | — |
| RE21-06-68529 | 21-25729 | 1.5000–2.0000 | QBT3 | — | — | — | 0.0295 (J) | — | 0.126349 | — | — | — |
| RE21-06-68530 | 21-25730 | 0.0000–0.5000 | SOIL | 0.167 | — | — | 0.55 (J) | — | 0.375458 | — | — | — |
| RE21-06-68532 | 21-25730 | 0.5000–1.0000 | QBT3 | — | 0.145 | — | 0.112 (J) | — | 0.054482 | — | — | — |
| RE21-06-68533 | 21-25730 | 1.5000–2.0000 | QBT3 | — | — | — | 0.036 (J) | — | 0.034718 | — | — | — |
| RE21-06-68534 | 21-25731 | 0.0000–0.5000 | SOIL | 0.097 | — | — | 0.211 (J) | — | 0.266003 | — | — | — |
| RE21-06-68536 | 21-25731 | 0.5000–1.0000 | QBT3 | — | 0.149 | — | 0.258 (J) | — | 0.076393 | — | — | — |
| RE21-06-68537 | 21-25731 | 1.5000–2.0000 | QBT3 | — | 0.235 | — | 0.249 (J) | — | 0.036648 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68548 | 21-25732 | 0.0000–0.5000 | SOIL | 0.121 | — | — | 0.395 | — | 0.102658 | — | — | — |
| RE21-06-68549 | 21-25732 | 0.5000–1.0000 | QBT3 | — | 0.168 | 0.0327 | 0.323 | — | 0.064544 | — | — | — |
| RE21-06-68550 | 21-25732 | 1.5000–2.0000 | QBT3 | — | 0.342 | — | 0.282 | — | 0.037324 | — | — | — |
| RE21-06-68551 | 21-25733 | 0.0000–0.5000 | SOIL | 0.386 | — | 0.0569 | 1.96 | — | 0.172059 | 14.2 | 0.717 | 10.5 |
| RE21-06-68552 | 21-25733 | 0.5000–1.0000 | QBT3 | — | 0.0767 | — | 0.208 | — | 0.217917 | 2.93 | 0.161 | 2.23 |
| RE21-06-68553 | 21-25733 | 1.5000–2.0000 | QBT3 | — | — | — | 0.211 | — | 0.209949 | 1.99 | 0.121 | — |
| RE21-06-68554 | 21-25734 | 0.0000–0.5000 | SOIL | 0.115 | — | — | 0.32 | — | 0.170743 | — | — | — |
| RE21-06-68555 | 21-25734 | 0.5000–1.0000 | SOIL | 0.0505 | 0.216 | — | 0.24 | — | 0.094201 | — | — | — |
| RE21-06-68556 | 21-25734 | 1.5000–2.0000 | QBT3 | — | 0.224 | — | 0.325 | — | 0.061455 | — | — | — |
| RE21-06-68557 | 21-25735 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.195118 | — | — | — |
| RE21-06-68558 | 21-25735 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 0.107043 | — | — | — |
| RE21-06-68559 | 21-25735 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.056197 | — | — | — |
| RE21-06-68560 | 21-25736 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.05604 | — | — | — |
| RE21-06-68561 | 21-25736 | 0.5000–1.0000 | QBT3 | — | — | — | 0.575 | — | 0.218188 | — | — | — |
| RE21-06-68562 | 21-25736 | 1.5000–2.0000 | QBT3 | — | — | — | 0.2 | — | 0.171219 | — | — | — |
| RE21-06-68563 | 21-25737 | 0.0000–0.5000 | SOIL | 0.121 | — | — | 0.263 | — | 0.408909 | — | — | — |
| RE21-06-68564 | 21-25737 | 0.5000–1.0000 | QBT3 | — | 0.0781 | — | 0.0557 | — | 0.167674 | — | — | — |
| RE21-06-68565 | 21-25737 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.070106 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68567 | 21-25738 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 0.050122 | — | — | — |
| RE21-06-68568 | 21-25738 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.096696 | — | — | — |
| RE21-06-68569 | 21-25739 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | 0.034922 | — | — | — |
| RE21-06-68570 | 21-25739 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 0.041487 | — | — | — |
| RE21-06-68571 | 21-25739 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.053891 | — | — | — |
| RE21-06-68572 | 21-25740 | 0.0000–0.5000 | SOIL | 0.0253 | — | — | — | — | 0.016861 | — | — | — |
| RE21-06-68573 | 21-25740 | 0.5000–1.0000 | SOIL | — | 0.246 | — | 0.171 | — | 0.039743 | — | — | — |
| RE21-06-68574 | 21-25740 | 1.5000–2.0000 | SOIL | — | — | — | 0.0272 | — | 0.075729 | — | — | — |
| RE21-06-68575 | 21-25741 | 0.0000–0.5000 | SOIL | 0.0753 | — | — | 0.0924 | — | 0.030898 | — | — | — |
| RE21-06-68576 | 21-25741 | 0.5000–1.0000 | SOIL | 0.0479 | 0.297 | — | 0.192 | — | 0.039427 | — | — | — |
| RE21-06-68577 | 21-25741 | 1.5000–2.0000 | SOIL | — | 0.129 | — | 0.142 | — | 0.066183 | — | — | — |
| MD21-07-74338 | 21-25748 | 14.0000–15.0000 | QBT3 | 0.0832 | — | — | 0.445 | — | 0.388525 | 4.13 | 0.26 | 3.67 |
| MD21-07-74339 | 21-25750 | 2.5000–3.0000 | SOIL | — | — | — | 0.0818 | — | 0.07564 | — | — | — |
| MD21-07-74340 | 21-25750 | 4.0000–4.5000 | SOIL | — | — | — | 0.0902 | — | 0.04995 | — | — | — |
| MD21-07-74341 | 21-25751 | 4.0000–4.5000 | QBT3 | — | — | — | 0.221 | — | 0.066059 | 6.74 | 0.457 | 4.85 |
| MD21-07-74342 | 21-25751 | 6.0000–6.5000 | QBT3 | — | — | — | 0.15 | — | 0.062683 | 4.46 | 0.259 | 3.24 |
| MD21-07-74343 | 21-25752 | 2.3300–3.3300 | SOIL | — | — | — | 0.105 | — | 0.106594 | — | — | — |
| MD21-07-74344 | 21-25752 | 3.8300–4.8300 | QBT3 | — | — | — | — | — | 0.079217 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| MD21-07-74345 | 21-25753 | 2.3300–3.3300 | SOIL | — | — | — | 0.0606 | — | 0.064959 | — | — | — |
| MD21-07-74346 | 21-25753 | 3.8300–4.8300 | QBT3 | — | — | — | — | — | 0.105738 | — | — | — |
| RE21-06-68640 | 21-25758 | 1.5000–2.0000 | QBT3 | — | — | — | 0.0637 | — | 0.163596 | — | — | — |
| RE21-06-68646 | 21-25761 | 1.5000–2.0000 | QBT3 | — | 0.128 | — | 0.268 | — | 0.072077 | — | — | — |
| RE21-06-68648 | 21-25762 | 1.5000–2.0000 | SOIL | — | — | — | 0.0551 | — | 0.162277 | — | — | — |
| RE21-06-68652 | 21-25764 | 1.5000–2.0000 | SOIL | — | 0.145 | — | 0.101 | — | 0.350467 | — | — | — |
| RE21-06-68653 | 21-25765 | 0.0000–0.5000 | SOIL | 0.173 | — | 0.0424 | 3.53 | — | 0.033358 | — | — | — |
| RE21-06-68654 | 21-25765 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.108257 | — | — | — |
| RE21-06-68655 | 21-25766 | 0.0000–0.5000 | SOIL | 0.128 | — | — | 3.22 | — | 0.04765 | — | 0.213 | — |
| RE21-06-68656 | 21-25766 | 1.5000–2.0000 | QBT3 | — | — | — | 0.112 | — | 0.052326 | — | 0.108 | — |
| RE21-06-68657 | 21-25767 | 0.0000–0.5000 | SOIL | 0.0944 | 1.81 | 0.0294 | 0.754 | — | 0.13739 | — | — | — |
| RE21-06-68658 | 21-25767 | 1.5000–2.0000 | QBT3 | — | — | — | — | — | 0.033728 | — | — | — |
| RE21-06-68659 | 21-25768 | 0.0000–0.5000 | SOIL | 0.121 | — | — | 2.14 | — | 0.057139 | — | — | — |
| RE21-06-68660 | 21-25768 | 1.5000–2.0000 | QBT3 | — | 0.231 | — | 0.295 | — | 0.045381 | — | — | — |
| RE21-06-68661 | 21-25769 | 0.0000–0.5000 | SOIL | — | — | 0.035 | 0.332 | — | — | — | — | — |
| RE21-06-68662 | 21-25769 | 1.5000–2.0000 | QBT3 | — | — | — | 0.0457 | — | 0.019989 | — | — | — |
| RE21-06-68663 | 21-25770 | 0.0000–0.5000 | SOIL | — | — | — | 0.194 | — | 0.040005 | — | — | — |
| RE21-06-68665 | 21-25771 | 0.0000–0.5000 | SOIL | — | 1.84 | — | 1 | — | 0.024764 | — | — | — |

**Table 6.2-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-06-68666 | 21-25771 | 1.5000–2.0000 | QBT3 | — | 0.12 | — | 0.0852 | — | 0.015057 | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.3-1**
**Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-006(c)-99**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **6.58** | **na**[a] | **na** | **0.3** | **63.5** |
| **SOIL Background Value** | | | | **0.83** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **48.8** |
| **Residential SSL** | | | | **31.3** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **23500** |
| **Industrial SSL** | | | | **454** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **124** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **92900** |
| RE21-07-1584 | 21-600388 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | — | 5.21 (U) | 33.3 | — | — | — | 57.9 | — | 1.53 (U) | 53.1 |
| RE21-07-1585 | 21-600388 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 3.93 (U) | — | — | — | — | — | — | 1.5 (U) | — |
| RE21-07-1586 | 21-600389 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 4.59 (U) | — | — | — | — | 25 | — | — | — |
| RE21-07-1587 | 21-600389 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 4.16 (U) | — | — | — | — | — | — | 1.51 (U) | — |
| RE21-07-1588 | 21-600390 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 4.82 (U) | — | — | — | — | 66.1 | — | 1.54 (U) | — |
| RE21-07-1589 | 21-600390 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 5.14 (U) | 12.7 | — | — | — | — | — | 1.62 (U) | — |
| RE21-07-1590 | 21-600391 | 0.0000–0.5000 | SOIL | — | — | 0.498 (U) | — | — | — | 4.07 (U) | — | — | — | — | 27.1 | 0.0345 | — | — |
| RE21-07-1591 | 21-600391 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 3.31 (U) | — | — | — | — | 15.4 | — | 1.54 (U) | — |
| RE21-07-1592 | 21-600392 | 0.0000–0.5000 | SOIL | — | — | 0.507 (U) | — | — | — | 8.42 (U) | — | — | — | — | 41.2 | — | — | — |
| RE21-07-1593 | 21-600392 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.48 (U) | — |
| RE21-07-1614 | 21-600403 | 0.0000–0.5000 | SOIL | — | — | 0.489 (U) | — | — | — | — | 34.4 | — | — | — | 1.7 | — | — | — |
| RE21-07-1615 | 21-600403 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.00131 (J) | 1.18 (J) | — |
| RE21-07-1616 | 21-600403 | 5.0000–6.0000 | QBT3 | — | — | — | — | 11.1 | — | — | — | — | — | — | — | 0.00308 | 1.48 (U) | — |
| RE21-07-5758 | 21-601199 | 3.0000–4.0000 | SOIL | 1.33 | — | — | 11900 (J-) | — | 19.2 (J) | — | — | — | 0.2 | — | 0.844 (J) | — | — | 56.3 |
| RE21-07-5759 | 21-601199 | 8.0000–9.0000 | QBT3 | 1.7 | — | — | 13700 (J-) | — | — | — | — | — | — | — | 1.42 | — | 1.65 (U) | — |
| RE21-07-5760 | 21-601199 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 1.48 | — | 0.621 (J) | — |
| RE21-07-5761 | 21-601199 | 18.0000–19.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.6 (U) | — |
| RE21-07-5762 | 21-601199 | 23.0000–24.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.62 (U) | — |
| RE21-07-5763 | 21-601200 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | 16.2 (J) | — | 16.4 | — | — | — | — | — | 1.71 (U) | — |
| RE21-07-5764 | 21-601200 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | 163 (J) | — | 15.9 | — | — | — | — | — | 1.71 (U) | — |
| RE21-07-5765 | 21-601200 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.64 (U) | — |
| RE21-07-5766 | 21-601200 | 18.0000–19.0000 | QBT3 | — | — | — | — | — | 5.69 (J) | — | — | — | — | — | — | — | 1.63 (U) | — |
| RE21-07-5767 | 21-601200 | 23.0000–24.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.62 (U) | — |
| RE21-07-5768 | 21-601201 | 3.0000–4.0000 | QBT3 | — | 66.6 | — | — | — | — | — | — | — | — | — | — | — | 1.13 (J) | — |

**Table 6.3-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **6.58** | **na**[a] | **na** | **0.3** | **63.5** |
| **SOIL Background Value** | | | | **0.83** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **48.8** |
| **Residential SSL** | | | | **31.3** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **23500** |
| **Industrial SSL** | | | | **454** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **124** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **92900** |
| RE21-07-5769 | 21-601201 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.4 (J) | — |
| RE21-07-5770 | 21-601201 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.812 (J) | — |
| RE21-07-5771 | 21-601201 | 18.0000–19.0000 | QBT3 | — | 58 | — | 2920 (J+) | — | — | 1.65 | 20.2 | 637 (J+) | — | — | — | — | 1.15 (J) | 96.5 |
| RE21-07-5772 | 21-601201 | 23.0000–24.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.11 (J) | — |
| RE21-07-5773 | 21-601202 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.967 (J) | — |
| RE21-07-5774 | 21-601202 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.832 (J) | — |
| RE21-07-5775 | 21-601202 | 22.0000–23.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 0.651 (J-) | — | 0.835 (J) | — |
| RE21-07-5776 | 21-601202 | 27.0000–28.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 0.7 (J-) | — | 0.959 (J) | — |
| RE21-07-5777 | 21-601202 | 32.0000–33.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 0.692 (J-) | — | 1.29 (J) | — |
| RE21-07-5778 | 21-601203 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.09 (J) | 78.7 |
| RE21-07-5779 | 21-601203 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.978 (J) | — |
| RE21-07-5780 | 21-601203 | 22.0000–23.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.949 (J) | — |
| RE21-07-5781 | 21-601203 | 27.0000–28.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.943 (J) | — |
| RE21-07-5782 | 21-601203 | 32.0000–33.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.775 (J) | — |
| RE21-07-5783 | 21-601204 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.1 (J) | — |
| RE21-07-5784 | 21-601204 | 17.0000–18.0000 | QBT3 | — | — | — | 2550 | — | — | — | — | — | — | — | — | — | 1.5 (U) | — |
| RE21-07-5785 | 21-601204 | 22.0000–23.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.27 (J) | — |
| RE21-07-5786 | 21-601204 | 27.0000–28.0000 | QBT3 | — | — | — | — | — | — | — | 18.5 | — | — | — | — | — | 1.31 (J) | — |
| RE21-07-5787 | 21-601204 | 32.0000–33.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.925 (J) | — |
| RE21-07-5805 | 21-601209 | 3.0000–4.0000 | SOIL | — | — | 1.39 | — | — | — | — | — | — | — | — | 1.27 (J-) | — | 3.55 | 1390 |
| RE21-07-5806 | 21-601209 | 4.0000–5.0000 | QBT3 | — | — | — | — | 7.78 | — | — | — | — | — | — | 0.766 (J-) | — | 2.61 | 69 |
| RE21-07-5807 | 21-601210 | 3.0000–4.0000 | SOIL | — | — | 0.57 (U) | — | — | — | — | — | — | — | — | 0.679 (J-) | — | 2.79 | — |
| RE21-07-5808 | 21-601210 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 0.89 (J-) | — | 3.1 | — |
| RE21-07-5809 | 21-601211 | 2.0000–3.0000 | SOIL | NA[f] | — | 0.561 (U) | — | — | — | — | — | — | — | — | — | — | 1.71 | — |
| RE21-07-5810 | 21-601211 | 3.0000–4.0000 | QBT3 | NA | — | — | — | 9.67 | — | — | — | — | — | — | — | — | 0.815 (J) | 69.4 |
| RE21-07-5811 | 21-601212 | 7.0000–8.0000 | QBT3 | NA | 46.1 | — | — | 11.5 | — | — | — | — | — | 7.83 | 2.06 | — | 1.76 (J) | — |
| RE21-07-5812 | 21-601212 | 8.0000–9.0000 | QBT3 | NA | — | — | 2880 | 13.6 | — | — | — | — | — | — | 1.57 | — | 1.56 (J) | — |
| RE21-07-5813 | 21-601213 | 12.0000–13.0000 | QBT3 | NA | — | — | — | 13.1 | — | — | — | — | — | — | — | — | 1.15 (J) | — |
| RE21-07-5814 | 21-601213 | 13.0000–14.0000 | QBT3 | NA | — | — | — | 14.9 | — | — | — | — | — | — | — | — | 1.06 (J) | — |
| RE21-07-5817 | 21-601215 | 6.0000–7.0000 | QBT3 | NA | — | — | — | 16.5 | — | — | — | — | — | — | — | — | 1.21 (J) | — |

**Table 6.3-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **6.58** | **na**[a] | **na** | **0.3** | **63.5** |
| **SOIL Background Value** | | | | **0.83** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **48.8** |
| **Residential SSL** | | | | **31.3** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **23500** |
| **Industrial SSL** | | | | **454** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **124** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **92900** |
| RE21-07-5818 | 21-601215 | 8.0000–9.0000 | QBT3 | NA | — | — | — | 17 | — | — | — | — | — | — | — | — | 1.26 (J) | — |
| MD21-09-8774 | 21-605256 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 17 | NA | NA | NA |
| MD21-09-8779 | 21-605260 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | NA | 6.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

**Table 6.3-2**
**Summary of Organic Chemicals Detected at Consolidated Unit 21-006(c)-99**

| Sample ID | Location ID | Depth (ft) | Media | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Chrysene | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **621** | **2290** | **na**[b] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **2340** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **20600** | **8910** | **na** | **na** | **na** | **na** |
| RE21-07-1584 | 21-600388 | 0.0000–0.5000 | SOIL | —[c] | 0.98 | 0.948 | 1.81 | 2.81 (J) | 0.635 (J) | 8.73 | 1.5 | 2.92 | NA[d] | NA | NA | NA |
| RE21-07-1586 | 21-600389 | 0.0000–0.5000 | SOIL | — | — | — | 0.333 (J) | — | — | — | — | 0.532 (J) | NA | NA | NA | NA |
| RE21-07-1588 | 21-600390 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 0.421 (J) | NA | NA | NA | NA |
| RE21-07-1646 | 21-600392 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.19E-05 | 5.52E-05 | 5.17E-06 | 0.000000289 (J) |
| RE21-07-1614 | 21-600403 | 0.0000–0.5000 | SOIL | — | — | — | 0.0249 (J) | — | — | 0.079 (J) | — | 0.0364 | NA | NA | NA | NA |
| RE21-07-1615 | 21-600403 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5758 | 21-601199 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | — | — | 0.0244 (J) | NA | NA | NA | NA |
| RE21-07-5759 | 21-601199 | 8.0000–9.0000 | QBT3 | 0.00966 (J) | — | — | — | — | — | — | 0.0371 (J) | 0.0955 | NA | NA | NA | NA |
| RE21-07-5807 | 21-601210 | 3.0000–4.0000 | SOIL | — | — | 0.0116 (J) | 0.0156 (J) | — | 0.0114 (J) | — | 0.0184 (J) | 0.0192 (J) | NA | NA | NA | NA |
| RE21-07-5812 | 21-601212 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | 0.0176 (J) | NA | NA | NA | NA |

**Table 6.3-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** | **199** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** | **1090** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **213** | **10600** | **na** | **na** |
| RE21-07-1584 | 21-600388 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.25 (J) | NA | NA | NA |
| RE21-07-1586 | 21-600389 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-1588 | 21-600390 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-1646 | 21-600392 | 0.0000–0.5000 | SOIL | 1.51E-05 | 0.0000003 (J) | 0.000000857 (J) | 0.000000893 (J) | 7.81E-06 | 0.000000251 (J) | 0.000000246 (J) | 0.000000268 (J) | 4.11E-06 | NA | NA | 0.000241 | 1.59E-05 |
| RE21-07-1614 | 21-600403 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-1615 | 21-600403 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | 0.00223 (J) | NA | NA |
| RE21-07-5758 | 21-601199 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-5759 | 21-601199 | 8.0000–9.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-5807 | 21-601210 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-5812 | 21-601212 | 8.0000–9.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |

**Table 6.3-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Tetrachloroethene | Toluene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **6.99** | **5570** | **9550** | **1090**[e] |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **36.4** | **57900** | **31500** | **3610**[e] |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **338** | **21100** | **27500** | **3130**[e] |
| RE21-07-1584 | 21-600388 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 1.38 | 2.26 | NA | NA | NA | NA | NA | NA |
| RE21-07-1586 | 21-600389 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.201 (J) | 0.42 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-1588 | 21-600390 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | 0.359 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-1646 | 21-600392 | 0.0000–0.5000 | SOIL | 1.81E-07 | 0.0000000964 (J) | 0.00000019 (J) | 1.98E-06 | NA | NA | 0.000000212 (J) | 7.21E-07 | NA | NA | NA | NA |
| RE21-07-1614 | 21-600403 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0146 (J) | 0.0292 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-1615 | 21-600403 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | — | — | — | — |
| RE21-07-5758 | 21-601199 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | — | 0.0237 (J) | NA | NA | 0.00626 | 0.000533 (J) | 0.000481 (J) | 0.000566 (J) |
| RE21-07-5759 | 21-601199 | 8.0000–9.0000 | QBT3 | NA | NA | NA | NA | 0.0363 (J) | 0.0973 | NA | NA | — | — | — | — |
| RE21-07-5807 | 21-601210 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | — | 0.0171 (J) | NA | NA | — | — | — | — |
| RE21-07-5812 | 21-601212 | 8.0000–9.0000 | QBT3 | NA | NA | NA | NA | — | 0.0154 (J) | NA | NA | — | — | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as a surrogate based on structural similarity.

[b] na = Not available.

[c] — = Not detected.

[d] NA= Not analyzed.

[e] SSLs for xylenes used as a surrogate based on structural similarity.

**Table 6.3-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-006(c)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-1584 | 21-600388 | 0.0000–0.5000 | SOIL | 0.236 | 1.69 | 0.0423 (J) | 3.5 (J) | —[c] | — | 3.39 | 0.23 | 2.33 |
| RE21-07-1585 | 21-600388 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0486 (J) | — | 0.004289 | — | — | — |
| RE21-07-1586 | 21-600389 | 0.0000–0.5000 | SOIL | 0.483 | — | 0.0297 (J) | 1.39 (J) | — | — | — | — | — |
| RE21-07-1587 | 21-600389 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0271 (J) | — | — | — | — | — |
| RE21-07-1588 | 21-600390 | 0.0000–0.5000 | SOIL | 0.0684 | — | — | 0.451 (J) | — | — | — | — | — |
| RE21-07-1589 | 21-600390 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0286 (J) | — | — | — | — | — |
| RE21-07-1590 | 21-600391 | 0.0000–0.5000 | SOIL | — | — | — | 0.274 (J) | — | — | — | — | — |
| RE21-07-1592 | 21-600392 | 0.0000–0.5000 | SOIL | 0.0385 | — | 0.162 (J) | 15.8 (J) | — | — | — | — | — |
| RE21-07-1614 | 21-600403 | 0.0000–0.5000 | SOIL | 0.11 | — | 0.0762 | 9.45 | — | — | — | — | — |
| RE21-07-1615 | 21-600403 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0332 | — | 0.009239 | — | — | — |
| RE21-07-1616 | 21-600403 | 5.0000–6.0000 | QBT3 | — | — | 0.03 | 0.05 | — | 0.004844 | — | — | — |
| RE21-07-5758 | 21-601199 | 3.0000–4.0000 | SOIL | 5.17 | 1.98 | 0.586 | 69.3 | 0.39 | 0.144419 | 18.8 | 0.793 | — |
| RE21-07-5759 | 21-601199 | 8.0000–9.0000 | QBT3 | 1.25 | 0.476 | 0.116 | 13.5 | — | 0.626337 | 5.63 | 0.222 | — |
| RE21-07-5760 | 21-601199 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | 0.701043 | — | — | — |
| RE21-07-5761 | 21-601199 | 18.0000–19.0000 | QBT3 | — | — | — | 0.109 | — | 0.177852 | — | — | — |
| RE21-07-5762 | 21-601199 | 23.0000–24.0000 | QBT3 | — | — | — | — | — | 0.168947 | — | — | — |
| RE21-07-5763 | 21-601200 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | 0.468431 | — | — | — |
| RE21-07-5764 | 21-601200 | 8.0000–9.0000 | QBT3 | — | — | — | 0.0354 | — | 0.491187 | — | — | — |
| RE21-07-5765 | 21-601200 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | 0.16711 | — | — | — |
| RE21-07-5766 | 21-601200 | 18.0000–19.0000 | QBT3 | — | — | — | — | — | 0.181844 | — | — | — |
| RE21-07-5767 | 21-601200 | 23.0000–24.0000 | QBT3 | — | — | — | — | — | 0.144081 | — | — | — |
| RE21-07-5768 | 21-601201 | 3.0000–4.0000 | QBT3 | — | — | — | 0.0314 | — | 0.106306 | — | 0.0937 | — |
| RE21-07-5769 | 21-601201 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | 0.059803 | — | 0.112 | — |
| RE21-07-5770 | 21-601201 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | 0.073604 | — | — | — |
| RE21-07-5771 | 21-601201 | 18.0000–19.0000 | QBT3 | — | — | — | — | — | 0.153249 | — | — | — |
| RE21-07-5772 | 21-601201 | 23.0000–24.0000 | QBT3 | — | — | — | 0.0322 | — | 0.087152 | — | — | — |
| RE21-07-5773 | 21-601202 | 12.0000–13.0000 | QBT3 | — | — | — | 0.222 | — | 0.026502 | — | — | — |
| RE21-07-5774 | 21-601202 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | 0.105 | — |

**Table 6.3-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-5776 | 21-601202 | 27.0000–28.0000 | QBT3 | — | NA[d] | — | — | — | 0.012876 | — | — | — |
| RE21-07-5778 | 21-601203 | 12.0000–13.0000 | QBT3 | 6.42 | — | 0.655 | 212 | — | — | — | — | — |
| RE21-07-5779 | 21-601203 | 17.0000–18.0000 | QBT3 | 2.04 | — | 0.605 | 90.5 | — | — | — | — | — |
| RE21-07-5780 | 21-601203 | 22.0000–23.0000 | QBT3 | 0.0452 | — | — | 2.09 | — | — | — | — | — |
| RE21-07-5781 | 21-601203 | 27.0000–28.0000 | QBT3 | — | — | — | 0.794 | — | — | — | — | — |
| RE21-07-5782 | 21-601203 | 32.0000–33.0000 | QBT3 | — | — | — | 0.252 | — | — | — | — | — |
| RE21-07-5783 | 21-601204 | 12.0000–13.0000 | QBT3 | — | — | — | 0.0511 | — | 0.013152 | — | — | — |
| RE21-07-5786 | 21-601204 | 27.0000–28.0000 | QBT3 | — | — | — | 0.0765 | — | — | — | — | — |
| RE21-07-5805 | 21-601209 | 3.0000–4.0000 | SOIL | — | — | — | 0.138 | — | — | — | — | — |
| RE21-07-5807 | 21-601210 | 3.0000–4.0000 | SOIL | 0.485 | — | 0.0703 | 10.1 | — | — | — | — | — |
| RE21-07-5808 | 21-601210 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0282 | — | — | — | — | — |
| RE21-07-5809 | 21-601211 | 2.0000–3.0000 | SOIL | 0.0405 | — | — | 1.02 | — | — | — | — | — |
| RE21-07-5810 | 21-601211 | 3.0000–4.0000 | QBT3 | 0.0878 | — | — | 0.815 | — | — | — | — | — |
| MD21-09-8773 | 21-601211 | 8.0000–9.0000 | SOIL | 0.805 | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5811 | 21-601212 | 7.0000–8.0000 | QBT3 | — | — | — | 0.146 | — | — | — | 0.0917 | — |
| RE21-07-5812 | 21-601212 | 8.0000–9.0000 | QBT3 | — | — | — | 0.0484 | — | — | — | — | — |
| RE21-07-5813 | 21-601213 | 12.0000–13.0000 | QBT3 | 4.28 | — | 0.754 | 180 | — | — | — | — | — |
| RE21-07-5814 | 21-601213 | 13.0000–14.0000 | QBT3 | 5.95 | — | 0.901 | 231 | — | — | — | — | — |
| RE21-07-5817 | 21-601215 | 6.0000–7.0000 | QBT3 | 0.312 | — | 0.0567 | 17.3 | — | — | — | — | — |
| RE21-07-5818 | 21-601215 | 8.0000–9.0000 | QBT3 | 0.137 | — | 0.0343 | 7.79 | — | 0.019511 | — | — | — |
| MD21-09-8776 | 21-605258 | 0.0000–0.5000 | SOIL | NA | NA | 0.046 | 0.219 | NA | NA | — | — | — |
| MD21-09-8777 | 21-605259 | 3.0000–4.0000 | SOIL | 1.82 | 1.99 | 0.321 | 21.2 | 0.49 | 0.625411 (J) | 9.1 | 0.456 | — |
| MD21-09-8778 | 21-605259 | 8.0000–9.0000 | SOIL | 1.78 | 1.3 | 0.236 | 19.9 | 0.377 | 0.600217 (J) | 6.64 | 0.323 | — |

**Table 6.3-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| MD21-09-8779 | 21-605260 | 3.0000–4.0000 | QBT3 | NA | NA | 0.099 | 30.4 | NA | 1.49154 (J) | — | — | — |
| MD21-09-8780 | 21-605260 | 8.0000–9.0000 | QBT3 | NA | NA | — | 6.58 | NA | 0.999383 (J) | — | — | — |
| MD21-09-8781 | 21-605261 | 3.0000–4.0000 | SOIL | NA | NA | 0.256 | 9.46 | NA | NA | — | — | — |
| MD21-09-8782 | 21-605261 | 8.0000–9.0000 | QBT3 | NA | NA | 0.08 | 0.807 | NA | NA | — | 0.091 | — |
| MD21-09-12454 | 21-608018 | 3.0000–4.0000 | QBT3 | NA | NA | — | 0.927 | NA | NA | NA | NA | NA |
| MD21-10-4659 | 21-609835 | 3.0000–4.0000 | QBT3 | NA | NA | — | 0.098 | NA | NA | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.4-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-009**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cyanide (Total) | Lead | Nickel | Nitrate | Perchlorate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **0.5** | **11.2** | **6.58** | **na**[a] | **na** | **0.3** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **0.5** | **22.3** | **15.4** | **na** | **na** | **1.52** | **48.8** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **1560** | **400** | **1560** | **125000** | **54.8** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **22700** | **800** | **22700** | **1820000** | **795** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **6190** | **800** | **6190** | **496000** | **217** | **1550** | **92900** |
| RE21-06-68252 | 21-25636 | 0.0000–0.5000 | SOIL | —[c] | — | — | 0.536 (U) | — | — | — | — | — | 8.4 | — | 11.2 | 49.8 |
| RE21-06-68253 | 21-25636 | 1.5000–2.0000 | SOIL | — | — | — | 0.535 (U) | — | — | — | — | — | 8.56 | 0.000579 (J) | 9.69 | 59.8 |
| RE21-06-68254 | 21-25637 | 0.0000–0.5000 | SOIL | — | — | — | 0.542 (U) | — | — | — | — | — | 5.76 | — | 12.2 | — |
| RE21-06-68255 | 21-25637 | 1.5000–2.0000 | SOIL | — | — | — | 0.552 (U) | — | — | — | — | 17.1 | 1.52 | — | 10.7 | — |
| RE21-06-68256 | 21-25638 | 0.0000–0.5000 | SOIL | — | — | — | 0.535 (U) | — | — | — | — | — | 8.44 | — | 10.5 | — |
| RE21-06-68257 | 21-25638 | 1.5000–2.0000 | QBT3 | — | — | 75.3 (J+) | — | 2980 | 15.4 | — | — | — | 2.02 | — | 5.76 | — |
| RE21-06-68258 | 21-25639 | 0.0000–0.5000 | SOIL | — | — | — | 0.556 (U) | — | — | — | — | — | 4.07 | — | 11.9 | — |
| RE21-06-68259 | 21-25639 | 1.5000–2.0000 | SOIL | — | — | — | 0.562 (U) | — | — | — | — | — | 2.91 | — | 9.6 | — |
| RE21-06-68260 | 21-25640 | 0.0000–0.5000 | SOIL | — | — | — | 0.534 (U) | — | — | — | — | — | 7.99 | — | 7.96 | — |
| RE21-06-68261 | 21-25640 | 1.5000–2.0000 | SOIL | — | — | — | 0.531 (U) | — | 24.7 | — | — | — | 19.3 (J—) | — | 2.11 | — |
| RE21-06-68262 | 21-25641 | 0.0000–0.5000 | SOIL | — | — | — | 0.532 (U) | — | — | — | 38.7 | — | 4.51 | 0.000659 (J) | 11 | 113 |
| RE21-06-68263 | 21-25641 | 1.5000–2.0000 | SOIL | — | — | — | 0.523 (U) | — | — | — | — | — | 3.31 | — | 11.8 | — |
| RE21-06-68264 | 21-25642 | 0.0000–0.5000 | SOIL | — | — | — | 0.537 (U) | 9400 | — | — | — | — | 1.94 (J—) | — | 9.32 | — |
| RE21-06-68265 | 21-25642 | 1.5000–2.0000 | SOIL | — | — | — | 0.549 (U) | — | — | 0.542 (J-) | — | — | 1.4 (J-) | — | 10.9 | — |
| RE21-06-68266 | 21-25643 | 0.0000–0.5000 | SOIL | — | — | — | 0.521 (U) | — | — | 0.709 (J-) | — | — | 4.01 (J-) | — | 9.96 | — |
| RE21-06-68267 | 21-25643 | 1.5000–2.0000 | QBT3 | 8740 | 2.83 | 49.3 (J+) | — | — | 9.51 | — | — | — | 1.52 (J-) | — | 6.89 | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] Chromium VI SSL used.
[b] na = Not available.
[c] — = Not detected or not detected above BV.

**Table 6.4-2**
**Summary of Organic Chemicals Detected at SWMU 21-009**

| Sample ID | Location ID | Depth (ft) | Media | Anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Chloroform | Dichloroethene[1,1-] | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **17200** | **0.621** | **6.21** | **62.1** | **5.72** | **618** | **2290** | **na**[a] | **na** |
| **Industrial SSL** | | | | **183000** | **2.34** | **23.4** | **234** | **31.9** | **2220** | **24400** | **na** | **na** |
| **Construction Worker SSL** | | | | **66800** | **21.3** | **213** | **2060** | **671** | **1830** | **8910** | **na** | **na** |
| RE21-06-68252 | 21-25636 | 0.0000–0.5000 | SOIL | —[b] | — | — | — | NA[c] | NA | 0.0312 (J) | NA | NA |
| RE21-06-68253 | 21-25636 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 0.000891 (J) | — | NA | NA |
| RE21-06-68254 | 21-25637 | 0.0000–0.5000 | SOIL | — | — | — | — | NA | NA | — | NA | NA |
| RE21-06-68255 | 21-25637 | 1.5000–2.0000 | SOIL | — | — | — | — | — | 0.000614 (J) | — | NA | NA |
| RE21-06-68260 | 21-25640 | 0.0000–0.5000 | SOIL | — | 0.0686 (J) | 0.16 (J) | 0.0573 (J) | NA | NA | 0.103 | NA | NA |
| RE21-06-68261 | 21-25640 | 1.5000–2.0000 | SOIL | — | — | — | — | 0.00119 | — | — | 0.000011 | 2.29E-05 |
| RE21-06-68264 | 21-25642 | 0.0000–0.5000 | SOIL | — | — | — | — | NA | NA | 0.0353 (J) | NA | NA |
| RE21-06-68265 | 21-25642 | 1.5000–2.0000 | SOIL | 0.0149 (J) | — | — | — | — | — | — | NA | NA |

**Table 6.4-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin[ 1,2,3,4,7,8-] | Hexachlorodibenzodioxin[ 1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-06-68252 | 21-25636 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68253 | 21-25636 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68254 | 21-25637 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68255 | 21-25637 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68260 | 21-25640 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68261 | 21-25640 | 1.5000–2.0000 | SOIL | 0.00000155 (J) | 0.00000401 (J) | 0.000000347 (J) | 0.000000674 (J) | 0.000000552 (J) | 3.76E-06 | 0.000000107 (J) | 0.000000145 (J) | 1.82E-06 |
| RE21-06-68264 | 21-25642 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68265 | 21-25642 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.4-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofurans (Totals) | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Total) | Tetrachloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **1720** | **0.000374** | **na** | **6.99** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **18300** | **0.00147** | **na** | **36.4** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **6680** | **0.0127** | **na** | **338** |
| RE21-06-68252 | 21-25636 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0238 (J) | NA | NA | NA |
| RE21-06-68253 | 21-25636 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | — | NA | NA | 0.000683 (J) |
| RE21-06-68254 | 21-25637 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0149 (J) | NA | NA | NA |
| RE21-06-68255 | 21-25637 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-06-68260 | 21-25640 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.162 | NA | NA | NA |
| RE21-06-68261 | 21-25640 | 1.5000–2.0000 | SOIL | 0.000087 | 0.00000366 (J) | 0.000000177 (J) | 3.21E-07 | 7.68E-07 | 0.0145 (J) | 0.000000147 (J) | 3.14E-07 | — |
| RE21-06-68264 | 21-25642 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0305 (J) | NA | NA | NA |
| RE21-06-68265 | 21-25642 | 1.5000–2.0000 | SOIL | NA | NA | NA | NA | NA | — | NA | NA | — |

Source: SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] — = Not detected.
[c] NA = Not analyzed.

**Table 6.4-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-009**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Plutonium-239/240 | Tritium |
|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** |
| **SOIL Background Value** | | | | **0.013**[b] | **0.054**[b] | **na** |
| **Residential SAL** | | | | **30** | **33** | **750** |
| **Industrial SAL** | | | | **180** | **210** | **440000** |
| **Construction Worker SAL** | | | | **34** | **36** | **320000** |
| RE21-06-68252 | 21-25636 | 0.0000-0.5000 | SOIL | —[c] | 0.131 | 0.033634 |
| RE21-06-68253 | 21-25636 | 1.5000-2.0000 | SOIL | 0.0472 | 0.23 | 0.02847 |
| RE21-06-68254 | 21-25637 | 0.0000-0.5000 | SOIL | — | 0.131 | 0.033314 |
| RE21-06-68255 | 21-25637 | 1.5000-2.0000 | SOIL | — | — | 0.051328 |
| RE21-06-68256 | 21-25638 | 0.0000-0.5000 | SOIL | — | 0.166 | 0.036191 |
| RE21-06-68257 | 21-25638 | 1.5000-2.0000 | QBT3 | — | 0.0257 | 0.015175 |
| RE21-06-68258 | 21-25639 | 0.0000-0.5000 | SOIL | — | — | 0.049929 |
| RE21-06-68259 | 21-25639 | 1.5000-2.0000 | SOIL | — | — | 0.060663 |
| RE21-06-68260 | 21-25640 | 0.0000-0.5000 | SOIL | 0.0488 | 1.15 | 0.02914 |
| RE21-06-68261 | 21-25640 | 1.5000-2.0000 | SOIL | — | 0.423 | — |
| RE21-06-68262 | 21-25641 | 0.0000-0.5000 | SOIL | 0.108 | 0.304 | 0.024135 |
| RE21-06-68263 | 21-25641 | 1.5000-2.0000 | SOIL | — | 0.233 | 0.035239 |
| RE21-06-68264 | 21-25642 | 0.0000-0.5000 | SOIL | 0.0381 | 0.11 | 0.056946 |
| RE21-06-68265 | 21-25642 | 1.5000-2.0000 | SOIL | — | 0.0216 | 0.060562 |
| RE21-06-68266 | 21-25643 | 0.0000-0.5000 | SOIL | — | 0.211 | 0.034258 |
| RE21-06-68267 | 21-25643 | 1.5000-2.0000 | QBT3 | 0.31 | 0.0368 | 0.029296 |
| RE21-09-3535 | 21-604497 | 0.0000-0.5000 | SOIL | 0.042 | NA[d] | NA |
| RE21-09-3537 | 21-604499 | 0.0000-0.5000 | SOIL | NA | 0.212 | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.5-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-012(b)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** | **800** | **619**[d] |
| MD21-07-74366 | 21-25778 | 0.0000–0.5000 | SOIL | —[e] | NA[f] | — | — | — | — | — | — | — | 35.3 | — | — | — | NA |
| MD21-07-74367 | 21-25778 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 34.7 | — | — | — | NA |
| MD21-07-74369 | 21-25779 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 32.2 | — | — | — | NA |
| MD21-07-74370 | 21-25779 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 44.1 | — | — | — | NA |
| MD21-07-74372 | 21-25780 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 23.8 | — | — | — | NA |
| MD21-07-74373 | 21-25780 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 22.6 | — | — | — | NA |
| MD21-07-74375 | 21-25781 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 22.4 | — | — | — | NA |
| MD21-07-74376 | 21-25781 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 39.5 | — | — | — | NA |
| MD21-07-74378 | 21-25782 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 22.4 | — | — | — | NA |
| MD21-07-74379 | 21-25782 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 15.8 | — | — | — | NA |
| MD21-07-74381 | 21-25783 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.401 (J) | — | — | — | 127 | — | — | 42.7 | NA |
| MD21-07-74382 | 21-25783 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | 0.423 (J) | — | — | — | 124 | — | — | 50.9 | NA |
| MD21-07-74384 | 21-25784 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 17.9 | 1.56 | — | 23 | NA |
| MD21-07-74385 | 21-25784 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | 0.524 (U) | — | — | — | — | — | — | — | NA |
| MD21-07-74387 | 21-25785 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 19.9 | — | — | — | NA |
| MD21-07-74388 | 21-25785 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | 0.529 (U) | — | — | — | — | — | — | — | NA |
| MD21-07-74390 | 21-25786 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.712 | 7350 | — | — | 218 | — | — | 69.5 | NA |
| MD21-07-74391 | 21-25786 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 80.8 | — | — | 29.3 | NA |
| MD21-07-74393 | 21-25787 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 134 | — | — | 23.4 | NA |
| MD21-07-74394 | 21-25787 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | 1.4 (J) | — | — | — | 1320 | NA | 36700 (J-) | 108 | NA |
| MD21-07-74396 | 21-25788 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.423 (J) | — | — | — | 103 | — | — | 29.2 | 10.5 (J+) |
| MD21-07-74397 | 21-25788 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | 150 | — | — | — | 9 (J+) |
| MD21-07-74399 | 21-25789 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.534 (U) | — | — | — | 34.2 | — | — | — | 7.89 (J+) |
| MD21-07-74400 | 21-25789 | 2.0000–2.5000 | SOIL | — | — | — | — | — | 0.51 (U) | — | — | — | 24.4 | — | — | — | 8.74 (J+) |
| MD21-07-74402 | 21-25790 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.586 (U) | — | — | — | 20.8 | — | — | — | 7.17 (J+) |
| MD21-07-74403 | 21-25790 | 2.0000–2.5000 | SOIL | — | — | — | — | — | 0.566 (U) | — | — | — | — | — | — | — | 13.5 (J+) |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** | **800** | **619**[d] |
| MD21-07-74405 | 21-25791 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 134 | — | — | — | 9.33 (J+) |
| MD21-07-74406 | 21-25791 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | 93.8 | — | — | — | 7.76 (J+) |
| MD21-07-74408 | 21-25792 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 43.4 | — | — | — | 7.58 (J+) |
| MD21-07-74409 | 21-25792 | 2.0000–2.5000 | SOIL | — | — | — | — | — | 0.522 (U) | — | — | — | 19.1 | — | — | — | 9.89 (J+) |
| MD21-07-74411 | 21-25793 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 130 | — | — | — | 10.8 (J+) |
| MD21-07-74412 | 21-25793 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | 92.9 | — | — | — | 10.7 (J+) |
| MD21-07-74414 | 21-25794 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.589 (U) | — | — | — | — | — | — | — | 5.9 |
| MD21-07-74415 | 21-25794 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | 0.556 (U) | — | — | — | — | — | — | — | 11.1 |
| MD21-07-74418 | 21-25795 | 0.0000–0.5000 | SOIL | 30800 (J+) | NA | — | — | — | 0.608 (U) | — | — | — | 31.7 | — | 22500 | — | 27 |
| MD21-07-74419 | 21-25795 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | 0.556 (U) | — | — | — | 14.9 | — | — | — | 15.8 |
| MD21-07-74416 | 21-25796 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.543 (U) | — | — | — | 17.8 | — | — | — | 7.5 |
| MD21-07-74417 | 21-25796 | 2.0000–2.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — | — | 4.2 |
| MD21-07-74436 | 21-25797 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 82.1 | — | — | 23.5 (J) | NA |
| MD21-07-74437 | 21-25797 | 2.0000–3.0000 | QBT3 | 29800 (J+) | — | 5.51 | 222 | 2.01 | — | 3540 | 19.1 | 5.06 | 156 | — | 22600 | 23.4 | NA |
| MD21-07-74438 | 21-25797 | 5.0000–6.0000 | QBT3 | 12300 (J+) | — | 6.58 | 177 | — | — | 37400 | 7.57 | — | 47.1 | — | — | 12.8 | NA |
| RE21-09-3642 | 21-25797 | 10.0000–11.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-07-74439 | 21-25798 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 202 | — | — | 32 | 12 (J+) |
| MD21-07-74440 | 21-25798 | 2.0000–3.0000 | QBT3 | 9440 (J+) | — | 3.32 | 58.7 | — | — | — | 7.54 | — | 28.8 | — | — | — | 10.4 (J+) |
| MD21-07-74441 | 21-25798 | 5.0000–6.0000 | QBT3 | — | — | 3.07 | 46.1 | — | — | — | 8.36 | — | 46.6 | — | — | — | 9.37 (J+) |
| MD21-07-74445 | 21-25800 | 2.3300–3.3360 | QBT3 | 11500 | — | 4.32 | 95 (J-) | — | — | — | 9.38 | 3.6 (J) | 107 (J-) | — | 15800 | 20.3 | 4.9 (J+) |
| MD21-07-74446 | 21-25800 | 4.3300–5.3300 | QBT3 | — | — | — | — | — | — | 4090 | 51.7 | — | 40.1 (J-) | — | — | — | 6.8 (J+) |
| MD21-07-74447 | 21-25801 | 2.3300–3.3300 | QBT3 | 10700 | — | 3.09 | 58.6 (J-) | — | — | — | 8.25 | — | 16 (J-) | — | — | — | 3.4 (J+) |
| MD21-07-74448 | 21-25801 | 4.3300–5.3300 | QBT3 | — | — | — | — | — | — | — | — | — | 7.71 (J-) | — | — | — | 5 (J+) |
| MD21-07-74449 | 21-25802 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.532 (U) | — | — | — | 20.8 (J-) | — | — | — | 9 (J+) |
| MD21-07-74450 | 21-25802 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.5 (J+) |
| MD21-07-74451 | 21-25803 | 2.3300–3.3300 | SOIL | — | — | — | — | — | 0.6 (U) | NA | — | — | — | — | 22000 | — | 12.5 |
| MD21-07-74452 | 21-25803 | 4.3300–5.3300 | QBT3 | — | — | — | 65.5 (J-) | — | — | NA | — | — | 5.43 | — | — | — | 5.68 |
| MD21-07-74453 | 21-25804 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.539 (U) | — | — | — | — | — | — | — | 14.7 (J+) |
| MD21-07-74454 | 21-25804 | 4.0000–5.0000 | QBT3 | — | — | 2.82 | — | — | — | — | — | — | 5.81 (J-) | — | — | — | 7.5 (J+) |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** | **800** | **619**[d] |
| MD21-07-74455 | 21-25805 | 2.6700–3.6700 | SOIL | — | — | — | — | — | 0.588 (U) | — | — | — | 51.5 (J) | — | — | — | 9.4 (J+) |
| MD21-07-74456 | 21-25805 | 4.6700–5.6700 | QBT3 | — | — | — | — | — | — | — | — | — | 5.06 (J) | — | — | — | 8.2 (J+) |
| MD21-07-74457 | 21-25806 | 2.0000–3.0000 | QBT3 | — | 0.507 (U) | — | — | — | — | 2270 | 12.4 | — | 13.4 | — | — | — | 9.13 (J-) |
| MD21-07-74458 | 21-25806 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | 4870 | 25.5 | — | 4.84 | — | — | — | 20.1 (J-) |
| MD21-07-74459 | 21-25807 | 2.5000–3.5000 | QBT3 | 8000 (J-) | — | 2.9 | 68.3 | — | — | 3690 | 7.64 | — | 78.2 | — | — | 28.6 | 10.7 (J-) |
| MD21-07-74460 | 21-25807 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 15.4 | — | — | — | 7.13 (J-) |
| MD21-07-74461 | 21-25808 | 2.5000–3.5000 | QBT3 | — | — | 3.28 | — | — | — | — | 8.8 | — | — | — | — | — | 4.37 (J-) |
| MD21-07-74462 | 21-25808 | 4.5000–5.5000 | QBT3 | — | — | 3.58 | 56.2 | — | — | — | — | — | 68.7 | — | — | — | 10 (J-) |
| MD21-07-74463 | 21-25809 | 2.0000–3.0000 | QBT3 | 16200 | — | 3.77 | 134 (J-) | — | — | 13700 (J) | 10.4 | — | 25.5 | — | — | — | 10.5 (J+) |
| MD21-07-74464 | 21-25809 | 4.0000–5.0000 | QBT3 | 13400 | — | — | 114 (J-) | — | — | 14700 (J) | 9.76 | — | 15.3 | — | — | — | 27.6 (J+) |
| MD21-07-74433 | 21-25810 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.523 (U) | 10800 (J) | — | — | 32.5 | — | — | — | 18 (J+) |
| MD21-07-74434 | 21-25810 | 2.0000–3.0000 | QBT3 | 15600 (J+) | — | 3.09 | 83.2 | — | — | 5900 (J) | 9.59 | — | 26.4 | — | — | 12.2 | 20.7 (J+) |
| MD21-07-74435 | 21-25810 | 5.0000–6.0000 | QBT3 | — | — | 2.85 | 98.7 | — | — | 39300 (J) | 7.7 | — | 11 | — | — | — | 10.2 (J+) |
| RE21-09-3644 | 21-25810 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-07-74467 | 21-25811 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | 21.1 | — | 47 | — | — | — | 7.07 (J-) |
| MD21-07-74468 | 21-25811 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 61.1 | — | 7.7 | — | — | — | 6.54 (J-) |
| MD21-07-74469 | 21-25812 | 2.0000–3.0000 | QBT3 | 16400 | — | 3.98 | 165 (J-) | — | — | 3840 (J) | 8.86 | — | 9.35 | — | — | — | 20.5 (J+) |
| MD21-07-74470 | 21-25812 | 4.0000–5.0000 | QBT3 | 9220 | — | 3.12 | 97 (J-) | — | — | 3430 (J) | — | — | 5.35 | — | — | — | 15.6 (J+) |
| MD21-07-74471 | 21-25813 | 3.0000–4.0000 | QBT3 | — | — | 2.94 | — | — | — | 4410 (J) | 11.5 | — | 19.4 | — | — | — | 5.76 (J+) |
| MD21-07-74472 | 21-25813 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 20 | — | 10.1 | — | — | — | 6.69 (J+) |
| MD21-07-74473 | 21-25814 | 1.6000–2.6000 | QBT3 | — | — | — | — | — | — | — | 17.5 | — | 10.2 | — | — | — | 7.55 (J-) |
| MD21-07-74474 | 21-25814 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | — | — | 23.6 | — | — | — | — | — | 5.91 (J-) |
| MD21-07-74475 | 21-25815 | 2.0000–3.0000 | QBT3 | 13900 | — | 2.88 | 116 (J-) | — | — | 2880 (J) | 7.88 | — | 6.31 | — | — | — | 14.2 (J+) |
| MD21-07-74476 | 21-25815 | 4.0000–5.0000 | QBT3 | 10600 | — | 2.83 | 100 (J-) | — | — | 2450 (J) | — | — | 8.28 | — | — | — | 11.3 (J+) |
| MD21-07-74478 | 21-25816 | 4.0000–5.0000 | QBT3 | 14400 (J-) | — | 3.21 | 88.3 | — | — | 4740 | 90 | — | 28.7 | — | — | — | 17.4 (J-) |
| MD21-07-74477 | 21-25816 | 6.0000–7.0000 | QBT3 | 14000 (J-) | — | 2.98 | 84.5 | — | — | 4250 | 17.6 | — | 22.5 | — | — | — | 21.4 (J-) |
| MD21-07-74479 | 21-25817 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | — | 7.61 | — | 5.37 | — | — | — | 4.37 |
| MD21-07-74480 | 21-25817 | 4.5000–5.5000 | QBT3 | — | — | 4.01 | 97.5 | — | — | 3480 | 23.9 | — | — | — | — | — | 4.24 |
| RE21-07-76274 | 21-27671 | 55.0000–56.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 3.49 |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** | **800** | **619**[d] |
| RE21-07-76275 | 21-27671 | 60.0000–61.0000 | QBT3 | — | — | — | — | — | — | 4670 (J+) | — | — | — | — | — | — | 3.47 |
| RE21-07-76276 | 21-27671 | 65.0000–66.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 9.24 |
| RE21-07-76277 | 21-27671 | 70.0000–71.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 3.96 |
| RE21-07-76278 | 21-27671 | 75.0000–76.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 2.01 | — | — | 2.92 |
| RE21-07-76280 | 21-27672 | 5.0000–6.0000 | QBT3 | — | — | 4.71 | 54.9 (J+) | — | — | 6130 (J+) | — | — | — | — | — | — | 4.44 |
| RE21-07-76281 | 21-27672 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 15.9 | 2.9 |
| RE21-07-76282 | 21-27672 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2 (J) |
| RE21-07-76283 | 21-27672 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | 2640 (J+) | 7.36 | — | — | — | — | — | 2.9 |
| RE21-07-76284 | 21-27672 | 25.0000–26.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 4.89 |
| RE21-07-76286 | 21-27673 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.87 |
| RE21-07-76287 | 21-27673 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 0.733 | — | — | 3.92 |
| RE21-07-76288 | 21-27673 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.95 (J) |
| RE21-07-76289 | 21-27673 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 23 | 4.15 |
| RE21-07-76290 | 21-27673 | 25.0000–26.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 5.8 |
| RE21-07-76292 | 21-27674 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 4.83 |
| RE21-07-76293 | 21-27674 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.25 |
| RE21-07-76294 | 21-27674 | 18.0000–19.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 10.2 | — | — | — | 18.4 |
| RE21-07-76295 | 21-27674 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.79 |
| RE21-07-76296 | 21-27674 | 25.0000–26.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.96 |
| RE21-09-3635 | 21-604528 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-3636 | 21-604529 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | 110 (J-) | NA | NA | 24 | NA |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Sodium | Strontium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **2770** | **na** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **915** | **na** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **na** | **46900** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **na** | **681000** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **na** | **186000** | **929** | **1550** | **92900** |
| MD21-07-74366 | 21-25778 | 0.0000–0.5000 | SOIL | — | — | 2.53 | NA | NA | 6.69 | 0.00343 (J-) | 1.59 (U) | — | 23.1 | — | — | 182 |
| MD21-07-74367 | 21-25778 | 2.0000–2.5000 | SOIL | — | — | 2.96 | NA | NA | 2.68 | 0.000993 (J-) | 1.6 (U) | — | 22.8 | — | — | 163 |
| MD21-07-74369 | 21-25779 | 0.0000–0.5000 | SOIL | — | — | 4.03 | NA | NA | 5.41 | 0.00119 (J-) | 1.63 (U) | — | 22.1 | — | — | 209 |
| MD21-07-74370 | 21-25779 | 2.0000–2.5000 | SOIL | — | — | 2.82 | NA | NA | 2.24 | 0.000818 (J-) | — | 1350 | 18.6 | — | — | 127 |
| MD21-07-74372 | 21-25780 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | 1.67 | 0.000897 (J-) | — | — | 17.8 | — | — | 57.3 |
| MD21-07-74373 | 21-25780 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | 1.19 | — | 1.61 (U) | — | 19.1 | — | — | — |
| MD21-07-74375 | 21-25781 | 0.0000–0.5000 | SOIL | — | — | 0.126 | NA | NA | — | 0.000934 (J-) | 1.64 (U) | — | 17.6 | — | — | 59.5 |
| MD21-07-74376 | 21-25781 | 2.0000–2.5000 | SOIL | — | — | 0.137 | NA | NA | — | 0.000537 (J-) | 1.55 (U) | — | 22 | — | — | 57.9 |
| MD21-07-74378 | 21-25782 | 0.0000–0.5000 | SOIL | — | — | 0.149 | NA | NA | 1.57 | 0.00112 (J-) | 1.64 (U) | — | 16.9 | — | — | — |
| MD21-07-74379 | 21-25782 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | 1.39 | 0.000854 (J-) | 1.7 (U) | — | 23.5 | — | — | — |
| MD21-07-74381 | 21-25783 | 0.0000–0.5000 | SOIL | — | — | 0.433 | NA | NA | 1.48 | 0.00397 (J-) | — | — | 44.8 | 3.33 | — | 90.4 |
| MD21-07-74382 | 21-25783 | 2.0000–2.5000 | SOIL | — | — | 0.251 | NA | NA | 2.03 | 0.00143 (J-) | 1.58 (U) | — | 43.3 | 2.5 | — | 85.6 |
| MD21-07-74384 | 21-25784 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | 12.9 | — | — | — | 25 | 3.74 | — | — |
| MD21-07-74385 | 21-25784 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | 6.55 | 0.000599 (J-) | 1.57 (U) | — | 7.64 | — | — | — |
| MD21-07-74387 | 21-25785 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | 0.00102 (J-) | 1.66 (U) | — | 11 | — | — | — |
| MD21-07-74388 | 21-25785 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | — | — | 1.59 (U) | — | 9.02 | — | — | — |
| MD21-07-74390 | 21-25786 | 0.0000–0.5000 | SOIL | — | — | 0.157 | NA | NA | — | — | — | — | 101 | 8.01 | — | 132 |
| MD21-07-74391 | 21-25786 | 2.0000–2.5000 | SOIL | — | — | 0.135 | NA | NA | — | 0.000881 (J-) | 1.7 (U) | 2370 | 45.2 | 3.38 | — | 64 |
| MD21-07-74393 | 21-25787 | 0.0000–0.5000 | SOIL | — | — | 0.137 | NA | NA | 0.803 (J) | 0.00171 (J-) | 1.6 (U) | — | 22.3 | — | — | 120 |
| MD21-07-74394 | 21-25787 | 2.0000–2.5000 | SOIL | — | — | 1.22 | NA | NA | 1.33 | — | 7.49 (U) | — | 25.2 | 2.77 | — | 354 |
| MD21-07-74396 | 21-25788 | 0.0000–0.5000 | SOIL | — | — | — | 0.88 | — | 3.43 (J-) | 0.00361 | 1.62 (U) | — | 31.8 | 1.88 | — | 314 |
| MD21-07-74397 | 21-25788 | 2.0000–2.5000 | SOIL | — | — | 0.164 | 0.949 | — | 2.49 (J-) | 0.00143 (J) | 1.64 (U) | — | 34.4 | — | — | 142 |
| MD21-07-74399 | 21-25789 | 0.0000–0.5000 | SOIL | — | — | — | 0.903 | — | — | — | 1.6 (U) | — | 12.2 | — | — | — |
| MD21-07-74400 | 21-25789 | 2.0000–2.5000 | SOIL | — | — | — | 1.43 | — | — | — | 1.53 (U) | — | 13.2 | — | — | — |
| MD21-07-74402 | 21-25790 | 0.0000–0.5000 | SOIL | — | — | — | 1.04 | — | 0.818 (J-) | 0.000669 (J) | — | — | 11.6 | — | — | — |
| MD21-07-74403 | 21-25790 | 2.0000–2.5000 | SOIL | — | — | — | 1.76 | — | — | 0.000624 (J) | 1.7 (U) | — | 18.5 | — | — | — |
| MD21-07-74405 | 21-25791 | 0.0000–0.5000 | SOIL | — | — | 0.136 | 1.02 | — | 1.69 (J-) | 0.00151 (J) | 1.71 (U) | — | 31.7 | 2.24 | — | 72.2 |
| MD21-07-74406 | 21-25791 | 2.0000–2.5000 | SOIL | — | — | — | 1.16 | — | 1.32 (J-) | 0.000705 (J) | 1.67 (U) | — | 20.5 | — | — | — |
| MD21-07-74408 | 21-25792 | 0.0000–0.5000 | SOIL | — | — | — | 0.669 | — | 1.39 (J-) | 0.0012 (J) | — | — | 23.3 | — | — | — |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Sodium | Strontium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **2770** | **na** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **915** | **na** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **na** | **46900** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **na** | **681000** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **na** | **186000** | **929** | **1550** | **92900** |
| MD21-07-74409 | 21-25792 | 2.0000–2.5000 | SOIL | — | — | — | 0.896 | — | 0.995 (J-) | 0.000595 (J) | — | — | 16.9 | — | — | — |
| MD21-07-74411 | 21-25793 | 0.0000–0.5000 | SOIL | — | — | — | 0.587 | — | 1.19 (J-) | 0.000729 (J) | — | — | 36.7 | 2.08 | — | 70.5 |
| MD21-07-74412 | 21-25793 | 2.0000–2.5000 | SOIL | — | — | — | 0.595 | — | 0.798 (J-) | — | 1.53 (U) | — | 26 | 2.23 | — | 57.8 |
| MD21-07-74414 | 21-25794 | 0.0000–0.5000 | SOIL | — | — | — | 2.15 | — | 1.37 | — | — | — | 9.55 | — | — | — |
| MD21-07-74415 | 21-25794 | 2.0000–2.5000 | SOIL | — | — | — | 3.81 | — | 0.759 (J) | — | 1.67 (U) | — | 6.82 | — | — | — |
| MD21-07-74418 | 21-25795 | 0.0000–0.5000 | SOIL | — | — | — | 0.881 | — | 1.24 | — | 1.65 (J) | — | 29.7 | — | — | 76.5 |
| MD21-07-74419 | 21-25795 | 2.0000–2.5000 | SOIL | — | — | — | 1.5 | — | 0.901 (J) | — | 1.67 (U) | — | 12.2 | — | — | — |
| MD21-07-74416 | 21-25796 | 0.0000–0.5000 | SOIL | — | — | — | 0.597 | — | 1.32 | — | — | — | 11.5 | — | — | — |
| MD21-07-74417 | 21-25796 | 2.0000–2.5000 | QBT3 | — | — | — | 0.371 | — | 0.668 (J) | — | 1.48 (U) | — | 2.2 | — | — | — |
| MD21-07-74436 | 21-25797 | 0.0000–0.5000 | SOIL | — | — | — | NA | — | 3.05 | 0.000834 (J-) | — | — | 24.2 | — | — | 269 |
| MD21-07-74437 | 21-25797 | 2.0000–3.0000 | QBT3 | 4110 | — | 0.114 | NA | 11.6 | 0.85 (J) | 0.00124 (J-) | 1.29 (J) | — | 35.4 | — | 29.4 | 102 |
| MD21-07-74438 | 21-25797 | 5.0000–6.0000 | QBT3 | 3260 | — | — | NA | 9.79 | 1.53 | 0.00161 (J-) | 1.76 (U) | — | 93.6 | — | 22.7 | — |
| RE21-09-3642 | 21-25797 | 10.0000–11.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | 67 | NA | NA | NA |
| MD21-07-74439 | 21-25798 | 0.0000–0.5000 | SOIL | — | — | 0.163 (J+) | 1.25 (J) | — | 0.918 (J) | 0.00151 (J) | — | — | 29.9 (J) | — | — | 147 (J+) |
| MD21-07-74440 | 21-25798 | 2.0000–3.0000 | QBT3 | — | — | — | 1.59 (J) | — | 0.851 (J) | 0.00154 (J) | 1.62 (U) | — | 9.8 (J) | — | — | — |
| MD21-07-74441 | 21-25798 | 5.0000–6.0000 | QBT3 | — | — | — | 2.26 (J) | — | 0.704 (J) | 0.000985 (J) | 1.61 (U) | — | 8.26 (J) | — | — | — |
| MD21-07-74445 | 21-25800 | 2.3300–3.3360 | QBT3 | — | 551 (J) | 9.68 | 1.44 | — | 5.12 | — | 0.983 (J) | — | 20.8 | — | — | 76.2 (J-) |
| MD21-07-74446 | 21-25800 | 4.3300–5.3300 | QBT3 | — | — | 2.53 | 1.18 | — | 1.82 | — | 1.49 (U) | — | 17.9 | — | — | — |
| MD21-07-74447 | 21-25801 | 2.3300–3.3300 | QBT3 | — | — | — | 0.427 | — | 0.678 (J) | — | 1.59 (U) | — | 14.9 | — | — | — |
| MD21-07-74448 | 21-25801 | 4.3300–5.3300 | QBT3 | — | — | — | 0.347 | — | — | — | 1.48 (U) | — | 6.66 | — | — | — |
| MD21-07-74449 | 21-25802 | 2.0000–3.0000 | SOIL | — | — | — | 0.419 | — | — | — | — | — | 9.97 | — | — | — |
| MD21-07-74450 | 21-25802 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | 1.48 (U) | — | 1.56 | — | — | — |
| MD21-07-74451 | 21-25803 | 2.3300–3.3300 | SOIL | — | — | — | 0.75 | — | — | — | 2.01 | — | 20.5 | — | — | — |
| MD21-07-74452 | 21-25803 | 4.3300–5.3300 | QBT3 | — | — | — | 1.68 | — | 0.615 (J) | — | 1.77 (U) | — | 14.4 | — | — | — |
| MD21-07-74453 | 21-25804 | 2.0000–3.0000 | SOIL | — | — | — | 0.562 | — | — | — | — | — | 13.5 | — | — | — |
| MD21-07-74454 | 21-25804 | 4.0000–5.0000 | QBT3 | — | — | — | 0.469 | — | 0.509 (J) | — | 1.47 (U) | — | 10.1 | — | — | — |
| MD21-07-74455 | 21-25805 | 2.6700–3.6700 | SOIL | — | — | — | 0.746 | — | — | — | 1.76 (U) | — | 21.2 | — | — | — |
| MD21-07-74456 | 21-25805 | 4.6700–5.6700 | QBT3 | — | — | — | 0.966 | — | — | — | 1.76 (U) | — | 8.91 | — | — | — |
| MD21-07-74457 | 21-25806 | 2.0000–3.0000 | QBT3 | — | — | — | 1.2 | — | — | — | 1.83 (U) | — | 19.6 | 3.31 | — | — |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Sodium | Strontium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **2770** | **na** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **915** | **na** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **na** | **46900** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **na** | **681000** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **na** | **186000** | **929** | **1550** | **92900** |
| MD21-07-74458 | 21-25806 | 4.0000–5.0000 | QBT3 | — | — | — | 0.48 | — | — | — | 1.74 (U) | — | 27.1 | 5.54 | — | — |
| MD21-07-74459 | 21-25807 | 2.5000–3.5000 | QBT3 | — | — | — | 0.974 | — | 1.31 | — | 1.83 (U) | — | 43 | — | — | — |
| MD21-07-74460 | 21-25807 | 4.5000–5.5000 | QBT3 | — | — | — | 1.67 | — | 1.47 | — | 1.73 (U) | — | 10.8 | — | — | — |
| MD21-07-74461 | 21-25808 | 2.5000–3.5000 | QBT3 | — | — | — | 1.07 | — | 0.934 (J) | — | 1.68 (U) | — | 5.31 | — | — | — |
| MD21-07-74462 | 21-25808 | 4.5000–5.5000 | QBT3 | — | — | — | 0.564 | — | 0.726 (J) | — | 1.79 (U) | — | 24.7 | — | 19.3 | 615 |
| MD21-07-74463 | 21-25809 | 2.0000–3.0000 | QBT3 | 3640 | NA | — | 0.589 | — | 2.03 | — | 1.19 (J) | — | 73.9 (J-) | 4.16 | 26.5 | 120 (J-) |
| MD21-07-74464 | 21-25809 | 4.0000–5.0000 | QBT3 | 3700 | NA | — | 0.954 | — | 2 | 0.000633 (J) | 1.2 (J) | — | 73.5 (J-) | 5.53 | 26.8 | 111 (J-) |
| MD21-07-74433 | 21-25810 | 0.0000–0.5000 | SOIL | — | — | 0.435 (J+) | 1.37 (J) | — | 2.2 | 0.00122 (J) | — | — | 59.2 (J) | 2.06 (J+) | — | 188 (J+) |
| MD21-07-74434 | 21-25810 | 2.0000–3.0000 | QBT3 | 2540 | — | 1.3 (J+) | 0.697 (J) | — | 1.91 | 0.000976 (J) | 1.1 (J) | — | 33.1 (J) | 3.29 (J+) | 18.4 | 170 (J+) |
| MD21-07-74435 | 21-25810 | 5.0000–6.0000 | QBT3 | 2360 | — | 0.359 (J+) | 1.02 (J) | — | 3.72 | — | 1.66 (U) | — | 86.9 (J) | — | — | — |
| RE21-09-3644 | 21-25810 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 33 | NA | NA | NA |
| MD21-07-74467 | 21-25811 | 3.0000–4.0000 | QBT3 | — | — | — | 1.27 | — | 3.91 | — | 0.665 (J) | — | 17.8 | — | — | — |
| MD21-07-74468 | 21-25811 | 5.0000–6.0000 | QBT3 | — | — | — | 1.06 | — | 2.55 | — | 1.63 (U) | — | 12.2 | — | — | — |
| MD21-07-74469 | 21-25812 | 2.0000–3.0000 | QBT3 | 2230 | NA | — | 0.496 | — | 2.55 | — | 1.79 (U) | — | 32.3 (J-) | — | — | — |
| MD21-07-74470 | 21-25812 | 4.0000–5.0000 | QBT3 | — | NA | — | 0.748 | — | 2.4 | — | 0.883 (J) | — | 23.5 (J-) | — | — | — |
| MD21-07-74471 | 21-25813 | 3.0000–4.0000 | QBT3 | — | NA | — | 1.88 | — | 2.67 | — | 0.853 (J) | — | 29.1 (J-) | — | — | — |
| MD21-07-74472 | 21-25813 | 5.0000–6.0000 | QBT3 | — | NA | — | 1.88 | — | 2.34 | — | 0.645 (J) | — | 14.8 (J-) | — | — | — |
| MD21-07-74473 | 21-25814 | 1.6000–2.6000 | QBT3 | — | — | — | 1.15 | — | 0.589 (J) | — | 1.77 (U) | — | 7.7 | — | — | — |
| MD21-07-74474 | 21-25814 | 3.5000–4.5000 | QBT3 | — | — | — | 1.71 | — | 0.944 (J) | — | 1.64 (U) | — | 1.24 | — | — | — |
| MD21-07-74475 | 21-25815 | 2.0000–3.0000 | QBT3 | 1900 | NA | — | 0.726 | — | 1.99 | — | 0.965 (J) | — | 27.9 (J-) | — | — | — |
| MD21-07-74476 | 21-25815 | 4.0000–5.0000 | QBT3 | — | NA | — | 0.952 | — | 2.66 | — | 1.1 (J) | — | 25.4 (J-) | — | — | — |
| MD21-07-74478 | 21-25816 | 4.0000–5.0000 | QBT3 | 2660 | — | — | 0.986 | 11 | 1.48 | — | 0.738 (J) | — | 34.2 | — | — | — |
| MD21-07-74477 | 21-25816 | 6.0000–7.0000 | QBT3 | 2470 | — | — | 1.14 | 10.1 | 1.54 | — | 1.78 (U) | — | 31.8 | — | — | — |
| MD21-07-74479 | 21-25817 | 2.5000–3.5000 | QBT3 | — | — | — | 0.367 | — | 12.7 (J-) | — | 1.6 (U) | — | 11.5 | — | — | — |
| MD21-07-74480 | 21-25817 | 4.5000–5.5000 | QBT3 | — | — | — | 0.601 | — | 19.5 (J-) | — | 1.63 (U) | — | 13.5 | — | — | — |
| RE21-07-76274 | 21-27671 | 55.0000–56.0000 | QBT3 | — | — | — | 0.28 | — | 1.36 (J-) | — | 0.781 (J) | — | 14.4 (J) | — | — | — |
| RE21-07-76275 | 21-27671 | 60.0000–61.0000 | QBT3 | — | — | — | 0.396 | — | 1.47 (J-) | — | 1.63 (U) | — | 14.4 (J) | — | — | — |
| RE21-07-76276 | 21-27671 | 65.0000–66.0000 | QBT3 | — | — | — | 0.334 | — | 1.23 (J-) | — | 0.829 (J) | — | 0.748 (J) | — | — | — |
| RE21-07-76277 | 21-27671 | 70.0000–71.0000 | QBT3 | — | — | — | 0.25 | — | 1.44 (J-) | — | 1.55 (U) | — | 1.07 (J) | — | — | — |

**Table 6.5-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Sodium | Strontium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **2770** | **na** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **915** | **na** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **na** | **46900** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **na** | **681000** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **na** | **186000** | **929** | **1550** | **92900** |
| RE21-07-76278 | 21-27671 | 75.0000–76.0000 | QBT3 | — | — | — | 0.251 | — | 1.53 (J-) | — | 1.56 (U) | — | 0.472 (J) | — | — | — |
| RE21-07-76280 | 21-27672 | 5.0000–6.0000 | QBT3 | — | — | — | 0.931 | — | 34.2 (J-) | 0.000684 (J) | 0.715 (J) | — | 36.9 (J) | — | — | — |
| RE21-07-76281 | 21-27672 | 10.0000–11.0000 | QBT3 | — | — | — | 1.32 | — | 9.29 (J-) | — | 1.6 (U) | — | 7.26 (J) | — | — | 131 |
| RE21-07-76282 | 21-27672 | 15.0000–16.0000 | QBT3 | — | — | — | 0.938 | — | 4.08 (J-) | — | 1.63 (U) | — | 4.68 (J) | — | — | — |
| RE21-07-76283 | 21-27672 | 20.0000–21.0000 | QBT3 | — | — | — | 0.628 | — | 1.52 (J-) | — | 1.62 (U) | — | 8.36 (J) | — | — | — |
| RE21-07-76284 | 21-27672 | 25.0000–26.0000 | QBT3 | — | — | — | 0.664 | — | 1.53 (J-) | — | 1.6 (U) | — | 4.28 (J) | — | — | — |
| RE21-07-76286 | 21-27673 | 5.0000–6.0000 | QBT3 | — | — | — | 1.62 | — | 1.98 | — | 1.69 (U) | — | 4.82 | — | — | — |
| RE21-07-76287 | 21-27673 | 10.0000–11.0000 | QBT3 | — | — | — | 2.34 | — | 1.94 (J-) | — | 1.62 (U) | — | 2.07 | — | — | — |
| RE21-07-76288 | 21-27673 | 15.0000–16.0000 | QBT3 | — | — | — | 0.478 | — | 2.11 (J-) | — | 0.604 (J) | — | 1.53 | — | — | — |
| RE21-07-76289 | 21-27673 | 20.0000–21.0000 | QBT3 | — | — | — | 0.353 | — | 1.7 (J-) | — | 0.603 (J) | — | 2.02 | — | — | — |
| RE21-07-76290 | 21-27673 | 25.0000–26.0000 | QBT3 | — | — | — | 0.481 | — | 1.34 (J-) | — | 1.58 (U) | — | 1.14 | — | — | — |
| RE21-07-76292 | 21-27674 | 5.0000–6.0000 | QBT3 | — | — | — | 2.53 | — | 2.18 (J-) | — | 1.6 (U) | — | 3.05 | — | — | — |
| RE21-07-76293 | 21-27674 | 10.0000–11.0000 | QBT3 | — | — | — | 0.738 | — | 1.77 (J-) | — | 0.97 (J) | — | 2.26 | — | — | — |
| RE21-07-76294 | 21-27674 | 18.0000–19.0000 | QBT3 | — | — | — | 0.5 | — | 1.46 (J-) | — | 1.64 (U) | — | 21.1 | — | — | — |
| RE21-07-76295 | 21-27674 | 20.0000–21.0000 | QBT3 | — | — | — | 0.581 | — | 1.37 (J-) | — | 0.587 (J) | — | 1.1 | — | — | — |
| RE21-07-76296 | 21-27674 | 25.0000–26.0000 | QBT3 | — | — | — | 0.182 | — | 1.21 (J-) | — | 1.62 (U) | — | 2.2 | — | — | — |
| RE21-09-3635 | 21-604528 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 120 |
| RE21-09-3636 | 21-604529 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | 27 | NA | NA | 95 |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.5-2**
**Summary of Organic Chemicals Detected at SWMU 21-012(b)**

| Sample ID | Location ID | Depth (ft) | Media | Acetone | Aroclor-1260 | Benzo(a)anthracene | Benzo(b)fluoranthene | Benzoic Acid | Chloroform | Chrysene | Dichlorobenzene[1,4-] | Fluoranthene | Isopropyltoluene[4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **67500** | **2.22** | **6.21** | **6.21** | **240000**[a] | **5.72** | **621** | **32.2** | **2290** | **3210**[c] |
| **Industrial SSL** | | | | **851000** | **8.26** | **23.4** | **23.4** | **2500000**[a] | **31.9** | **2340** | **180** | **24400** | **14900**[c] |
| **Construction Worker SSL** | | | | **263000** | **75.8** | **213** | **213** | **952000**[b] | **671** | **20600** | **3780** | **8910** | **10300**[c] |
| MD21-07-74367 | 21-25778 | 2.0000–2.5000 | SOIL | —[d] | NA[e] | — | — | — | — | — | — | 0.0157 (J) | — |
| MD21-07-74370 | 21-25779 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | 0.0129 (J) | — |
| MD21-07-74372 | 21-25780 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | NA | — | — | 0.0186 (J) | NA |
| MD21-07-74373 | 21-25780 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | 0.0133 (J) | — |
| MD21-07-74376 | 21-25781 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.629 (J) | — | — | — | — | 0.00153 |
| MD21-07-74379 | 21-25782 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74381 | 21-25783 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | NA | — | — | — | NA |
| MD21-07-74382 | 21-25783 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 0.000623 (J) |
| MD21-07-74385 | 21-25784 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74387 | 21-25785 | 0.0000–0.5000 | SOIL | NA | NA | 0.024 (J) | — | — | NA | 0.0306 (J) | — | 0.0522 | NA |
| MD21-07-74388 | 21-25785 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74391 | 21-25786 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74393 | 21-25787 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | NA | — | — | 0.0164 (J) | NA |
| MD21-07-74394 | 21-25787 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74396 | 21-25788 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | NA | — | — | 0.0137 (J) | NA |
| MD21-07-74400 | 21-25789 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74403 | 21-25790 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | 0.000503 (J) |
| MD21-07-74405 | 21-25791 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | NA | — | — | 0.0138 (J) | NA |
| MD21-07-74409 | 21-25792 | 2.0000–2.5000 | SOIL | 0.0226 | NA | — | — | — | — | — | — | — | — |
| MD21-07-74412 | 21-25793 | 2.0000–2.5000 | SOIL | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74437 | 21-25797 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74439 | 21-25798 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | NA | — | — | — | NA |
| MD21-07-74441 | 21-25798 | 5.0000–6.0000 | QBT3 | 0.00889 | — | — | — | — | — | — | — | — | — |
| MD21-07-74455 | 21-25805 | 2.6700–3.6700 | SOIL | — | NA | — | — | — | 0.000365 (J) | — | 0.00042 (J) | — | — |
| MD21-07-74456 | 21-25805 | 4.6700–5.6700 | QBT3 | 0.0639 | NA | — | — | — | 0.000256 (J) | — | — | — | — |
| MD21-07-74457 | 21-25806 | 2.0000–3.0000 | QBT3 | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74458 | 21-25806 | 4.0000–5.0000 | QBT3 | — | NA | — | — | — | — | — | — | — | — |
| MD21-07-74459 | 21-25807 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74461 | 21-25808 | 2.5000–3.5000 | QBT3 | 0.00618 | — | — | — | — | — | — | — | — | — |
| MD21-07-74462 | 21-25808 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |

**Table 6.5-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acetone | Aroclor-1260 | Benzo(a)anthracene | Benzo(b)fluoranthene | Benzoic Acid | Chloroform | Chrysene | Dichlorobenzene[1,4-] | Fluoranthene | Isopropyltoluene[4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **67500** | **2.22** | **6.21** | **6.21** | **240000**[a] | **5.72** | **621** | **32.2** | **2290** | **3210**[c] |
| **Industrial SSL** | | | | **851000** | **8.26** | **23.4** | **23.4** | **2500000**[a] | **31.9** | **2340** | **180** | **24400** | **14900**[c] |
| **Construction Worker SSL** | | | | **263000** | **75.8** | **213** | **213** | **952000**[b] | **671** | **20600** | **3780** | **8910** | **10300**[c] |
| MD21-07-74463 | 21-25809 | 2.0000–3.0000 | QBT3 | — | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74464 | 21-25809 | 4.0000–5.0000 | QBT3 | — | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74433 | 21-25810 | 0.0000–0.5000 | SOIL | NA | — | — | 0.0161 (J) | — | NA | — | — | 0.0155 (J) | NA |
| MD21-07-74434 | 21-25810 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74435 | 21-25810 | 5.0000–6.0000 | QBT3 | 0.00319 (J) | — | — | — | — | — | — | — | — | — |
| MD21-07-74467 | 21-25811 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74468 | 21-25811 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.000235 (J) | — | — | — | — |
| MD21-07-74469 | 21-25812 | 2.0000–3.0000 | QBT3 | — | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74470 | 21-25812 | 4.0000–5.0000 | QBT3 | 0.00398 (J) | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74471 | 21-25813 | 3.0000–4.0000 | QBT3 | — | NA | — | — | NA | 0.000219 (J) | — | — | — | — |
| MD21-07-74472 | 21-25813 | 5.0000–6.0000 | QBT3 | — | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74473 | 21-25814 | 1.6000–2.6000 | QBT3 | — | 0.0015 (J) | — | — | — | — | — | — | — | — |
| MD21-07-74474 | 21-25814 | 3.5000–4.5000 | QBT3 | 0.0036 (J) | — | — | — | — | — | — | — | — | — |
| MD21-07-74475 | 21-25815 | 2.0000–3.0000 | QBT3 | — | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74476 | 21-25815 | 4.0000–5.0000 | QBT3 | — | NA | — | — | NA | — | — | — | — | — |
| MD21-07-74478 | 21-25816 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74477 | 21-25816 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-07-74479 | 21-25817 | 2.5000–3.5000 | QBT3 | 0.00496 (J) | NA | — | — | — | — | — | — | — | — |
| MD21-07-74480 | 21-25817 | 4.5000–5.5000 | QBT3 | 0.014 | NA | — | — | — | — | — | — | — | — |
| RE21-07-76274 | 21-27671 | 55.0000–56.0000 | QBT3 | 0.00304 (J) | NA | — | — | — | — | — | — | — | — |
| RE21-07-76277 | 21-27671 | 70.0000–71.0000 | QBT3 | 0.0049 (J) | — | — | — | — | — | — | — | — | — |
| RE21-07-76278 | 21-27671 | 75.0000–76.0000 | QBT3 | 0.00344 (J) | NA | — | — | — | — | — | — | — | — |
| RE21-07-76280 | 21-27672 | 5.0000–6.0000 | QBT3 | 0.00346 (J) | NA | — | — | — | — | — | — | — | — |
| RE21-07-76281 | 21-27672 | 10.0000–11.0000 | QBT3 | 0.00351 (J-) | NA | — | — | — | — | — | — | — | — |
| RE21-07-76282 | 21-27672 | 15.0000–16.0000 | QBT3 | 0.0072 | NA | — | — | — | — | — | — | — | — |
| RE21-07-76283 | 21-27672 | 20.0000–21.0000 | QBT3 | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-76284 | 21-27672 | 25.0000–26.0000 | QBT3 | 0.0036 (J) | NA | — | — | — | — | — | — | — | — |

**Table 6.5-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Methylnaphthalene[2-] | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trichloroethene | Trimethylbenzene[1,2,4-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **310**[a] | **na**[f] | **1830** | **1720** | **5570** | **45.7** | **62**[a] | **1090**[g] |
| **Industrial SSL** | | | | **1090** | **4100**[a] | **na** | **20500** | **18300** | **57900** | **253** | **260**[a] | **3610**[g] |
| **Construction Worker SSL** | | | | **10600** | **1240**[b] | **na** | **7150** | **6680** | **21100** | **4600** | **688**[b] | **3130**[g] |
| MD21-07-74367 | 21-25778 | 2.0000–2.5000 | SOIL | — | — | NA | — | 0.0167 (J) | 0.00343 | — | — | — |
| MD21-07-74370 | 21-25779 | 2.0000–2.5000 | SOIL | — | — | NA | — | 0.0154 (J) | 0.00613 | — | — | — |
| MD21-07-74372 | 21-25780 | 0.0000–0.5000 | SOIL | NA | — | NA | — | 0.0184 (J) | NA | NA | NA | NA |
| MD21-07-74373 | 21-25780 | 2.0000–2.5000 | SOIL | — | — | NA | — | 0.019 (J) | 0.00239 | — | — | — |
| MD21-07-74376 | 21-25781 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00901 | — | — | — |
| MD21-07-74379 | 21-25782 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00526 | — | — | — |
| MD21-07-74381 | 21-25783 | 0.0000–0.5000 | SOIL | NA | — | NA | — | 0.0149 (J) | NA | NA | NA | NA |
| MD21-07-74382 | 21-25783 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.0101 | — | — | — |
| MD21-07-74385 | 21-25784 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00374 | — | — | — |
| MD21-07-74387 | 21-25785 | 0.0000–0.5000 | SOIL | NA | — | NA | 0.0264 (J) | 0.0596 | NA | NA | NA | NA |
| MD21-07-74388 | 21-25785 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00202 | — | — | — |
| MD21-07-74391 | 21-25786 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00263 | — | — | — |
| MD21-07-74393 | 21-25787 | 0.0000–0.5000 | SOIL | NA | — | NA | — | 0.0199 (J) | NA | NA | NA | NA |
| MD21-07-74394 | 21-25787 | 2.0000–2.5000 | SOIL | — | — | NA | — | 0.0267 (J) | 0.0219 (J+) | — | — | — |
| MD21-07-74396 | 21-25788 | 0.0000–0.5000 | SOIL | NA | — | NA | — | 0.0134 (J) | NA | NA | NA | NA |
| MD21-07-74400 | 21-25789 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00291 | — | — | — |
| MD21-07-74403 | 21-25790 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.0291 | 0.000322 (J) | — | — |
| MD21-07-74405 | 21-25791 | 0.0000–0.5000 | SOIL | NA | — | NA | — | 0.0141 (J) | NA | NA | NA | NA |
| MD21-07-74409 | 21-25792 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.00564 | — | — | — |
| MD21-07-74412 | 21-25793 | 2.0000–2.5000 | SOIL | — | — | NA | — | — | 0.0325 | — | — | — |
| MD21-07-74437 | 21-25797 | 2.0000–3.0000 | QBT3 | — | — | NA | — | — | 0.000687 (J) | — | — | — |
| MD21-07-74439 | 21-25798 | 0.0000–0.5000 | SOIL | NA | — | NA | — | 0.0176 (J) | NA | NA | NA | NA |
| MD21-07-74441 | 21-25798 | 5.0000–6.0000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| MD21-07-74455 | 21-25805 | 2.6700–3.6700 | SOIL | 0.00476 (J) | — | NA | — | — | — | — | — | 0.000553 (J) |
| MD21-07-74456 | 21-25805 | 4.6700–5.6700 | QBT3 | 0.00315 (J) | — | NA | — | — | — | — | — | — |
| MD21-07-74457 | 21-25806 | 2.0000–3.0000 | QBT3 | — | — | NA | — | — | — | — | 0.000281 (J) | — |
| MD21-07-74458 | 21-25806 | 4.0000–5.0000 | QBT3 | — | — | NA | — | — | 0.000749 (J) | — | — | — |

**Table 6.5-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Methylnaphthalene[2-] | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trichloroethene | Trimethylbenzene[1,2,4-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **310**[a] | **na**[f] | **1830** | **1720** | **5570** | **45.7** | **62**[a] | **1090**[g] |
| **Industrial SSL** | | | | **1090** | **4100**[a] | **na** | **20500** | **18300** | **57900** | **253** | **260**[a] | **3610**[g] |
| **Construction Worker SSL** | | | | **10600** | **1240**[b] | **na** | **7150** | **6680** | **21100** | **4600** | **688**[b] | **3130**[g] |
| MD21-07-74459 | 21-25807 | 2.5000–3.5000 | QBT3 | — | — | NA | — | — | 0.000838 (J) | — | 0.000262 (J) | 0.000374 (J) |
| MD21-07-74461 | 21-25808 | 2.5000–3.5000 | QBT3 | — | — | NA | — | — | 0.000363 (J) | — | — | — |
| MD21-07-74462 | 21-25808 | 4.5000–5.5000 | QBT3 | — | — | NA | — | — | 0.000868 (J) | — | — | — |
| MD21-07-74463 | 21-25809 | 2.0000–3.0000 | QBT3 | — | — | NA | — | — | 0.00258 | — | — | — |
| MD21-07-74464 | 21-25809 | 4.0000–5.0000 | QBT3 | — | — | NA | — | — | 0.0024 | — | — | — |
| MD21-07-74433 | 21-25810 | 0.0000–0.5000 | SOIL | NA | — | NA | 0.016 (J) | 0.015 (J) | NA | NA | NA | NA |
| MD21-07-74434 | 21-25810 | 2.0000–3.0000 | QBT3 | — | — | NA | — | — | 0.000485 (J) | — | — | — |
| MD21-07-74435 | 21-25810 | 5.0000–6.0000 | QBT3 | — | — | NA | — | — | 0.000401 (J) | — | — | — |
| MD21-07-74467 | 21-25811 | 3.0000–4.0000 | QBT3 | — | — | NA | — | — | 0.000967 (J) | — | — | — |
| MD21-07-74468 | 21-25811 | 5.0000–6.0000 | QBT3 | — | — | NA | — | — | 0.0043 | — | — | — |
| MD21-07-74469 | 21-25812 | 2.0000–3.0000 | QBT3 | — | — | NA | — | — | 0.00681 | — | — | 0.000539 (J) |
| MD21-07-74470 | 21-25812 | 4.0000–5.0000 | QBT3 | — | — | NA | — | — | 0.0013 | — | — | — |
| MD21-07-74471 | 21-25813 | 3.0000–4.0000 | QBT3 | — | — | NA | — | — | 0.000645 (J) | — | — | — |
| MD21-07-74472 | 21-25813 | 5.0000–6.0000 | QBT3 | — | — | NA | — | — | 0.00119 | — | — | — |
| MD21-07-74473 | 21-25814 | 1.6000–2.6000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| MD21-07-74474 | 21-25814 | 3.5000–4.5000 | QBT3 | — | — | NA | — | — | 0.000821 (J) | — | — | — |
| MD21-07-74475 | 21-25815 | 2.0000–3.0000 | QBT3 | — | — | NA | — | — | 0.00103 (J) | — | — | — |
| MD21-07-74476 | 21-25815 | 4.0000–5.0000 | QBT3 | — | — | NA | — | — | 0.00183 | — | — | — |
| MD21-07-74478 | 21-25816 | 4.0000–5.0000 | QBT3 | — | — | NA | — | — | 0.000534 (J) | — | — | — |
| MD21-07-74477 | 21-25816 | 6.0000–7.0000 | QBT3 | — | — | NA | — | — | 0.00071 (J) | — | — | — |
| MD21-07-74479 | 21-25817 | 2.5000–3.5000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| MD21-07-74480 | 21-25817 | 4.5000–5.5000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| RE21-07-76274 | 21-27671 | 55.0000–56.0000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| RE21-07-76277 | 21-27671 | 70.0000–71.0000 | QBT3 | — | — | 0.00000034 (J) | — | — | — | — | — | — |
| RE21-07-76278 | 21-27671 | 75.0000–76.0000 | QBT3 | — | — | NA | — | — | — | — | — | — |

**Table 6.5-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Methylnaphthalene[2-] | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trichloroethene | Trimethylbenzene[1,2,4-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **310**[a] | **na**[f] | **1830** | **1720** | **5570** | **45.7** | **62**[a] | **1090**[g] |
| **Industrial SSL** | | | | **1090** | **4100**[a] | **na** | **20500** | **18300** | **57900** | **253** | **260**[a] | **3610**[g] |
| **Construction Worker SSL** | | | | **10600** | **1240**[b] | **na** | **7150** | **6680** | **21100** | **4600** | **688**[b] | **3130**[g] |
| RE21-07-76280 | 21-27672 | 5.0000–6.0000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| RE21-07-76281 | 21-27672 | 10.0000–11.0000 | QBT3 | — | — | NA | — | — | — | — | — | — |
| RE21-07-76282 | 21-27672 | 15.0000–16.0000 | QBT3 | — | 0.0152 (J) | NA | 0.0127 (J) | — | — | — | — | — |
| RE21-07-76283 | 21-27672 | 20.0000–21.0000 | QBT3 | 0.00284 (J) | — | NA | — | — | — | — | 0.000243 (J) | — |
| RE21-07-76284 | 21-27672 | 25.0000–26.0000 | QBT3 | — | — | NA | — | — | — | — | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Isopropylbenzene used as surrogate based on structural similarity.

[d] — = Not detected.

[e] NA= Not analyzed.

[f] na = Not available.

[g] SSL for xylenes used a surrogate based on structural similarity.

**Table 6.5-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-012(b)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-07-74366 | 21-25778 | 0.0000–0.5000 | SOIL | 0.143 | NA[c] | —[d] | 0.0289 | 1.02 | 0.054905 | — | — | — |
| MD21-07-74367 | 21-25778 | 2.0000–2.5000 | SOIL | 0.0346 | — | 0.338 | — | 0.265 | 0.035415 | — | — | — |
| MD21-07-74369 | 21-25779 | 0.0000–0.5000 | SOIL | 0.0759 | NA | — | — | 1.49 | 0.058444 | — | — | — |
| MD21-07-74370 | 21-25779 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.147 | 0.184762 | — | — | — |
| MD21-07-74372 | 21-25780 | 0.0000–0.5000 | SOIL | 0.169 | — | — | — | 0.751 | 0.043636 | — | — | — |
| MD21-07-74373 | 21-25780 | 2.0000–2.5000 | SOIL | 0.0801 | NA | 0.523 | — | 1.48 | 0.035331 | — | — | — |
| MD21-07-74375 | 21-25781 | 0.0000–0.5000 | SOIL | 0.177 | — | — | — | 1.5 | 0.049333 | — | — | — |
| MD21-07-74376 | 21-25781 | 2.0000–2.5000 | SOIL | 0.0727 | NA | 0.173 | — | 0.784 | 0.030757 | — | — | — |
| MD21-07-74378 | 21-25782 | 0.0000–0.5000 | SOIL | 0.15 | — | — | 0.0235 | 1.33 | 0.045624 | — | — | — |
| MD21-07-74379 | 21-25782 | 2.0000–2.5000 | SOIL | 0.0426 | NA | 0.206 | — | 0.463 | 0.069231 | — | — | — |
| MD21-07-74381 | 21-25783 | 0.0000–0.5000 | SOIL | 0.127 | NA | — | — | 0.941 | 0.06464 | — | — | 2.37 |
| MD21-07-74382 | 21-25783 | 2.0000–2.5000 | SOIL | 0.0504 | — | 0.341 | — | 1.54 | 0.041207 | — | — | — |
| MD21-07-74384 | 21-25784 | 0.0000–0.5000 | SOIL | 0.521 | — | 2.2 | 0.0971 | 2 | 0.040985 | — | — | — |
| MD21-07-74385 | 21-25784 | 2.0000–2.5000 | SOIL | 0.0444 | — | 0.319 | — | 0.519 | 0.05664 | — | — | — |
| MD21-07-74387 | 21-25785 | 0.0000–0.5000 | SOIL | 0.129 | NA | — | — | 1.25 | 0.042546 | — | — | — |
| MD21-07-74388 | 21-25785 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.124 | 0.046022 | — | — | — |
| MD21-07-74390 | 21-25786 | 0.0000–0.5000 | SOIL | 0.0236 | NA | — | — | 0.525 | 0.050242 | 3.39 | — | 2.68 |

**Table 6.5-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-07-74391 | 21-25786 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.0712 | 0.11969 | — | — | — |
| MD21-07-74393 | 21-25787 | 0.0000–0.5000 | SOIL | 0.129 | — | — | — | 0.331 | 0.043615 | — | — | — |
| MD21-07-74394 | 21-25787 | 2.0000–2.5000 | SOIL | 0.044 | — | 0.201 | — | 0.608 | 0.047656 | — | — | — |
| MD21-07-74396 | 21-25788 | 0.0000–0.5000 | SOIL | 0.103 | NA | — | — | 0.218 (J) | 0.039 | — | — | — |
| MD21-07-74397 | 21-25788 | 2.0000–2.5000 | SOIL | 0.0558 | — | 0.228 | — | 0.132 (J) | 0.028604 | — | — | — |
| MD21-07-74399 | 21-25789 | 0.0000–0.5000 | SOIL | 0.0992 | NA | — | — | 0.701 (J) | — | — | — | — |
| MD21-07-74400 | 21-25789 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.887 (J) | 0.025751 | — | — | — |
| MD21-07-74402 | 21-25790 | 0.0000–0.5000 | SOIL | 0.0486 | 0.128 | — | — | 0.332 (J) | 0.070667 | — | — | — |
| MD21-07-74403 | 21-25790 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.0924 (J) | 0.053455 | — | — | — |
| MD21-07-74405 | 21-25791 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.163 (J) | 0.037805 | — | — | — |
| MD21-07-74406 | 21-25791 | 2.0000–2.5000 | SOIL | 0.0559 | NA | 0.144 | — | 0.186 (J) | — | — | — | — |
| MD21-07-74408 | 21-25792 | 0.0000–0.5000 | SOIL | 0.0758 | NA | — | — | 0.217 (J) | 0.045818 | — | — | — |
| MD21-07-74409 | 21-25792 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.0367 (J) | 0.033698 | — | — | — |
| MD21-07-74411 | 21-25793 | 0.0000–0.5000 | SOIL | 0.0426 | NA | — | — | 0.492 (J) | 0.034911 | — | — | — |
| MD21-07-74412 | 21-25793 | 2.0000–2.5000 | SOIL | — | — | 0.326 | — | 0.351 (J) | 0.031111 | — | — | — |
| MD21-07-74414 | 21-25794 | 0.0000–0.5000 | SOIL | 0.0927 | NA | — | — | 0.265 | 0.040364 | — | — | — |
| MD21-07-74415 | 21-25794 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.129 | 0.039667 | — | — | — |
| MD21-07-74418 | 21-25795 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.213 | 0.055989 | — | — | — |

**Table 6.5-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-07-74419 | 21-25795 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.0407 | 0.070364 | — | — | — |
| MD21-07-74416 | 21-25796 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.341 | 0.026112 | — | — | — |
| MD21-07-74417 | 21-25796 | 2.0000–2.5000 | QBT3 | — | NA | — | — | — | 0.018632 | — | — | — |
| MD21-07-74436 | 21-25797 | 0.0000–0.5000 | SOIL | 0.206 | — | — | — | 0.462 | 0.0684706 (J-) | — | — | — |
| MD21-07-74437 | 21-25797 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.0818 | 0.171938 (J-) | — | — | — |
| MD21-07-74438 | 21-25797 | 5.0000–6.0000 | QBT3 | — | NA | 0.135 | 0.0575 | 0.0661 | 0.181765 (J-) | — | — | — |
| RE21-09-3642 | 21-25797 | 10.0000–11.0000 | SOIL | NA | NA | NA | — | 0.068 | NA | NA | NA | NA |
| MD21-07-74439 | 21-25798 | 0.0000–0.5000 | SOIL | 0.299 | — | — | — | 0.797 | 0.07181 | — | — | — |
| MD21-07-74440 | 21-25798 | 2.0000–3.0000 | QBT3 | — | NA | — | — | — | 0.135556 | — | — | — |
| MD21-07-74441 | 21-25798 | 5.0000–6.0000 | QBT3 | — | NA | — | — | 0.0506 | 0.05946 | — | — | — |
| MD21-07-74445 | 21-25800 | 2.3300–3.3360 | QBT3 | — | NA | — | — | — | 0.054278 | — | — | — |
| MD21-07-74446 | 21-25800 | 4.3300–5.3300 | QBT3 | — | NA | — | — | — | 0.037961 | — | — | — |
| MD21-07-74447 | 21-25801 | 2.3300–3.3300 | QBT3 | — | NA | — | — | 0.093 | 0.036973 | — | — | — |
| MD21-07-74448 | 21-25801 | 4.3300–5.3300 | QBT3 | — | — | — | — | 0.0526 | 0.025954 | — | — | — |
| MD21-07-74449 | 21-25802 | 2.0000–3.0000 | SOIL | — | NA | — | — | 0.0739 | 0.061303 | — | — | — |
| MD21-07-74450 | 21-25802 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 0.046218 | — | — | — |
| MD21-07-74451 | 21-25803 | 2.3300–3.3300 | SOIL | — | — | — | — | 0.0448 | 0.128 | — | — | — |
| MD21-07-74452 | 21-25803 | 4.3300–5.3300 | QBT3 | — | NA | — | — | — | 0.080122 | — | — | — |

**Table 6.5-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-07-74453 | 21-25804 | 2.0000–3.0000 | SOIL | — | — | — | 0.107 | 0.158 | 0.050714 | — | — | — |
| MD21-07-74454 | 21-25804 | 4.0000–5.0000 | QBT3 | — | — | — | 0.301 | 0.0304 | 0.034581 | — | — | — |
| MD21-07-74455 | 21-25805 | 2.6700–3.6700 | SOIL | — | NA | — | — | 0.0761 | — | — | — | — |
| MD21-07-74456 | 21-25805 | 4.6700–5.6700 | QBT3 | — | — | — | — | — | 0.070902 | — | — | — |
| MD21-07-74457 | 21-25806 | 2.0000–3.0000 | QBT3 | — | NA | — | — | — | 0.060641 | 2.23 | 0.125 | 1.95 |
| MD21-07-74458 | 21-25806 | 4.0000–5.0000 | QBT3 | — | NA | — | — | — | — | — | 0.0922 | — |
| MD21-07-74459 | 21-25807 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | 0.124024 | 2.03 | 0.112 | — |
| MD21-07-74460 | 21-25807 | 4.5000–5.5000 | QBT3 | — | NA | — | — | — | 0.12 | — | — | — |
| MD21-07-74461 | 21-25808 | 2.5000–3.5000 | QBT3 | — | NA | — | — | — | 0.087706 | — | 0.1 | — |
| MD21-07-74462 | 21-25808 | 4.5000–5.5000 | QBT3 | — | NA | — | — | — | 0.087494 | — | — | — |
| MD21-07-74463 | 21-25809 | 2.0000–3.0000 | QBT3 | — | NA | — | — | — | 0.117157 | 2.32 | 0.119 | 2.18 |
| MD21-07-74464 | 21-25809 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 0.086442 | 2.86 | 0.182 | 3.08 |
| MD21-07-74433 | 21-25810 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.414 | 0.05784 | — | — | — |
| MD21-07-74434 | 21-25810 | 2.0000–3.0000 | QBT3 | — | NA | 0.133 | — | 0.367 | 0.039212 | 2.06 | 0.0978 | 2.08 |
| MD21-07-74435 | 21-25810 | 5.0000–6.0000 | QBT3 | — | NA | — | — | 0.0894 | 0.027315 | — | — | — |
| MD21-07-74467 | 21-25811 | 3.0000–4.0000 | QBT3 | — | NA | — | — | — | 0.09418 | — | — | — |
| MD21-07-74468 | 21-25811 | 5.0000–6.0000 | QBT3 | — | NA | — | — | — | 0.158889 | — | — | — |
| MD21-07-74469 | 21-25812 | 2.0000–3.0000 | QBT3 | — | NA | — | — | — | 0.1895 | — | — | — |

**Table 6.5-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-07-74470 | 21-25812 | 4.0000–5.0000 | QBT3 | — | NA | — | — | — | 0.197651 | — | — | — |
| MD21-07-74471 | 21-25813 | 3.0000–4.0000 | QBT3 | 6.41 | — | — | 0.144 | 0.287 | 0.033424 | — | — | — |
| MD21-07-74472 | 21-25813 | 5.0000–6.0000 | QBT3 | 2.38 | NA | — | 0.0474 | 0.149 | 0.050536 | — | — | — |
| MD21-07-74473 | 21-25814 | 1.6000–2.6000 | QBT3 | — | NA | — | — | — | 0.109506 | — | 0.111 | — |
| MD21-07-74474 | 21-25814 | 3.5000–4.5000 | QBT3 | — | NA | — | — | — | 0.091879 | — | — | — |
| MD21-07-74475 | 21-25815 | 2.0000–3.0000 | QBT3 | — | NA | — | — | 0.0469 | 0.170614 | — | — | — |
| MD21-07-74476 | 21-25815 | 4.0000–5.0000 | QBT3 | — | NA | — | — | — | 0.136765 | — | — | — |
| MD21-07-74478 | 21-25816 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 0.109524 | — | — | — |
| MD21-07-74477 | 21-25816 | 6.0000–7.0000 | QBT3 | — | NA | — | — | — | 0.223902 | — | — | — |
| MD21-07-74479 | 21-25817 | 2.5000–3.5000 | QBT3 | 0.581 | — | — | — | 0.11 | 0.041466 | — | — | — |
| MD21-07-74480 | 21-25817 | 4.5000–5.5000 | QBT3 | 0.144 | — | — | — | — | 0.06526 | — | — | — |
| RE21-07-76274 | 21-27671 | 55.0000–56.0000 | QBT3 | — | NA | — | — | — | 0.030231 | — | — | — |
| RE21-07-76275 | 21-27671 | 60.0000–61.0000 | QBT3 | — | NA | — | — | — | 0.033452 | — | — | — |
| RE21-07-76276 | 21-27671 | 65.0000–66.0000 | QBT3 | — | — | — | — | — | 0.034517 | — | — | — |
| RE21-07-76277 | 21-27671 | 70.0000–71.0000 | QBT3 | — | NA | — | — | — | 0.041255 | — | — | — |
| RE21-07-76278 | 21-27671 | 75.0000–76.0000 | QBT3 | — | NA | — | — | — | 0.036916 | — | — | — |
| RE21-07-76280 | 21-27672 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.09491 | — | — | — |
| RE21-07-76281 | 21-27672 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 0.071626 | — | — | — |

**Table 6.5-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-76282 | 21-27672 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | 0.038025 | — | — | — |
| RE21-07-76283 | 21-27672 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | 0.062714 | — | — | — |
| RE21-07-76284 | 21-27672 | 25.0000–26.0000 | QBT3 | — | NA | — | — | — | 0.064005 | — | — | — |
| RE21-07-76286 | 21-27673 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.10806 | — | — | — |
| RE21-07-76287 | 21-27673 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 0.076006 | — | — | — |
| RE21-07-76288 | 21-27673 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | 0.052368 | — | 0.1 | — |
| RE21-07-76289 | 21-27673 | 20.0000–21.0000 | QBT3 | — | NA | — | — | — | 0.029821 | — | — | — |
| RE21-07-76292 | 21-27674 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.076719 | — | — | — |
| RE21-07-76293 | 21-27674 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 0.03102 | — | — | — |
| RE21-07-76294 | 21-27674 | 18.0000–19.0000 | QBT3 | — | NA | — | — | — | 0.033054 | — | — | — |
| RE21-07-76295 | 21-27674 | 20.0000–21.0000 | QBT3 | — | NA | — | — | — | 0.025399 | — | — | — |
| RE21-07-76296 | 21-27674 | 25.0000–26.0000 | QBT3 | — | NA | — | — | — | 0.033293 | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] NA = Not analyzed.

[d] — = Not detected or not detected above BV/FV.

**Table 6.6-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-013(c)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 26.2 |
| RE21-06-68285 | 21-25648 | 2.5000–3.0000 | SOIL | — | — | — | — | — | 9230 | — | — | — | — | — |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68288 | 21-25649 | 2.5000–3.0000 | QBT3 | 14800 (J+) | — | 95 | — | — | 2570 | 23.8 | — | — | — | — |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 8.72 | — | — | — |
| RE21-06-68290 | 21-25650 | 2.5000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.527 (U) | — | — | — | — | — | — |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | — | — | — | — | 2.73 (U) | 6240 | — | — | — | — | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68295 | 21-25652 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 3750 | — | — | — | — | — |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | 7850 (J+) | — | 58.8 | — | — | — | — | — | — | — | — |
| RE21-06-68299 | 21-25654 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68300 | 21-25654 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68303 | 21-25655 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68305 | 21-25656 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | 7.68 | — | — | — | — |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.5 (U) | — | — | — | — | — | — |
| RE21-06-68313 | 21-25657 | 2.5000–3.0000 | QBT3 | 8490 | 4.38 | 68.6 | — | — | 2790 | — | — | 5.09 | — | 11.7 |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.49 (U) | — | — | — | — | — | — |
| RE21-06-68315 | 21-25658 | 2.5000–3.0000 | QBT3 | — | 3.94 | — | — | — | — | — | — | — | — | — |

**Table 6.6-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.525 (U) | — | — | — | — | — | — |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68318 | 21-25660 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.45 (U) | — | — | — | — | — | — |
| RE21-06-68319 | 21-25660 | 2.5000–3.0000 | QBT3 | 8350 | 4.69 | 108 | — | — | 6030 | — | — | — | — | — |
| RE21-06-68320 | 21-25661 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.53 (U) | — | — | — | — | — | — |
| RE21-06-68321 | 21-25661 | 2.5000–3.0000 | QBT3 | — | 3.18 | — | — | — | — | — | — | — | — | — |
| RE21-06-68322 | 21-25662 | 0.0000–0.5000 | SOIL | 29300 | — | — | — | 2.59 (U) | — | — | — | — | — | — |
| RE21-06-68323 | 21-25662 | 2.5000–3.0000 | QBT3 | — | 3.1 | — | — | — | — | — | — | — | — | — |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.542 (U) | — | — | — | — | — | — |
| RE21-06-68325 | 21-25663 | 2.5000–3.0000 | QBT3 | 17100 (J+) | — | 159 | — | — | 4990 | 9.78 | — | 5.86 | — | — |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68327 | 21-25664 | 2.5000–3.0000 | QBT3 | 22100 (J+) | 7.05 | 109 | — | — | 3990 | 12.5 | — | 5.47 | 15000 | 26.5 |
| RE21-09-3571 | 21-25664 | 8.0000–9.0000 | QBT3 | NA[f] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68329 | 21-25665 | 2.5000–3.0000 | SOIL | 34800 (J+) | — | — | 2.39 | — | — | 20.1 | — | — | 21900 | — |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.533 (U) | — | — | — | — | — | — |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68333 | 21-25667 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 2930 | 9.06 | — | — | — | — |
| RE21-06-68334 | 21-25668 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68335 | 21-25668 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68336 | 21-25669 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 10200 | — | — | — | — | — |
| RE21-06-68337 | 21-25669 | 2.5000–3.0000 | QBT3 | — | 4.42 | — | — | — | — | — | — | — | — | — |

**Table 6.6-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Sodium | Thallium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **2770** | **1.1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **915** | **0.73** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **na** | **5.16** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **na** | **74.9** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **na** | **20.4** | **929** | **1550** | **92900** |
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | — | 2.49 | — | 1.19 (J-) | 0.00054 (J) | — | — | — | — | — | — |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | — | 0.228 | — | — | 0.00157 (J) | — | — | — | — | — | — |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | — | — | — | 2.68 (J-) | 0.00145 (J) | 1.54 (U) | — | — | — | — | — |
| RE21-06-68285 | 21-25648 | 2.5000–3.0000 | SOIL | — | — | — | 0.863 (J-) | 0.002 (J) | 1.58 (U) | — | — | — | — | — |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | — | — | — | 4.22 (J-) | 0.000606 (J) | 1.53 (U) | — | — | — | — | — |
| RE21-06-68288 | 21-25649 | 2.5000–3.0000 | QBT3 | 2590 | — | 7.06 | 4.2 (J-) | 0.00261 | 1.6 (U) | — | — | — | — | — |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | — | — | — | 1.16 (J-) | 0.00218 | 1.54 (U) | — | — | — | — | — |
| RE21-06-68290 | 21-25650 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.00336 | 1.58 (U) | — | — | — | — | — |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | — | — | — | 1.75 | 0.000645 (J) | 3.81 | — | — | — | — | — |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | — | — | — | 0.839 (J) | 0.00285 | 5.21 | — | — | — | — | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.58 (U) | — | — | — | — | — |
| RE21-06-68295 | 21-25652 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.55 (U) | — | — | — | — | — |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | — | — | — | 3.16 (J-) | — | 1.54 (U) | — | — | — | — | — |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.5 (U) | — | — | — | — | — |
| RE21-06-68299 | 21-25654 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | 1.55 (U) | — | — | — | — | — |
| RE21-06-68300 | 21-25654 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.54 (U) | — | — | — | — | — |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | — | — | — | 0.954 (J-) | — | — | — | — | 5.56 (J+) | — | — |
| RE21-06-68303 | 21-25655 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.55 (U) | — | — | — | — | — |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.53 (U) | — | — | — | — | — |
| RE21-06-68305 | 21-25656 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | 1.51 (U) | — | — | — | — | — |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 5.62 | — | — | — | — | — |
| RE21-06-68313 | 21-25657 | 2.5000–3.0000 | QBT3 | 1700 | — | 6.65 | — | — | 2.85 | — | — | — | — | — |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | — | — | — | 0.781 (J-) | NA | 4.52 | — | — | — | — | — |
| RE21-06-68315 | 21-25658 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.61 | — | — | — | — | — |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 3.83 | — | — | — | — | — |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | — | — | — | 1.03 (J-) | — | 2.72 | — | — | — | — | — |
| RE21-06-68318 | 21-25660 | 0.0000–0.5000 | SOIL | — | — | — | 1.91 (J-) | — | 6.14 | — | — | — | — | — |
| RE21-06-68319 | 21-25660 | 2.5000–3.0000 | QBT3 | — | — | — | 1.06 (J-) | 0.00242 | 2.04 | — | — | — | — | — |
| RE21-06-68320 | 21-25661 | 0.0000–0.5000 | SOIL | — | — | — | 2.85 (J-) | — | 5.99 | — | — | — | — | — |
| RE21-06-68321 | 21-25661 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.32 (J) | — | — | — | — | — |
| RE21-06-68322 | 21-25662 | 0.0000–0.5000 | SOIL | — | — | — | 1.19 (J-) | — | 5.84 | — | — | — | — | — |

**Table 6.6-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Sodium | Thallium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **2770** | **1.1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **915** | **0.73** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **na** | **5.16** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **na** | **74.9** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **na** | **20.4** | **929** | **1550** | **92900** |
| RE21-06-68323 | 21-25662 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.77 | — | — | — | — | — |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | — | — | — | 3.51 | — | — | — | — | — | — | — |
| RE21-06-68325 | 21-25663 | 2.5000–3.0000 | QBT3 | 2960 | — | — | 0.792 (J) | 0.000929 (J) | 1.55 (U) | — | — | — | — | — |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | — | — | — | 5.07 | 0.00119 (J) | 1.59 (U) | — | — | — | — | 49.6 |
| RE21-06-68327 | 21-25664 | 2.5000–3.0000 | QBT3 | 3580 | — | 8.93 | 0.986 (J) | 0.00726 | 0.809 (J) | — | — | — | 24.2 | — |
| RE21-09-3571 | 21-25664 | 8.0000–9.0000 | QBT3 | NA | NA | NA | NA | 0.0019 | NA | NA | NA | NA | NA | NA |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | — | — | — | 0.95 (J) | 0.000648 (J) | — | — | — | — | — | — |
| RE21-06-68329 | 21-25665 | 2.5000–3.0000 | SOIL | 5970 | 0.123 | — | 0.959 (J) | 0.00356 | 1.7 (U) | 1950 | — | 2.02 (J-) | — | — |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | — | — | — | 5.7 | — | 1.63 (U) | — | — | — | — | — |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | — | — | — | 2.57 | — | — | — | — | — | — | — |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | — | — | — | 3.46 | — | 1.67 (U) | — | — | — | — | — |
| RE21-06-68333 | 21-25667 | 2.5000–3.0000 | QBT3 | — | — | — | 0.776 (J) | 0.000603 (J) | 1.53 (U) | — | — | — | — | — |
| RE21-06-68334 | 21-25668 | 0.0000–0.5000 | SOIL | — | — | — | 1.87 (J-) | — | 1.56 (U) | — | — | — | — | — |
| RE21-06-68335 | 21-25668 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.55 (U) | — | — | — | — | — |
| RE21-06-68336 | 21-25669 | 0.0000–0.5000 | SOIL | — | — | — | 1.32 (J-) | — | — | — | — | — | — | — |
| RE21-06-68337 | 21-25669 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | 1.57 (U) | — | — | — | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.6-2**
**Summary of Organic Chemicals Detected at SWMU 21-013(c)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Chloroform | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **240000**[b] | **347** | **5.72** | **621** |
| **Industrial SSL** | | | | **36700** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2500000**[b] | **1370** | **31.9** | **2340** |
| **Construction Worker SSL** | | | | **18600** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **2500000**[c] | **4760** | **671** | **20600** |
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | —[d] | — | — | — | — | 0.0528 | 0.0907 (J+) | 0.044 (J) | — | — | — | NA[e] | 0.0479 |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | — | 0.00703 (J) | — | — | — | 0.036 | 0.053 (J) | — | — | — | — | — | 0.0421 |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | 0.0172 (J) | 0.024 (J) | — | — | — | — | 0.108 (J) | — | — | — | — | NA | 0.0711 |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | 0.0366 | 0.0497 | — | 0.0022 (J) | — | 0.145 | 0.236 (J) | 0.12 | — | — | — | NA | 0.168 |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 0.0197 (J) | — | — | — | — | NA | — |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | 0.0145 (J) | 0.0232 (J) | — | — | — | 0.0792 | 0.133 | 0.0583 | — | — | — | NA | 0.0853 |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | — | — | 0.0016 (J) | — | — | — | 0.0226 (J) | — | — | — | — | NA | — |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | — | — | — | 0.0014 (J) | — | 0.0182 (J) | 0.035 (J) | — | — | — | — | NA | — |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | — | — | — | — | — | — | 0.0111 (J) | — | — | — | — | — | — |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | — | 0.0195 (J) | 0.0036 | 0.0019 (J) | — | 0.0242 (J) | 0.0365 (J) | — | — | — | — | NA | — |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | — | — | 0.0039 | 0.0023 (J) | — | — | 0.0233 (J) | — | — | — | — | NA | — |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | — | — | — | 0.0016 (J) | — | 0.024 (J) | 0.0528 | 0.0192 (J) | — | — | — | NA | 0.0249 (J) |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 0.435 (J) | — | NA | — |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | — | — | — | 0.0024 (J) | — | 0.0172 (J) | 0.0316 (J) | 0.0114 (J) | — | 0.471 (J) | — | NA | 0.0172 (J) |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.462 (J) | — | 0.000287 (J) | — |
| RE21-06-68318 | 21-25660 | 0.0000-0.5000 | SOIL | — | — | — | 0.00194 (J) | — | — | 0.0125 (J) | — | — | 0.435 (J) | — | NA | — |
| RE21-06-68320 | 21-25661 | 0.0000-0.5000 | SOIL | — | — | — | 0.00132 (J) | — | — | — | — | — | 0.432 (J) | 0.355 | NA | — |
| RE21-06-68321 | 21-25661 | 2.5000-3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.44 (J) | — | — | — |
| RE21-06-68322 | 21-25662 | 0.0000-0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 0.471 (J) | — | NA | — |
| RE21-06-68323 | 21-25662 | 2.5000-3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.437 (J) | — | — | — |

**Table 6.6-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Chloroform | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **240000**[b] | **347** | **5.72** | **621** |
| **Industrial SSL** | | | | **36700** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2500000**[b] | **1370** | **31.9** | **2340** |
| **Construction Worker SSL** | | | | **18600** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **2500000**[c] | **4760** | **671** | **20600** |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | — | 0.0227 (J) | 0.0062 | 0.0029 (J) | — | 0.0474 | — | 0.0344 (J) | — | — | — | NA | 0.0653 |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | — | — | — | 0.0014 (J) | — | 0.021 (J) | — | — | — | — | — | NA | 0.0297 (J) |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | 0.0173 (J) | 0.0248 (J) | 0.0062 | 0.0041 | — | 0.0665 | — | 0.0512 (J) | — | — | — | NA | 0.076 |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | — | 0.0105 (J) | — | — | — | 0.0675 | 0.174 | 0.0882 (J) | 0.0622 | — | — | NA | 0.0856 |
| RE21-09-3572 | 21-604500 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | 0.14 (J) | — | 0.14 (J) | NA | 0.12 (J) | NA | — |
| RE21-09-3573 | 21-604501 | 0.0000–0.5000 | SOIL | — | — | NA | NA | 0.08 (J) | — | 0.23 (J) | — | 0.18 (J) | NA | — | NA | 0.082 (J) |

**Table 6.6-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | 0.0685 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | 0.0595 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | 0.118 | 0.013 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | 0.374 | 0.0214 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | 0.0205 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | 0.144 | 0.0105 (J) | 1.32E-05 | 2.41E-05 | 0.0000024 (J) | 6.14E-06 | 0.000000537 (J) | 0.000000487 (J) | 4.39E-06 | 0.000000393 (J) | 0.000000214 (J) | 0.000000225 (J) |

**Table 6.6-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | — | — | 0.0000012 (J) | 2.15E-06 | 0.000000255 (J) | 4.71E-07 | — | — | — | 0.0000000754 (J) | — | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | 0.0194 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | 0.0341 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | 0.0117 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | 0.0355 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | 0.0219 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | 0.0545 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | 0.0328 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68318 | 21-25660 | 0.0000–0.5000 | SOIL | 0.0149 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68320 | 21-25661 | 0.0000–0.5000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68321 | 21-25661 | 2.5000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68322 | 21-25662 | 0.0000–0.5000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68323 | 21-25662 | 2.5000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | 0.0205 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | 0.159 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | 0.056 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | 0.182 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | 0.012 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | 0.107 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-3572 | 21-604500 | 0.0000–0.5000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-09-3573 | 21-604501 | 0.0000–0.5000 | SOIL | 0.19 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.6-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran[ 1,2,3,4,6,7,8,9-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Total) | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **6.21** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** |
| **Industrial SSL** | | | | **na** | **23.4** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** |
| **Construction Worker SSL** | | | | **na** | **213** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** |
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | NA | 0.0315 (J) | NA | NA | NA | NA | 0.0146 (J) | 0.0732 | NA | NA | NA |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | NA | — | NA | NA | NA | NA | 0.03 (J) | 0.088 | NA | NA | — |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0804 | 0.146 | NA | NA | NA |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | NA | 0.103 | NA | NA | NA | NA | 0.253 | 0.384 | NA | NA | NA |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0145 (J) | 0.0295 (J) | NA | NA | NA |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | 4.42E-06 | 0.0492 | 0.000112 | 0.00000521 (J) | 0.000000269 (J) | 2.52E-06 | 0.108 | 0.184 (J) | 0.000000256 (J) | 4.47E-07 | NA |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | 7.54E-08 | — | 1.08E-05 | — | — | — | — | — | — | — | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.022 (J) | NA | NA | NA |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0173 (J) | 0.0419 | NA | NA | NA |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | 0.0172 (J) | NA | NA | — |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0196 (J) | 0.0516 | NA | NA | NA |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0117 (J) | 0.0279 (J) | NA | NA | NA |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | NA | 0.017 (J) | NA | NA | NA | NA | 0.0267 (J) | 0.0478 | NA | NA | NA |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0213 (J) | 0.0449 | NA | NA | NA |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-06-68318 | 21-25660 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.011 (J) | NA | NA | NA |
| RE21-06-68320 | 21-25661 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.0133 (J) | NA | NA | NA |
| RE21-06-68321 | 21-25661 | 2.5000–3.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-06-68322 | 21-25662 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-06-68323 | 21-25662 | 2.5000–3.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.013 (J) | 0.0189 (J) | NA | NA | NA |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | NA | 0.0296 (J) | NA | NA | NA | NA | 0.103 | 0.161 | NA | NA | NA |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0231 (J) | 0.0551 | NA | NA | NA |

**Table 6.6-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran[ 1,2,3,4,6,7,8,9-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Total) | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **6.21** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** |
| **Industrial SSL** | | | | **na** | **23.4** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** |
| **Construction Worker SSL** | | | | **na** | **213** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | NA | 0.0446 | NA | NA | NA | NA | 0.119 | 0.198 | NA | NA | NA |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.0125 (J) | NA | NA | — |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | NA | 0.071 | NA | NA | NA | NA | 0.0484 | 0.108 | NA | NA | NA |
| RE21-09-3572 | 21-604500 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-09-3573 | 21-604501 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.11 (J) | 0.17 (J) | NA | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

**Table 6.6-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-013(c)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.054**[b] | **1.31**[b] | **na** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **33** | **5.7** | **750** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **210** | **1900** | **440000** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **36** | **800** | **320000** | **43** |
| RE21-06-68282 | 21-25647 | 0.0000–0.5000 | SOIL | —[c] | — | 0.28 | — | 0.038591 | — |
| RE21-06-68283 | 21-25647 | 2.5000–3.0000 | SOIL | — | NA [d] | 0.125 | — | 0.106101 | — |
| RE21-06-68284 | 21-25648 | 0.0000–0.5000 | SOIL | 0.0402 | — | 0.728 | — | 0.069477 | — |
| RE21-06-68285 | 21-25648 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.076284 | — |
| RE21-06-68287 | 21-25649 | 0.0000–0.5000 | SOIL | 0.025 | — | 0.0643 | — | 0.043767 | — |
| RE21-06-68288 | 21-25649 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.170761 | — |
| RE21-06-68289 | 21-25650 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.034682 | — |
| RE21-06-68290 | 21-25650 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.057512 | — |
| RE21-06-68292 | 21-25651 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.016144 | — |
| RE21-06-68293 | 21-25651 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.054454 | — |
| RE21-06-68294 | 21-25652 | 0.0000–0.5000 | SOIL | — | — | 0.0576 | — | 0.07942 | — |
| RE21-06-68295 | 21-25652 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.016823 | — |
| RE21-06-68297 | 21-25653 | 0.0000–0.5000 | SOIL | — | — | 0.201 | — | 0.031321 | — |
| RE21-06-68298 | 21-25653 | 2.5000–3.0000 | QBT3 | 0.0424 | 0.33 | 0.243 | — | 0.026249 | — |
| RE21-06-68299 | 21-25654 | 0.0000–0.5000 | QBT3 | — | — | — | — | 0.032226 | — |
| RE21-06-68300 | 21-25654 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.056415 | — |
| RE21-06-68302 | 21-25655 | 0.0000–0.5000 | SOIL | — | — | 0.144 | — | 0.201526 | — |
| RE21-06-68303 | 21-25655 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.029591 | — |
| RE21-06-68304 | 21-25656 | 0.0000–0.5000 | SOIL | 0.0857 | — | 0.549 | — | 0.062382 | — |
| RE21-06-68305 | 21-25656 | 0.5000–1.0000 | QBT3 | — | — | — | — | 0.019789 | — |
| RE21-06-68312 | 21-25657 | 0.0000–0.5000 | SOIL | — | — | 0.0564 | — | 0.06674 | — |
| RE21-06-68313 | 21-25657 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.089576 | — |
| RE21-06-68314 | 21-25658 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.082905 | — |
| RE21-06-68315 | 21-25658 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.074274 | — |
| RE21-06-68316 | 21-25659 | 0.0000–0.5000 | SOIL | 0.0519 | — | 0.121 | — | 0.036467 | — |

**Table 6.6-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.054**[b] | **1.31**[b] | **na** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **33** | **5.7** | **750** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **210** | **1900** | **440000** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **36** | **800** | **320000** | **43** |
| RE21-06-68317 | 21-25659 | 0.5000–1.0000 | QBT3 | — | — | — | — | 0.170312 | — |
| RE21-06-68318 | 21-25660 | 0.0000–0.5000 | SOIL | — | — | 0.062 | — | 0.044052 | — |
| RE21-06-68319 | 21-25660 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.103956 | — |
| RE21-06-68320 | 21-25661 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.068938 | — |
| RE21-06-68321 | 21-25661 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.039251 | — |
| RE21-06-68322 | 21-25662 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.128811 | — |
| RE21-06-68323 | 21-25662 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.055406 | — |
| RE21-06-68324 | 21-25663 | 0.0000–0.5000 | SOIL | 0.051 | — | — | — | 0.247778 | — |
| RE21-06-68325 | 21-25663 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.092933 | — |
| RE21-06-68326 | 21-25664 | 0.0000–0.5000 | SOIL | 0.0687 | — | 0.0561 | — | 0.164735 | — |
| RE21-06-68327 | 21-25664 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.232418 | — |
| RE21-06-68328 | 21-25665 | 0.0000–0.5000 | SOIL | — | — | 0.168 | — | 0.214642 | — |
| RE21-06-68329 | 21-25665 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.101574 | — |
| RE21-06-68330 | 21-25666 | 0.0000–0.5000 | SOIL | 0.0375 | — | 0.162 | — | 0.401572 | — |
| RE21-06-68331 | 21-25666 | 2.5000–3.0000 | SOIL | — | — | — | — | 0.084376 | — |
| RE21-06-68332 | 21-25667 | 0.0000–0.5000 | SOIL | 0.0568 | — | 0.137 | — | 0.24847 | — |
| RE21-06-68333 | 21-25667 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.037214 | — |
| RE21-06-68334 | 21-25668 | 0.0000–0.5000 | SOIL | 0.0271 | NA | 0.129 | — | 0.110902 | — |
| RE21-06-68335 | 21-25668 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.055483 | — |
| RE21-06-68336 | 21-25669 | 0.0000–0.5000 | SOIL | 0.043 | — | 0.0742 | — | 0.17817 | — |
| RE21-06-68337 | 21-25669 | 2.5000–3.0000 | QBT3 | — | — | — | — | 0.046326 | 0.0937 |
| RE21-09-3573 | 21-604501 | 0.0000–0.5000 | SOIL | NA | NA | 0.105 | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.7-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-022(f)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Calcium | Chromium | Cobalt | Copper | Lead | Manganese | Nitrate | Selenium | Silver | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **2200** | **7.14** | **3.14** | **4.66** | **11.2** | **482** | **na** | **0.3** | **1** | **63.5** |
| **Residential SSL** | | | | **3.9** | **15600** | **na**[a] | **219**[b] | **23**[c] | **3130** | **400** | **10700** | **125000** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **na** | **2920**[b] | **300**[c] | **45400** | **800** | **145000** | **1820000** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **na** | **449**[b] | **34.9**[d] | **12400** | **800** | **463** | **496000** | **1550** | **1550** | **92900** |
| RE21-08-8714 | 21-603138 | 13.5000–14.5000 | QBT3 | —[e] | — | — | — | — | 4.69 | 11.6 | — | — | 2.79 | — | — |
| RE21-08-8715 | 21-603138 | 18.5000–19.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 2.58 | — | — |
| RE21-08-8716 | 21-603138 | 23.5000–24.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 2.4 | — | — |
| RE21-08-8720 | 21-603140 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 1.15 (J) | — | 131 (J-) |
| RE21-08-8721 | 21-603140 | 9.0000–10.0000 | QBT3 | — | — | — | 9.61 (J) | — | 5.67 (J) | — | — | — | 0.815 (J) | 2.71 | — |
| RE21-08-8722 | 21-603141 | 8.5000–9.5000 | QBT3 | — | — | — | — | — | — | — | — | 1.05 (J-) | 1.03 (J) | — | 161 (J-) |
| RE21-08-8723 | 21-603141 | 10.5000–11.5000 | QBT3 | — | — | — | — | — | — | — | — | 1.09 (J-) | 0.713 (J) | — | 74.9 (J-) |
| RE21-08-8724 | 21-603142 | 8.5000–9.5000 | QBT3 | — | 54 | 2690 | — | — | — | 12.5 | — | — | 1.06 (J) | — | 3840 |
| RE21-08-8725 | 21-603142 | 10.5000–11.5000 | QBT3 | — | — | — | 8.03 | — | — | — | — | — | 1.66 (U) | — | 85.2 |
| RE21-08-8726 | 21-603143 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | — | 1.09 (J-) | 1.73 (U) | — | 354 |
| RE21-08-8727 | 21-603143 | 9.5000–10.5000 | QBT3 | — | — | — | — | — | — | — | — | 1.95 (J-) | 0.775 (J) | — | 86 |
| RE21-08-8728 | 21-603144 | 7.5000–8.5000 | QBT3 | — | — | — | 8.28 | — | — | — | — | — | 1.7 (U) | — | — |
| RE21-08-8729 | 21-603144 | 9.5000–10.5000 | QBT3 | — | — | — | 8.19 | — | — | — | — | — | 1.75 (U) | — | 64.2 |
| RE21-08-8730 | 21-603145 | 6.5000–7.5000 | QBT3 | — | 52.8 | — | — | 5.69 | 10.6 | 34.4 | 1580 | — | 1 (J) | — | 98.7 |
| RE21-08-8731 | 21-603145 | 8.5000–9.5000 | QBT3 | 3.18 | 63.1 | — | — | 3.47 | 7.84 | 33.7 | 1100 | — | 1.52 (J) | — | 102 |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSLs used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected.

**Table 6.7-2**
**Summary of Organic Chemicals Detected at SWMU 21-022(f)**

| Sample ID | Location ID | Depth (ft) | Media | Acetone | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene | Fluoranthene | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **67500** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **621** | **2290** | **6.21** | **na**[b] | **1830** | **1720** |
| **Industrial SSL** | | | | **851000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2340** | **24400** | **23.4** | **na** | **20500** | **18300** |
| **Construction Worker SSL** | | | | **263000** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **20600** | **8910** | **213** | **na** | **7150** | **6680** |
| RE21-08-8722 | 21-603141 | 8.5000–9.5000 | QBT3 | 0.202 (J) | —[c] | — | — | — | 0.012 (J) | — | — | — | NA[d] | — | — |
| RE21-08-8744 | 21-603141 | 8.5000–9.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00000187 (J) | NA | NA |
| RE21-08-8723 | 21-603141 | 10.5000–11.5000 | QBT3 | 0.119 (J) | — | — | — | — | — | — | — | — | NA | — | — |
| RE21-08-8724 | 21-603142 | 8.5000–9.5000 | QBT3 | — | 0.0738 | 0.0634 | 0.122 | 0.0264 (J) | — | 0.0741 | 0.0807 | 0.0275 (J) | NA | 0.0121 (J) | 0.0735 |
| RE21-08-8725 | 21-603142 | 10.5000–11.5000 | QBT3 | — | — | — | 0.0134 (J) | — | — | — | — | — | NA | — | — |
| RE21-08-8729 | 21-603144 | 9.5000–10.5000 | QBT3 | — | 0.0221 (J) | 0.015 (J) | 0.0287 (J) | — | — | 0.0173 (J) | 0.0382 (J) | — | NA | 0.0174 (J) | 0.0295 (J) |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] na = Not available.

[c] — = Not detected.

[d] NA = Not analyzed.

**Table 6.7-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-022(f)**

| Sample ID | Location ID | Depth (ft) | Media | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **1.98** | **0.09** |
| **Residential SAL** | | | | **33** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **210** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **36** | **320000** | **220** | **43** |
| RE21-08-8714 | 21-603138 | 13.5000–14.5000 | QBT3 | —[b] | 0.584607 | 2.03 | — |
| RE21-08-8715 | 21-603138 | 18.5000–19.5000 | QBT3 | — | 0.50954 | — | — |
| RE21-08-8716 | 21-603138 | 23.5000–24.5000 | QBT3 | 0.0321 | 0.20678 | — | — |
| RE21-08-8720 | 21-603140 | 7.0000–8.0000 | QBT3 | — | 0.203056 | — | — |
| RE21-08-8721 | 21-603140 | 9.0000–10.0000 | QBT3 | — | 0.089428 | — | — |
| RE21-08-8722 | 21-603141 | 8.5000–9.5000 | QBT3 | — | 4.15195 | — | 0.0983 |
| RE21-08-8723 | 21-603141 | 10.5000–11.5000 | QBT3 | — | 1.48728 | — | 0.0917 |
| RE21-08-8724 | 21-603142 | 8.5000–9.5000 | QBT3 | — | 0.894234 | — | — |
| RE21-08-8725 | 21-603142 | 10.5000–11.5000 | QBT3 | — | 0.723855 | — | 0.189 |
| RE21-08-8726 | 21-603143 | 7.5000–8.5000 | QBT3 | — | 0.23625 | — | — |
| RE21-08-8727 | 21-603143 | 9.5000–10.5000 | QBT3 | — | 0.834352 | — | — |
| RE21-08-8728 | 21-603144 | 7.5000–8.5000 | QBT3 | — | 0.203409 | — | — |
| RE21-08-8729 | 21-603144 | 9.5000–10.5000 | QBT3 | — | 0.308263 | — | — |
| RE21-08-8730 | 21-603145 | 6.5000–7.5000 | QBT3 | — | 1.34764 | — | — |
| RE21-08-8731 | 21-603145 | 8.5000–9.5000 | QBT3 | — | 1.70959 | — | — |
| MD21-09-8724 | 21-603145 | 13.5000–14.5000 | QBT3 | NA[c] | 0.273632 | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] — = Not detected or not detected above BV/FV.
[c] NA = Not analyzed.

**Table 6.8-1**
**Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-022(h)-99**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **217000** |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | —[c] | — | — | — | — | 5950 (J+) | — | 9.8 (J-) | 0.54 (U) | — |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 4150 (J+) | — | 5.4 (J-) | 0.54 (U) | — |
| RE21-07-991 | 21-600233 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | 0.53 (U) | — |
| RE21-07-992 | 21-600233 | 2.0000–3.0000 | QBT3 | — | 0.52 (UJ) | — | — | — | — | — | — | 0.52 (U) | — |
| RE21-07-993 | 21-600234 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | 0.51 (U) | — |
| RE21-07-994 | 21-600234 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | 0.52 (U) | — |
| RE21-07-996 | 21-600235 | 2.0000–3.0000 | QBT3 | — | 0.51 (UJ) | — | — | — | 2500 (J+) | — | — | 0.51 (U) | — |
| RE21-07-997 | 21-600236 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | 0.53 (U) | — |
| RE21-07-998 | 21-600236 | 2.0000–3.0000 | QBT3 | — | 0.51 (UJ) | — | — | — | — | — | — | 0.51 (U) | — |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | — | 0.52 (UJ) | — | — | — | — | — | — | 0.52 (U) | — |
| RE21-07-1000 | 21-600237 | 2.0000–3.0000 | QBT3 | — | 0.53 (UJ) | — | — | — | — | — | — | 0.53 (U) | — |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | NA[d] | — | — |
| RE21-07-1002 | 21-600238 | 2.0000–3.0000 | QBT3 | — | — | — | 67.1 | — | — | — | NA | 0.57 (UJ) | — |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.2 | — | 22.2 (J-) | NA | — | — |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | — | 0.62 (UJ) | — | — | — | — | — | NA | — | — |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-1006 | 21-600240 | 2.0000–3.0000 | QBT3 | 9300 | — | 2.9 | 136 | — | 36600 (J-) | 9.5 (J-) | NA | — | — |
| MD21-09-8601 | 21-600240 | 4.0000–5.0000 | QBT3 | NA | NA | NA | 100 | NA | NA | NA | NA | NA | NA |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | — | — | — | — | 6 | 20100 (J-) | 27.3 (J-) | NA | — | — |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | — | 0.6 (UJ) | — | — | — | — | 11.9 (J-) | NA | 0.6 (UJ) | — |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.73 (J) | — | — | NA | — | — |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | — | — | — | 56.6 | — | 12600 (J-) | — | NA | 0.57 (UJ) | — |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.86 (J) | — | 356 | 249 | — | 22400 |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 22.6 | 67.7 | — | — |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | 39.2 | 17.9 | — | — |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | 7730 | — | — | 49.3 | — | — | — | — | — | — |

**Table 6.8-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **217000** |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 10200 | — | — | 72.4 | — | — | 14.8 | 47.7 | — | — |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | — | — | 6.03 | — | — |
| RE21-07-5011 | 21-601059 | 13.5000–14.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5012 | 21-601059 | 15.5000–16.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5013 | 21-601060 | 13.5000–14.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5017 | 21-601062 | 13.5000–14.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5018 | 21-601062 | 18.5000–19.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5019 | 21-601062 | 23.5000–24.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5020 | 21-601063 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5021 | 21-601063 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5022 | 21-601063 | 24.0000–25.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8841 | 21-605282 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8842 | 21-605282 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 52 | NA | NA | NA | NA | NA | NA |
| MD21-09-8843 | 21-605282 | 4.0000–5.0000 | QBT3 | NA | NA | NA | 130 | NA | NA | NA | NA | NA | NA |
| MD21-10-4661 | 21-605282 | 9.0000–10.0000 | QBT3 | NA | NA | NA | 110 | NA | NA | NA | NA | NA | NA |
| MD21-09-8844 | 21-605283 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8845 | 21-605284 | 14.0000–15.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8846 | 21-605284 | 19.0000–20.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-4664 | 21-609837 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.8-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **1** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **23**[e] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **310**[e] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **92.9**[f] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **92900** |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | 11.3 | — | — | 16.4 | — | 62.7 (J) | 0.012 | — | — | — |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | — | — | — | 6.3 | — | 37.1 (J) | — | — | — | — |
| RE21-07-991 | 21-600233 | 0.0000–0.5000 | QBT3 | — | — | — | 7.3 | — | 4.7 (J) | — | — | — | — |
| RE21-07-992 | 21-600233 | 2.0000–3.0000 | QBT3 | — | — | — | 0.31 (J) | — | 0.61 (J) | — | 0.52 (U) | — | — |
| RE21-07-993 | 21-600234 | 0.0000–0.5000 | QBT3 | — | — | — | 0.77 | — | 0.96 (J) | — | — | — | — |
| RE21-07-994 | 21-600234 | 2.0000–3.0000 | QBT3 | — | — | — | 0.4 (J) | — | — | — | — | — | — |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | 12.5 | — | — | 0.46 (J) | — | 2.1 (J) | — | — | — | — |
| RE21-07-996 | 21-600235 | 2.0000–3.0000 | QBT3 | — | — | — | 0.23 (J) | — | 3.7 (J) | — | — | — | — |
| RE21-07-997 | 21-600236 | 0.0000–0.5000 | QBT3 | — | — | — | 0.28 (J) | — | 3.6 (J) | — | — | — | — |
| RE21-07-998 | 21-600236 | 2.0000–3.0000 | QBT3 | — | — | — | 0.15 (J) | — | — | — | — | — | — |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | — | — | — | 0.18 (J) | — | 0.88 (J) | — | 0.52 (U) | — | — |
| RE21-07-1000 | 21-600237 | 2.0000–3.0000 | QBT3 | — | — | — | 0.15 (J) | — | — | — | — | — | — |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | — | — | — | 18 | — | 6.8 (J+) | — | — | — | NA |
| RE21-07-1002 | 21-600238 | 2.0000–3.0000 | QBT3 | — | — | — | 12 | — | 1.6 (J+) | — | 0.38 (U) | — | NA |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | 185 (J-) | — | 1.24 (J-) | 8 | — | 4.6 (J+) | — | — | 1.8 | NA |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | 11.4 (J-) | — | 0.133 (J-) | 1.3 | — | — | — | — | — | NA |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | 23.6 (J-) | — | — | 21.3 | — | 4.2 (J+) | — | — | — | NA |
| RE21-07-1006 | 21-600240 | 2.0000–3.0000 | QBT3 | — | 2070 | — | 4.9 | 10.9 (J-) | 1.7 (J+) | 0.0043 (J+) | 0.53 (U) | — | NA |
| MD21-09-8601 | 21-600240 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | 104 (J-) | — | 0.965 (J-) | 3.3 | — | 1.4 (J+) | — | — | 1.8 | NA |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | — | — | 0.25 (J-) | 0.83 | — | — | — | 0.38 (U) | — | NA |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | 49.5 (J-) | — | 0.274 (J-) | 7.2 (J) | — | 3.4 (J+) | — | — | — | NA |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | — | — | — | 1.8 | 7.2 (J-) | — | — | 0.58 (U) | — | NA |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | 3940 | — | 1.92 (J) | 13.9 | — | 1.52 | — | 8.11 (U) | 47.3 | 1200 |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | 33.9 | — | 0.105 (J) | 0.56 | — | 1.38 | — | 1.03 (J) | — | 86.4 |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | 21.2 | — | 0.134 (J) | 0.868 | 6.83 | 1.42 | — | 1.13 (J) | 6.71 | 75 |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | — | — | — | 0.996 | — | 1.77 | — | 1.67 (U) | — | — |

**Table 6.8-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **1** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **23**[e] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **310**[e] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **92.9**[f] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **92900** |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | — | — | — | 1.2 | — | 1.48 | — | 1.62 (U) | — | — |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 21.8 | — | 0.108 (J+) | 1.57 | — | 1.44 | — | 0.866 (J) | — | 104 (J) |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | — | — | — | 1.02 | — | — | — | 1.51 (U) | — | — |
| RE21-07-5011 | 21-601059 | 13.5000–14.5000 | QBT3 | — | — | — | 0.948 | — | 1.84 | — | 0.602 (J) | — | — |
| RE21-07-5012 | 21-601059 | 15.5000–16.5000 | QBT3 | — | — | — | 0.828 | — | 1.25 | — | 1.6 (U) | — | — |
| RE21-07-5013 | 21-601060 | 13.5000–14.5000 | QBT3 | — | — | — | 1.53 | — | 1.53 | — | 1.19 (J) | — | — |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | 12.7 | — | — | 1.38 | — | 1.47 | — | 1.6 (U) | — | — |
| RE21-07-5017 | 21-601062 | 13.5000–14.5000 | QBT3 | — | — | — | 1.5 | — | 1.6 | — | 0.609 (J) | — | — |
| RE21-07-5018 | 21-601062 | 18.5000–19.5000 | QBT3 | — | — | — | 1.17 | — | 1.38 | — | 1.62 (U) | — | — |
| RE21-07-5019 | 21-601062 | 23.5000–24.5000 | QBT3 | 12.4 | — | — | 1.17 | — | 1.53 | — | 1.54 (U) | — | — |
| RE21-07-5020 | 21-601063 | 14.0000–15.0000 | QBT3 | — | — | — | 0.46 | — | — | — | 2.23 | — | — |
| RE21-07-5021 | 21-601063 | 19.0000–20.0000 | QBT3 | — | — | — | 0.5 | — | — | — | 1.32 (J) | — | — |
| RE21-07-5022 | 21-601063 | 24.0000–25.0000 | QBT3 | — | — | — | 0.345 | — | — | — | 1.52 (J) | — | — |
| MD21-09-8841 | 21-605282 | 0.0000–0.5000 | SOIL | NA | NA | NA | 2.7 | NA | NA | NA | NA | NA | NA |
| MD21-09-8842 | 21-605282 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8843 | 21-605282 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-4661 | 21-605282 | 9.0000–10.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8844 | 21-605283 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.98 (J) | NA | 72 | 0.015 | NA | NA | NA |
| MD21-09-8845 | 21-605284 | 14.0000–15.0000 | QBT3 | NA | NA | NA | 1.2 | NA | NA | NA | — | NA | NA |
| MD21-09-8846 | 21-605284 | 19.0000–20.0000 | QBT3 | NA | NA | NA | 1.4 | NA | NA | NA | — | NA | NA |
| MD21-10-4664 | 21-609837 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 26 (J-) | NA | NA | NA | NA |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSLs used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

[e] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table 6.8-2**
**Summary of Organic Chemicals Detected at Consolidated Unit 21-022(h)-99**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Carbazole |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **2600**[b] | **240**[d] |
| **Industrial SSL** | | | | **36700** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **9100**[b] | **960**[d] |
| **Construction Worker SSL** | | | | **18600** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **47600**[c] | **10800**[e] |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | —[f] | — | NA[g] | NA | — | 0.21 (J) | 0.39 (J) | — | — | — | — | — |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | — | — | NA | NA | — | — | 0.074 (J) | — | — | — | — | — |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | 0.14 (J) | — | — |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | 0.08 (J) | — | — | — | — | — |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | 2 | 2.3 | NA | NA | 5.5 (J) | 5.9 (J) | 7.3 (J) | 6.4 (J) | 2.7 (J) | 7.9 (J) | 0.51 (J) | 1.5 |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | 0.19 (J) | 0.2 (J) | 0.29 (J) | — | — | 0.39 (J) | — | — |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | 0.89 | 1.2 | NA | NA | 2.6 | 2.8 (J) | 3.5 (J) | 2 (J) | 1.6 (J) | 2.1 | — | 0.77 (J) |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | 0.1 (J) | — | — |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | 0.14 (J) | 0.21 (J) | NA | NA | 0.73 | 0.81 (J) | 1.3 (J) | 0.54 (J) | 0.46 (J) | 1.6 | 0.15 (J) | 0.18 (J) |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | 0.14 (J) | — | — |
| RE21-07-1121 | 21-600242 | 2.0000–3.0000 | QBT3 | NA | NA | 0.0478 | 0.0211 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | 0.635 | 1.25 | NA | NA | 2.6 | — | 3.25 | 2.62 (J) | 1.38 | 2.61 | — | NA |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | 0.0324 (J) | 0.0579 | NA | NA | 0.113 | — | 0.162 | 0.182 (J) | — | 0.41 | — | NA |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | 0.108 | 0.154 | NA | NA | 0.288 | — | 0.403 | 0.344 (J) | 0.147 | 0.474 | — | NA |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | — | — | NA | NA | 0.0191 (J) | — | 0.018 (J) | — | — | — | — | NA |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | NA |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 0.0202 (J) | 0.0287 (J) | NA | NA | 0.0665 | 0.0711 | 0.0898 | 0.0464 (J) | 0.042 | 0.27 (J) | — | NA |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | — | — | NA | NA | 0.0152 (J) | — | 0.0161 (J) | — | — | 0.0963 (J) | — | NA |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | NA |

**Table 6.8-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chrysene | Di-n-butylphthalate | Dibenz(a,h)anthracene | Dibenzofuran | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **621** | **6110** | **0.621** | **78**[b] | **2290** | **2290** | **na**[h] | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **2340** | **68400** | **2.34** | **1000**[b] | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **20600** | **23800** | **21.3** | **238**[c] | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | 0.19 (J) | — | — | — | 0.52 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.089 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | 0.081 (J) | — | — | — | 0.25 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.14 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | 6.1 (J) | 0.26 (J) | — | 1.1 | 8.4 | 1.6 | NA | NA | NA | NA | NA | NA |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | 0.2 (J) | — | — | — | 0.48 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.11 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | 2.9 | 0.35 (J) | 0.43 (J) | 0.4 (J) | 5.7 | 0.73 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | 0.87 | — | 0.12 (J) | — | 1.9 | 0.11 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.098 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-1121 | 21-600242 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | 1.81E-05 | 3.18E-05 | 2.85E-06 | 0.000000246 (J) | 8.72E-06 | 0.000000214 (J) |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | 2.87 | — | — | — | 7.02 | 0.544 | NA | NA | NA | NA | NA | NA |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | 0.122 | — | — | — | 0.294 | 0.0291 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | 0.324 | — | — | — | 0.904 | 0.0971 | NA | NA | NA | NA | NA | NA |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | 0.0171 (J) | — | — | — | 0.0308 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | — | — | — | — | 0.0149 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 0.0781 | — | — | — | 0.145 | 0.0161 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | 0.0124 (J) | — | — | — | 0.0253 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | — | — | — | — | 0.0178 (J) | — | NA | NA | NA | NA | NA | NA |

**Table 6.8-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Methylnaphthalene[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** | **3210** | **199** | **310**[b] |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** | **14900** | **1090** | **4100**[b] |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **213** | **10300** | **10600** | **4100**[c] |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | 5 (J) | NA | NA | 0.51 (J) |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | 1.6 (J) | NA | NA | 0.16 (J) |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | — | NA | NA | — |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | 0.0019 (J) | — | — |
| RE21-07-1121 | 21-600242 | 2.0000–3.0000 | QBT3 | 0.000000922 (J) | 0.000000488 (J) | 5.49E-06 | 0.00000041 (J) | 0.000000252 (J) | 0.000000105 (J) | 0.000000265 (J) | 4.12E-06 | NA | NA | NA | NA |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | 2.2 (J) | NA | NA | 0.107 (J) |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | 0.146 (J) | — | 0.0033 (J) | — |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | 0.288 (J) | — | 0.00263 (J) | 0.0296 (J) |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | — | — | — | — |

**Table 6.8-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **45** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** |
| **Industrial SSL** | | | | **252** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** |
| **Construction Worker SSL** | | | | **702** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | 0.25 (J) | 0.45 (J) | NA | NA |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | 0.15 (J) | NA | NA |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | — | 0.11 (J) | NA | NA |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | 1.7 | NA | NA | NA | NA | NA | NA | NA | 9.8 | 19 | NA | NA |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | 0.31 (J) | 0.62 (J) | NA | NA |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | — | 0.1 (J) | NA | NA |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | 0.45 (J) | NA | NA | NA | NA | NA | NA | NA | 5.1 | 9.3 | NA | NA |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | 1.2 | 2.2 | NA | NA |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA |
| RE21-07-1121 | 21-600242 | 2.0000–3.0000 | QBT3 | NA | 0.000132 | 6.63E-06 | 0.000000136 (J) | 1.36E-07 | 0.000000108 (J) | 0.000000335 (J) | 2.56E-06 | NA | NA | 0.000000353 (J) | 2.28E-06 |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | 0.275 (J) | NA | NA | NA | NA | NA | NA | NA | 5.4 | 6.99 | NA | NA |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | 0.242 | 0.27 | NA | NA |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | 0.0878 | NA | NA | NA | NA | NA | NA | NA | 0.841 | 0.838 | NA | NA |

**Table 6.8-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **45** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** |
| **Industrial SSL** | | | | **252** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** |
| **Construction Worker SSL** | | | | **702** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | 0.0282 (J) | 0.0368 (J) | NA | NA |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | 0.0159 (J) | NA | NA |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 0.0168 (J) | NA | NA | NA | NA | NA | NA | NA | 0.131 | 0.154 | NA | NA |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | 0.0185 (J) | 0.0284 (J) | NA | NA |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | — | 0.0116 (J) | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] EPA Region 6 (EPA 2007, 099314).

[e] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[f] — = Not detected.

[g] NA = Not analyzed.

[h] na = Not available.

**Table 6.8-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-022(h)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **43** |
| RE21-07-989 | 21-600232 | 0.0000–0.5000 | QBT3 | 0.618 | 0.557 | 1.94 | 3.02 (J) | 0.37 | —[c] | — |
| RE21-07-990 | 21-600232 | 2.0000–3.0000 | QBT3 | 0.176 | 0.327 | 1.12 | 1.54 (J) | — | — | 0.103 |
| RE21-07-991 | 21-600233 | 0.0000–0.5000 | QBT3 | 0.053 | 0.423 | 0.32 | 0.336 (J) | — | — | — |
| RE21-07-993 | 21-600234 | 0.0000–0.5000 | QBT3 | — | 0.376 | — | 0.454 (J) | — | — | — |
| RE21-07-994 | 21-600234 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.247 | — | — |
| RE21-07-995 | 21-600235 | 0.0000–0.5000 | QBT3 | — | 0.37 | — | 0.196 (J) | — | — | — |
| RE21-07-997 | 21-600236 | 0.0000–0.5000 | QBT3 | — | 0.161 | — | 0.248 (J) | — | — | — |
| RE21-07-999 | 21-600237 | 0.0000–0.5000 | QBT3 | — | 0.149 | — | 0.068 (J) | — | — | — |
| RE21-07-1000 | 21-600237 | 2.0000–3.0000 | QBT3 | — | — | — | 0.065 (J-) | — | — | — |
| RE21-07-1001 | 21-600238 | 0.0000–0.5000 | SOIL | 0.401 | — | 0.885 | 14.3 (J) | — | — | — |
| RE21-07-1002 | 21-600238 | 2.0000–3.0000 | QBT3 | 0.053 | — | 0.533 | 0.887 (J) | — | — | — |
| RE21-07-1003 | 21-600239 | 0.0000–0.5000 | SOIL | 4.57 | — | 42.2 | 25 (J) | — | — | — |
| RE21-07-1004 | 21-600239 | 2.0000–3.0000 | QBT3 | 1.01 | — | 1.96 | 2.62 (J) | — | — | — |
| RE21-07-1005 | 21-600240 | 0.0000–0.5000 | SOIL | 0.367 | — | 0.413 | 4.53 (J) | — | — | — |
| RE21-07-1006 | 21-600240 | 2.0000–3.0000 | QBT3 | — | — | — | 0.176 (J) | — | — | — |
| RE21-07-1007 | 21-600241 | 0.0000–0.5000 | SOIL | 4.64 | — | 19.2 | 78.1 (J) | — | — | — |
| RE21-07-1008 | 21-600241 | 2.0000–3.0000 | QBT3 | 0.247 | — | 0.949 | 2.1 (J) | — | — | — |
| RE21-07-1009 | 21-600242 | 0.0000–0.5000 | SOIL | 1.06 | — | 6.4 | 14.8 (J) | — | — | — |
| RE21-07-1010 | 21-600242 | 2.0000–3.0000 | QBT3 | — | — | 0.38 | 0.181 (J) | — | — | — |
| RE21-07-1015 | 21-600245 | 0.0000–0.5000 | SOIL | 1.85 | — | 7.13 | 8.08 | — | 0.034374 | — |
| RE21-07-1016 | 21-600245 | 2.0000–3.0000 | QBT3 | 0.223 | — | 0.965 | 1.05 | — | — | — |
| RE21-07-1017 | 21-600245 | 5.0000–6.0000 | QBT3 | 0.0497 | — | 0.454 | 0.505 | — | — | — |
| RE21-07-5007 | 21-601057 | 8.5000–9.5000 | QBT3 | — | — | — | 0.543 | — | 0.054451 | — |
| RE21-07-5008 | 21-601057 | 10.5000–11.5000 | QBT3 | — | — | — | 0.0658 | — | 0.046655 | — |
| RE21-07-5009 | 21-601058 | 1.5000–2.5000 | QBT3 | 0.181 | — | 1.98 | 0.363 | — | — | — |
| RE21-07-5010 | 21-601058 | 3.5000–4.5000 | QBT3 | — | — | 0.414 | 0.131 | — | — | 0.128 |
| RE21-07-5011 | 21-601059 | 13.5000–14.5000 | QBT3 | — | — | — | — | — | 0.049201 | — |
| RE21-07-5012 | 21-601059 | 15.5000–16.5000 | QBT3 | — | — | — | — | — | 0.03597 | — |
| RE21-07-5013 | 21-601060 | 13.5000–14.5000 | QBT3 | — | — | — | 0.0907 | — | 0.049657 | — |
| RE21-07-5014 | 21-601060 | 15.5000–16.5000 | QBT3 | — | — | — | 0.0915 | — | 0.057528 | — |
| RE21-07-5017 | 21-601062 | 13.5000–14.5000 | QBT3 | — | — | — | 0.0547 | — | 0.044395 | — |
| RE21-07-5018 | 21-601062 | 18.5000–19.5000 | QBT3 | — | — | — | 0.122 | — | 0.05202 | — |
| RE21-07-5019 | 21-601062 | 23.5000–24.5000 | QBT3 | — | — | — | — | — | 0.035923 | — |
| RE21-07-5020 | 21-601063 | 14.0000–15.0000 | QBT3 | — | — | — | 0.127 | — | 0.045761 | — |

**Table 6.8-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **43** |
| RE21-07-5021 | 21-601063 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | 0.0367 | — |
| RE21-07-5022 | 21-601063 | 24.0000–25.0000 | QBT3 | — | — | — | — | — | 0.049978 | — |
| MD21-09-8845 | 21-605284 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | 0.037036 | NA[d] |
| MD21-09-8846 | 21-605284 | 19.0000–20.0000 | QBT3 | — | — | — | 0.043 | — | — | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.9-1**
**Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-023(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** |
| **SOIL Background Value** | | | | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** |
| **Residential SSL** | | | | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** |
| **Industrial SSL** | | | | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** |
| **Construction Worker SSL** | | | | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | 0.948 (J-) | —[e] | 88 (J+) | — | 26500 (J+) | — | — | — | — |
| RE21-07-5212 | 21-601106 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 8.67 | — | — | — |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | — | — | — | 0.552 (U) | — | — | — | — | — |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | — | — | 55 (J+) | — | — | — | — | — | — |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | — | — | 62.9 (J+) | — | 2660 (J+) | — | — | — | — |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | — | — | 47.5 (J+) | — | — | — | — | — | — |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5220 | 21-601110 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 7.86 | — | — | — |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | 5.4 | — |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | — | — | — | — | 6880 (J+) | 48.8 | — | — | — |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | — | — | — | — | — | — | — | — | — |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | — | — | — | — | 17000 (J+) | — | — | — | — |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | — | — | 334 | — | 42700 (J+) | — | — | — | — |
| RE21-07-5231 | 21-601116 | 2.5000–3.5000 | QBT3 | NA | 3.02 | 66.9 (J+) | — | — | — | — | — | — |
| RE21-07-5232 | 21-601116 | 4.5000–5.5000 | QBT3 | NA | 3.89 | — | — | 3330 | — | — | — | — |
| RE21-07-5233 | 21-601117 | 2.5000–3.5000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-5234 | 21-601117 | 4.5000–5.5000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | NA | 5.21 | — | — | 8150 | — | — | — | — |
| RE21-07-5236 | 21-601118 | 4.0000–5.0000 | QBT3 | NA | 4.76 | — | — | 6050 | — | — | — | — |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | NA | 4.95 | 128 (J) | — | 7500 | — | — | 6.68 | 14800 |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | NA | 5.26 | 122 (J) | — | 9470 | — | — | 19 | — |
| RE21-07-5239 | 21-601120 | 2.0000–3.0000 | SOIL | NA | — | — | 0.6 (U) | — | — | — | — | — |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | NA | — | — | 0.604 (U) | — | — | — | — | — |
| RE21-07-5241 | 21-601121 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-5242 | 21-601121 | 4.0000–5.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-5243 | 21-601122 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-5244 | 21-601122 | 4.0000–5.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |

**Table 6.9-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** |
| **SOIL Background Value** | | | | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** |
| **Residential SSL** | | | | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** |
| **Industrial SSL** | | | | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** |
| **Construction Worker SSL** | | | | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** |
| RE21-07-5245 | 21-601123 | 5.5000–6.5000 | QBT3 | — | 3.52 | — | — | 2550 | — | — | — | — |
| RE21-07-5246 | 21-601123 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5247 | 21-601124 | 5.5000–6.5000 | QBT3 | — | 3.82 | 60.7 | — | 3000 | — | — | — | — |
| RE21-07-5248 | 21-601124 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5249 | 21-601125 | 5.0000–6.0000 | QBT3 | — | — | 58.6 | — | 25000 | — | — | 5.29 | — |
| RE21-07-5250 | 21-601125 | 7.0000–8.0000 | QBT3 | — | — | — | — | 6070 | — | — | — | — |
| RE21-07-5251 | 21-601126 | 7.0000–8.0000 | QBT3 | — | 5.2 | — | — | — | — | — | — | — |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | — | 3.15 | 75.5 | — | 2960 | — | — | 4.86 | — |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | — | — | — | 0.568 (U) | 10300 | — | — | — | — |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | — | — | — | 0.51 (U) | — | — | — | — | — |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | — | 3.05 | — | — | 2300 (J+) | 9.86 | — | — | — |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5258 | 21-601129 | 6.0000–7.0000 | QBT3 | NA[f] | — | — | — | — | — | — | — | — |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | NA | 3.31 | — | — | 3930 | — | — | — | — |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | NA | 3.5 | — | — | 7080 | — | — | — | — |
| RE21-07-5261 | 21-601130 | 4.0000–5.0000 | QBT3 | NA | 2.99 | — | — | — | — | — | — | — |
| RE21-07-5262 | 21-601130 | 9.0000–10.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-5263 | 21-601130 | 14.0000–15.0000 | QBT3 | NA | 3.27 | 84.4 (J+) | — | — | — | 8.07 | — | — |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | — | — | — | 0.526 (U) | 9960 | — | — | — | — |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | — | — | — | 0.507 (U) | — | — | — | — | — |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7058 | 21-603012 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7059 | 21-603012 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7060 | 21-603013 | 5.2500–6.2500 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7061 | 21-603013 | 7.2500–8.2500 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7062 | 21-603014 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7063 | 21-603014 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-08-7064 | 21-603015 | 3.5000–4.5000 | QBT3 | NA | 4.84 | 72.8 | — | 6650 | — | — | — | — |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | NA | 2.86 | — | — | — | — | — | — | — |

**Table 6.9-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Vanadium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **17** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **39.6** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | 1270 | 1930 (J+) | — | 0.115 | — | 2.3 | — | 1.17 (J) | — |
| RE21-07-5212 | 21-601106 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 7.82 | — | 1.67 (U) | — |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | 44 | — | — | 0.109 | — | 2.62 | — | — | — |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | 21.9 | — | — | — | — | 2.38 | — | 0.619 (J) | — |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | 14.6 | — | — | — | — | 1.84 | — | 0.582 (J) | — |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | 13.9 | — | — | — | — | 2.77 | — | 1.48 (J) | — |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | 15.6 (J) | — | — | — | — | 2.37 | — | 1.79 (U) | — |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | 19.8 | — | — | — | — | 1.91 | — | 1.78 (U) | — |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | — | — | — | 0.129 | — | 1.64 | — | 0.756 (J) | — |
| RE21-07-5220 | 21-601110 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 1.75 | — | 1.71 (U) | — |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.43 (J) | — |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | 13.3 | — | 714 | — | 6.64 (J) | 1.31 | — | 2.22 | — |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.43 | — | 5.26 | — |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | — | — | — | 0.255 | — | — | 0.000708 (J) | 5.24 | — |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | — | — | — | — | 15.8 (J) | 1.36 | — | 9.26 | — |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | — | — | — | — | 15.7 (J) | 1.43 | — | 22.5 | — |
| RE21-07-5231 | 21-601116 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | — | 5.17 | — |
| RE21-07-5232 | 21-601116 | 4.5000–5.5000 | QBT3 | — | — | — | 0.163 | — | — | — | 4.77 | — |
| RE21-07-5233 | 21-601117 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | — | 3.35 | — |
| RE21-07-5234 | 21-601117 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | — | 4.47 | — |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 1.21 (J-) | — | 6.26 | — |
| RE21-07-5236 | 21-601118 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 1.26 (J-) | — | 6.29 | — |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | 33.3 (J) | — | — | 0.253 | 6.76 | 2.79 (J-) | 0.00306 | 10.7 | — |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | 35.6 (J) | — | — | 2.16 | — | 11.6 (J-) | 0.00649 | 9.11 | — |
| RE21-07-5239 | 21-601120 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.65 (J-) | — | 7.59 | — |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | — | — | — | — | — | 1.44 (J-) | 0.00069 (J) | 12.4 | — |
| RE21-07-5241 | 21-601121 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 3.27 | — |
| RE21-07-5242 | 21-601121 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | 3.94 | — |
| RE21-07-5243 | 21-601122 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 1.15 (J-) | — | 2.34 | — |
| RE21-07-5244 | 21-601122 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 1.25 (J-) | — | 3.45 | — |
| RE21-07-5245 | 21-601123 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | — | — | 0.691 (J) | — |

**Table 6.9-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Vanadium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **17** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **39.6** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** |
| RE21-07-5246 | 21-601123 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | 1.57 (U) | — |
| RE21-07-5247 | 21-601124 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | — | — | 1.7 (U) | — |
| RE21-07-5248 | 21-601124 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | 1.73 (U) | — |
| RE21-07-5249 | 21-601125 | 5.0000–6.0000 | QBT3 | — | 2320 | — | — | — | — | — | 0.625 (J) | — |
| RE21-07-5250 | 21-601125 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | 1.74 (U) | — |
| RE21-07-5251 | 21-601126 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | 1.69 (U) | 22.5 (J) |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | 1.6 (U) | — |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | — | — | — | — | — | — | 0.000866 (J) | 1.7 (U) | — |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | — | — | — | — | — | — | 0.000639 (J) | 1.53 (U) | — |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | 939 | — | — | — | — | 1.62 | — | 2.46 | — |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 1.37 | — | 1.92 | — |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | 1.16 | — | 1.56 (J) | — |
| RE21-07-5258 | 21-601129 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 3.44 | — |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | — | — | — | 0.108 | — | 1.04 (J) | — | 4.78 | — |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | — | — | — | 0.136 | — | — | — | 6.78 | — |
| RE21-07-5261 | 21-601130 | 4.0000–5.0000 | QBT3 | — | — | — | 0.168 | — | — | — | 4.74 | — |
| RE21-07-5262 | 21-601130 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | 0.000772 (J) | 4.88 | — |
| RE21-07-5263 | 21-601130 | 14.0000–15.0000 | QBT3 | 17.7 | — | 843 | — | — | — | — | 6.01 | — |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | — | 1.58 (U) | — |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | 0.000534 (J) | — | — |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | 1.59 (U) | — |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 1.5 (U) | — |
| RE21-08-7058 | 21-603012 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | 1.61 (U) | — |
| RE21-08-7059 | 21-603012 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 1.67 (U) | — |
| RE21-08-7060 | 21-603013 | 5.2500–6.2500 | QBT3 | 12 | — | — | — | — | — | — | 1.59 (U) | — |

**Table 6.9-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Vanadium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **17** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **39.6** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** |
| RE21-08-7061 | 21-603013 | 7.2500–8.2500 | QBT3 | — | — | — | — | — | — | — | 1.54 (U) | — |
| RE21-08-7062 | 21-603014 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 1.58 (U) | — |
| RE21-08-7063 | 21-603014 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | 1.52 (U) | — |
| RE21-08-7064 | 21-603015 | 3.5000–4.5000 | QBT3 | — | — | — | 0.232 | — | 1.97 (J-) | 0.00203 (J) | 8.49 | — |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | — | — | — | 0.259 | — | 2.01 (J-) | 0.00133 (J) | 5.94 | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSLs used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

**Table 6.9-2**
**Summary of Organic Chemicals Detected at Consolidated Unit 21-023(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl) phthalate | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **621** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **2340** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **20600** |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | —[b] | 0.0114 (J) | — | NA[c] | — | — | — | — | — | — | — |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | — | — | 0.0151 (J) | NA | 0.0452 | 0.0377 | 0.0841 | 0.0176 (J) | — | — | 0.0435 |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | — | — | 0.00952 (J) | NA | — | 0.0175 (J) | 0.029 (J) | — | — | — | 0.0153 (J) |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | 0.0171 (J) | — | 0.0292 (J) | NA | — | 0.0262 (J) | 0.0287 (J) | — | 0.0159 (J) | — | 0.0348 (J) |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | — | — | — | NA | — | — | 0.0144 (J) | — | — | — | 0.0129 (J) |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | 0.0155 (J) | 0.0261 (J) | — | — | — | 0.0194 (J) |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | — | — | 0.0115 (J) | NA | — | 0.0513 (J) | 0.0665 (J) | — | 0.0324 (J) | 0.0942 (J) | 0.0524 |
| MD21-09-8818 | 21-601114 | 9.0000–10.0000 | SOIL | — | NA | — | NA | — | — | 0.11 (J) | — | — | — | — |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | 0.0124 (J) | 0.0237 (J) | — | — | — | 0.0195 (J) |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | — | — | — | NA | — | — | 0.0141 (J) | — | — | — | 0.0122 (J) |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | 2.12 (J) | — |
| RE21-08-7066 | 21-601118 | 4.0000–5.0000 | QBT3 | NA | NA | NA | 0.0069 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | — | — | — | NA | — | — | 0.0741 (J) | — | — | — | — |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | — | — | — | NA | — | — | 0.0146 (J) | — | — | — | 0.0159 (J) |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl) phthalate | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **621** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **2340** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **20600** |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | 0.11 | — | 0.191 | NA | 1.97 | **1.65** | 2.57 | 0.562 | — | — | 1.81 |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | — | — | 0.0103 (J) | NA | 0.0347 | 0.0274 (J) | 0.032 (J) | — | 0.0128 (J) | — | 0.0271 (J) |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | — | — | 0.0123 (J) | NA | — | 0.0454 | 0.0784 | 0.0266 (J) | — | — | 0.0554 |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | 0.0128 (J) |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | 1.38 | — | 2.36 | NA | 15.4 | 12.2 | 14.5 | 3.94 | — | — | 14.9 |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | — | — | — | NA | — | 0.0322 (J) | 0.0412 | 0.016 (J) | 0.0166 (J) | — | 0.0415 |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | 0.025 (J) | — | 0.0608 | NA | 0.197 | 0.187 | 0.345 | 0.0987 | — | — | 0.213 |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Di-n-butylphthalate | Ethylbenzene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6110** | **69.7** | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **68400** | **385** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **23800** | **6630** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | — | 0.000565 (J) | 0.0188 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | — | — | 0.109 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | — | — | 0.0355 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | — | — | 0.0922 | 0.0122 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | — | — | 0.0261 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | — | — | 0.0183 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | 0.049 (J) | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | 0.0469 (J) | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | 0.156 (J) | — | 0.0306 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | 0.0523 (J) | — | 0.0926 | — | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8818 | 21-601114 | 9.0000–10.0000 | SOIL | — | NA | 0.15 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | 0.0644 (J) | — | 0.0429 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | 0.0543 (J) | — | 0.024 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7066 | 21-601118 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | 9.6E-06 | 1.73E-05 | 0.0000555 (J) | 0.0000879 (J) | 0.000000605 (J) | 0.000000193 (J) | 4.3E-06 |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | — | — | 0.0254 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | 0.0415 (J) | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | — | — | 2.14 | 0.0261 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | — | — | 0.0285 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | 0.0668 (J) | — | 0.0148 (J) | — | NA | NA | NA | NA | NA | NA | NA |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Di-n-butylphthalate | Ethylbenzene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6110** | **69.7** | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **68400** | **385** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **23800** | **6630** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | 0.108 (J) | — | 0.0129 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | 0.0615 (J) | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | — | — | 0.118 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | — | 0.000287 (J) | 0.0199 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | — | — | 20.2 | 0.42 | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | — | — | 0.0636 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | 0.0395 (J) | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | — | — | 0.533 | 0.0204 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | — | — | 0.0141 (J) | — | NA | NA | NA | NA | NA | NA | NA |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran 1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **6.21** | **3210**[e] | **310**[f] | **45** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **23.4** | **14900**[e] | **4100**[f] | **252** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **213** | **10300**[e] | **1240**[g] | **702** | **na** | **na** | **na** | **na** |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | NA | NA | NA | 0.0189 (J) | — | — | — | NA | NA | NA | NA |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| MD21-09-8818 | 21-601114 | 9.0000–10.0000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | 0.000297 (J) | — | — | NA | NA | NA | NA |
| RE21-08-7066 | 21-601118 | 4.0000–5.0000 | QBT3 | 0.000000313 (J) | 0.000000192 (J) | 2.72E-05 | NA | NA | NA | NA | 0.0000969 (J) | 0.000018 (J) | 4.17E-07 | 0.000000133 (J) |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | 0.000399 (J) | — | — | NA | NA | NA | NA |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | NA | NA | NA | 0.52 | — | 0.0213 (J) | 0.0609 | NA | NA | NA | NA |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran 1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **6.21** | **3210**[e] | **310**[f] | **45** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **23.4** | **14900**[e] | **4100**[f] | **252** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **213** | **10300**[e] | **1240**[g] | **702** | **na** | **na** | **na** | **na** |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | NA | NA | NA | 0.022 (J) | — | — | — | NA | NA | NA | NA |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | NA | NA | NA | 4.06 | — | 0.396 | 1.17 | NA | NA | NA | NA |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | NA | NA | NA | 0.0128 (J) | — | — | — | NA | NA | NA | NA |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | NA | NA | NA | 0.048 | — | — | — | NA | NA | NA | NA |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | NA | NA | NA | — | — | — | — | NA | NA | NA | NA |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Tetrachloroethene | Toluene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **1830** | **1720** | **8970** | **0.000374** | **na** | **6.99** | **5570** | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **na** | **20500** | **18300** | **51200** | **0.00147** | **na** | **36.4** | **57900** | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **na** | **7150** | **6680** | **30300** | **0.0127** | **na** | **338** | **21100** | **27500** | **3130**[h] |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | NA | 0.0172 (J) | 0.0158 (J) | — | NA | NA | — | — | 0.00101 (J) | 0.00203 (J) |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | NA | 0.0794 | 0.0855 | — | NA | NA | 0.00315 | — | — | — |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | NA | — | — | — | NA | NA | 0.000539 (J) | — | — | — |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | 0.000868 (J) | — | — | — |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | NA | 0.0346 (J) | 0.0364 (J) | — | NA | NA | 0.00616 | 0.000401 (J) | — | — |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | NA | 0.101 | 0.0701 | — | NA | NA | — | — | — | — |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | NA | 0.0239 (J) | 0.0215 (J) | — | NA | NA | 0.0037 | — | — | — |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | NA | 0.0137 (J) | 0.0138 (J) | — | NA | NA | 0.00209 | — | — | — |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | NA | 0.0168 (J) | 0.0318 (J) | — | NA | NA | 0.00584 | — | — | — |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | NA | 0.0485 | 0.0978 | — | NA | NA | 0.00148 | — | — | — |
| MD21-09-8818 | 21-601114 | 9.0000–10.0000 | SOIL | NA | — | 0.14 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | NA | 0.0236 (J) | 0.0331 (J) | — | NA | NA | — | — | — | — |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | NA | 0.0229 (J) | 0.0227 (J) | — | NA | NA | — | — | — | — |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |
| RE21-08-7066 | 21-601118 | 4.0000–5.0000 | QBT3 | 2.03E-06 | NA | NA | NA | 0.0000000951 (J) | 9.51E-08 | NA | NA | NA | NA |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | — | 0.00035 (J) | — | — |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | NA | — | — | — | NA | NA | 0.000243 (J) | — | — | — |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | NA | — | 0.0184 (J) | — | NA | NA | — | — | — | — |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | NA | 0.506 | 2.63 | — | NA | NA | — | — | — | — |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | NA | — | 0.0446 | — | NA | NA | — | — | — | — |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | NA | — | 0.0134 (J) | — | NA | NA | — | — | — | — |

**Table 6.9-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Tetrachloroethene | Toluene | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **1830** | **1720** | **8970** | **0.000374** | **na** | **6.99** | **5570** | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **na** | **20500** | **18300** | **51200** | **0.00147** | **na** | **36.4** | **57900** | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **na** | **7150** | **6680** | **30300** | **0.0127** | **na** | **338** | **21100** | **27500** | **3130**[h] |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | NA | 0.0118 (J) | — | — | NA | NA | — | — | — | — |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | NA | 0.0691 | 0.104 | — | NA | NA | — | — | — | — |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | NA | 0.0157 (J) | 0.0207 (J) | 0.00137 | NA | NA | — | 0.000333 (J) | 0.000236 (J) | 0.000286 (J) |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | NA | 6.49 | 18.3 | — | NA | NA | — | — | — | — |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | NA | 0.0158 (J) | 0.0634 | — | NA | NA | — | — | — | — |
| RE21-08-7056 | 21-603011 | 3.0000–4.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | NA | 0.286 | 0.413 | — | NA | NA | — | — | — | — |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | NA | — | — | — | NA | NA | — | — | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

[e] Isopropylbenzene used as surrogate based on structural similarity.

[f] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[h] SSLs for xylenes used as surrogates based on structural similarity.

**Table 6.9-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-023(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** |
| RE21-07-5211 | 21-601106 | 2.0000–3.0000 | QBT3 | 0.0599 | —[c] | — | 0.589 | — | 4.62353 | — | — |
| RE21-07-5212 | 21-601106 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 1.24422 | — | — |
| RE21-07-5213 | 21-601107 | 1.5000–2.5000 | SOIL | 0.113 | 0.133 | — | 0.624 | — | 0.275939 | — | — |
| RE21-07-5214 | 21-601107 | 3.5000–4.0000 | QBT3 | — | — | — | 0.122 | — | 0.195495 | — | — |
| RE21-07-5215 | 21-601108 | 2.0000–3.0000 | QBT3 | 0.0427 | — | — | 0.141 | — | 0.263227 | — | 0.0949 |
| RE21-07-5216 | 21-601108 | 4.0000–5.0000 | QBT3 | — | — | — | 0.293 | — | 0.286687 | — | 0.0987 |
| RE21-07-5217 | 21-601109 | 4.0000–5.0000 | QBT3 | — | — | — | 0.152 | — | 0.24201 | — | — |
| RE21-07-5218 | 21-601109 | 6.0000–7.0000 | QBT3 | 0.0288 | — | — | 0.134 | — | 0.18428 | — | — |
| RE21-07-5219 | 21-601110 | 2.0000–3.0000 | QBT3 | 0.0849 | — | — | 0.379 | — | 0.332126 | — | — |
| RE21-07-5220 | 21-601110 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0787 | — | 0.433936 | — | — |
| RE21-07-5221 | 21-601111 | 2.0000–3.0000 | QBT3 | — | NA[d] | — | 0.0221 | — | 0.777312 | — | — |
| RE21-07-5222 | 21-601111 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0338 | — | 0.688558 | — | — |
| RE21-07-5227 | 21-601114 | 2.0000–3.0000 | SOIL | 0.281 | — | 0.167 | 2.25 | — | 0.055919 | — | — |
| RE21-07-5228 | 21-601114 | 4.0000–5.0000 | SOIL | 0.229 | — | 0.175 | 2.88 | — | 0.08336 | — | — |
| MD21-09-8818 | 21-601114 | 9.0000–10.0000 | SOIL | NA | NA | 0.289 | 3.77 | NA | NA | NA | NA |
| RE21-07-5229 | 21-601115 | 2.0000–3.0000 | SOIL | — | — | — | 0.12 | — | 0.107468 | — | — |
| RE21-07-5230 | 21-601115 | 4.0000–5.0000 | SOIL | — | — | — | 0.0385 | — | 0.116734 | — | — |
| RE21-07-5231 | 21-601116 | 2.5000–3.5000 | QBT3 | — | — | — | 0.044 (J) | — | 0.148364 | — | — |
| RE21-07-5232 | 21-601116 | 4.5000–5.5000 | QBT3 | 0.204 (J) | — | 0.253 | 1.51 (J) | — | 0.141778 | — | — |
| RE21-07-5233 | 21-601117 | 2.5000–3.5000 | QBT3 | — | — | — | 0.0323 (J) | — | 0.118129 | — | — |
| RE21-07-5234 | 21-601117 | 4.5000–5.5000 | QBT3 | 0.0369 (J) | — | 0.0284 | 0.484 (J) | — | 0.059569 | — | 0.0981 |
| RE21-07-5235 | 21-601118 | 2.0000–3.0000 | QBT3 | — | — | — | 0.164 | 0.131 | 0.14 | — | — |
| RE21-07-5236 | 21-601118 | 4.0000–5.0000 | QBT3 | — | — | 0.0346 | 0.149 | — | 0.140476 | — | — |
| RE21-07-5237 | 21-601119 | 2.0000–3.0000 | QBT3 | 0.0772 | — | 0.0483 | 1.51 | — | 0.215794 | — | — |
| RE21-07-5238 | 21-601119 | 4.0000–5.0000 | QBT3 | 0.119 | — | — | 0.727 | — | 0.265745 | — | — |

**Table 6.9-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** |
| RE21-07-5239 | 21-601120 | 2.0000–3.0000 | SOIL | — | — | — | 0.0237 | — | 0.592029 | — | — |
| RE21-07-5240 | 21-601120 | 4.0000–5.0000 | SOIL | — | — | — | 0.639 | — | 0.538788 | — | — |
| MD21-09-8817 | 21-601120 | 9.0000–10.0000 | QBT3 | NA | NA | 0.034 | 0.33 | NA | NA | NA | NA |
| RE21-07-5241 | 21-601121 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.064286 | — | — |
| RE21-07-5242 | 21-601121 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0489 | — | 0.070967 | — | 0.107 |
| RE21-07-5243 | 21-601122 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.09209 | — | — |
| RE21-07-5244 | 21-601122 | 4.0000–5.0000 | QBT3 | — | — | — | 0.647 | — | 0.077 | — | — |
| RE21-07-5245 | 21-601123 | 5.5000–6.5000 | QBT3 | — | — | — | 0.0561 | — | 0.025925 | — | — |
| RE21-07-5246 | 21-601123 | 7.5000–8.5000 | QBT3 | — | — | — | 0.039 | — | 0.039274 | — | — |
| RE21-07-5247 | 21-601124 | 5.5000–6.5000 | QBT3 | 0.17 | — | — | 2.51 | — | — | — | — |
| RE21-07-5248 | 21-601124 | 7.5000–8.5000 | QBT3 | — | — | — | 0.398 | — | — | — | — |
| RE21-07-5249 | 21-601125 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0952 | — | — | — | 0.138 |
| RE21-07-5250 | 21-601125 | 7.0000–8.0000 | QBT3 | — | — | — | 0.102 | — | — | — | 0.124 |
| RE21-07-5251 | 21-601126 | 7.0000–8.0000 | QBT3 | — | — | — | 0.154 | — | — | — | — |
| RE21-07-5252 | 21-601126 | 9.0000–10.0000 | QBT3 | — | — | — | 0.169 | — | — | — | 0.104 |
| RE21-07-5253 | 21-601127 | 2.2500–3.2500 | SOIL | 0.101 | — | — | 0.324 | — | — | — | — |
| RE21-07-5254 | 21-601127 | 4.2500–5.2500 | SOIL | 0.129 | — | — | 0.459 | — | — | — | — |
| RE21-07-5255 | 21-601128 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0531 | — | 0.234088 | — | — |
| RE21-07-5256 | 21-601128 | 10.0000–11.0000 | QBT3 | — | — | — | 0.0307 | — | 0.180924 | — | — |
| RE21-07-5257 | 21-601128 | 15.0000–16.0000 | QBT3 | — | — | — | 0.0291 | — | 0.168947 | — | — |
| RE21-07-5258 | 21-601129 | 6.0000–7.0000 | QBT3 | — | — | 0.0279 | 0.0657 (J) | — | 0.111499 | — | — |
| RE21-07-5259 | 21-601129 | 11.0000–12.0000 | QBT3 | 0.0728 (J) | — | 0.158 | 0.423 (J) | — | 0.073468 | — | — |
| RE21-07-5260 | 21-601129 | 16.0000–17.0000 | QBT3 | 0.116 (J) | — | 0.139 | 1.38 (J) | — | 0.087591 | — | — |
| RE21-07-5261 | 21-601130 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0963 (J) | — | 0.061984 | — | — |
| RE21-07-5262 | 21-601130 | 9.0000–10.0000 | QBT3 | — | — | — | 0.078 (J) | — | 0.06058 | — | — |
| RE21-07-5263 | 21-601130 | 14.0000–15.0000 | QBT3 | — | — | — | 0.247 (J) | — | 0.055369 | — | — |
| RE21-08-7054 | 21-603010 | 3.0000–4.0000 | SOIL | 0.056 | — | — | 0.296 | — | 0.023597 | — | — |
| RE21-08-7055 | 21-603010 | 5.0000–6.0000 | SOIL | — | — | — | 0.156 | — | 0.015122 | — | — |
| RE21-08-7057 | 21-603011 | 5.0000–6.0000 | QBT3 | — | — | — | 0.167 (J) | — | 0.009338 | — | — |
| RE21-08-7058 | 21-603012 | 4.0000–5.0000 | QBT3 | — | — | — | 0.116 (J) | — | 0.091009 | — | — |
| RE21-08-7059 | 21-603012 | 6.0000–7.0000 | QBT3 | — | — | — | 0.0384 (J) | — | 0.209002 | — | — |
| RE21-08-7060 | 21-603013 | 5.2500–6.2500 | QBT3 | 0.0571 | — | — | 0.0592 (J) | — | 0.040747 | — | — |

**Table 6.9-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** |
| RE21-08-7061 | 21-603013 | 7.2500–8.2500 | QBT3 | — | — | — | — | — | 0.034517 | — | — |
| RE21-08-7062 | 21-603014 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | 0.032659 | — | — |
| RE21-08-7063 | 21-603014 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | 0.014332 | — | — |
| RE21-08-7064 | 21-603015 | 3.5000–4.5000 | QBT3 | 1.75 | — | 0.076 | 0.086 (J) | 1.95 | 0.194452 | 7.95 | 0.457 |
| RE21-08-7065 | 21-603015 | 5.5000–6.5000 | QBT3 | 2.3 | — | — | 0.0742 (J) | — | 0.218761 | 2.53 | 0.143 |
| MD21-09-8814 | 21-603015 | 10.5000–11.5000 | QBT3 | 0.724 | NA | NA | NA | NA | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.10-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(a)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | — | — | — | 20.3 | — | — |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | 8.1 | — | 10 | — | — |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 16.6 | — | — |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 25.6 | — | — |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.472 (J) | — | — | — | 36.3 | — | — |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.548 (J) | — | — | — | 62.4 | — | — |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.414 (J) | — | — | — | 48.9 | — | — |
| RE21-07-74887 | 21-27325 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | 24000 | 4.72 | 166 | 1.64 | — | 3820 | 18.7 | 4 | 10.9 | — | 16600 |
| RE21-09-3582 | 21-27325 | 4.0000–5.0000 | QBT3 | — | NA[f] | — | NA | NA | NA | 13 | NA | NA | NA | NA |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.558 | — | — | — | 82.5 | — | — |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | 14.9 | — | — |
| RE21-07-74891 | 21-27327 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 93.9 | — | — |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | 23.1 | — | — |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.504 (U) | — | — | — | — | — | — |
| RE21-07-74897 | 21-27330 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 2270 | 32.4 | — | — | — | — |
| RE21-07-74899 | 21-27331 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74901 | 21-27332 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.522 (U) | — | — | — | — | — | — |
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74903 | 21-27333 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.516 (U) | — | — | — | — | — | — |
| RE21-07-74904 | 21-27333 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.498 (U) | — | — | — | — | — | — |

**Table 6.10-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | — | — | — | — | — | 7530 | — | — | — | — | — |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | — | — | 46.9 | — | — | — | 7.21 | — | 5.46 | — | — |
| RE21-07-74909 | 21-27336 | 2.0000–3.0000 | QBT3 | — | — | 60.5 | — | — | — | 9.36 | — | — | — | — |
| RE21-07-74910 | 21-27336 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | 9.73 | — | — | — | — |
| RE21-07-74925 | 21-27338 | 2.6700–3.6700 | SOIL | — | — | — | — | 0.585 (U) | — | — | — | — | — | — |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | — | — | — | — | 0.56 (U) | — | — | — | — | — | — |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | — | — | — | — | — | — | 7.2 | — | 11 | — | — |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | — | — | — | — | — | — | 10.5 | — | — | — | — |
| RE21-07-74929 | 21-27340 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | 10.1 | — | — | — | — |
| RE21-07-74930 | 21-27340 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | 3530 (J+) | 8.07 | — | — | — | — |
| RE21-07-74931 | 21-27341 | 5.0000–6.0000 | QBT3 | — | 2.87 | 71.5 | — | — | 34000 | 8.73 | 4.09 | 10.8 | — | — |
| RE21-07-74932 | 21-27341 | 10.0000–11.0000 | QBT3 | — | 2.85 | — | — | — | 3880 | 13.9 | — | — | — | — |
| RE21-07-74933 | 21-27341 | 15.0000–16.0000 | QBT3 | — | 3.55 | — | — | — | 5500 | — | — | — | — | — |
| RE21-07-74934 | 21-27342 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.586 (U) | — | — | — | — | 0.542 | — |
| RE21-07-74935 | 21-27342 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 12.7 (J) | — | — | — | — |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 2570 | 13.3 (J) | — | — | — | — |

**Table 6.10-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **929** | **1550** | **92900** |
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | — | — | 0.149 | — | 0.965 (J) | — | 1.59 (U) | — | — | 51.2 |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.727 (J) | — | 1.57 (U) | — | — | — |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | — | — | — | — | 6.31 | 0.000616 (J-) | 1.59 (U) | — | — | — |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | — | — | — | — | 1.46 | — | 1.5 (U) | — | — | — |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | — | — | 0.309 | — | 2.51 | — | 1.55 (U) | — | — | 57.7 |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | 30.7 | — | 0.34 | — | 2.12 | — | 1.59 (U) | — | — | 116 |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | 26 | — | 0.47 | — | 1.23 | 0.000959 (J-) | 1.66 (U) | 2.95 | — | 91.3 |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | 22.7 | — | 0.408 | — | 0.856 (J) | — | 1.53 (U) | — | — | 69.8 |
| RE21-07-74887 | 21-27325 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.59 | — | 2.23 (U) | 1.87 | — | — |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | 28.5 | 3390 | — | 10.5 | — | 0.000755 (J-) | 1.57 (U) | — | 23 | — |
| RE21-09-3582 | 21-27325 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | 40.3 | — | 0.201 | — | 2.14 | — | 1.65 (U) | 4.05 | — | 96.2 |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.655 (J) | — | — | — | — | — |
| RE21-07-74891 | 21-27327 | 0.0000–0.5000 | SOIL | 25.6 | — | 0.112 | — | 1.58 | — | 1.63 (U) | 2.53 | — | 56.2 |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.836 (J) | 0.00177 (J-) | — | — | — | — |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | 22.6 | — | — | — | 1.27 | — | 1.57 (U) | — | — | — |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | 13.5 | — | — | — | 0.752 (J) | — | 1.53 (U) | — | — | — |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.07 | — | — | — | — | — |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.746 (J) | — | — | — | — | — |
| RE21-07-74897 | 21-27330 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | 1.5 (U) | — | — | — |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | 1.49 (U) | — | — | — |
| RE21-07-74899 | 21-27331 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | 1.5 (U) | — | — | — |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | 1.5 (U) | — | — | — |
| RE21-07-74901 | 21-27332 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.3 | — | 1.57 (U) | — | — | — |
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | 18.5 | — | — | — | 1.2 | — | 1.52 (U) | — | — | — |
| RE21-07-74903 | 21-27333 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.834 (J) | — | 1.55 (U) | — | — | — |
| RE21-07-74904 | 21-27333 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.849 (J) | — | — | — | — | — |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | 43.5 (J-) | — | 0.798 | — | 0.905 (J) | — | — | — | — | 123 |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | 14 (J-) | — | 0.205 | — | 0.772 (J) | — | 1.13 (J) | — | — | — |
| RE21-07-74909 | 21-27336 | 2.0000–3.0000 | QBT3 | — | — | 0.162 | — | 0.651 (J) | 0.000787 (J) | 0.835 (J) | — | — | — |

**Table 6.10-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **929** | **1550** | **92900** |
| RE21-07-74910 | 21-27336 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.511 (J) | — | 1.54 (U) | — | — | — |
| RE21-07-74925 | 21-27338 | 2.6700–3.6700 | SOIL | — | — | 0.431 | — | — | — | 1.63 (J) | 1.94 (J) | — | — |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | 12.8 | — | 0.114 | — | 6.67 | — | 1.76 (U) | — | — | — |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | — | — | — | — | 4.97 | — | 1.82 (U) | — | — | — |
| RE21-07-74929 | 21-27340 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-07-74930 | 21-27340 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | 1.61 (U) | — | — | — |
| RE21-07-74931 | 21-27341 | 5.0000–6.0000 | QBT3 | — | 4010 (J+) | 0.95 | 9.53 | 4.53 | 0.000903 (J) | 16 (U) | 13.3 | 23.2 | — |
| RE21-07-74932 | 21-27341 | 10.0000–11.0000 | QBT3 | — | — | 0.519 | — | 3.93 | — | 15.4 (U) | — | — | — |
| RE21-07-74933 | 21-27341 | 15.0000–16.0000 | QBT3 | — | — | — | — | 2.75 | — | 15.6 (U) | 3.05 | — | — |
| RE21-07-74934 | 21-27342 | 0.0000–0.5000 | SOIL | — | — | 0.14 (J) | — | 0.699 (J) | 0.000719 (J) | — | — | — | — |
| RE21-07-74935 | 21-27342 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 0.988 (U) | — | — | — |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.492 (J) | — | 0.642 (U) | — | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSLs used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.10-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(a)**

| Sample ID | Location ID | Depth (ft) | Media | Acetone | Anthracene | Benzo(a)anthracene | Benzo(b)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Chloroaniline[4-] | Chloroform | Chrysene | Dichlorobenzene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **67500** | **17200** | **6.21** | **6.21** | **240000**[a] | **347** | **24**[a] | **5.72** | **621** | **32.2** |
| **Industrial SSL** | | | | **851000** | **183000** | **23.4** | **23.4** | **2500000**[a] | **1370** | **86**[a] | **31.9** | **2340** | **180** |
| **Construction Worker SSL** | | | | **263000** | **66800** | **213** | **213** | **952000**[b] | **4760** | **1084**[b] | **671** | **20600** | **3780** |
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | NA[c] | —[d] | — | — | 0.567 (J) | — | — | NA | — | — |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | NA | — | — | 0.0159 (J) | — | — | — | NA | — | — |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | NA | 0.00916 (J) | — | 0.0164 (J) | — | — | — | NA | — | — |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | NA | — | — | — | 0.621 (J) | — | 0.0804 (J) | NA | — | — |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | 0.462 | — | — | — |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | NA | — | 0.0146 (J) | — | — | — | — | NA | 0.0148 (J) | — |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | 0.116 (J) | — | NA | — | — |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | NA | 0.00721 (J) | — | — | — | — | — | NA | — | — |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.000442 (J) |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | NA | — | — | — | — | — | — | NA | — | — |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | 0.26 | — | — | — | — | — | — | 0.000248 (J) | — | — |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | — | — | — | — | — | — | — | 0.000251 (J) | — | — |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | 0.0404 | — | — | — | — | — | — | — | — | — |
| RE21-07-515 | 21-27340 | 5.5000–6.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74930 | 21-27340 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | 0.000233 (J) | — | — |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |

**Table 6.10-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluoranthene | Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzofuran[2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Isopropyltoluene[4-] | MethyleneChloride | Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **na**[e] | **na** | **na** | **na** | **na** | **na** | **3210**[f] | **199** | **na** |
| **Industrial SSL** | | | | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **14900**[f] | **1090** | **na** |
| **Construction Worker SSL** | | | | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **10300**[f] | **10600** | **na** |
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | 0.0121 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | 0.0142 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | 0.0166 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | 0.0209 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | 0.0283 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | 0.000488 (J) | — | NA |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | 0.0157 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | 0.0159 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | — | NA | NA | NA | NA | NA | NA | — | 0.0055 (J) | NA |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-515 | 21-27340 | 5.5000–6.5000 | QBT3 | NA | 0.00000147 (J) | 3E-06 | 0.000000514 (J) | 1.1E-06 | 0.0000000517 (J) | 4.8E-07 | NA | NA | 0.000013 (J) |
| RE21-07-74930 | 21-27340 | 7.0000–8.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | — | — | NA |

**Table 6.10-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran[2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloroethene | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **1830** | **1720** | **na** | **0.000374** | **na** | **5570** | **45.7** | **1090**[g] |
| **Industrial SSL** | | | | **na** | **na** | **20500** | **18300** | **na** | **0.00147** | **na** | **57900** | **253** | **3610**[g] |
| **Construction Worker SSL** | | | | **na** | **na** | **7150** | **6680** | **na** | **0.0127** | **na** | **21100** | **4600** | **3130**[g] |
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | NA | NA | — | 0.0131 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.00107 | — | — |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | NA | NA | — | 0.0141 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.00128 | — | — |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | NA | NA | — | 0.0142 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.00223 | — | — |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.00712 | — | — |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.00338 | — | — |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | NA | NA | — | 0.0241 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.00273 | — | — |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.000895 (J) | — | — |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | NA | NA | 0.0115 (J) | 0.0489 | NA | NA | NA | NA | NA | NA |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.00126 | 0.000769 (J) | — |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | NA | NA | — | 0.0158 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.00503 | 0.00286 | — |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000771 (J) | 0.000335 (J) | — |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000452 (J) | — | — |
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000887 (J) | — | — |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | NA | NA | — | 0.0171 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000765 (J) | — | — |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | NA | NA | — | — | NA | NA | NA | 0.000709 (J) | — | — |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.00189 | — | 0.000333 (J) |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000831 (J) | — | — |
| RE21-07-515 | 21-27340 | 5.5000–6.5000 | QBT3 | 0.00000111 (J) | 1.7E-07 | NA | NA | 7.5E-07 | 0.0000000773 (J) | 3E-07 | NA | NA | NA |

**Table 6.10-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran[2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloroethene | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **1830** | **1720** | **na** | **0.000374** | **na** | **5570** | **45.7** | **1090**[g] |
| **Industrial SSL** | | | | **na** | **na** | **20500** | **18300** | **na** | **0.00147** | **na** | **57900** | **253** | **3610**[g] |
| **Construction Worker SSL** | | | | **na** | **na** | **7150** | **6680** | **na** | **0.0127** | **na** | **21100** | **4600** | **3130**[g] |
| RE21-07-74930 | 21-27340 | 7.0000–8.0000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000748 (J) | — | — |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | NA | NA | — | — | NA | NA | NA | 0.000362 (J) | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] NA = Not analyzed.

[d] — = Not detected.

[e] na = Not available.

[f] Isopropylbenzene used as surrogate based on structural similarity.

[g] SSLs for xylenes used as surrogate based on structural similarity.

**Table 6.10-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(a)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-74874 | 21-27320 | 0.0000–0.5000 | SOIL | 0.0947 | —[c] | — | 0.504 | — | 0.015009 | — | — | — |
| RE21-07-74875 | 21-27320 | 2.0000–2.5000 | QBT3 | — | 0.0845 | — | 0.063 | — | 0.036049 | — | — | — |
| RE21-07-74877 | 21-27321 | 0.0000–0.5000 | SOIL | 0.0932 | — | — | 1.75 | — | 0.038261 | — | — | — |
| RE21-07-74878 | 21-27321 | 2.0000–2.5000 | QBT3 | — | 0.119 | — | 0.267 | — | 0.027596 | — | — | — |
| RE21-07-74880 | 21-27322 | 0.0000–0.5000 | SOIL | 0.0672 | — | — | 0.567 | — | 0.026947 | — | — | — |
| RE21-07-74881 | 21-27322 | 2.0000–2.5000 | SOIL | — | 0.33 | — | 1.27 | — | 0.014929 | — | — | — |
| RE21-09-3584 | 21-27322 | 4.0000–5.0000 | QBT3 | NA[d] | — | — | 0.084 | NA | NA | NA | NA | NA |
| MD21-09-12451 | 21-27322 | 9.0000–10.0000 | SOIL | NA | NA | — | 0.051 | NA | NA | NA | NA | NA |
| RE21-07-74883 | 21-27323 | 0.0000–0.5000 | SOIL | 0.0953 | — | — | 0.934 | — | 0.024919 | — | — | — |
| RE21-07-74884 | 21-27323 | 2.0000–2.5000 | SOIL | — | — | — | 0.248 | — | 0.021378 | — | — | — |
| RE21-07-74887 | 21-27325 | 0.0000–0.5000 | SOIL | — | — | — | 0.151 | — | 0.035259 | — | — | — |
| RE21-07-74888 | 21-27325 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 0.058734 | — | — | — |
| RE21-07-74889 | 21-27326 | 0.0000–0.5000 | SOIL | 0.173 | — | 0.0268 | 2.32 | — | — | 2.61 | — | 2.31 |
| RE21-07-74890 | 21-27326 | 2.0000–2.5000 | SOIL | — | 0.275 | — | 0.172 | — | — | — | — | — |
| RE21-07-74891 | 21-27327 | 0.0000–0.5000 | SOIL | — | — | — | 0.554 | — | 0.02316 | — | — | — |
| RE21-07-74892 | 21-27327 | 2.0000–2.5000 | SOIL | — | — | — | 0.0292 | — | 0.047716 | — | — | — |
| RE21-07-74893 | 21-27328 | 0.0000–0.5000 | SOIL | — | — | — | 0.212 | — | 0.012698 | — | — | — |
| RE21-07-74894 | 21-27328 | 2.0000–2.5000 | QBT3 | — | — | — | 0.111 | — | 0.006232 | — | — | — |
| RE21-07-74895 | 21-27329 | 0.0000–0.5000 | SOIL | — | — | — | 0.233 | — | 0.019086 | — | — | — |
| RE21-07-74896 | 21-27329 | 2.0000–2.5000 | SOIL | — | — | — | 0.0487 | — | 0.014184 | — | — | — |
| RE21-07-74897 | 21-27330 | 0.0000–0.5000 | QBT3 | — | NA | — | 0.038 | 0.104 | 0.018637 | — | — | — |
| RE21-07-74898 | 21-27330 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 0.005374 | — | — | — |
| RE21-07-74899 | 21-27331 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | 0.015833 | — | — | — |
| RE21-07-74900 | 21-27331 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 0.004473 | — | — | — |
| RE21-07-74901 | 21-27332 | 0.0000–0.5000 | SOIL | — | — | — | 0.363 | — | — | — | — | — |

**Table 6.10-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-74902 | 21-27332 | 2.0000–2.5000 | QBT3 | — | 0.0819 | — | 0.0786 | — | — | — | — | — |
| RE21-07-74903 | 21-27333 | 0.0000–0.5000 | SOIL | — | — | — | 0.099 | — | — | — | — | — |
| RE21-07-74907 | 21-27335 | 2.6700–3.6700 | SOIL | — | — | — | 1.2 | — | 0.064778 | — | — | — |
| RE21-07-74908 | 21-27335 | 4.6700–5.6700 | QBT3 | — | — | — | 0.753 | — | 0.041246 | — | — | — |
| RE21-07-74909 | 21-27336 | 2.0000–3.0000 | QBT3 | — | — | — | 0.199 | — | 0.04384 | — | — | — |
| RE21-07-74910 | 21-27336 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0574 | — | 0.044809 | — | — | — |
| RE21-07-74925 | 21-27338 | 2.6700–3.6700 | SOIL | — | — | — | 0.0299 | — | 0.09688 | — | — | — |
| RE21-07-74926 | 21-27338 | 4.6700–5.6700 | SOIL | — | — | — | — | — | 0.050181 | — | — | — |
| RE21-07-74927 | 21-27339 | 6.1000–7.1000 | QBT3 | 0.0951 | 0.159 | — | 0.0765 | — | — | — | — | — |
| RE21-07-74928 | 21-27339 | 8.1000–9.1000 | QBT3 | — | — | — | 0.0428 | — | — | — | — | — |
| RE21-07-74929 | 21-27340 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.02714 | — | — | — |
| RE21-07-74931 | 21-27341 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0586 | — | 0.03353 | 4.11 | 0.246 | 4.26 |
| RE21-07-74932 | 21-27341 | 10.0000–11.0000 | QBT3 | — | — | 0.0846 | 0.167 | — | 0.020324 | — | — | — |
| RE21-07-74933 | 21-27341 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | 0.03534 | 2.02 | 0.106 | 1.95 |
| RE21-07-74934 | 21-27342 | 0.0000–0.5000 | SOIL | — | — | — | 0.601 | — | 0.0784458 (J-) | — | — | — |
| RE21-07-74935 | 21-27342 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.0470277 (J-) | — | — | — |
| RE21-07-74936 | 21-27342 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.0383585 (J-) | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.11-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(b)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **1550** | **92900** |
| RE21-07-2202 | 21-600498 | 0.0000–0.5000 | SOIL | —[e] | — | — | 0.486 (U) | — | — | — | — | — | — | — | — | 2.55 | — | — | — | NA[f] | — | — |
| RE21-07-2203 | 21-600498 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.93 | 0.00152 (J-) | 1.47 (U) | — | NA | — | — |
| RE21-07-2204 | 21-600499 | 0.0000–0.5000 | QBT3 | — | 49.2 | — | — | — | — | — | — | — | 14.9 | — | — | 3.27 | — | 0.671 (J) | — | NA | — | — |
| RE21-07-2205 | 21-600499 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.83 | — | 1.51 (U) | — | NA | — | — |
| RE21-07-2206 | 21-600500 | 0.0000–0.5000 | SOIL | — | — | — | 0.501 (U) | — | — | — | — | — | — | — | — | 2.5 | — | — | — | NA | — | 54.7 |
| RE21-07-2207 | 21-600500 | 2.0000–3.0000 | QBT3 | — | — | — | — | 3740 (J+) | — | — | — | — | — | — | — | 10.4 | 0.0139 | 1.48 (U) | — | NA | — | — |
| RE21-07-2208 | 21-600501 | 0.0000–0.5000 | SOIL | — | — | — | 0.48 (U) | — | — | — | — | — | — | — | — | 1.39 | — | — | — | NA | — | — |
| RE21-07-2209 | 21-600501 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.45 (U) | — | NA | — | — |
| RE21-07-2210 | 21-600502 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.5 | — | 1.51 (U) | — | NA | — | — |
| RE21-07-2211 | 21-600502 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 8.16 | — | — | — | — | — | — | — | — | 1.51 (U) | — | NA | — | — |
| RE21-07-2212 | 21-600503 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.45 | — | 1.46 (U) | — | NA | — | — |
| RE21-07-2213 | 21-600503 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.48 (U) | — | NA | — | — |
| RE21-07-2214 | 21-600504 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 0.945 | — | — | — | 43.5 | 0.00285 | — | — | NA | — | 50.4 |
| RE21-07-2215 | 21-600504 | 2.0000–3.0000 | SOIL | — | — | 2.38 | 0.573 (U) | 30200 | — | — | — | — | — | 0.109 (J+) | 16.3 (J+) | 5.62 | 0.0109 | — | — | NA | — | — |
| RE21-07-2216 | 21-600505 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 0.138 (J+) | — | 5.63 | 0.000807 (J-) | — | — | NA | — | 96.7 |
| RE21-07-2217 | 21-600505 | 2.0000–3.0000 | QBT3 | — | 60.5 (J+) | — | — | — | 15.7 | — | — | — | — | — | — | 38.9 | 0.00102 (J) | 0.807 (J) | — | NA | — | — |
| RE21-07-2244 | 21-600512 | 0.0000–0.5000 | SOIL | — | — | — | 0.511 (U) | — | — | — | — | — | — | — | — | 16.8 | 0.00631 | — | — | NA | — | 59 |
| RE21-07-2245 | 21-600512 | 2.0000–3.0000 | SOIL | — | — | — | 0.496 (U) | — | — | — | — | — | — | — | — | 67.2 | 0.00609 (J-) | — | — | NA | — | 48.9 |
| RE21-07-2246 | 21-600512 | 5.0000–6.0000 | QBT3 | — | 85.2 (J+) | — | — | — | 16 | 4.22 | 5.02 | — | 19.1 | — | 7.14 (J+) | 36.8 | 0.00374 (J-) | 1.06 (J) | — | NA | — | — |
| RE21-07-5147 | 21-601086 | 5.3000–6.3000 | SOIL | — | — | — | 0.555 (U) | — | — | — | — | — | — | 0.16 (J+) | — | 2.01 | — | 1.67 (U) | — | 17.6 | — | 50 (J) |
| RE21-07-5148 | 21-601086 | 7.3000–8.3000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.3 | — | 1.65 (U) | — | 4.18 | — | — |
| RE21-07-5149 | 21-601087 | 5.5000–6.5000 | SOIL | — | — | — | — | — | 19.8 | — | — | — | 23.1 | 0.28 | — | 1.35 | — | — | — | 28.7 | — | 68.7 |
| RE21-07-5150 | 21-601087 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | 12.4 | — | 4.81 (J) | — | — | 0.144 | — | 6.67 | — | 1.57 (U) | — | 4.17 | — | — |
| RE21-07-5151 | 21-601088 | 5.5000–6.5000 | SOIL | — | — | — | — | 6820 (J) | — | — | 43.1 (J) | — | 59.7 | 1.81 | — | 1.95 | 0.00762 | 1.55 (U) | 4.09 | 28.7 | — | 87 |
| RE21-07-5152 | 21-601088 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 4.25 | 0.00088 (J) | 1.53 (U) | — | 3.64 | — | — |
| RE21-07-5153 | 21-601089 | 3.3000–4.3000 | SOIL | — | — | — | 0.593 | — | 52.4 | — | 70.3 (J) | — | 40.8 | 4.42 | — | 2.3 | 0.000746 (J) | — | 22.8 | 24.1 | — | 126 |
| RE21-07-5154 | 21-601089 | 5.3000–6.3000 | QBT3 | — | — | — | — | — | 13.3 | — | 16 (J) | — | — | 0.385 | — | 1.37 | — | 1.56 (U) | 5.81 | 6.14 | — | — |

**Table 6.11-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **1550** | **92900** |
| RE21-07-5155 | 21-601090 | 1.5000–2.5000 | QBT3 | 4.63 | 91.9 | — | — | 3130 | — | — | 10.1 | — | 17.6 | 0.125 | 7.02 | 10.6 | 0.018 (J+) | 1.55 (U) | — | 19.6 | — | 69.5 |
| RE21-07-5156 | 21-601090 | 3.5000–4.5000 | QBT3 | 5.01 | 56.4 | — | — | — | 8.44 (J) | — | 8.76 | 0.949 | 13.8 | — | — | 2.57 | 0.0118 (J+) | 0.734 (J) | — | 15.7 | — | 98.2 |
| RE21-07-5157 | 21-601091 | 5.0000–6.0000 | SOIL | 14.5 | — | — | 2.08 | — | 42.6 (J) | — | 121 | 0.768 | 120 | 2.63 | — | 3.47 | 0.0434 (J+) | 1.58 (U) | 3.84 | 32.2 | 50.1 | 856 |
| RE21-07-5158 | 21-601091 | 7.0000–8.0000 | QBT3 | 6.45 | 128 | — | — | 2810 | 15.8 (J) | — | 45.4 | — | 33.6 | 1.48 | — | 25.3 | 0.0348 (J+) | 0.57 (J) | — | 21.5 | — | 583 |
| RE21-07-5161 | 21-601093 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.42 | — | 1.44 (U) | — | 1.05 | — | — |
| RE21-07-5162 | 21-601093 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 1.84 | — | 0.72 (J) | — | 1.46 | — | — |
| RE21-07-5163 | 21-601093 | 18.0000–19.0000 | QBT3 | — | — | — | — | 2510 | — | — | — | — | — | — | — | 1.19 | — | 1.43 (U) | — | 4.02 | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSLs used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.11-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(b)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthylene | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Chrysene | Di-n-butylphthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **1720**[a] | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **621** | **6110** |
| **Industrial SSL** | | | | **18300**[a] | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **2340** | **68400** |
| **Construction Worker SSL** | | | | **6680**[a] | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **20600** | **23800** |
| RE21-07-2202 | 21-600498 | 0.0000–0.5000 | SOIL | —[b] | — | NA[c] | NA | — | — | 0.0203 (J) | — | — | — | 0.0146 (J) | — |
| RE21-07-2204 | 21-600499 | 0.0000–0.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-2206 | 21-600500 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | 0.0129 (J) | — | — | — | 0.0117 (J) | — |
| RE21-07-2211 | 21-600502 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | 0.0764 (J) | — | — |
| RE21-07-2215 | 21-600504 | 2.0000–3.0000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-2216 | 21-600505 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-2217 | 21-600505 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-2244 | 21-600512 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-2245 | 21-600512 | 2.0000–3.0000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-2246 | 21-600512 | 5.0000–6.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-5147 | 21-601086 | 5.3000–6.3000 | SOIL | — | — | NA | NA | — | — | 0.0118 (J) | — | — | 0.0964 (J) | — | — |
| RE21-07-5149 | 21-601087 | 5.5000–6.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | 0.152 (J) |
| RE21-07-5150 | 21-601087 | 7.5000–8.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-5151 | 21-601088 | 5.5000–6.5000 | SOIL | — | — | NA | NA | — | 0.0301 (J) | 0.0405 | — | 0.0167 (J) | 0.365 (J) | 0.0315 (J) | — |
| RE21-07-5153 | 21-601089 | 3.3000–4.3000 | SOIL | — | 0.0218 (J) | NA | NA | 0.114 | 0.131 | 0.179 | 0.0596 | 0.0739 | 0.456 (J) | 0.139 | — |
| RE21-07-5176 | 21-601089 | 3.3000–4.3000 | SOIL | NA | NA | 0.0909 | 0.0519 | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5154 | 21-601089 | 5.3000–6.3000 | QBT3 | — | — | NA | NA | — | 0.0263 (J) | 0.0336 (J) | 0.0165 (J) | — | — | 0.0243 (J) | — |
| RE21-07-5155 | 21-601090 | 1.5000–2.5000 | QBT3 | — | 0.0576 (J) | NA | NA | — | 0.153 | 0.18 | 0.102 (J) | — | — | 0.137 (J) | 0.497 (J) |
| RE21-07-5156 | 21-601090 | 3.5000–4.5000 | QBT3 | — | — | NA | NA | — | 0.0262 (J) | 0.036 | 0.0125 (J) | — | — | 0.0239 (J) | — |
| RE21-07-5157 | 21-601091 | 5.0000–6.0000 | SOIL | 0.0129 (J) | 0.0331 (J) | NA | NA | 0.419 | 0.508 | 0.828 | 0.338 | — | 0.083 (J) | 0.495 | 0.069 (J) |
| RE21-07-5158 | 21-601091 | 7.0000–8.0000 | QBT3 | — | 0.013 (J) | NA | NA | — | 0.143 | 0.256 | 0.11 | — | — | 0.16 | 0.0411 (J) |

**Table 6.11-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Dichlorobenzene[1,4-] | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **32.2** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **180** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **3780** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-2202 | 21-600498 | 0.0000–0.5000 | SOIL | — | 0.0348 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2204 | 21-600499 | 0.0000–0.5000 | QBT3 | — | 0.0188 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2206 | 21-600500 | 0.0000–0.5000 | SOIL | — | 0.0264 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2211 | 21-600502 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2215 | 21-600504 | 2.0000–3.0000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2216 | 21-600505 | 0.0000–0.5000 | SOIL | — | 0.0183 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2217 | 21-600505 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2244 | 21-600512 | 0.0000–0.5000 | SOIL | — | 0.0145 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2245 | 21-600512 | 2.0000–3.0000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2246 | 21-600512 | 5.0000–6.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5147 | 21-601086 | 5.3000–6.3000 | SOIL | — | 0.0122 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5149 | 21-601087 | 5.5000–6.5000 | SOIL | — | 0.0185 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5150 | 21-601087 | 7.5000–8.5000 | QBT3 | — | 0.0114 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5151 | 21-601088 | 5.5000–6.5000 | SOIL | — | 0.0502 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5153 | 21-601089 | 3.3000–4.3000 | SOIL | — | 0.295 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5176 | 21-601089 | 3.3000–4.3000 | SOIL | NA | NA | 8.21E-06 | 1.53E-05 | 0.00000207 (J) | 4.54E-06 | 0.000000592 (J) | 2.79E-06 | 0.0000006 (J) | 0.000000324 (J) | 0.000000229 (J) |
| RE21-07-5154 | 21-601089 | 5.3000–6.3000 | QBT3 | — | 0.0481 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5155 | 21-601090 | 1.5000–2.5000 | QBT3 | — | 0.296 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5156 | 21-601090 | 3.5000–4.5000 | QBT3 | — | 0.0396 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5157 | 21-601091 | 5.0000–6.0000 | SOIL | 0.237 (J) | 0.429 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5158 | 21-601091 | 7.0000–8.0000 | QBT3 | — | 0.0689 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.11-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **6.21** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** |
| **Industrial SSL** | | | | **na** | **23.4** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** |
| **Construction Worker SSL** | | | | **na** | **213** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** |
| RE21-07-2202 | 21-600498 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.016 (J) | 0.0261 (J) | NA | NA | NA |
| RE21-07-2204 | 21-600499 | 0.0000–0.5000 | QBT3 | NA | — | NA | NA | NA | NA | — | 0.0176 (J) | NA | NA | NA |
| RE21-07-2206 | 21-600500 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | 0.0126 (J) | 0.0224 (J) | NA | NA | NA |
| RE21-07-2211 | 21-600502 | 2.0000–3.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-07-2215 | 21-600504 | 2.0000–3.0000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | 0.00079 (J) |
| RE21-07-2216 | 21-600505 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.0174 (J) | NA | NA | NA |
| RE21-07-2217 | 21-600505 | 2.0000–3.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | 0.00089 (J) |
| RE21-07-2244 | 21-600512 | 0.0000–0.5000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.016 (J) | NA | NA | NA |
| RE21-07-2245 | 21-600512 | 2.0000–3.0000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | 0.00114 |
| RE21-07-2246 | 21-600512 | 5.0000–6.0000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | 0.00064 (J) |
| RE21-07-5147 | 21-601086 | 5.3000–6.3000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.0131 (J) | NA | NA | — |
| RE21-07-5149 | 21-601087 | 5.5000–6.5000 | SOIL | NA | — | NA | NA | NA | NA | — | — | NA | NA | 0.000398 (J) |
| RE21-07-5150 | 21-601087 | 7.5000–8.5000 | QBT3 | NA | — | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-07-5151 | 21-601088 | 5.5000–6.5000 | SOIL | NA | — | NA | NA | NA | NA | — | 0.0343 | NA | NA | 0.000304 (J) |
| RE21-07-5153 | 21-601089 | 3.3000–4.3000 | SOIL | NA | 0.0271 (J) | NA | NA | NA | NA | — | 0.147 | NA | NA | — |
| RE21-07-5176 | 21-601089 | 3.3000–4.3000 | SOIL | 3.26E-06 | NA | 7.48E-05 | 0.00000349 (J) | 0.00000038 (J) | 2.11E-06 | NA | NA | 0.000000522 (J) | 1.77E-06 | NA |
| RE21-07-5154 | 21-601089 | 5.3000–6.3000 | QBT3 | NA | — | NA | NA | NA | NA | — | 0.0336 (J) | NA | NA | — |
| RE21-07-5155 | 21-601090 | 1.5000–2.5000 | QBT3 | NA | 0.0484 (J) | NA | NA | NA | NA | 0.249 | 0.315 | NA | NA | 0.00135 |
| RE21-07-5156 | 21-601090 | 3.5000–4.5000 | QBT3 | NA | — | NA | NA | NA | NA | 0.0131 (J) | 0.0338 (J) | NA | NA | — |
| RE21-07-5157 | 21-601091 | 5.0000–6.0000 | SOIL | NA | 0.276 | NA | NA | NA | NA | 0.0842 | 0.518 | NA | NA | — |
| RE21-07-5158 | 21-601091 | 7.0000–8.0000 | QBT3 | NA | 0.0821 | NA | NA | NA | NA | 0.0237 (J) | 0.137 | NA | NA | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

**Table 6.11-3**
**Summary of Radionuclides Detected or detected above BVs/FVs at SWMU 21-024(b)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-2202 | 21-600498 | 0.0000–0.5000 | SOIL | 0.239 | —[c] | — | 3.59 | — | 2.8 | — | 2.87 |
| RE21-07-2204 | 21-600499 | 0.0000–0.5000 | QBT3 | 0.706 | 0.342 | 0.515 | 15.7 | 0.01292 | — | 0.0903 | — |
| RE21-07-2205 | 21-600499 | 2.0000–3.0000 | QBT3 | — | — | — | 0.232 | 0.004857 | — | — | — |
| RE21-07-2206 | 21-600500 | 0.0000–0.5000 | SOIL | 0.0824 | — | — | 1.37 | — | — | — | — |
| RE21-07-2207 | 21-600500 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0369 | 0.011309 | — | — | — |
| RE21-07-2208 | 21-600501 | 0.0000–0.5000 | SOIL | 0.118 | — | 0.0238 | 4.08 | 0.004914 | — | — | — |
| RE21-07-2209 | 21-600501 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0231 | — | — | — | — |
| RE21-07-2210 | 21-600502 | 0.0000–0.5000 | QBT3 | — | 0.27 | — | 0.465 | — | — | — | — |
| RE21-07-2211 | 21-600502 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0243 | — | — | — | — |
| RE21-07-2212 | 21-600503 | 0.0000–0.5000 | QBT3 | — | 0.136 | — | 0.231 | 0.007712 | — | 0.0919 | — |
| RE21-07-2213 | 21-600503 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 0.103 | — |
| RE21-07-2214 | 21-600504 | 0.0000–0.5000 | SOIL | 3.4 | NA[d] | — | 70.4 (J) | — | — | — | — |
| RE21-07-2215 | 21-600504 | 2.0000–3.0000 | SOIL | 0.471 | — | — | 10.3 (J) | 0.079681 | — | — | — |
| RE21-07-2216 | 21-600505 | 0.0000–0.5000 | SOIL | 2.23 | — | 0.352 | 59.5 (J) | — | — | — | — |
| RE21-07-2217 | 21-600505 | 2.0000–3.0000 | QBT3 | 0.792 | — | 0.164 | 24.2 (J) | 0.032238 | — | — | — |
| RE21-07-2244 | 21-600512 | 0.0000–0.5000 | SOIL | 2.64 | — | 0.642 | 76.3 (J) | — | — | — | — |
| RE21-07-2245 | 21-600512 | 2.0000–3.0000 | SOIL | 2.85 | NA | 0.666 | 131 (J) | 0.038799 | — | — | — |
| RE21-07-2246 | 21-600512 | 5.0000–6.0000 | QBT3 | 0.536 | — | — | 9.16 (J) | 0.013586 | — | — | — |
| RE21-07-5147 | 21-601086 | 5.3000–6.3000 | SOIL | — | — | — | 0.345 | — | — | — | — |
| RE21-07-5148 | 21-601086 | 7.3000–8.3000 | QBT3 | — | — | — | 0.259 | 0.023415 | — | — | — |
| RE21-07-5149 | 21-601087 | 5.5000–6.5000 | SOIL | 2.85 | — | 1.2 | 50.2 | 0.061433 | 5.01 | 0.208 | — |
| RE21-07-5150 | 21-601087 | 7.5000–8.5000 | QBT3 | 1.05 | — | 0.32 | 17.4 | 0.042351 | 2.03 | 0.16 | — |
| RE21-07-5151 | 21-601088 | 5.5000–6.5000 | SOIL | 31 | — | 1.31 | 55.3 | 0.033348 | — | — | — |
| RE21-07-5152 | 21-601088 | 7.5000–8.5000 | QBT3 | 0.916 | — | — | 2.05 | — | — | 0.0947 | — |
| RE21-07-5153 | 21-601089 | 3.3000–4.3000 | SOIL | 73 | — | 2 | 73.1 | 0.028888 | — | — | — |
| RE21-07-5154 | 21-601089 | 5.3000–6.3000 | QBT3 | 4.68 | NA | 0.171 | 5.09 | 0.021017 | — | 0.0969 | — |
| RE21-07-5155 | 21-601090 | 1.5000–2.5000 | QBT3 | 1.69 | NA | 0.248 | 31 | — | — | 0.121 | — |

**Table 6.11-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-5156 | 21-601090 | 3.5000–4.5000 | QBT3 | 2.43 | — | 0.295 | 37.7 (J) | 0.011982 | 2.32 | 0.109 | — |
| RE21-07-5157 | 21-601091 | 5.0000–6.0000 | SOIL | 18 | NA | 4.95 | 797 (J) | 0.042039 | 8.42 | 0.318 | 3.44 |
| RE21-07-5158 | 21-601091 | 7.0000–8.0000 | QBT3 | 20.9 | — | 2.32 | 420 (J) | 0.03551 | 4.95 | 0.264 | 2.65 |
| RE21-07-5161 | 21-601093 | 8.0000–9.0000 | QBT3 | 0.197 | — | — | 1.87 | — | — | — | — |
| RE21-07-5162 | 21-601093 | 13.0000–14.0000 | QBT3 | 0.254 | — | 0.0355 | 6.22 | — | — | — | — |
| RE21-07-5163 | 21-601093 | 18.0000–19.0000 | QBT3 | 0.123 | — | — | 2.19 | — | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.12-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(d)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **6.58** | **na**[a] | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | —[e] | 3.07 | — | — | 4720 (J+) | — | — | — | — | 61.7 | — | — | — | 1.07 | — | 2.2 | — | NA[f] | — | — |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | — | 4.17 | — | — | 11800 (J+) | — | — | 4.88 | — | 98.8 | — | — | — | 1.16 | — | 5.3 | — | NA | — | — |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | — | 3.69 | — | — | 6390 (J+) | — | — | 10.4 | — | 65.2 | — | — | — | 1.66 | — | 2.7 | — | NA | — | — |
| MD21-09-8609 | 19-601285 | 25.0000–26.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | NA | 57 | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | — | — | — | 0.627 | — | — | — | 33.1 | 0.57 | 35.5 | — | 0.218 (J+) | NA | 16.6 | 0.0011 (J-) | 1.66 (U) | 7.22 | 3.27 (J) | — | 71.5 |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | — | — | — | 1.04 | — | 37.4 | — | 160 | 0.938 | 47.1 | — | 0.699 (J+) | NA | 41.7 | — | — | 9.23 | 4.5 (J) | — | 96 |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | 7420 (J+) | 2.86 | 53.1 | — | — | 27.4 | — | 106 | — | 27.5 | — | 0.352 (J+) | NA | 16.4 | — | 0.872 (J) | 4.6 | 3.76 (J) | 19.3 | 69.7 |
| RE21-07-75013 | 21-27366 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.73 | — | 1.6 (U) | — | — | — | — |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 42.8 | — | — | — | 2.89 | — | 1.52 (U) | — | — | — | — |
| MD21-09-8613 | 21-27366 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 53 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-12448 | 21-27366 | 9.0000–10.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 48 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75015 | 21-27367 | 0.0000–0.5000 | SOIL | — | — | — | 1.8 | — | 43.2 | — | 109 | 2.24 | 75.9 | — | 0.689 | — | 8.61 | — | 1.59 (U) | 20.1 | 14.8 | — | 140 |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | — | — | — | — | 2460 (J+) | — | — | 10.2 | — | — | — | — | — | 4.24 | — | 1.46 (U) | 4.68 | — | — | — |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | — | — | — | 0.952 | — | — | — | 51.7 | 0.514 | — | — | 0.168 | — | 5.72 | — | 1.58 (U) | 9.14 | 4.3 | — | 55.4 |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | 7.82 | — | — | — | — | — | 7.61 | — | 1.48 (U) | — | — | — | — |
| RE21-07-75019 | 21-27369 | 0.0000–0.5000 | SOIL | — | — | — | 0.502 (U) | — | — | — | — | — | — | — | — | — | 1.35 | — | — | — | — | — | — |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 8.2 | — | — | — | — | — | — | — | 0.717 (J) | — | 1.46 (U) | — | — | — | — |
| RE21-07-75021 | 21-27370 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.2 | — | 1.53 (U) | 6.42 | — | — | — |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.53 (U) | 2.19 | — | — | — |
| RE21-07-75023 | 21-27371 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 0.621 | — | — | — | — | 1.89 | — | 1.56 (U) | 4.3 | 2.27 | — | — |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.1 | — | 1.51 (U) | — | — | — | — |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | — | — | — | 2.3 | — | 36.5 | — | 161 | 2.28 | 56.6 | — | 0.826 (J+) | NA | 121 | 0.00591 (J-) | — | 11 | 8.51 (J) | — | 145 |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | — | — | — | 1.11 | — | 23.6 | — | 85.1 | 1.17 | 37.3 | — | 0.422 (J+) | NA | 65 | 0.00237 (J-) | — | 4.34 | 6.79 (J) | — | 107 |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | — | — | — | 0.493 (J) | — | — | — | — | 0.554 | — | — | — | NA | 53.5 | 0.00187 (J-) | 1.61 (U) | 1.25 | 2.11 (J) | — | 51.7 |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | — | — | — | 0.436 (J) | — | — | — | — | — | 22.7 | — | — | NA | 28.1 | 0.00329 (J-) | 1.65 (U) | — | — | — | — |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | — | — | — | — | — | — | — | — | NA | — | — | — | — | 0.52 | — | — | — | NA | — | — |

**Table 6.12-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **6.58** | **na[a]** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219[b]** | **23[c]** | **3130** | **1560** | **400** | **10700** | **23[c]** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920[b]** | **300[c]** | **45400** | **22700** | **800** | **145000** | **310[c]** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449[b]** | **34.9[d]** | **12400** | **6190** | **800** | **463** | **92.9[d]** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | — | — | — | — | 10700 | — | — | — | NA | 94.1 | — | — | — | 0.2 (J) | — | — | — | NA | — | — |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 14.3 | — | — | NA | — | — | — | 7.8 | 0.34 | — | — | — | NA | — | — |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | — | 11.8 | — | 1.4 | 7380 | — | — | 35.2 | — | 44.9 | 1360 | 0.388 | 15.7 (J-) | 3.37 | — | 7.98 | 2.56 | NA | — | 158 (J+) |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | — | 9.37 | 71.1 (J+) | — | 5170 | 18 | — | 37.7 | — | 38.3 | 615 | 0.465 | 12.1 (J-) | — | — | 5.82 | 2.77 | NA | 18.2 | 131 (J+) |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | — | — | — | 1.24 | 8700 | 233 | 10.1 | 575 | — | 102 | — | 1.5 | 70.4 (J-) | 2.04 | 0.00068 (J) | 9.7 | 18.1 | NA | — | 258 (J+) |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | — | — | — | 1.09 | 9460 | 29.1 | — | 199 | — | 74.3 | — | 0.691 | — | 1.63 | — | 7.17 | 11.3 | NA | — | 163 (J+) |
| RE21-07-6098 | 21-601274 | 2.0000–3.0000 | SOIL | — | — | — | 0.511 (U) | — | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-6099 | 21-601274 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.66 (U) | — | NA | — | — |
| RE21-07-6100 | 21-601275 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 2.16 | — | 1.82 (U) | — | NA | — | — |
| RE21-07-6101 | 21-601275 | 4.0000–5.0000 | QBT3 | — | 2.81 | — | — | — | — | — | — | — | — | — | — | — | 2.16 | — | 1.8 (U) | — | NA | — | — |
| RE21-07-6102 | 21-601276 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.48 | — | 1.72 (U) | — | NA | — | — |
| RE21-07-6103 | 21-601276 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.22 | — | 1.62 (U) | — | NA | — | — |
| RE21-07-6104 | 21-601277 | 2.0000–3.0000 | SOIL | — | — | — | 0.609 (U) | — | — | — | — | — | — | — | — | — | 2.11 | — | 1.83 (U) | — | NA | — | — |
| RE21-07-6105 | 21-601277 | 4.0000–5.0000 | SOIL | — | — | — | 0.622 (U) | — | — | — | — | — | — | — | — | — | 1.91 | — | — | — | NA | — | — |
| RE21-07-6106 | 21-601278 | 2.0000–3.0000 | SOIL | — | — | — | 0.565 (U) | 7480 | — | — | — | — | — | — | — | — | — | — | 1.69 (U) | — | NA | — | — |
| RE21-07-6107 | 21-601278 | 4.0000–5.0000 | QBT3 | — | 3.69 | 121 (J+) | — | 9640 | — | — | 5.84 | — | — | — | — | 6.78 (J+) | — | — | 1.71 (U) | — | NA | — | — |
| RE21-07-6108 | 21-601279 | 2.0000–3.0000 | SOIL | — | — | — | 0.58 (U) | — | — | — | — | — | — | — | — | — | — | — | 1.74 (U) | — | NA | — | — |
| RE21-07-6109 | 21-601279 | 4.0000–5.0000 | SOIL | — | — | — | 0.574 (U) | — | — | — | — | — | — | — | — | — | — | — | 1.72 (U) | — | NA | — | — |
| RE21-07-6110 | 21-601280 | 2.0000–3.0000 | QBT3 | — | 3.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.7 (U) | — | NA | — | — |
| RE21-07-6111 | 21-601280 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.64 (U) | — | NA | — | — |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.62 (U) | — | NA | — | — |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.63 (U) | — | NA | — | — |
| RE21-07-6114 | 21-601282 | 2.0000–3.0000 | QBT3 | — | 3.31 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.7 (U) | — | NA | — | — |

**Table 6.12-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **6.58** | **na**[a] | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-07-6115 | 21-601282 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.64 (U) | — | NA | — | — |
| RE21-07-6116 | 21-601283 | 2.0000–3.0000 | QBT3 | — | — | — | — | 8810 | — | — | — | — | — | — | — | — | — | — | 1.67 (U) | — | NA | — | — |
| RE21-07-6117 | 21-601283 | 4.0000–5.0000 | QBT3 | — | — | — | — | 4520 | — | — | — | — | — | — | 0.143 | — | — | — | 1.63 (U) | — | NA | — | — |
| RE21-07-6118 | 21-601284 | 2.0000–3.0000 | QBT3 | — | — | — | — | 5150 | — | — | — | — | — | — | — | — | — | — | 1.67 (U) | — | NA | — | — |
| RE21-07-6119 | 21-601284 | 4.0000–5.0000 | QBT3 | — | — | — | — | 2600 | — | — | — | — | — | — | — | — | — | — | 1.61 (U) | — | NA | — | — |
| MD21-09-8848 | 21-605286 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | NA | — | 0.74 (U) | 26 | NA | — | NA | — | NA | NA | — | — | NA | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.12-2**
**Organic Chemicals Detected at SWMU 21-024(d)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Anthracene | Aroclor-1242 | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720**[a] | **17200** | **2.22** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** |
| **Industrial SSL** | | | | **36700** | **18300**[a] | **183000** | **8.26** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** |
| **Construction Worker SSL** | | | | **18600** | **6680**[a] | **66800** | **75.8** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | —[b] | — | — | NA[c] | NA | NA | — | — | — | — | — |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | 0.0115 (J) | — | — |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | 0.04 | — | 0.124 | NA | NA | NA | 0.18 | 0.147 | 0.234 | 0.0818 (J) | — |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-08-10278 | 21-27365 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.178 | 0.422 | 0.186 | NA | NA | NA | NA | NA |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-08-10279 | 21-27365 | 2.0000–2.5000 | SOIL | NA | NA | NA | 0.256 | 0.457 | 0.188 | NA | NA | NA | NA | NA |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| MD21-09-8616 | 21-27365 | 4.0000–5.0000 | QBT3 | NA | NA | NA | — | 0.26 | — | NA | NA | NA | NA | NA |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-3012 | 21-27367 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | 0.129 | 0.051 | NA | NA | NA | NA | NA |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-08-10281 | 21-27370 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | 0.0285 | 0.0117 | NA | NA | NA | NA | NA |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-08-10282 | 21-27370 | 2.0000–2.5000 | QBT3 | NA | NA | NA | 0.0037 | 0.0056 | 0.0024 (J) | NA | NA | NA | NA | NA |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | — | 0.0162 (J) | — | NA | NA | NA | 0.1 (J) | — | 0.42 (J) | — | — |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | 0.0758 | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | — | — | 0.047 (J) | NA | NA | NA | 0.3 (J) | 0.27 (J) | 0.28 (J) | 0.12 (J) | 0.3 (J) |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Anthracene | Aroclor-1242 | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720**[a] | **17200** | **2.22** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** |
| **Industrial SSL** | | | | **36700** | **18300**[a] | **183000** | **8.26** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** |
| **Construction Worker SSL** | | | | **18600** | **6680**[a] | **66800** | **75.8** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | — | — | — | NA | NA | NA | 0.11 (J) | 0.1 (J) | 0.11 (J) | 0.052 (J) | 0.11 (J) |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | — | — | — | NA | NA | NA | — | 0.0155 (J) | 0.0392 | 0.0183 (J) | — |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | 0.0404 | 0.0146 (J) | — |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | 0.0181 (J-) | — | 0.0538 (J-) | NA | NA | NA | — | 0.0991 (J-) | 0.162 (J-) | 0.0555 (J-) | — |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | NA | — | — | — | — | — |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | 0.0574 | — | — | 0.0283 (J) | — |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | — | — | 0.166 (J) | NA | NA | NA | 0.456 | 0.486 (J) | 0.93 (J) | 0.226 | — |
| MD21-09-8615 | 21-601281 | 9.0000–10.0000 | QBT3 | — | — | 0.11 (J) | NA | NA | NA | 0.42 | 0.35 (J) | 0.57 (J) | 0.17 (J) | 0.33 (J) |
| RE21-07-6138 | 21-601283 | 4.0000–5.0000 | QBT3 | NA | NA | NA | — | — | — | NA | NA | NA | NA | NA |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Carbazole | Chrysene | Di-n-butylphthalate | Dibenz(a,h)anthracene | Dichlorobenzene[1,2-] | Dichlorobenzene[1,3-] | Dichlorobenzene[1,4-] | Fluoranthene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **240000**[d] | **347** | **2600**[d] | **240**[f] | **621** | **6110** | **0.621** | **3010** | **69**[f] | **32.2** | **2290** |
| **Industrial SSL** | | | | **2500000**[d] | **1370** | **9100**[d] | **960**[f] | **2340** | **68400** | **2.34** | **14300** | **140**[f] | **180** | **24400** |
| **Construction Worker SSL** | | | | **952000**[e] | **4760** | **47600**[e] | **10800**[g] | **20600** | **23800** | **21.3** | **9710** | **5780**[g] | **3780** | **8910** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | — | — | — | NA | — | 0.0674 (J) | — | — | — | — | 0.0112 (J) |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | — | 0.0751 (J) | — | NA | 0.0107 (J) | 0.0979 (J) | — | — | — | — | 0.0182 (J) |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | — | 0.0897 (J) | — | NA | 0.16 | 0.154 (J) | — | — | — | 0.000331 (J) | 0.41 |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | — | 0.181 (J) | — | NA | — | 0.184 (J) | — | — | — | — | — |
| RE21-08-10278 | 21-27365 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | — | 0.307 | 0.248 (J) | NA | — | 0.335 (J) | — | — | — | 0.000241 (J) | — |
| RE21-08-10279 | 21-27365 | 2.0000–2.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Carbazole | Chrysene | Di-n-butylphthalate | Dibenz(a,h)anthracene | Dichlorobenzene[1,2-] | Dichlorobenzene[1,3-] | Dichlorobenzene[1,4-] | Fluoranthene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **240000**[d] | **347** | **2600**[d] | **240**[f] | **621** | **6110** | **0.621** | **3010** | **69**[f] | **32.2** | **2290** |
| **Industrial SSL** | | | | **2500000**[d] | **1370** | **9100**[d] | **960**[f] | **2340** | **68400** | **2.34** | **14300** | **140**[f] | **180** | **24400** |
| **Construction Worker SSL** | | | | **952000**[e] | **4760** | **47600**[e] | **10800**[g] | **20600** | **23800** | **21.3** | **9710** | **5780**[g] | **3780** | **8910** |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | — | 0.287 | — | NA | — | 0.308 (J) | — | — | — | — | — |
| MD21-09-8616 | 21-27365 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | 0.000306 (J) | — |
| RE21-07-3012 | 21-27367 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | 0.445 (J) | — | — | NA | — | — | — | — | — | — | 0.0103 (J) |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | 0.00062 (J) | — |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-08-10281 | 21-27370 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-08-10282 | 21-27370 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | 0.453 (J) | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | — | 0.43 (J) | — | NA | 0.198 (J) | 0.395 | — | — | — | — | 0.0407 |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | — | 0.159 (J) | — | NA | — | 0.132 (J) | — | — | — | — | — |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | 0.043 (J) |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | — | — | — | NA | 0.5 | — | 0.04 (J) | — | — | — | 0.88 |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | — | — | — | NA | 0.19 (J) | — | — | 0.00025 (J) | 0.00025 (J) | — | 0.3 (J) |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | — | — | — | NA | — | 0.125 (J) | — | — | — | — | 0.0142 (J) |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | — | — | — | NA | 0.0204 (J) | 0.0706 (J) | — | — | — | 0.000307 (J) | 0.0122 (J) |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | — | 0.187 (J) | 0.211 (J-) | NA | 0.0941 (J-) | 0.164 (J-) | — | — | — | 0.097 (J-) | 0.169 (J-) |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | — | 0.0956 (J) | 0.0827 (J) | NA | — | 0.0568 (J) | — | — | — | — | — |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | 0.131 (J) |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | — | — | — | NA | 0.63 (J) | — | — | — | — | — | 1.17 (J) |
| MD21-09-8615 | 21-601281 | 9.0000–10.0000 | QBT3 | NA | — | — | 0.1 (J) | 0.42 | — | 0.085 (J) | — | — | — | 1.1 |
| RE21-07-6138 | 21-601283 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **na**[h] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | 0.0505 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10278 | 21-27365 | 0.0000–0.5000 | SOIL | NA | 0.000677 | 0.00134 | 0.000175 | 7.31E-06 | 0.000604 | 3.33E-05 | 3.88E-05 | 3.32E-05 | 0.00056 | 1.14E-05 |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10279 | 21-27365 | 2.0000–2.5000 | SOIL | NA | 0.000312 | 0.000628 | 9.11E-05 | 3.5E-06 | 0.000287 | 1.68E-05 | 0.000018 | 1.66E-05 | 0.000273 | 5.45E-06 |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8616 | 21-27365 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3012 | 21-27367 | 0.0000–0.5000 | SOIL | NA | 0.000408 | 0.000868 | 0.000129 | 4.03E-06 | 0.000348 | 1.18E-05 | 1.98E-05 | 1.66E-05 | 0.000277 | 4.85E-06 |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10281 | 21-27370 | 0.0000–0.5000 | SOIL | NA | 3.41E-05 | 7.37E-05 | 1.03E-05 | 0.000000437 (J) | 2.47E-05 | 0.0000013 (J) | 0.00000192 (J) | 0.00000136 (J) | 2.74E-05 | 0.000000547 (J) |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10282 | 21-27370 | 2.0000–2.5000 | QBT3 | NA | 2.93E-06 | 6.72E-06 | 0.000000833 (J) | — | 2.04E-06 | 0.000000152 (J) | 0.000000195 (J) | — | 2.09E-06 | — |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **na**[h] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | 0.0206 (J-) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8615 | 21-601281 | 9.0000–10.0000 | QBT3 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6138 | 21-601283 | 4.0000–5.0000 | QBT3 | NA | 3.93E-06 | 8.77E-06 | 0.00000127 (J) | — | 0.0000036 (J) | — | 0.000000278 (J) | 0.000000271 (J) | 5.49E-07 | — |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] | Pentachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[i] | **199** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[i] | **1090** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[i] | **10600** | **na** | **na** | **na** | **na** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | — | 0.00117 | — | NA | NA | NA | NA |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | NA | NA | NA | NA | 0.0726 | 0.0027 | — | NA | NA | NA | NA |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10278 | 21-27365 | 0.0000–0.5000 | SOIL | 4.82E-06 | 2.67E-06 | 6.98E-06 | 0.000215 | NA | NA | NA | 0.00439 | 0.000414 | 1.54E-05 | 0.000234 |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-08-10279 | 21-27365 | 2.0000–2.5000 | SOIL | 0.00000241 (J) | 0.00000126 (J) | 3.55E-06 | 0.000109 | NA | NA | NA | 0.00169 | 0.000166 | 6.63E-06 | 0.000106 |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| MD21-09-8616 | 21-27365 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] | Pentachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[i] | **199** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[i] | **1090** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[i] | **10600** | **na** | **na** | **na** | **na** |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-07-3012 | 21-27367 | 0.0000–0.5000 | SOIL | 0.000004 | 0.00000128 (J) | 5.95E-06 | 0.000171 | NA | NA | NA | 0.0024 | 0.000267 | 5.59E-06 | 9.47E-05 |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | — | 0.000495 (J) | — | NA | NA | NA | NA |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | NA | NA | NA | NA |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-08-10281 | 21-27370 | 0.0000–0.5000 | SOIL | 0.000000501 (J) | — | 0.000000743 (J) | 1.35E-05 | NA | NA | NA | 0.000221 | 1.44E-05 | 0.00000065 (J) | 9.03E-06 |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-08-10282 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | — | 4.14E-07 | NA | NA | NA | 1.78E-05 | — | — | 4.75E-07 |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | NA | NA | NA | NA |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | NA | NA | NA | NA |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | 0.019 | NA | NA | NA | NA |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | NA | NA | NA | NA | — | — | 0.014 | NA | NA | NA | NA |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.13 (J) | — | 0.012 | NA | NA | NA | NA |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | 0.057 (J) | — | 0.014 | NA | NA | NA | NA |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | 0.0127 (J) | — | — | NA | NA | NA | NA |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | 0.0123 (J) | — | — | NA | NA | NA | NA |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | 0.05 (J-) | — | — | NA | NA | NA | NA |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | NA | NA | NA | NA |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | 0.0226 (J) | — | — | NA | NA | NA | NA |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | 0.222 | — | — | NA | NA | NA | NA |
| MD21-09-8615 | 21-601281 | 9.0000–10.0000 | QBT3 | NA | NA | NA | NA | 0.21 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-6138 | 21-601283 | 4.0000–5.0000 | QBT3 | — | — | — | 4.8E-07 | NA | NA | NA | 0.000028 (J) | 0.00000284 (J) | — | — |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **1830** | **1720** | **0.000045** | **na** | **0.000374** | **na** | **5570** | **45.7** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **20500** | **18300** | **0.000204** | **na** | **0.00147** | **na** | **57900** | **253** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **7150** | **6680** | **0.000284** | **na** | **0.0127** | **na** | **21100** | **4600** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | NA | NA | NA | 0.0161 (J) | 0.0148 (J) | NA | NA | NA | NA | — | — |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | NA | NA | NA | 0.402 | 0.308 | NA | NA | NA | NA | — | — |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10278 | 21-27365 | 0.0000–0.5000 | SOIL | 2.65E-06 | 6.36E-06 | 0.000102 | NA | NA | 2.23E-06 | 8.93E-05 | 6.11E-06 | 5.97E-05 | NA | NA |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00333 | 0.00232 |
| RE21-08-10279 | 21-27365 | 2.0000–2.5000 | SOIL | 0.00000112 (J) | 3.12E-06 | 4.68E-05 | NA | NA | 0.000001 | 3.88E-05 | 2.72E-06 | 3.04E-05 | NA | NA |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00677 | 0.00292 |
| MD21-09-8616 | 21-27365 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |
| RE21-07-3012 | 21-27367 | 0.0000–0.5000 | SOIL | 0.00000118 (J) | 4.93E-06 | 5.73E-05 | NA | NA | 8.62E-07 | 3.05E-05 | 5.52E-06 | 4.48E-05 | NA | NA |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | 0.0032 | 0.00236 |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00166 | 0.0014 |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | — | 0.00105 |
| RE21-08-10281 | 21-27370 | 0.0000–0.5000 | SOIL | 0.000000186 (J) | 0.000000784 (J) | 9.9E-06 | NA | NA | — | 1.21E-06 | 8.12E-07 | 6.37E-06 | NA | NA |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00148 | — |
| RE21-08-10282 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | 2.91E-07 | NA | NA | — | — | 0.0000000861 (J) | 1.8E-07 | NA | NA |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00304 | — |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | 0.0756 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00897 | 0.0041 |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00225 | 0.00213 |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | NA | NA | NA | — | 0.037 (J) | NA | NA | NA | NA | 0.0003 (J) | — |
| RE21-07-6091 | 21-601270 | 4.0000–5.0000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |
| RE21-07-6092 | 21-601271 | 2.0000–3.0000 | SOIL | NA | NA | NA | 0.37 | 0.62 | NA | NA | NA | NA | — | — |
| RE21-07-6093 | 21-601271 | 4.0000–5.0000 | QBT3 | NA | NA | NA | 0.13 (J) | 0.22 (J) | NA | NA | NA | NA | — | — |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | NA | NA | NA | — | 0.0169 (J) | NA | NA | NA | NA | — | — |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | NA | NA | NA | — | 0.015 (J) | NA | NA | NA | NA | — | — |

**Table 6.12-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **1830** | **1720** | **0.000045** | **na** | **0.000374** | **na** | **5570** | **45.7** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **20500** | **18300** | **0.000204** | **na** | **0.00147** | **na** | **57900** | **253** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **7150** | **6680** | **0.000284** | **na** | **0.0127** | **na** | **21100** | **4600** |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | NA | NA | NA | 0.151 (J-) | 0.158 (J-) | NA | NA | NA | NA | — | — |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 0.146 (J) | 0.127 (J) | NA | NA | NA | NA | — | — |
| RE21-07-6113 | 21-601281 | 4.0000–5.0000 | QBT3 | NA | NA | NA | 0.86 (J) | 1.3 (J) | NA | NA | NA | NA | — | — |
| MD21-09-8615 | 21-601281 | 9.0000–10.0000 | QBT3 | NA | NA | NA | 0.59 | 0.95 | NA | NA | NA | NA | NA | NA |
| RE21-07-6138 | 21-601283 | 4.0000–5.0000 | QBT3 | — | — | 1.38E-07 | NA | NA | — | 1.2E-06 | — | — | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] — = Not detected.

[c] NA= Not analyzed.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[f] EPA Region 6 SSL (EPA 2007, 099314).

[g] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) (carcinogens multiplied by 10 to adjust to 10-5 risk value) and equation and parameters from NMED (2009, 108070).

[h] na= Not available.

[i] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table 6.12-3**
**Summary of Radionuclides Detected or Detected above BV/FVs at SWMU 21-024(d)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Europium-152 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **na** | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **2.9** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **11** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **9.1** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE19-07-6120 | 19-601285 | 10.0000–11.0000 | QBT3 | —[c] | — | — | — | 0.385 | — | 0.025119 | — | — | — |
| RE19-07-6121 | 19-601285 | 15.0000–16.0000 | QBT3 | — | — | — | — | 1.01 | — | 0.030802 | — | — | — |
| RE19-07-6122 | 19-601285 | 20.0000–21.0000 | QBT3 | 0.0379 | — | — | — | 0.492 | — | 0.053224 | — | — | — |
| RE21-07-75010 | 21-27365 | 0.0000–0.5000 | SOIL | 0.471 | — | — | 0.104 | 16.8 | — | 0.037773 | — | — | — |
| RE21-07-75011 | 21-27365 | 2.0000–2.5000 | SOIL | 0.708 | 0.103 | — | 0.166 | 16.3 | — | 0.123101 | 4.49 | — | 2.81 |
| RE21-07-75012 | 21-27365 | 3.0000–3.5000 | QBT3 | 0.302 | 0.106 | — | — | 3.92 | — | 0.095431 | 2.29 | 0.0914 | — |
| RE21-07-75013 | 21-27366 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.14 | — | — | — | — | — |
| RE21-07-75014 | 21-27366 | 2.0000–2.5000 | QBT3 | — | 0.158 | — | — | 0.533 | 0.315 | 0.007864 | — | — | — |
| RE21-07-75015 | 21-27367 | 0.0000–0.5000 | SOIL | 2.21 | — | — | 0.593 | 32.7 | — | 0.061404 | 9.03 | 0.538 | 6.58 |
| RE21-07-75016 | 21-27367 | 2.0000–2.5000 | QBT3 | 0.228 | — | — | 0.0679 | 3.97 | — | 0.018172 | — | 0.1 | — |
| RE21-07-75017 | 21-27368 | 0.0000–0.5000 | SOIL | 0.619 | — | — | 0.112 | 14.1 | — | 0.016641 | 3.17 | — | 2.57 |
| RE21-07-75018 | 21-27368 | 2.0000–2.5000 | QBT3 | 0.115 | 0.179 | — | — | 1.9 | — | 0.009855 | — | — | — |
| RE21-07-75019 | 21-27369 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.196 | — | — | — | — | — |
| RE21-07-75020 | 21-27369 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.101 | — | — | — | — | — |
| RE21-07-75021 | 21-27370 | 0.0000–0.5000 | SOIL | 0.184 | — | — | — | 6.22 | — | — | — | — | — |
| RE21-07-75022 | 21-27370 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.246 | — | — | — | — | — |
| RE21-07-75023 | 21-27371 | 0.0000–0.5000 | SOIL | 0.0471 | — | — | — | 1.04 | — | — | — | — | — |
| RE21-07-75024 | 21-27371 | 2.0000–2.5000 | QBT3 | — | 0.117 | — | — | 1.07 | — | — | — | — | — |
| RE21-07-75025 | 21-27372 | 0.0000–0.5000 | SOIL | 1.73 | — | — | 0.168 | 16.5 | — | 0.138667 | 6 | 0.63 | 3.67 |
| RE21-07-75026 | 21-27372 | 2.0000–2.5000 | SOIL | 0.284 | 0.128 | — | 0.069 | 3.5 | — | 0.110556 | 3.35 | — | 2.44 |
| RE21-07-75027 | 21-27373 | 0.0000–0.5000 | SOIL | 0.222 | — | — | 0.0469 | 5.45 | — | — | — | — | — |
| RE21-07-75028 | 21-27373 | 2.0000–2.5000 | SOIL | — | 0.165 | — | — | 0.765 | — | 0.100607 | — | — | — |
| RE21-07-6090 | 21-601270 | 2.0000–3.0000 | SOIL | — | — | 0.393 | — | 0.18 (J) | — | — | — | — | — |

**Table 6.12-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Europium-152 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **na** | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **2.9** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **11** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **9.1** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-6094 | 21-601272 | 1.0000–2.0000 | SOIL | 2.31 (J) | 0.312 | — | 0.123 | 33.8 (J) | — | 0.046735 | — | — | — |
| RE21-07-6095 | 21-601272 | 3.0000–4.0000 | QBT3 | 0.539 (J) | 0.312 | — | 0.0405 | 7.55 (J) | — | 0.031771 | — | — | — |
| RE21-07-6096 | 21-601273 | 1.0000–2.0000 | SOIL | 1.12 (J) | 0.254 | — | 0.106 (J-) | 19.3 (J-) | — | — | 4.28 | 0.222 | — |
| RE21-07-6097 | 21-601273 | 2.0000–3.0000 | SOIL | 0.209 (J) | NA[d] | — | — | 4.38 (J-) | — | — | — | — | — |
| RE21-07-6098 | 21-601274 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.0558 | 0.263 | — | — | — | — |
| RE21-07-6101 | 21-601275 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.137 | — | — | — | — | — |
| RE21-07-6102 | 21-601276 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | 0.11 | — |
| RE21-07-6106 | 21-601278 | 2.0000–3.0000 | SOIL | 0.0664 | — | — | — | 0.0384 | 0.219 | — | — | — | — |
| RE21-07-6107 | 21-601278 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.0307 | — | 0.037936 | — | 0.0955 | — |
| RE21-07-6108 | 21-601279 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.0241 | — | — | — | — | — |
| RE21-07-6109 | 21-601279 | 4.0000–5.0000 | SOIL | — | — | — | — | — | 0.854 | 0.05887 | — | — | — |
| RE21-07-6112 | 21-601281 | 2.0000–3.0000 | QBT3 | 0.123 | — | — | — | — | — | — | — | 0.115 | — |
| RE21-07-6114 | 21-601282 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.027 | — | — | — | 0.106 | — |
| RE21-07-6115 | 21-601282 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.0502 | — | — | — | — | — |
| RE21-07-6116 | 21-601283 | 2.0000–3.0000 | QBT3 | — | — | — | — | 2.1 | — | — | — | 0.119 | — |
| RE21-07-6117 | 21-601283 | 4.0000–5.0000 | QBT3 | — | — | — | 0.0246 | 5.02 | — | — | — | — | — |
| MD21-09-8614 | 21-601283 | 9.0000–10.0000 | QBT3 | NA | NA | NA | — | 1.24 | NA | NA | NA | NA | NA |
| RE21-07-6119 | 21-601284 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.0258 | — | — | — | — | — |
| MD21-09-8848 | 21-605286 | 0.0000–0.5000 | SOIL | 0.276 | NA | NA | 0.0315 | 3.37 | NA | — | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.13-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(e)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-07-74568 | 21-27242 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | — | — | — | — | — | — | — | 0.848 | — | 1.7 | 0.00284 (J+) | — | — | 2.22 | — | — |
| RE21-07-74582 | 21-27242 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 7.87 | — | — | — | — | — | 0.993 | — | — | — | 1.68 (U) | — | — | — | — |
| RE21-07-74569 | 21-27243 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 0.658 | — | 1.68 | — | 1.6 (U) | — | — | — | — |
| RE21-07-74583 | 21-27243 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.564 (U) | — | — | — | — | — | — | — | — | — | — | — | 1.69 (U) | — | — | — | — |
| RE21-07-74572 | 21-27244 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 0.563 | — | 1.34 | — | 1.57 (U) | — | 8.54 | — | 71.6 |
| RE21-07-74577 | 21-27244 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 7.66 | — | — | — | — | — | 1.5 | — | — | — | 1.53 (U) | — | — | — | — |
| RE21-07-74571 | 21-27245 | 0.0000–0.5000 | SOIL | — | 3.23 | — | — | 2.32 | — | 21.4 | — | 26.5 | — | 72.1 | 0.595 | 1.23 | — | 1.28 | — | 1.75 (U) | 1.1 | 22.5 | — | 124 |
| RE21-07-74580 | 21-27245 | 2.0000–3.0000 | QBT3 | 8150 (J+) | — | 3.31 | 47.1 | — | — | 11.1 | — | 6.25 | — | — | — | 1.46 | — | — | — | 1.65 (U) | — | — | — | — |
| RE21-07-74570 | 21-27246 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.17 | — | 1.6 (U) | — | 2.3 | — | 50.1 |
| RE21-07-74581 | 21-27246 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 11.2 | — | — | — | — | — | 1.67 | — | — | — | 1.61 (U) | — | — | — | — |
| RE21-07-74575 | 21-27247 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 0.579 | — | 4.03 | 0.000866 (J) | 1.63 (U) | — | — | — | — |
| RE21-07-74578 | 21-27247 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.605 | — | 2.3 | — | 1.56 (U) | — | — | — | — |
| RE21-07-74574 | 21-27248 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 0.592 | — | 13.3 | — | 1.56 (U) | — | — | — | 58.2 |
| RE21-07-74579 | 21-27248 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.933 | — | 1.36 | — | 1.51 (U) | — | — | — | — |
| RE21-07-74573 | 21-27249 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 0.599 | — | 2.29 | — | 1.67 (U) | — | 3.1 | — | — |
| RE21-07-74576 | 21-27249 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 18.4 | — | 5.11 | — | — | — | 2.24 | — | — | — | 1.49 (U) | — | — | — | — |
| RE21-07-74584 | 21-27250 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA[f] | — | 2.51 | — | 1.6 (U) | — | 2.71 (J+) | — | — |
| RE21-07-74585 | 21-27250 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.292 | — | 1.06 | — | 1.54 (U) | — | — | — | — |
| RE21-07-74586 | 21-27251 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | 2.2 | — | 1.62 (U) | — | 1.98 (J+) | — | 50.1 |
| RE21-07-74587 | 21-27251 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.245 | — | 1.95 | — | 1.51 (U) | — | — | — | — |
| RE21-07-74588 | 21-27252 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | 2.54 | 0.000609 (J) | 1.54 (U) | — | 3.62 (J+) | — | — |
| RE21-07-74589 | 21-27252 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.354 | — | 0.929 (J) | — | 1.6 (U) | — | — | — | — |

**Table 6.13-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-07-74590 | 21-27253 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.506 (U) | — | — | — | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-74591 | 21-27253 | 1.0000–1.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 20.9 | — | 0.289 | — | — | — | 1.55 (U) | — | — | — | — |
| RE21-07-74592 | 21-27254 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.564 (U) | — | — | — | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-74593 | 21-27254 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.319 | — | — | — | 1.61 (U) | — | — | — | — |
| RE21-07-74594 | 21-27255 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — | — | 1.68 (U) | — | 1.92 (J+) | — | — |
| RE21-07-74595 | 21-27255 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.311 | — | — | — | 1.69 (U) | — | — | — | — |
| RE21-07-74615 | 21-27259 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.983 (J) | — | — | — | 0.566 (J) | — | — | — | — |
| RE21-07-74616 | 21-27259 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | 9.12 (J) | — | 4.75 | — | — | — | 0.973 (J) | — | — | — | 1.04 (J) | — | — | — | — |
| RE21-07-74617 | 21-27259 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | 14 (J) | — | 5.29 | — | — | — | 1.73 (J) | — | — | — | 0.962 (J) | — | — | — | — |
| RE21-07-74618 | 21-27260 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.655 | — | — | — | — | — | 28.1 | — | 0.479 (J) | — | 9.72 | 0.0012 (J) | — | — | 3.49 | — | 78.9 |
| RE21-07-74619 | 21-27260 | 2.0000–3.0000 | QBT3 | — | — | 4.98 | 58.6 | — | — | 8.81 (J) | 3.23 | 8.23 | — | 25.8 | — | 0.66 (J) | — | 2.34 | — | 1.55 | — | — | 21.1 | — |
| RE21-07-74620 | 21-27260 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | 7.35 (J) | — | — | — | — | — | 1.02 (J) | — | 2.04 | — | 1.02 (J) | — | — | — | — |
| RE21-07-74627 | 21-27263 | 3.0000–4.0000 | SOIL | — | NA | — | — | 0.557 (U) | — | — | — | — | 0.777 | — | — | 0.351 | — | 1.3 (J-) | — | — | — | — | — | — |
| RE21-07-74628 | 21-27263 | 5.0000–6.0000 | SOIL | — | NA | — | — | 0.557 (U) | — | — | — | — | — | — | — | 0.487 | 15.5 | — | — | — | — | — | — | — |
| RE21-07-74629 | 21-27264 | 4.0000–5.0000 | SOIL | — | NA | — | — | — | — | — | — | 29.2 | 30.3 | 28.2 | 0.267 (J+) | 0.755 | — | — | 0.000891 (J) | — | 1.24 | 62 | — | 84.7 |
| RE21-07-74630 | 21-27264 | 6.0000–7.0000 | SOIL | — | NA | — | — | 0.526 (U) | — | — | — | — | — | — | — | 0.32 | — | 2.12 (J-) | 0.00177 (J) | 1.58 (U) | — | — | — | — |
| RE21-07-74631 | 21-27265 | 4.2500–5.2500 | SOIL | — | NA | — | — | — | — | — | — | — | — | 65.8 | 0.127 (J+) | 0.541 | — | 1.4 (J-) | — | — | — | 2.08 | — | 66.1 |
| RE21-07-74632 | 21-27265 | 6.2500–7.2500 | QBT3 | — | NA | — | — | — | 6260 | 8.55 | — | — | — | 86.8 | — | 0.956 | — | 1.41 (J-) | — | 0.933 (J) | — | — | — | — |
| RE21-07-74633 | 21-27266 | 4.5000–5.5000 | SOIL | — | NA | — | — | 0.531 (U) | — | — | — | — | — | — | — | 0.684 | — | 1.55 | 0.00136 (J) | — | — | 2.02 | — | — |
| RE21-07-74634 | 21-27266 | 6.5000–7.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — | 1.61 | — | 1.83 | 0.000564 (J) | 1.6 (U) | — | — | — | — |
| RE21-07-74635 | 21-27267 | 5.0000–6.0000 | SOIL | — | NA | — | — | 0.498 (U) | — | — | — | — | — | — | — | 0.684 | — | — | 0.00114 (J) | — | — | — | — | — |
| RE21-07-74636 | 21-27267 | 7.0000–8.0000 | QBT3 | — | NA | — | — | — | — | 10.3 | — | — | — | — | — | 0.644 | — | 9.27 | — | 1.53 (U) | — | — | — | — |
| RE21-07-74637 | 21-27268 | 3.7500–4.7500 | SOIL | — | NA | — | — | 0.508 (U) | — | — | — | — | — | — | — | 0.829 | — | — | — | — | — | — | — | — |
| RE21-07-74638 | 21-27268 | 5.7500–6.7500 | QBT3 | — | NA | — | — | — | — | 8.6 | — | — | — | — | — | 1.25 | — | 1.44 | — | 1.62 (U) | — | — | — | — |
| RE21-07-74639 | 21-27269 | 1.2500–2.2500 | SOIL | — | NA | — | — | 2.93 | — | — | — | 130 | — | 161 | 2.95 | 1.94 | — | 1.47 | — | — | 1.52 | 9.02 | — | 102 (J+) |
| RE21-07-74640 | 21-27269 | 3.2500–4.2500 | QBT3 | — | NA | — | 47.8 (J+) | 2.4 | — | 9.6 | — | 29.7 | — | 17.8 | 1.02 | 0.46 | — | 23.8 | — | 1.68 (U) | — | 5.08 | — | 72.3 (J+) |
| RE21-07-74641 | 21-27270 | 2.0000–3.0000 | SOIL | — | NA | — | — | 15 | — | — | — | 25.9 | — | 23 | 0.485 | 0.776 | — | 1.54 | — | — | — | 2.2 | — | 82.6 (J+) |
| RE21-07-74642 | 21-27270 | 4.0000–5.0000 | SOIL | — | NA | — | — | 6.55 | — | — | — | — | — | — | 0.219 | 0.507 | — | 1.62 | — | 1.55 (U) | — | — | — | 67.1 (J+) |
| RE21-07-74643 | 21-27271 | 6.0000–7.0000 | SOIL | — | — | — | — | 0.517 (U) | — | — | — | — | — | — | — | 0.502 (J) | — | 6.11 | 0.000667 (J) | — | — | — | — | — |
| RE21-07-74644 | 21-27271 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | 9.95 (J) | — | — | — | — | — | 1.8 (J) | — | 2.71 | 0.000704 (J) | 0.691 (J) | — | — | — | — |

**Table 6.13-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **0.1** | **na** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **1550** | **92900** |
| RE21-07-74645 | 21-27272 | 6.0000–7.0000 | SOIL | — | — | — | — | 0.564 (U) | — | — | — | — | — | — | — | 0.597 (J) | — | 2.2 | — | — | — | — | — | 52.9 |
| RE21-07-74646 | 21-27272 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | 5.72 | — | — | — | 0.516 (J) | — | 2.43 | — | 0.608 (J) | — | — | — | — |
| RE21-07-74647 | 21-27273 | 3.5000–4.0000 | SOIL | — | — | — | — | 0.566 (U) | — | — | — | — | — | 31.7 | — | 0.368 (J) | — | 2.83 | — | — | — | — | — | — |
| RE21-07-74648 | 21-27273 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | 12.4 (J) | — | — | — | — | — | 1.37 (J) | — | 2.58 | — | 0.607 (J) | — | — | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSLs used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.13-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(e)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butanone[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720**[a] | **67500** | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **39600** |
| **Industrial SSL** | | | | **36700** | **18300**[a] | **851000** | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **369000** |
| **Construction Worker SSL** | | | | **18600** | **6680**[a] | **263000** | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **148000** |
| RE21-07-74568 | 21-27242 | 0.0000–0.5000 | SOIL | —[b] | — | — | 0.00711 (J) | — | — | — | — | — | — | — |
| RE21-07-74582 | 21-27242 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74569 | 21-27243 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74583 | 21-27243 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74572 | 21-27244 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.0131 (J) | — | 0.0364 | — | — | — | — |
| RE21-07-74577 | 21-27244 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74571 | 21-27245 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74580 | 21-27245 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74570 | 21-27246 | 0.0000–0.5000 | SOIL | — | — | 0.00437 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74581 | 21-27246 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74575 | 21-27247 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74578 | 21-27247 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74574 | 21-27248 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74579 | 21-27248 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74573 | 21-27249 | 0.0000–0.5000 | SOIL | 0.0188 (J) | — | — | 0.0349 (J) | 0.117 | 0.125 | 0.203 | — | 0.0786 | — | — |
| RE21-07-74576 | 21-27249 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74584 | 21-27250 | 0.0000–0.5000 | SOIL | — | — | NA[c] | — | — | — | — | — | — | — | NA |
| RE21-07-74585 | 21-27250 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74586 | 21-27251 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | NA |
| RE21-07-74587 | 21-27251 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74589 | 21-27252 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-4045 | 21-27253 | 1.0000–1.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74591 | 21-27253 | 1.0000–1.5000 | QBT3 | — | — | 0.00284 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74592 | 21-27254 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | NA |
| RE21-07-74593 | 21-27254 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74595 | 21-27255 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |

**Table 6.13-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butanone[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720**[a] | **67500** | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **39600** |
| **Industrial SSL** | | | | **36700** | **18300**[a] | **851000** | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **369000** |
| **Construction Worker SSL** | | | | **18600** | **6680**[a] | **263000** | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **148000** |
| RE21-07-74616 | 21-27259 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74617 | 21-27259 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 0.00471 (J) |
| RE21-07-74618 | 21-27260 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | NA |
| RE21-07-74619 | 21-27260 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74628 | 21-27263 | 5.0000–6.0000 | SOIL | — | — | 0.00385 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74629 | 21-27264 | 4.0000–5.0000 | SOIL | — | 0.0261 (J) | 0.00904 (J) | 0.0108 (J) | — | — | — | — | — | — | — |
| RE21-07-74631 | 21-27265 | 4.2500–5.2500 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74635 | 21-27267 | 5.0000–6.0000 | SOIL | — | — | — | 0.00753 (J) | 0.0784 | — | 0.165 | 0.0291 (J) | — | — | — |
| RE21-07-74637 | 21-27268 | 3.7500–4.7500 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74639 | 21-27269 | 1.2500–2.2500 | SOIL | — | — | — | — | — | — | — | 0.125 | — | — | — |
| RE21-07-74640 | 21-27269 | 3.2500–4.2500 | QBT3 | — | — | — | — | — | — | — | 0.0386 | — | 0.115 (J) | — |
| RE21-07-74641 | 21-27270 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74642 | 21-27270 | 4.0000–5.0000 | SOIL | — | — | — | — | — | — | — | — | — | 0.383 | — |
| RE21-07-74643 | 21-27271 | 6.0000–7.0000 | SOIL | 0.0223 (J) | — | — | 0.117 | 0.498 | 0.406 | 0.738 | 0.184 | — | — | — |
| RE21-07-74644 | 21-27271 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | 0.0224 (J) | — | 0.0107 (J) | — | — |
| RE21-07-74645 | 21-27272 | 6.0000–7.0000 | SOIL | — | — | — | 0.0177 (J) | 0.111 | — | 0.193 | — | — | — | — |
| RE21-07-74646 | 21-27272 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74647 | 21-27273 | 3.5000–4.0000 | SOIL | 0.0142 (J) | — | — | 0.0741 | 0.242 (J) | 0.197 (J) | 0.315 (J) | 0.0946 (J) | — | 0.0801 (J) | — |

**Table 6.13-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chloroaniline[4-] | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Ethylbenzene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Methylnaphthalene[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **24**[d] | **621** | **6110** | **32.2** | **69.7** | **2290** | **2290** | **6.21** | **3210**[f] | **199** | **310**[d] |
| **Industrial SSL** | | | | **86**[d] | **2340** | **68400** | **180** | **385** | **24400** | **24400** | **23.4** | **14900**[f] | **1090** | **4100**[d] |
| **Construction Worker SSL** | | | | **1084**[e] | **20600** | **23800** | **3780** | **6630** | **8910** | **8910** | **213** | **10300**[f] | **10600** | **1240**[e] |
| RE21-07-74568 | 21-27242 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.0143 (J) | — | — | — | — | — |
| RE21-07-74582 | 21-27242 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74569 | 21-27243 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74583 | 21-27243 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74572 | 21-27244 | 0.0000–0.5000 | SOIL | — | 0.0196 (J) | — | — | — | 0.0275 (J) | — | — | — | — | — |
| RE21-07-74577 | 21-27244 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74571 | 21-27245 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74580 | 21-27245 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74570 | 21-27246 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74581 | 21-27246 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74575 | 21-27247 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.0162 (J) | — | — | — | — | — |
| RE21-07-74578 | 21-27247 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74574 | 21-27248 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74579 | 21-27248 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74573 | 21-27249 | 0.0000–0.5000 | SOIL | — | 0.144 | — | — | — | 0.278 | 0.0306 (J) | — | — | — | 0.0113 (J) |
| RE21-07-74576 | 21-27249 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74584 | 21-27250 | 0.0000–0.5000 | SOIL | — | — | 0.0622 (J) | — | NA | 0.0122 (J) | — | — | NA | NA | — |
| RE21-07-74585 | 21-27250 | 2.0000–2.5000 | QBT3 | — | — | 0.0925 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74586 | 21-27251 | 0.0000–0.5000 | SOIL | — | — | — | — | NA | 0.0268 (J) | — | — | NA | NA | — |
| RE21-07-74587 | 21-27251 | 2.0000–2.5000 | QBT3 | — | — | 0.0828 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74589 | 21-27252 | 2.0000–2.5000 | QBT3 | — | — | 0.0839 (J) | — | — | — | — | — | — | — | — |
| RE21-07-4045 | 21-27253 | 1.0000–1.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74591 | 21-27253 | 1.0000–1.5000 | QBT3 | — | — | 0.0735 (J) | — | — | — | — | — | 0.0508 (J) | — | — |
| RE21-07-74592 | 21-27254 | 0.0000–0.5000 | SOIL | — | — | 0.0404 (J) | — | NA | 0.0181 (J) | — | — | NA | NA | — |
| RE21-07-74593 | 21-27254 | 2.0000–2.5000 | QBT3 | — | — | 0.1 (J) | — | — | — | — | — | 0.00106 (J) | — | — |
| RE21-07-74595 | 21-27255 | 2.0000–2.5000 | QBT3 | — | — | 0.0992 (J) | — | — | — | — | — | 0.000685 (J) | — | — |

**Table 6.13-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chloroaniline[4-] | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Ethylbenzene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Methylnaphthalene[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **24**[d] | **621** | **6110** | **32.2** | **69.7** | **2290** | **2290** | **6.21** | **3210**[f] | **199** | **310**[d] |
| **Industrial SSL** | | | | **86**[d] | **2340** | **68400** | **180** | **385** | **24400** | **24400** | **23.4** | **14900**[f] | **1090** | **4100**[d] |
| **Construction Worker SSL** | | | | **1084**[e] | **20600** | **23800** | **3780** | **6630** | **8910** | **8910** | **213** | **10300**[f] | **10600** | **1240**[e] |
| RE21-07-74616 | 21-27259 | 15.0000–16.0000 | QBT3 | — | — | 0.0443 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74617 | 21-27259 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74618 | 21-27260 | 0.0000–0.5000 | SOIL | — | — | 0.0497 (J) | — | NA | 0.0143 (J) | — | — | NA | NA | — |
| RE21-07-74619 | 21-27260 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | 0.000915 (J) | — | — |
| RE21-07-74628 | 21-27263 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74629 | 21-27264 | 4.0000–5.0000 | SOIL | — | — | — | — | 0.000663 (J) | 0.0162 (J) | — | — | — | — | — |
| RE21-07-74631 | 21-27265 | 4.2500–5.2500 | SOIL | — | — | — | — | — | 0.0192 (J) | — | — | — | 0.00251 (J+) | — |
| RE21-07-74635 | 21-27267 | 5.0000–6.0000 | SOIL | — | 0.0792 | — | — | — | 0.0913 | — | — | — | — | — |
| RE21-07-74637 | 21-27268 | 3.7500–4.7500 | SOIL | — | — | — | — | — | — | — | — | 0.000419 (J) | — | — |
| RE21-07-74639 | 21-27269 | 1.2500–2.2500 | SOIL | 0.263 (J) | — | 0.121 (J) | 0.000635 (J) | — | 0.0411 | — | — | — | — | — |
| RE21-07-74640 | 21-27269 | 3.2500–4.2500 | QBT3 | — | — | 0.0987 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74641 | 21-27270 | 2.0000–3.0000 | SOIL | — | — | 0.0822 (J) | — | — | — | — | — | — | — | — |
| RE21-07-74642 | 21-27270 | 4.0000–5.0000 | SOIL | 0.407 (J) | — | 0.326 (J) | — | — | 0.0207 (J) | — | — | — | — | — |
| RE21-07-74643 | 21-27271 | 6.0000–7.0000 | SOIL | — | 0.48 | — | — | — | 0.781 | 0.0205 (J) | — | — | — | — |
| RE21-07-74644 | 21-27271 | 8.0000–9.0000 | QBT3 | — | 0.0186 (J) | — | — | — | 0.0351 | — | — | — | — | — |
| RE21-07-74645 | 21-27272 | 6.0000–7.0000 | SOIL | — | 0.108 | — | — | — | 0.182 | — | — | — | — | — |
| RE21-07-74646 | 21-27272 | 9.0000–10.0000 | QBT3 | — | 0.0268 (J) | — | — | — | 0.0458 | — | — | — | — | — |
| RE21-07-74647 | 21-27273 | 3.5000–4.0000 | SOIL | — | 0.239 (J) | — | — | — | 0.512 | 0.0192 (J) | 0.168 (J) | — | — | — |

**Table 6.13-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trichloroethene | Trimethylbenzene[1,2,4-] | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **45** | **na**[g] | **na** | **1830** | **1720** | **5570** | **45.7** | **62**[d] | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **252** | **na** | **na** | **20500** | **18300** | **57900** | **253** | **260**[d] | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **702** | **na** | **na** | **7150** | **6680** | **21100** | **4600** | **688**[e] | **27500** | **3130**[h] |
| RE21-07-74568 | 21-27242 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.0119 (J) | 0.00373 | — | — | — | — |
| RE21-07-74582 | 21-27242 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | 0.00206 | — | — | — | — |
| RE21-07-74569 | 21-27243 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | 0.00506 | 0.00118 | — | — | — |
| RE21-07-74583 | 21-27243 | 2.0000–3.0000 | SOIL | — | NA | NA | — | — | 0.000466 (J) | — | — | — | — |
| RE21-07-74572 | 21-27244 | 0.0000–0.5000 | SOIL | — | NA | NA | 0.0114 (J) | 0.0231 (J) | 0.00145 | 0.00062 (J) | — | — | — |
| RE21-07-74577 | 21-27244 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | 0.000448 (J) | — | — | — | — |
| RE21-07-74571 | 21-27245 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | 0.01 | — | — | — | — |
| RE21-07-74580 | 21-27245 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | 0.00222 | — | — | — | — |
| RE21-07-74570 | 21-27246 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | 0.00145 | — | — | — | — |
| RE21-07-74581 | 21-27246 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | 0.000448 (J) | — | — | — | — |
| RE21-07-74575 | 21-27247 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.0129 (J) | 0.00747 | 0.00515 | — | — | — |
| RE21-07-74578 | 21-27247 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | 0.0025 | — | — | — | — |
| RE21-07-74574 | 21-27248 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | 0.0249 | 0.0164 | — | — | — |
| RE21-07-74579 | 21-27248 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | 0.0121 (J) | 0.00561 | — | — | — | — |
| RE21-07-74573 | 21-27249 | 0.0000–0.5000 | SOIL | 0.0209 (J) | NA | NA | 0.22 | 0.212 | 0.00141 | 0.00408 | — | — | — |
| RE21-07-74576 | 21-27249 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | 0.000795 (J) | — | — | — | — |
| RE21-07-74584 | 21-27250 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.0121 (J) | NA | NA | NA | NA | NA |
| RE21-07-74585 | 21-27250 | 2.0000–2.5000 | QBT3 | — | NA | NA | — | — | 0.00495 | — | — | — | — |
| RE21-07-74586 | 21-27251 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.022 (J) | NA | NA | NA | NA | NA |
| RE21-07-74587 | 21-27251 | 2.0000–2.5000 | QBT3 | — | NA | NA | — | — | 0.00391 | — | — | — | — |
| RE21-07-74589 | 21-27252 | 2.0000–2.5000 | QBT3 | — | NA | NA | — | — | 0.00262 | — | — | — | — |
| RE21-07-4045 | 21-27253 | 1.0000–1.5000 | QBT3 | NA | 0.00000478 (J) | 0.000000411 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74591 | 21-27253 | 1.0000–1.5000 | QBT3 | — | NA | NA | — | — | 0.00849 | — | — | — | — |
| RE21-07-74592 | 21-27254 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.0312 (J) | NA | NA | NA | NA | NA |
| RE21-07-74593 | 21-27254 | 2.0000–2.5000 | QBT3 | — | NA | NA | — | — | 0.00899 | — | — | — | — |
| RE21-07-74595 | 21-27255 | 2.0000–2.5000 | QBT3 | — | NA | NA | — | — | 0.0209 | — | — | — | — |

**Table 6.13-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trichloroethene | Trimethylbenzene[1,2,4-] | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **45** | **na**[g] | **na** | **1830** | **1720** | **5570** | **45.7** | **62**[d] | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **252** | **na** | **na** | **20500** | **18300** | **57900** | **253** | **260**[d] | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **702** | **na** | **na** | **7150** | **6680** | **21100** | **4600** | **688**[e] | **27500** | **3130**[h] |
| RE21-07-74616 | 21-27259 | 15.0000–16.0000 | QBT3 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-74617 | 21-27259 | 20.0000–21.0000 | QBT3 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-74618 | 21-27260 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.0148 (J) | NA | NA | NA | NA | NA |
| RE21-07-74619 | 21-27260 | 2.0000–3.0000 | QBT3 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-74628 | 21-27263 | 5.0000–6.0000 | SOIL | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-74629 | 21-27264 | 4.0000–5.0000 | SOIL | — | NA | NA | 0.0176 (J) | — | 0.00402 | — | 0.00034 (J) | 0.00157 | 0.00411 |
| RE21-07-74631 | 21-27265 | 4.2500–5.2500 | SOIL | — | NA | NA | — | 0.0235 (J) | — | — | — | — | — |
| RE21-07-74635 | 21-27267 | 5.0000–6.0000 | SOIL | — | NA | NA | 0.0228 (J) | 0.0841 | — | — | — | — | — |
| RE21-07-74637 | 21-27268 | 3.7500–4.7500 | SOIL | — | NA | NA | — | — | 0.000426 (J) | — | — | — | — |
| RE21-07-74639 | 21-27269 | 1.2500–2.2500 | SOIL | — | NA | NA | 0.0154 (J) | 0.0487 | — | — | — | — | — |
| RE21-07-74640 | 21-27269 | 3.2500–4.2500 | QBT3 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-74641 | 21-27270 | 2.0000–3.0000 | SOIL | — | NA | NA | — | 0.0114 (J) | 0.00044 (J) | — | — | — | — |
| RE21-07-74642 | 21-27270 | 4.0000–5.0000 | SOIL | — | NA | NA | 0.0108 (J) | 0.0255 (J) | — | — | — | — | — |
| RE21-07-74643 | 21-27271 | 6.0000–7.0000 | SOIL | — | NA | NA | 0.316 | 0.768 | — | — | — | — | — |
| RE21-07-74644 | 21-27271 | 8.0000–9.0000 | QBT3 | — | NA | NA | 0.0162 (J) | 0.0303 (J) | — | — | — | — | — |
| RE21-07-74645 | 21-27272 | 6.0000–7.0000 | SOIL | — | NA | NA | 0.064 | 0.179 | — | — | — | — | — |
| RE21-07-74646 | 21-27272 | 9.0000–10.0000 | QBT3 | — | NA | NA | 0.0184 (J) | 0.0434 | — | — | — | — | — |
| RE21-07-74647 | 21-27273 | 3.5000–4.0000 | SOIL | — | NA | NA | 0.257 | 0.555 (J) | — | — | — | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] — = Not detected.

[c] NA= Not analyzed.

[d] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[f] Isopropylbenzene used as surrogate based on structural similarity.

[g] na = Not available.

[h] SSLs for xylenes used as surrogates based on structural similarity.

**Table 6.13-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(e)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-74568 | 21-27242 | 0.0000–0.5000 | SOIL | 0.0407 | —[c] | — | 0.561 | — | 0.01487 | — | — | — |
| RE21-07-74582 | 21-27242 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0643 | — | 0.038647 | — | — | — |
| RE21-07-74569 | 21-27243 | 0.0000–0.5000 | SOIL | — | — | — | 0.303 | — | 0.036577 | — | — | — |
| RE21-07-74583 | 21-27243 | 2.0000–3.0000 | SOIL | — | — | — | 0.111 | — | — | — | — | — |
| RE21-07-74572 | 21-27244 | 0.0000–0.5000 | SOIL | — | — | — | 0.893 | — | — | — | — | — |
| RE21-07-74571 | 21-27245 | 0.0000–0.5000 | SOIL | 1.86 | — | 0.329 | 56.6 | — | — | 12.3 | 0.589 | 8.96 |
| RE21-07-74580 | 21-27245 | 2.0000–3.0000 | QBT3 | 0.105 | — | — | 2.52 | — | — | — | — | — |
| RE21-07-74570 | 21-27246 | 0.0000–0.5000 | SOIL | 0.0802 | — | — | 0.934 | — | — | — | — | — |
| RE21-07-74581 | 21-27246 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.027444 | — | — | — |
| RE21-07-74575 | 21-27247 | 0.0000–0.5000 | SOIL | — | — | — | 6.66 | — | 0.028921 | — | — | — |
| RE21-07-74578 | 21-27247 | 2.0000–3.0000 | QBT3 | — | — | — | 0.12 | — | — | — | — | — |

**Table 6.13-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-74574 | 21-27248 | 0.0000–0.5000 | SOIL | 0.1 | NA[d] | — | 2.54 | — | 0.016943 | — | — | — |
| RE21-07-74579 | 21-27248 | 2.0000–3.0000 | QBT3 | 0.0242 | — | — | 1.26 | — | — | — | — | — |
| RE21-07-74573 | 21-27249 | 0.0000–0.5000 | SOIL | 0.0949 | — | — | 1.7 | — | — | — | — | — |
| RE21-07-74576 | 21-27249 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0484 | — | — | — | — | — |
| RE21-07-74584 | 21-27250 | 0.0000–0.5000 | SOIL | 0.135 | NA | — | 2.52 | — | 0.017846 | — | — | — |
| RE21-07-74585 | 21-27250 | 2.0000–2.5000 | QBT3 | — | 0.158 | — | 0.437 | 0.111 | 0.010917 | — | — | — |
| RE21-07-74586 | 21-27251 | 0.0000–0.5000 | SOIL | 0.191 | — | — | 4.23 | — | — | — | — | — |
| RE21-07-74587 | 21-27251 | 2.0000–2.5000 | QBT3 | — | — | — | 0.15 | — | 0.014319 | — | — | — |
| RE21-07-74588 | 21-27252 | 0.0000–0.5000 | SOIL | — | — | — | 0.393 | — | — | — | — | — |
| RE21-07-74589 | 21-27252 | 2.0000–2.5000 | QBT3 | — | 0.0856 | — | — | — | — | — | — | — |
| RE21-07-74591 | 21-27253 | 1.0000–1.5000 | QBT3 | — | — | — | 0.0457 | — | 0.007133 | — | — | — |
| RE21-07-74592 | 21-27254 | 0.0000–0.5000 | SOIL | — | — | — | 0.0988 | — | — | — | — | — |
| RE21-07-74593 | 21-27254 | 2.0000–2.5000 | QBT3 | — | 0.207 | — | 0.0449 | — | 0.01582 | — | — | — |
| RE21-07-74594 | 21-27255 | 0.0000–0.5000 | SOIL | — | — | — | 0.3 | — | — | — | — | — |
| RE21-07-74615 | 21-27259 | 10.0000–11.0000 | QBT3 | — | — | — | 0.0416 | — | — | — | — | — |
| RE21-07-74618 | 21-27260 | 0.0000–0.5000 | SOIL | 0.133 | NA | — | 4.03 | — | 0.005895 | — | — | — |
| RE21-07-74619 | 21-27260 | 2.0000–3.0000 | QBT3 | 0.0749 | — | — | 1.51 | — | — | — | 0.103 | — |
| RE21-07-74620 | 21-27260 | 5.0000–6.0000 | QBT3 | — | — | — | 0.333 | — | — | — | — | — |

**Table 6.13-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-74627 | 21-27263 | 3.0000–4.0000 | SOIL | — | — | — | 0.12 (J-) | — | 0.108333 | — | — | — |
| RE21-07-74628 | 21-27263 | 5.0000–6.0000 | SOIL | — | — | — | — | — | 0.045126 | — | — | — |
| RE21-07-74629 | 21-27264 | 4.0000–5.0000 | SOIL | — | — | — | 0.0581 (J-) | — | 0.045377 | 3.54 | — | — |
| RE21-07-74630 | 21-27264 | 6.0000–7.0000 | SOIL | — | — | — | — | — | 0.049336 | — | — | — |
| RE21-07-74631 | 21-27265 | 4.2500–5.2500 | SOIL | 0.393 | — | 0.0265 (J-) | 3.03 (J-) | — | — | 2.96 | — | — |
| RE21-07-74632 | 21-27265 | 6.2500–7.2500 | QBT3 | — | — | — | 0.112 (J-) | — | — | — | — | — |
| RE21-07-74633 | 21-27266 | 4.5000–5.5000 | SOIL | 0.221 | — | 0.0208 | 2.03 | — | — | 3.41 | 0.232 | 2.45 |
| RE21-07-74634 | 21-27266 | 6.5000–7.5000 | QBT3 | — | — | — | 0.279 | — | — | — | — | — |
| RE21-07-74635 | 21-27267 | 5.0000–6.0000 | SOIL | — | 0.0814 | — | 0.379 | — | — | — | — | — |
| RE21-07-74636 | 21-27267 | 7.0000–8.0000 | QBT3 | — | — | — | 0.0524 | — | 0.023919 | — | — | — |
| RE21-07-74637 | 21-27268 | 3.7500–4.7500 | SOIL | — | — | — | 0.262 | — | — | — | — | — |
| RE21-07-74638 | 21-27268 | 5.7500–6.7500 | QBT3 | — | — | — | 0.0987 | — | — | — | 0.102 | — |
| RE21-07-74639 | 21-27269 | 1.2500–2.2500 | SOIL | 0.169 | 0.231 | — | 2.85 | — | — | 6.28 | 0.335 | 4.83 |
| RE21-07-74640 | 21-27269 | 3.2500–4.2500 | QBT3 | 0.0904 | NA | — | 0.633 | — | — | 3.26 | 0.22 | 3.12 |
| RE21-07-74641 | 21-27270 | 2.0000–3.0000 | SOIL | 0.0857 | 0.227 | — | 0.612 | — | 0.018934 | — | — | — |
| RE21-07-74642 | 21-27270 | 4.0000–5.0000 | SOIL | 0.0313 | 0.179 | — | 0.207 | — | 0.024928 | — | — | — |
| RE21-07-74643 | 21-27271 | 6.0000–7.0000 | SOIL | — | — | — | 0.111 | — | — | — | — | — |
| RE21-07-74644 | 21-27271 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | 0.016426 | — | — | — |

**Table 6.13-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **5.7** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **1900** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **800** | **320000** | **220** | **43** | **160** |
| RE21-07-74645 | 21-27272 | 6.0000–7.0000 | SOIL | — | — | — | 0.153 | — | — | — | — | — |
| RE21-07-74646 | 21-27272 | 9.0000–10.0000 | QBT3 | — | — | — | 0.0249 | — | — | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.15-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(h)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **na**[a] | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **10700** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **145000** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | —[e] | — | NA[f] | — | 0.719 | — | 21.6 | 36.6 (J) | 0.503 | 87.7 | — | 2.28 (J) | NA | — | 1.17 | 0.0019 (J) | — | 2.57 | — | 85.2 (J) |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | — | 4.01 | NA | — | — | — | 20.1 | 17.4 (J) | — | 48.8 | — | 1.3 (J) | NA | 7.29 | — | 0.00161 (J) | 1.6 (U) | 2.46 | — | — |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | 0.793 | 4.02 | NA | — | — | 2480 (J) | 9.4 | 25.5 (J) | 0.521 | 33.1 | — | 1.17 (J) | NA | — | — | 0.000691 (J) | 0.975 (J) | — | — | 105 (J) |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | 1.2 | 2.91 | NA | — | — | — | 16.4 | 25.2 (J) | — | 25.7 | — | 0.479 (J) | NA | — | — | — | 1.6 (U) | — | — | 65.5 (J) |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | — | 3.8 | NA | — | — | — | 9.28 | — | — | — | — | 0.11 (J) | NA | — | — | — | 1.8 (U) | — | — | — |
| RE21-07-251 | 21-600061 | 5.0000–6.0000 | QBT3 | — | 4.66 | NA | — | — | — | 17.6 | 5.93 (J) | — | 18.6 | — | 0.155 (J) | NA | — | — | — | 1.61 (U) | — | — | — |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | — | — | — | — | — | — | — | — | 0.58 (U) | — | — | — | 0.72 | — | — | — | — | — | — | — |
| RE21-07-253 | 21-600062 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | 0.56 (U) | — | — | — | 0.49 (J) | — | — | — | — | — | — | — |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 2900 | 7.38 | — | — | — | — | — | NA | — | — | — | 1.26 (J) | — | — | — |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.511 (U) | — | — | — | — | — | — | — | NA | — | 1.23 (J-) | — | — | — | — | — |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 4.76 | — | — | — | — | NA | — | — | 0.00434 | 1.15 (J) | — | — | — |
| RE21-07-379 | 21-600076 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | 15.5 | 5.26 | — | — | — | 0.155 (J) | NA | — | 1.84 | — | 1.64 | — | — | — |
| RE21-07-380 | 21-600076 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 14.1 | — | — | 12.4 | — | 0.446 | NA | — | — | — | 1.76 (U) | — | — | — |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.506 (U) | — | — | — | — | — | — | — | NA | — | 1.23 (J-) | — | — | — | — | — |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | 1.08 (J-) | 0.00203 (J) | 1.55 (U) | — | — | — |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | 1.65 (J-) | 0.000613 (J) | 1.65 (U) | — | — | — |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | — | 2.85 | — | — | — | — | 8.34 | 11.2 | — | 39 | — | 1.02 | NA | — | 1.05 (J-) | 0.00119 (J) | 1.66 (U) | — | — | — |
| MD21-09-8738 | 21-600078 | 4.0000–5.0000 | QBT3 | 2.1 (U J) | — | — | — | — | — | — | — | NA | — | — | NA | NA | — | NA | NA | 0.51 (U) | — | — | — |
| RE21-07-385 | 21-600079 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.502 (U) | — | — | — | — | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.552 (U) | — | — | — | — | — | — | — | NA | — | — | 0.00074 (J) | — | — | — | — |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.519 (U) | 6970 (J) | — | — | — | — | — | — | NA | — | — | — | 1.56 (U) | — | — | — |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — | — | 1.69 (U) | — | — | — |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.987 | — | — | 31.5 | — | 35.7 | — | 0.36 | NA | — | — | — | 2.43 (U) | — | — | 321 |
| RE21-07-390 | 21-600081 | 2.0000–3.0000 | QBT3 | — | — | 49.3 | — | — | — | — | — | — | — | — | — | NA | — | 1.44 | — | 0.964 (J) | — | — | — |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 6860 (J) | — | — | 0.815 | 22.8 | 681 (J+) | — | NA | — | 0.982 (J-) | 0.00258 | 1.73 (U) | — | — | — |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — | 0.00107 (J) | 1.53 (U) | — | — | — |
| RE21-07-393 | 21-600083 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | 1.51 (J-) | — | 1.66 (U) | — | — | — |
| RE21-07-394 | 21-600083 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — | 0.0016 (J) | 1.55 (U) | — | — | — |
| RE21-07-395 | 21-600084 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.513 (U) | 9340 (J) | — | — | — | — | — | 0.23 | NA | — | 1.07 (J-) | — | 1.54 (U) | — | — | — |

**Table 6.15-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead | Manganese | Mercury | Molybdenum | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** | **482** | **0.1** | **na**[a] | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** | **671** | **0.1** | **na** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **3130** | **1560** | **400** | **10700** | **23**[c] | **391** | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** | **145000** | **310**[c] | **5680** | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** | **463** | **92.9**[d] | **1550** | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-396 | 21-600084 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 11.8 | — | — | NA | — | — | — | 1.74 (U) | — | — | — |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.618 (U) | — | — | — | — | — | — | — | NA | — | 1.3 (J-) | — | 1.85 (U) | — | — | — |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | 1.19 (J-) | — | 1.63 (U) | — | — | — |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | 11.9 (J-) | 11.9 | 165 | — | 4.99 | 3350 (J-) | 57.5 (J-) | 374 | 2.76 | 317 | — | 20 | NA | 7.56 | — | 0.00122 (J) | 7.92 (U) | 16 | 23.9 | 407 (J-) |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | 1.47 (J-) | 3.72 | — | — | — | — | 32 (J-) | 43.2 | — | 53.2 | — | 2.11 | NA | — | — | 0.00184 (J) | 1.57 (U) | 1.54 | — | 87.5 (J-) |
| RE21-07-5179 | 21-601096 | 8.5000–9.5000 | SOIL | — | — | — | 1.95 | 0.556 (U) | — | — | — | — | 114 | 729 (J-) | — | NA | — | — | — | 1.53 (J) | — | — | 130 (J-) |
| RE21-07-5180 | 21-601096 | 10.5000–11.5000 | SOIL | — | — | — | — | 0.57 (U) | — | — | — | — | 29.5 | — | 0.225 (U) | NA | — | — | — | — | — | — | 53.6 (J-) |
| RE21-07-5181 | 21-601097 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 7.06 | — | 17.6 (J) | NA | 0.311 (J+) | NA | — | 1.1 (J-) | — | 2.23 | — | — | — |
| RE21-07-5182 | 21-601097 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | 4.77 | — | 13.4 (J) | NA | 0.174 (J+) | NA | — | 1.46 (J-) | — | 1.34 (J) | — | — | — |
| RE21-07-5183 | 21-601098 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | 0.738 (J+) | NA | — | — | — | 0.678 (J) | — | — | — |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | — | 2.84 | — | — | — | — | — | 7.04 | — | — | NA | 1.56 (J+) | NA | — | — | — | 1.1 (J) | — | — | — |
| MD21-09-8739 | 21-601098 | 10.0000–11.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.14 (J) | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-5185 | 21-601099 | 8.0000–9.0000 | SOIL | — | — | — | — | 0.546 (U) | — | — | — | — | — | NA | — | NA | — | 6.2 (J-) | — | 3 | — | — | — |
| RE21-07-5186 | 21-601099 | 10.0000–11.0000 | SOIL | — | — | — | — | 0.554 (U) | — | — | — | — | — | NA | — | NA | — | 4.71 (J-) | — | 3.68 | — | — | — |
| RE21-07-5187 | 21-601100 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — | NA | — | 1.43 (J-) | — | 0.992 (J) | — | — | — |
| RE21-07-5188 | 21-601100 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — | NA | — | 1.78 (J-) | — | 1.44 (J) | — | — | — |
| RE21-07-5189 | 21-601101 | 3.5000–4.5000 | SOIL | — | — | — | — | 0.628 (U) | — | — | — | — | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-5190 | 21-601101 | 5.5000–6.5000 | QBT3 | — | 3.27 | — | — | — | — | 13.7 | — | — | — | — | — | NA | — | 1.24 (J) | — | 1.89 (U) | — | — | — |
| RE21-07-5191 | 21-601102 | 2.7500–3.7500 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — | — | 1.8 (U) | — | — | — |
| RE21-07-5192 | 21-601102 | 4.7500–5.7500 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | NA | — | — | — | 1.83 (U) | — | — | — |
| RE21-07-5195 | 21-601104 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — | NA | — | — | — | 1.22 (J) | — | — | — |
| RE21-07-5196 | 21-601104 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — | NA | — | — | — | 1.77 | — | — | — |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | — | — | 1.23 (J) | — | NA | — | NA | — | — | 0.000741 (J) | 1.69 | — | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.15-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(h)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720**[a] | **67500** | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **240000**[b] | **347** |
| **Industrial SSL** | | | | **36700** | **18300**[a] | **851000** | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2500000**[b] | **1370** |
| **Construction Worker SSL** | | | | **18600** | **6680**[a] | **263000** | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **952000**[c] | **4760** |
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | —[d] | — | — | — | — | 0.142 | 0.2 (J) | — | 0.0322 (J) | — | 0.0736 (J) |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | — | — | — | — | 0.0234 (J) | — | — | — | — | — | — |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | — | — | NA[e] | — | — | — | — | — | — | — | 1.4 |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-3345 | 21-600077 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | 0.0247 (J) | — | — | 0.0287 (J) | 0.0492 | — | 0.147 | — | — | — | — |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | 0.0885 (J) |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 0.131 (J) |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | — | — | — | 0.0124 (J) | 0.0378 | 0.0366 | 0.0422 | 0.135 (J) | 0.0232 (J) | — | — |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | — | — | NA | 0.0108 (J) | — | — | — | — | — | — | — |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | 0.0169 (J) | — | — | 0.0188 (J) | 0.0553 | 0.121 | 0.162 | — | — | — | — |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | 0.157 | — | — | — | — |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | 0.121 (J) | — | 0.0458 (J) | — | — |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | — | 0.0135 (J) | — | 0.0344 (J) | 0.175 | 0.176 (J) | 0.246 (J) | 0.119 (J) | — | 0.613 (J) | 0.232 |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | 0.0264 (J) | 0.034 (J) | — | 0.0166 (J) | — | — |
| RE21-07-5183 | 21-601098 | 3.0000–4.0000 | QBT3 | — | — | 0.00495 (J) | — | — | — | — | — | — | — | — |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | — | — | 0.00497 (J) | — | — | — | — | — | — | — | — |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | — | — | 0.00346 (J) | — | — | — | — | — | — | — | — |

**Table 6.15-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chloroform | Chrysene | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **5.72** | **621** | **6110** | **32.2** | **2290** | **2290** | **na**[f] | **na** | **na** | **na** |
| **Industrial SSL** | | | | **31.9** | **2340** | **68400** | **180** | **24400** | **24400** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **671** | **20600** | **23800** | **3780** | **8910** | **8910** | **na** | **na** | **na** | **na** |
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | — | 0.0355 (J) | 0.187 (J) | — | 0.0342 (J) | — | NA | NA | NA | NA |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | 0.000225 (J) | — | 0.194 (J) | — | 0.0113 (J) | — | NA | NA | NA | NA |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | — | 0.0215 (J) | 0.0827 (J) | 0.000396 (J) | 0.0132 (J) | — | NA | NA | NA | NA |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | — | — | 0.187 (J) | — | 0.0139 (J) | — | NA | NA | NA | NA |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | NA | — | — | — | 0.0133 (J) | — | NA | NA | NA | NA |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | NA | — | — | — | 0.0236 (J) | — | NA | NA | NA | NA |
| RE21-07-3345 | 21-600077 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | NA | NA | 0.0000018 (J) | 3.38E-06 | 0.000000654 (J) | 1.14E-06 |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | 0.000246 (J) | 0.0477 | — | — | 0.11 | 0.0152 (J) | NA | NA | NA | NA |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | NA | — | — | — | 0.0264 (J) | — | NA | NA | NA | NA |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | — | — | 0.0392 (J) | — | — | — | NA | NA | NA | NA |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | — | 0.0384 | — | — | 0.0794 | — | NA | NA | NA | NA |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | NA | — | — | — | 0.0138 (J) | — | NA | NA | NA | NA |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | — | 0.0602 | — | — | 0.117 | — | NA | NA | NA | NA |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | NA | 0.0179 (J) | — | — | 0.0359 (J) | — | NA | NA | NA | NA |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | NA | — | — | — | 0.045 | — | NA | NA | NA | NA |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | NA | 0.0164 (J) | — | — | 0.0254 (J) | — | NA | NA | NA | NA |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | — | 0.162 | 1.32 | — | 0.259 | — | NA | NA | NA | NA |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | — | 0.0213 (J) | 0.118 (J) | — | 0.0389 | — | NA | NA | NA | NA |
| RE21-07-5183 | 21-601098 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | — | — | — | — | — | — | NA | NA | NA | NA |

**Table 6.15-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[g] | **45** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[g] | **252** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[g] | **702** | **na** | **na** | **na** |
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | NA | NA | NA | NA | — | 0.000586 (J) | — | NA | NA | NA |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-3345 | 21-600077 | 2.0000–3.0000 | SOIL | 6.79E-07 | 0.0000000633 (J) | 0.0000000877 (J) | 8.44E-07 | NA | NA | NA | 1.23E-05 | 0.000000973 (J) | 4.04E-07 |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | 0.015 (J) | NA | NA | NA |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.104 (J) | — | — | NA | NA | NA |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | 0.000446 (J) | — | NA | NA | NA |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | — | NA | NA | NA |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-5183 | 21-601098 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | NA | NA | NA | NA | — | — | — | NA | NA | NA |

**Table 6.15-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Phenanthrene | Pyrene | Tetrachlorodibenzo dioxins (Total) | Tetrachlorodibenzo furans (Totals) | Tetrachloroethene | Toluene | Trimethylbenzene [1,2,4-] | Trimethylbenzene [1,3,5-] | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **1830** | **1720** | **na** | **na** | **6.99** | **5570** | **62**[b] | **780**[a] | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **20500** | **18300** | **na** | **na** | **36.4** | **57900** | **260**[b] | **10000**[a] | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **7150** | **6680** | **na** | **na** | **338** | **21100** | **688**[c] | **10000**[b] | **27500** | **3130**[h] |
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | 0.011 (J) | 0.0511 | NA | NA | — | 0.0004 (J) | — | — | — | 0.000421 (J) |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | 0.000294 (J) |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | 0.012 (J) | 0.0139 (J) | NA | NA | 0.000249 (J) | — | — | — | — | — |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | — | 0.0194 (J) | NA | NA | — | — | 0.00035 (J) | 0.000252 (J) | 0.00024 (J) | — |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | 0.0212 (J) | 0.0151 (J) | NA | NA | — | — | — | — | — | — |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | — | — | NA | NA | — | — | — | — | 0.000278 (J) | 0.000547 (J) |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | — | 0.0167 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | 0.000447 (J) | — | — | — | — |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | 0.0283 (J) | 0.0186 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3345 | 21-600077 | 2.0000–3.0000 | SOIL | NA | NA | 4.35E-07 | 2.25E-07 | NA | NA | NA | NA | NA | NA |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | 0.108 | 0.139 | NA | NA | — | — | — | — | — | — |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | 0.0141 (J) | 0.0296 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | 0.00049 (J) | — | — | — | — |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | 0.0542 | 0.0721 | NA | NA | — | — | — | — | — | — |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | — | 0.0164 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | 0.101 | 0.151 | NA | NA | — | 0.00243 | — | — | — | — |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | — | 0.0386 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | 0.0332 (J) | 0.0551 | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | 0.00113 | — | — | — | — |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | 0.0158 (J) | 0.0336 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | 0.000374 (J) | — | — | — | — |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | 0.106 | 0.235 | NA | NA | — | 0.000816 (J) | — | — | — | — |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | — | 0.0264 (J) | NA | NA | — | — | — | — | — | — |
| RE21-07-5183 | 21-601098 | 3.0000–4.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA= Not analyzed.

[f] na = Not available.

[g] Isopropylbenzene used as surrogate based on structural similarity.

[h] SSLs for xylenes used as surrogates based on structural similarity.

**Table 6.15-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(h)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-246 | 21-600059 | 1.0000–2.0000 | SOIL | 0.0702 | 0.124 | —[c] | 1.94 | 1.17279 | 3.08 | — | 2.91 |
| RE21-07-247 | 21-600059 | 3.0000–4.0000 | QBT3 | — | — | — | 0.838 | 1.53333 | — | 0.105 | — |
| RE21-07-248 | 21-600060 | 1.5000–2.5000 | QBT3 | 0.0777 | 0.332 | — | 3.04 | 0.031654 | — | 0.108 | — |
| RE21-07-249 | 21-600060 | 3.5000–4.5000 | QBT3 | — | 0.25 | — | 1.1 | 0.038938 | — | — | — |
| RE21-07-250 | 21-600061 | 3.0000–4.0000 | QBT3 | 0.167 | — | 0.0575 | 7.4 | 0.041392 | — | 0.0929 | — |
| RE21-07-251 | 21-600061 | 5.0000–6.0000 | QBT3 | — | — | — | 2.33 | 0.096281 | — | — | — |
| RE21-07-252 | 21-600062 | 0.0000–1.0000 | SOIL | — | 0.076 | — | 0.802 | — | — | — | — |
| RE21-07-253 | 21-600062 | 2.0000–3.0000 | QBT3 | — | — | — | 0.061 | 0.114623 | — | 0.096 | — |
| RE21-07-373 | 21-600062 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0308 | 0.364162 | — | — | — |
| RE21-07-377 | 21-600075 | 0.0000–0.5000 | SOIL | 0.0296 | — | — | 0.36 | 0.020711 | — | — | — |
| RE21-07-378 | 21-600075 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0437 | 0.195695 | — | — | — |
| RE21-07-379 | 21-600076 | 0.0000–0.5000 | QBT3 | 0.0399 | 0.383 | — | 0.824 | 0.074036 | — | — | — |
| RE21-07-380 | 21-600076 | 2.0000–3.0000 | QBT3 | — | — | — | 0.309 | 0.043359 | — | 0.106 | — |
| RE21-07-381 | 21-600077 | 0.0000–0.5000 | SOIL | 0.106 | — | — | 4.09 | 0.026484 | — | — | — |
| RE21-07-382 | 21-600077 | 2.0000–3.0000 | SOIL | 0.083 | 0.257 | — | 1.75 | 0.066188 | — | — | — |
| RE21-07-383 | 21-600078 | 0.0000–0.5000 | SOIL | 0.253 | — | 0.0485 | 1.41 | 0.182447 | — | — | — |
| RE21-07-384 | 21-600078 | 2.0000–3.0000 | QBT3 | — | 0.138 | — | 1.21 | 0.237125 | — | 0.0979 | — |

**Table 6.15-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-385 | 21-600079 | 0.0000–0.5000 | SOIL | — | — | — | 0.183 | 0.049521 | — | — | — |
| RE21-07-386 | 21-600079 | 2.0000–3.0000 | SOIL | 0.0985 | 0.142 | — | 0.846 | 0.033624 | — | — | — |
| RE21-07-387 | 21-600080 | 0.0000–0.5000 | SOIL | 0.0293 | — | — | 0.542 | 0.272984 | — | — | — |
| RE21-07-388 | 21-600080 | 2.0000–3.0000 | QBT3 | 0.0575 | 0.119 | — | 0.651 | 10.3982 | — | — | — |
| MD21-09-8737 | 21-600080 | 4.0000–5.0000 | QBT3 | — | NA[d] | — | 1.73 | 0.550592 | NA | NA | NA |
| MD21-09-12449 | 21-600080 | 9.0000–10.0000 | SOIL | NA | NA | — | 0.343 | NA | NA | NA | NA |
| RE21-07-389 | 21-600081 | 0.0000–0.5000 | SOIL | 0.241 | — | 0.051 | 2.71 | 0.71399 | — | — | — |
| RE21-07-390 | 21-600081 | 2.0000–3.0000 | QBT3 | — | — | — | 0.312 | 0.105983 | — | — | — |
| RE21-07-391 | 21-600082 | 0.0000–0.5000 | SOIL | 0.203 | — | 0.0242 | 3.85 | 0.04509 | — | — | — |
| RE21-07-392 | 21-600082 | 2.0000–3.0000 | QBT3 | — | — | — | 0.15 | 0.027271 | — | — | — |
| RE21-07-393 | 21-600083 | 0.0000–0.5000 | SOIL | 0.111 | — | — | 2.39 | 0.036072 | — | — | — |
| RE21-07-394 | 21-600083 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0417 | 0.093462 | — | — | — |
| RE21-07-395 | 21-600084 | 0.0000–0.5000 | SOIL | — | — | — | 0.133 | 0.012587 | — | — | — |
| RE21-07-396 | 21-600084 | 2.0000–3.0000 | QBT3 | — | — | — | 0.518 | 0.062116 | — | — | — |
| MD21-09-8746 | 21-600084 | 4.0000–5.0000 | QBT3 | NA | NA | — | 1.78 | NA | NA | NA | NA |
| MD21-09-12450 | 21-600084 | 9.0000–10.0000 | SOIL | NA | NA | — | 0.04 | NA | NA | NA | NA |
| RE21-07-397 | 21-600085 | 0.0000–0.5000 | SOIL | 0.199 | — | 0.0426 | 3.59 | 0.089064 | — | — | — |
| RE21-07-398 | 21-600085 | 2.0000–3.0000 | QBT3 | — | — | — | 0.062 | 0.058126 | — | — | — |

**Table 6.15-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-5177 | 21-601095 | 3.5000–4.5000 | QBT3 | — | — | — | 0.908 | 6.05358 | 2.05 | 0.0962 | 1.97 |
| RE21-07-5178 | 21-601095 | 5.5000–6.5000 | QBT3 | — | — | — | 0.23 | 4.04916 | — | 0.123 | — |
| RE21-07-5179 | 21-601096 | 8.5000–9.5000 | SOIL | — | — | — | — | 2.06169 | — | — | — |
| RE21-07-5180 | 21-601096 | 10.5000–11.5000 | SOIL | — | — | — | 0.0396 | 1.93144 | — | — | — |
| RE21-07-5181 | 21-601097 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0435 | 0.393725 | — | 0.0974 | — |
| RE21-07-5182 | 21-601097 | 7.0000–8.0000 | QBT3 | — | — | — | 0.0277 | 0.385644 | — | 0.108 | — |
| RE21-07-5184 | 21-601098 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.104286 | — | — | — |
| RE21-07-5185 | 21-601099 | 8.0000–9.0000 | SOIL | — | — | — | — | 0.810298 | — | — | — |
| RE21-07-5186 | 21-601099 | 10.0000–11.0000 | SOIL | — | — | — | — | 0.82791 | — | — | — |
| RE21-07-5187 | 21-601100 | 3.5000–4.5000 | QBT3 | — | — | — | — | 1.28277 | — | — | — |
| RE21-07-5188 | 21-601100 | 5.5000–6.5000 | QBT3 | — | — | — | — | 1.28666 | — | — | — |
| RE21-07-5189 | 21-601101 | 3.5000–4.5000 | SOIL | — | — | — | — | 0.35383 | — | — | — |
| RE21-07-5190 | 21-601101 | 5.5000–6.5000 | QBT3 | — | — | — | — | 0.247721 | — | — | — |
| RE21-07-5191 | 21-601102 | 2.7500–3.7500 | QBT3 | — | — | — | — | 0.495612 | — | — | — |
| RE21-07-5192 | 21-601102 | 4.7500–5.7500 | QBT3 | — | — | — | — | 0.404432 | — | — | — |
| RE21-07-5195 | 21-601104 | 9.0000–10.0000 | QBT3 | — | — | — | — | 0.314518 | — | — | — |
| RE21-07-5196 | 21-601104 | 14.0000–15.0000 | QBT3 | — | — | — | — | 0.199496 | — | — | — |
| RE21-07-5197 | 21-601104 | 19.0000–20.0000 | QBT3 | — | — | — | — | 0.268511 | — | — | — |

**Table 6.15-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-09-8740 | 21-605241 | 2.0000–3.0000 | QBT3 | — | NA | — | 0.077 | 0.13572 | NA | NA | NA |
| MD21-09-8741 | 21-605241 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | 0.135087 | NA | NA | NA |
| MD21-09-8742 | 21-605242 | 0.0000–0.5000 | SOIL | NA | NA | 0.061 | 1.82 | NA | NA | NA | NA |
| MD21-09-8743 | 21-605243 | 0.0000–0.5000 | SOIL | NA | NA | 0.032 | 1.74 | NA | NA | NA | NA |
| MD21-09-8744 | 21-605244 | 0.0000–0.5000 | SOIL | NA | NA | — | 1.77 | NA | NA | NA | NA |
| MD21-09-8745 | 21-605244 | 4.0000–5.0000 | QBT3 | NA | NA | — | 1.74 | NA | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.16-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(i)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **na** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| AAA4129 | 21-01672 | 0.0000–5.0000 | QBT3 | 13100 | NA[e] | 3.8 | 235 | —[f] | — | 74400 | — | — | 8.2 | — | 15.7 |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | — | NA | — | 157 | — | — | 67000 | — | — | — | — | — |
| AAA4132 | 21-01672 | 10.0000–15.0000 | QBT3 | 9290 | NA | — | 271 | — | — | 123000 | — | — | 6.7 | — | 12.3 |
| AAA4133 | 21-01672 | 15.0000–20.0000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.881 | — | 44.7 | — | 21.2 | — | 115 |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | — | — | — | — | — | 0.748 | — | — | — | — | — | 46.8 |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.981 | — | 35.5 | — | 18.8 | — | 93.4 |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | 22.6 |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.683 | — | — | — | — | — | 33 |
| 0121-97-1236 | 21-05355 | 0.0000–0.5000 | SOIL | — | 5.8 (U) | — | — | — | 0.87 (U) | — | 30.2 | — | 15 | — | 97.4 |
| 0121-97-1238 | 21-05355 | 0.5000–1.0000 | SOIL | — | 5.5 (U) | — | 304 | — | 0.98 (J) | — | 36.9 | — | 22.2 | — | 107 |
| 0121-97-1226 | 21-05357 | 0.0000–0.5000 | SOIL | — | 5.9 (U) | — | — | — | 0.89 (U) | — | — | — | — | — | — |
| 0121-97-1231 | 21-05357 | 0.5000–1.0000 | SOIL | — | 6.1 (U) | — | — | — | 0.92 (U) | — | — | — | — | — | — |
| 0121-97-1221 | 21-05362 | 0.0000–0.5000 | SOIL | — | 6.6 (J) | — | — | — | 1 (J) | — | 42.5 | — | 17.1 | — | 144 |
| 0121-97-1223 | 21-05362 | 0.5000–1.0000 | SOIL | — | 5.5 (U) | — | — | — | 0.82 (U) | — | 25 | — | — | — | 83.6 |
| 0121-97-1224 | 21-05379 | 0.0000–0.5000 | SOIL | — | 5.7 (U) | — | — | — | 0.86 (U) | — | 26.5 | — | — | — | 76.9 |
| 0121-97-1225 | 21-05379 | 0.5000–1.0000 | SOIL | — | 5.9 (U) | — | — | — | 0.89 (U) | — | — | — | — | — | — |
| 0121-97-1230 | 21-05389 | 0.0000–0.5000 | SOIL | — | 5.9 (U) | — | — | — | 0.89 (U) | — | — | — | — | — | — |
| 0121-97-1229 | 21-05389 | 0.5000–1.0000 | SOIL | — | 6.1 (U) | — | — | — | 0.91 (U) | — | — | — | — | — | — |
| 0121-97-1228 | 21-05404 | 0.0000–0.5000 | SOIL | — | 6 (U) | — | — | — | 0.89 (U) | — | — | — | — | — | — |
| 0121-97-1235 | 21-05404 | 0.5000–1.0000 | SOIL | — | 5.9 (U) | — | — | — | 0.88 (U) | — | — | — | — | — | — |
| 0121-97-1239 | 21-05404 | 1.0000–1.5000 | SOIL | — | 5.9 (U) | — | — | — | 0.89 (U) | — | — | — | — | — | — |
| 0121-97-1237 | 21-05418 | 0.0000–0.5000 | SOIL | — | 5.7 (U) | — | — | — | 0.85 (U) | — | — | — | — | — | — |
| 0121-97-1241 | 21-05418 | 0.5000–1.0000 | SOIL | — | 7.3 (U) | — | — | — | 0.7 | — | — | — | — | — | — |
| 0121-97-1227 | 21-05422 | 0.0000–0.5000 | SOIL | — | 5.7 (U) | — | — | — | 0.86 (U) | — | — | — | — | — | — |
| 0121-97-1240 | 21-05422 | 0.5000–1.0000 | SOIL | — | 5.7 (U) | — | — | — | 0.85 (U) | — | — | — | — | — | — |
| 0121-97-1232 | 21-05425 | 0.0000–0.5000 | SOIL | — | 5.6 (U) | — | — | — | 0.84 (U) | — | — | — | — | — | — |
| 0121-97-1234 | 21-05425 | 0.5000–1.0000 | SOIL | — | 5.7 (U) | — | — | — | 0.85 (U) | — | — | — | — | — | — |
| 0121-97-1233 | 21-05425 | 1.0000–1.5000 | SOIL | — | 5.7 (U) | — | — | — | 0.85 (U) | — | — | — | — | — | — |

**Table 6.16-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **na** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| 0121-97-1222 | 21-05425 | 1.5000–2.0000 | SOIL | — | 5.6 (U) | — | — | — | 0.85 (U) | — | — | — | — | — | — |
| 0121-97-1453 | 21-05512 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — |
| 0121-97-1454 | 21-05513 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0049 | 21-10501 | 0.0000–0.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.56 | — | — | — | — | — | — |
| MD21-98-0047 | 21-10503 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.57 (U) | — | — | — | — | — | — |
| MD21-98-0045 | 21-10504 | 0.0000–0.5000 | QBT3 | 14000 | NA | 5.6 | 54 | — | — | — | 8.1 | 3.3 | 5.3 | — | — |
| MD21-98-0046 | 21-10505 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.56 (U) | — | — | — | — | — | — |
| MD21-98-0044 | 21-10506 | 0.0000–0.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0043 | 21-10507 | 0.0000–0.5000 | QBT3 | 15000 | NA | 5.6 | 62 | — | — | — | 8.5 | — | 6.5 | — | — |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | — | NA | 8.3 | — | — | 0.54 (U) | — | — | — | — | — | — |
| MD21-98-0041 | 21-10509 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.55 (U) | 6700 | — | — | — | — | — |
| MD21-98-0040 | 21-10510 | 0.0000–0.5000 | QBT3 | — | NA | 4.5 | — | — | — | — | — | — | — | — | — |
| MD21-98-0039 | 21-10511 | 0.0000–0.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | 13 |
| MD21-98-0038 | 21-10512 | 0.0000–0.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0037 | 21-10513 | 0.0000–0.5000 | QBT3 | 25000 | NA | 8.2 | 110 | 1.8 | — | 3100 | 16 | 5.7 | 8 | 17000 | 26 |
| MD21-98-0036 | 21-10514 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.56 (U) | — | — | — | — | — | — |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0034 | 21-10516 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.53 (U) | — | — | — | — | — | — |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | — | NA | — | — | — | — | — | 20 | — | — | — | 50 |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | 12 |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | — | NA | — | — | — | — | 3300 | 9.2 (J) | — | — | — | 14 |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 6 | — | — |
| MD21-01-0008 | 21-11194 | 0.8333–1.3333 | FILL | — | — | — | — | — | — | 7700 | — | — | — | — | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | — | — | — | — | — | — | — | 7.7 | — | — | — | — |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | — | NA | — | 58 | — | — | 3600 | — | — | — | — | — |
| MD21-01-0014 | 21-11196 | 4.5000–5.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0015 | 21-11197 | 2.3333–3.3333 | QBT3 | — | NA | — | — | — | — | — | 13 | — | — | — | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |

**Table 6.16-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **54800** | **400** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **na** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | — | — | 3.6 | 160 | — | — | 73000 | — | — | — | — | — |
| MD21-01-0018 | 21-11198 | 5.3333–6.3333 | QBT3 | — | NA | — | — | — | — | — | 11 | — | — | — | — |
| MD21-01-0019 | 21-11199 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0020 | 21-11199 | 12.0000–13.0000 | QBT3 | — | NA | — | — | — | — | — | 17 | — | — | — | — |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | — | NA | — | — | — | — | — | 11 | — | — | — | 18 |
| MD21-01-0055 | 21-11200 | 12.0000–13.0000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | — | NA | — | — | — | — | — | 13 | — | — | — | 19 |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | — | 0.82 (U) | — | — | — | — | — | 19.9 | — | — | — | — |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | — | 0.82 (U) | — | — | — | — | — | 21.2 | — | — | — | — |
| MD21-01-0309 | 21-11216 | 17.1700–18.0000 | QBT3 | — | 0.82 (UJ) | — | — | — | — | — | 39.6 | — | — | — | — |
| MD21-01-0308 | 21-11217 | 8.0000–9.1700 | QBT3 | — | 0.89 (UJ) | — | — | — | — | 5090 | 23.6 | — | — | — | — |
| MD21-01-0313 | 21-11217 | 12.0000–13.0000 | QBT3 | — | 0.82 (UJ) | — | — | — | — | — | 27.4 | — | — | — | — |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | — | 0.89 (U) | — | — | — | — | — | 9.8 | — | 15.1 (J) | — | — |
| MD21-01-0314 | 21-11218 | 8.0000–9.0000 | QBT3 | — | 0.82 (UJ) | — | — | — | — | — | 21.8 | — | — | — | — |
| MD21-01-0315 | 21-11218 | 12.0000–13.0000 | QBT3 | — | 0.82 (UJ) | — | — | — | — | — | 48.6 | — | — | — | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | — | 0.82 (U) | — | — | — | — | — | 74.5 | — | 5.3 (J) | — | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | — | 0.86 (U) | — | 48.7 | — | — | 11300 | — | — | — | — | — |
| MD21-01-0301 | 21-11219 | 12.0000–13.0000 | QBT3 | — | 0.83 (U) | — | — | — | — | — | 56.9 | — | — | — | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | — | 0.84 (U) | — | — | — | — | 2940 | 77.5 | — | — | — | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | — | 0.85 (U) | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | — | 0.85 (U) | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0311 | 21-11221 | 4.0000–5.0000 | QBT3 | — | 0.87 (U) | — | 54 | — | — | 6880 | — | — | — | — | — |
| MD21-01-0304 | 21-11221 | 7.0000–8.0000 | QBT3 | — | 0.82 (U) | — | — | — | — | — | — | — | — | — | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | — | NA | 2.85 | — | — | — | — | — | — | — | — | — |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-08-7190 | 21-603023 | 8.5000–9.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-08-7191 | 21-603023 | 10.5000–11.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-08-7192 | 21-603024 | 7.5000–8.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-08-7193 | 21-603024 | 9.5000–10.5000 | QBT3 | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-08-7194 | 21-603025 | 7.5000–8.5000 | QBT3 | — | NA | 4 | — | — | — | 2820 (J+) | — | — | — | — | 16.9 |
| RE21-08-7195 | 21-603025 | 9.5000–10.5000 | QBT3 | 8680 (J+) | NA | 6.91 | 88.3 | — | — | 22800 (J+) | — | — | 6.22 | — | 21.6 |

**Table 6.16-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lithium | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na** | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **1.1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **na** | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **0.73** | **39.6** | **48.8** |
| **Residential SSL** | | | | **160**[c] | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **5.16** | **391** | **23500** |
| **Industrial SSL** | | | | **2000**[c] | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **74.9** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **619**[d] | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **20.4** | **1550** | **92900** |
| AAA4129 | 21-01672 | 0.0000–5.0000 | QBT3 | 14.8 | 6440 | NA | 14.8 | NA | NA | 0.52 (J-) | 1.2 (U) | 223 | — | — | — |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | 7.4 (J) | 5660 | NA | — | NA | NA | 0.43 (UJ) | 1.1 (U) | 262 | — | — | — |
| AAA4132 | 21-01672 | 10.0000–15.0000 | QBT3 | 13.1 | 8840 | NA | — | NA | NA | 0.45 (UJ) | 1.1 (U) | 415 | — | — | — |
| AAA4133 | 21-01672 | 15.0000–20.0000 | QBT3 | 1.7 (J) | — | NA | — | NA | NA | 0.41 (UJ) | — | 1.4 (J) | — | — | — |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | NA | — | 10.9 | — | NA | — | — | — | NA | — | — | 267 |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | NA | — | 6.17 | — | NA | — | — | — | NA | — | — | 114 |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | NA | — | 0.172 | — | NA | 0.0532 (J) | — | — | NA | — | — | — |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | NA | — | 9.93 | — | NA | — | — | — | NA | — | — | 226 |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | NA | — | 0.791 | — | NA | — | — | — | NA | — | — | 51.6 |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | NA | — | 2.91 | — | NA | — | — | — | NA | — | — | 108 |
| 0121-97-1236 | 21-05355 | 0.0000–0.5000 | SOIL | NA | — | 5.5 | — | NA | NA | — | 1.5 (U) | NA | — | — | 236 |
| 0121-97-1238 | 21-05355 | 0.5000–1.0000 | SOIL | NA | — | 14.7 | — | NA | NA | — | 1.4 (U) | NA | — | — | 316 |
| 0121-97-1226 | 21-05357 | 0.0000–0.5000 | SOIL | NA | — | — | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1231 | 21-05357 | 0.5000–1.0000 | SOIL | NA | — | — | — | NA | NA | — | 1.6 (U) | NA | — | — | — |
| 0121-97-1221 | 21-05362 | 0.0000–0.5000 | SOIL | NA | — | 9.1 | — | NA | NA | — | 1.4 (U) | NA | — | — | 199 |
| 0121-97-1223 | 21-05362 | 0.5000–1.0000 | SOIL | NA | — | 5.1 | — | NA | NA | — | 1.4 (U) | NA | — | — | 128 |
| 0121-97-1224 | 21-05379 | 0.0000–0.5000 | SOIL | NA | — | 7.2 | — | NA | NA | — | 1.5 (U) | NA | — | — | 162 |
| 0121-97-1225 | 21-05379 | 0.5000–1.0000 | SOIL | NA | — | 2.4 | — | NA | NA | — | 1.5 (U) | NA | — | — | 58.3 |
| 0121-97-1230 | 21-05389 | 0.0000–0.5000 | SOIL | NA | — | 0.27 | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1229 | 21-05389 | 0.5000–1.0000 | SOIL | NA | — | 0.17 | — | NA | NA | — | 1.6 (U) | NA | — | — | — |
| 0121-97-1228 | 21-05404 | 0.0000–0.5000 | SOIL | NA | — | 0.16 | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1235 | 21-05404 | 0.5000–1.0000 | SOIL | NA | — | — | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1239 | 21-05404 | 1.0000–1.5000 | SOIL | NA | — | — | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1237 | 21-05418 | 0.0000–0.5000 | SOIL | NA | — | — | — | NA | NA | — | 1.4 (U) | NA | — | — | — |
| 0121-97-1241 | 21-05418 | 0.5000–1.0000 | SOIL | NA | — | — | — | NA | NA | — | — | NA | — | — | — |
| 0121-97-1227 | 21-05422 | 0.0000–0.5000 | SOIL | NA | — | 0.78 | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1240 | 21-05422 | 0.5000–1.0000 | SOIL | NA | — | 0.2 | — | NA | NA | — | 1.4 (U) | NA | — | — | — |
| 0121-97-1232 | 21-05425 | 0.0000–0.5000 | SOIL | NA | — | 0.11 | — | NA | NA | — | 1.4 (U) | NA | — | — | — |
| 0121-97-1234 | 21-05425 | 0.5000–1.0000 | SOIL | NA | — | — | — | NA | NA | — | 1.4 (U) | NA | — | — | — |
| 0121-97-1233 | 21-05425 | 1.0000–1.5000 | SOIL | NA | — | — | — | NA | NA | — | 1.5 (U) | NA | — | — | — |
| 0121-97-1222 | 21-05425 | 1.5000–2.0000 | SOIL | NA | — | — | — | NA | NA | — | 1.4 (U) | NA | — | — | — |

**Table 6.16-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lithium | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na** | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **1.1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **na** | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **0.73** | **39.6** | **48.8** |
| **Residential SSL** | | | | **160**[c] | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **5.16** | **391** | **23500** |
| **Industrial SSL** | | | | **2000**[c] | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **74.9** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **619**[d] | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **20.4** | **1550** | **92900** |
| 0121-97-1453 | 21-05512 | 0.0000–0.5000 | SOIL | NA | — | 0.11 | — | NA | NA | — | — | NA | 0.98 (U) | — | — |
| 0121-97-1454 | 21-05513 | 0.0000–0.5000 | SOIL | NA | — | — | — | NA | NA | — | — | NA | 0.96 (U) | — | — |
| MD21-98-0049 | 21-10501 | 0.0000–0.5000 | QBT3 | NA | — | 0.12 | — | NA | NA | 1 (U) | 2 (U) | NA | 2 (U) | — | — |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | NA | — | 0.13 | — | NA | NA | — | 2.2 (U) | NA | 2.2 (U) | — | 57 |
| MD21-98-0047 | 21-10503 | 0.0000–0.5000 | SOIL | NA | — | 0.11 (U) | — | NA | NA | — | 2.3 (U) | NA | 2.3 (U) | — | 53 |
| MD21-98-0045 | 21-10504 | 0.0000–0.5000 | QBT3 | NA | 1700 | 0.13 | — | NA | NA | 1.1 (U) | 2.2 (U) | NA | 2.2 (U) | 20 | 77 |
| MD21-98-0046 | 21-10505 | 0.0000–0.5000 | SOIL | NA | — | 0.16 | — | NA | NA | — | 2.2 (U) | NA | 2.2 (U) | — | 60 |
| MD21-98-0044 | 21-10506 | 0.0000–0.5000 | QBT3 | NA | — | — | — | NA | NA | 1 (U) | 2.1 (U) | NA | 2.1 (U) | — | — |
| MD21-98-0043 | 21-10507 | 0.0000–0.5000 | QBT3 | NA | 1700 | 0.11 (U) | — | NA | NA | 1.1 (U) | 2.2 (U) | NA | 2.2 (U) | 19 | 150 |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | NA | — | 1.7 | — | NA | NA | — | 2.2 (U) | NA | 2.2 (U) | — | 93 |
| MD21-98-0041 | 21-10509 | 0.0000–0.5000 | SOIL | NA | — | 0.14 | — | NA | NA | — | 2.2 (U) | NA | 2.2 (U) | — | 67 |
| MD21-98-0040 | 21-10510 | 0.0000–0.5000 | QBT3 | NA | — | 0.11 (U) | — | NA | NA | 1.1 (U) | 2.2 (U) | NA | 2.2 (U) | — | 140 |
| MD21-98-0039 | 21-10511 | 0.0000–0.5000 | QBT3 | NA | — | — | — | NA | NA | 1 (U) | 2.1 (U) | NA | 2.1 (U) | — | — |
| MD21-98-0038 | 21-10512 | 0.0000–0.5000 | QBT3 | NA | — | — | — | NA | NA | 1 (U) | 2 (U) | NA | 2 (U) | — | — |
| MD21-98-0037 | 21-10513 | 0.0000–0.5000 | QBT3 | NA | 2900 | 0.18 | 8.3 | NA | NA | 1.1 (U) | 2.2 (U) | NA | 2.2 (U) | 28 | — |
| MD21-98-0036 | 21-10514 | 0.0000–0.5000 | SOIL | NA | — | 0.11 (U) | — | NA | NA | — | 2.2 (U) | NA | 2.2 (U) | — | 54 |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | NA | — | — | — | NA | NA | 1 (U) | 2 (U) | NA | 2 (U) | — | — |
| MD21-98-0034 | 21-10516 | 0.0000–0.5000 | SOIL | NA | — | 0.22 | — | NA | NA | — | 2.1 (U) | NA | 2.1 (U) | — | — |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | NA | — | 0.45 | — | NA | NA | — | — | NA | — | — | 76 |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | NA | — | — | — | NA | NA | 0.358 | — | NA | — | — | — |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | NA | — | 0.11 (J) | — | NA | NA | 1.67 | — | NA | — | — | — |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | NA | — | — | — | NA | NA | 0.367 | — | NA | — | — | — |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | NA | NA | — | — | NA | NA | 0.308 | — | NA | — | — | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | NA | — | — | — | NA | NA | 0.756 | — | NA | — | — | — |
| MD21-01-0008 | 21-11194 | 0.8333–1.3333 | FILL | NA | — | — | — | NA | NA | — | — | NA | — | — | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | NA | — | — | — | NA | NA | 0.7 | — | NA | — | — | — |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | NA | — | 0.25 | — | NA | NA | 0.327 (J) | — | NA | — | — | — |
| MD21-01-0014 | 21-11196 | 4.5000–5.5000 | QBT3 | NA | — | — | — | NA | NA | 0.658 | — | NA | — | — | — |
| MD21-01-0015 | 21-11197 | 2.3333–3.3333 | QBT3 | NA | — | — | 9.7 | NA | NA | 0.577 | — | NA | — | — | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | NA | — | — | — | NA | NA | 0.533 | — | NA | — | — | — |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | NA | 2400 | — | — | NA | NA | 0.681 | — | NA | — | — | — |

**Table 6.16-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lithium | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na** | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **1.1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **na** | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **0.73** | **39.6** | **48.8** |
| **Residential SSL** | | | | **160**[c] | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **5.16** | **391** | **23500** |
| **Industrial SSL** | | | | **2000**[c] | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **74.9** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **619**[d] | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **20.4** | **1550** | **92900** |
| MD21-01-0018 | 21-11198 | 5.3333–6.3333 | QBT3 | NA | — | — | — | NA | NA | 0.448 | — | NA | — | — | — |
| MD21-01-0019 | 21-11199 | 8.0000–9.0000 | QBT3 | NA | — | — | — | NA | NA | 0.582 | — | NA | — | — | — |
| MD21-01-0020 | 21-11199 | 12.0000–13.0000 | QBT3 | NA | — | — | 8.4 | NA | NA | 0.571 | — | NA | — | — | — |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | NA | — | — | — | NA | NA | 0.664 | — | NA | — | — | — |
| MD21-01-0055 | 21-11200 | 12.0000–13.0000 | QBT3 | NA | — | — | — | NA | NA | 0.554 | — | NA | — | — | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | NA | — | — | 7.7 | NA | NA | 0.582 | — | NA | — | — | — |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | NA | — | — | 9.4 | NA | NA | — | — | NA | — | — | — |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | NA | — | — | 10.5 | NA | NA | — | — | NA | — | — | — |
| MD21-01-0309 | 21-11216 | 17.1700–18.0000 | QBT3 | NA | — | — | 18.9 | NA | NA | 0.32 (J) | — | NA | — | — | — |
| MD21-01-0308 | 21-11217 | 8.0000–9.1700 | QBT3 | NA | — | — | 13.6 | NA | NA | — | — | NA | — | — | — |
| MD21-01-0313 | 21-11217 | 12.0000–13.0000 | QBT3 | NA | — | — | 13.2 | NA | NA | — | — | NA | — | — | — |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | NA | — | — | — | NA | NA | 0.4 (J) | — | NA | — | — | — |
| MD21-01-0314 | 21-11218 | 8.0000–9.0000 | QBT3 | NA | — | — | 11.2 | NA | NA | 0.38 (J) | — | NA | — | — | — |
| MD21-01-0315 | 21-11218 | 12.0000–13.0000 | QBT3 | NA | — | — | 23.3 | NA | NA | — | — | NA | — | — | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | NA | — | — | 33.2 | NA | NA | 0.46 (J) | — | NA | 1.6 (J-) | — | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | NA | — | — | — | NA | NA | — | — | NA | — | — | — |
| MD21-01-0301 | 21-11219 | 12.0000–13.0000 | QBT3 | NA | — | — | 28 | NA | NA | 0.32 (J) | — | NA | — | — | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | NA | — | — | 35.4 | NA | NA | — | — | NA | — | — | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | NA | — | 0.36 | — | NA | NA | — | — | NA | — | — | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | NA | — | 0.63 | — | NA | NA | — | — | NA | — | — | — |
| MD21-01-0311 | 21-11221 | 4.0000–5.0000 | QBT3 | NA | — | — | — | NA | NA | 0.41 (J) | — | NA | — | — | — |
| MD21-01-0304 | 21-11221 | 7.0000–8.0000 | QBT3 | NA | — | — | — | NA | NA | 0.38 (J) | — | NA | — | — | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | NA | — | 0.658 | — | — | 0.000667 (J) | 4.17 | — | NA | — | — | — |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | NA | — | 0.197 | — | — | — | 4.07 | — | NA | — | — | — |
| RE21-08-7190 | 21-603023 | 8.5000–9.5000 | QBT3 | NA | — | — | — | — | — | 3.16 | — | NA | — | — | — |
| RE21-08-7191 | 21-603023 | 10.5000–11.5000 | QBT3 | NA | — | 0.105 | — | — | 0.00054 (J) | 4.43 | — | NA | — | — | — |
| RE21-08-7192 | 21-603024 | 7.5000–8.5000 | QBT3 | NA | — | — | — | — | — | 3.96 | — | NA | — | — | — |
| RE21-08-7193 | 21-603024 | 9.5000–10.5000 | QBT3 | NA | — | — | — | — | — | 4.16 | — | NA | — | — | — |

**Table 6.16-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lithium | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na** | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **1.1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **na** | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **0.73** | **39.6** | **48.8** |
| **Residential SSL** | | | | **160**[c] | **na** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **5.16** | **391** | **23500** |
| **Industrial SSL** | | | | **2000**[c] | **na** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **74.9** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **619**[d] | **na** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **20.4** | **1550** | **92900** |
| RE21-08-7194 | 21-603025 | 7.5000–8.5000 | QBT3 | NA | — | — | — | 1.89 | — | 6.23 | — | NA | — | — | — |
| RE21-08-7195 | 21-603025 | 9.5000–10.5000 | QBT3 | NA | 3080 | — | 6.88 (J-) | 2.83 | — | 15.6 | — | NA | — | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] NA = Not analyzed.

[f] — = Not detected or not detected above BV.

**Table 6.16-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(i)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Aldrin | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | BHC[alpha-] | BHC[delta-] | BHC[gamma-] | Bis(2-ethylhexyl)phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **0.284** | **17200** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **1720**[c] | **62.1** | **240000** | **0.772** | **5.17**[d] | **5.17** | **347** |
| **Industrial SSL** | | | | **36700** | **851000** | **1.12** | **183000** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **18300**[c] | **234** | **2500000** | **3.04** | **22.9**[d] | **22.9** | **1370** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **7.15** | **66800** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **6680**[c] | **2060** | **2500000** | **26.3** | **83**[d] | **83** | **4760** |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | —[a] | NA[b] | NA | — | NA | NA | NA | — | — | — | — | — | — | NA | NA | NA | 0.11 (J) |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.906 | 0.4 | NA | — | — | — | — | — | — | NA | NA | NA | — |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | — | NA | NA | — | 0.371 | 0.176 | NA | — | — | — | — | — | — | NA | NA | NA | — |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.0214 | 0.0128 | NA | — | — | — | — | — | — | NA | NA | NA | — |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.85 | 0.365 | NA | — | — | — | — | — | — | NA | NA | NA | — |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | — | NA | NA | — | 0.0672 | 0.0379 | NA | — | — | — | — | — | — | NA | NA | NA | 0.0447 (J) |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.558 | 0.267 | NA | — | — | — | — | — | — | NA | NA | NA | — |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.091 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | — | NA | — | — | 0.11 | — | NA | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | — | 0.081 (J) | — | — | 0.071 | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | — | 0.021 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | 0.044 (J) | 0.2 (J) | — | 0.045 (J) | — | — | — | 0.082 (J) | 0.074 (J) | 0.078 (J) | — | 0.078 (J) | 0.18 (J) | — | — | — | 0.055 (J) |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | — | 0.078 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | — | 0.035 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | — | 0.022 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | — | 0.024 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0011 | 21-11195 | 2.6667–4.0000 | FILL | — | 0.014 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0012 | 21-11195 | 5.6667–6.6667 | FILL | — | 0.02 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0526 | 21-11195 | 12.0000–13.0000 | QBT3 | — | 0.0118 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.0119 (J) |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | — | 0.022 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | — | 0.023 (J+) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0522 | 21-11199 | 17.0000–18.0000 | QBT3 | — | 0.0083 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.0112 (J) |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | — | 0.017 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

**Table 6.16-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Aldrin | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | BHC[alpha-] | BHC[delta-] | BHC[gamma-] | Bis(2-ethylhexyl)phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **0.284** | **17200** | **1.12** | **2.22** | **15.5** | **6.21** | **0.621** | **6.21** | **1720**[c] | **62.1** | **240000** | **0.772** | **5.17**[d] | **5.17** | **347** |
| **Industrial SSL** | | | | **36700** | **851000** | **1.12** | **183000** | **8.26** | **8.26** | **85.4** | **23.4** | **2.34** | **23.4** | **18300**[c] | **234** | **2500000** | **3.04** | **22.9**[d] | **22.9** | **1370** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **7.15** | **66800** | **4.36** | **75.8** | **471** | **213** | **21.3** | **213** | **6680**[c] | **2060** | **2500000** | **26.3** | **83**[d] | **83** | **4760** |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 (J) | — | — | — | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | 0.099 (J) | — | — | — | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | — | 0.016 (J) | — | — | — | — | — | — | — | — | — | — | 0.089 (J) | — | — | — | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | — | 0.016 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0523 | 21-11222 | 12.0000–15.0000 | FILL | — | 0.0079 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0525 | 21-11222 | 17.0000–18.0000 | FILL | — | 0.0255 | 0.00027 (J-) | — | — | — | 0.00035 (J) | — | — | — | — | — | — | 0.00022 (J-) | 0.00024 (J-) | 0.00024 (J-) | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | 0.147 | — | NA | 0.261 | NA | NA | — | 0.395 | 0.389 | 0.496 | 0.357 (J) | — | — | NA | NA | NA | — |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | 0.126 | — | NA | 0.191 | NA | NA | — | 0.349 | 0.306 | 0.396 | 0.265 (J) | — | — | NA | NA | NA | — |

**Table 6.16-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Bromomethane | Butanone[2-] | Chrysene | DDD[4,4'-] | DDT[4,4'-] | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dieldrin | Endosulfan Sulfate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Isopropylbenzene | Methylnaphthalene[2-] | Naphthalene | Phenanthrene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **22.3** | **39600** | **621** | **20.3** | **17.2** | **6110** | **32.2** | **0.304** | **367**[e] | **2290** | **2290** | **6.21** | **3210** | **310**[f] | **45** | **1830** | **1720** |
| **Industrial SSL** | | | | **83.6** | **369000** | **2340** | **79.8** | **78.1** | **68400** | **180** | **1.2** | **4100**[e] | **24400** | **24400** | **23.4** | **14900** | **4100**[f] | **252** | **20500** | **18300** |
| **Construction Worker SSL** | | | | **67.1** | **148000** | **20600** | **695** | **142** | **23800** | **3780** | **10.3** | **1430**[e] | **8910** | **8910** | **213** | **10300** | **1240**[g] | **702** | **7150** | **6680** |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | NA | NA | — | NA | NA | — | — | NA | NA | — | — | — | NA | — | — | — | — |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | NA | NA | — | NA | NA | 0.0408 (J) | — | NA | NA | 0.0244 (J) | — | — | NA | — | — | — | 0.0345 |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | NA | NA | — | NA | NA | — | — | NA | NA | — | — | — | NA | — | — | — | — |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | NA | NA | — | NA | NA | — | — | NA | NA | — | — | — | NA | — | — | — | — |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | NA | NA | — | NA | NA | 0.0432 (J) | — | NA | NA | 0.0534 | — | — | NA | — | — | 0.0409 | 0.0655 |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | NA | NA | — | NA | NA | — | — | NA | NA | — | — | — | NA | — | — | — | — |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | NA | NA | — | NA | NA | — | — | NA | NA | — | — | — | NA | — | — | — | — |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | — | — | — | — | 0.57 | — | — | NA | — | — | 0.66 | 0.52 |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | NA | NA | — | — | — | — | — | — | — | — | — | — | NA | — | — | — | — |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | NA | NA | — | — | — | — | — | — | — | — | — | — | NA | — | — | — | — |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | — | 0.012 (J) | — | — | — | — | 0.0039 (J) | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | — | 0.056 | 0.089 (J) | — | — | — | — | — | — | 0.31 (J) | — | — | — | — | — | 0.26 (J) | 0.23 (J) |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | — | 0.0083 (J) | — | — | — | — | — | — | — | — | — | — | 0.0025 (J) | — | — | — | — |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | — | 0.014 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | — | 0.0095 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | — | 0.011 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0011 | 21-11195 | 2.6667–4.0000 | FILL | 0.0034 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0012 | 21-11195 | 5.6667–6.6667 | FILL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0526 | 21-11195 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | — | 0.0042 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | — | 0.0054 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | — | 0.0051 (J+) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0522 | 21-11199 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 0.0043 (J) | — | — | — | — | — | — | — |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

**Table 6.16-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Bromomethane | Butanone[2-] | Chrysene | DDD[4,4'-] | DDT[4,4'-] | Di-n-butylphthalate | Dichlorobenzene[1,4-] | Dieldrin | Endosulfan Sulfate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Isopropylbenzene | Methylnaphthalene[2-] | Naphthalene | Phenanthrene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **22.3** | **39600** | **621** | **20.3** | **17.2** | **6110** | **32.2** | **0.304** | **367**[e] | **2290** | **2290** | **6.21** | **3210** | **310**[f] | **45** | **1830** | **1720** |
| **Industrial SSL** | | | | **83.6** | **369000** | **2340** | **79.8** | **78.1** | **68400** | **180** | **1.2** | **4100**[e] | **24400** | **24400** | **23.4** | **14900** | **4100**[f] | **252** | **20500** | **18300** |
| **Construction Worker SSL** | | | | **67.1** | **148000** | **20600** | **695** | **142** | **23800** | **3780** | **10.3** | **1430**[e] | **8910** | **8910** | **213** | **10300** | **1240**[g] | **702** | **7150** | **6680** |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | — | — | — | — | 0.0028 (J) | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | — | — | — | — | 0.0022 (J) | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0523 | 21-11222 | 12.0000–15.0000 | FILL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0525 | 21-11222 | 17.0000–18.0000 | FILL | — | — | — | 0.00029 (J-) | — | — | — | 0.0003 (J-) | 0.00023 (J-) | — | — | — | — | — | — | — | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | — | — | 0.412 | NA | NA | — | — | NA | NA | 1.2 | 0.136 | 0.273 (J) | — | 0.0342 | 0.0861 | 0.972 | 0.9 |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | — | — | 0.304 | NA | NA | — | — | NA | NA | 0.996 | — | 0.204 (J) | — | 0.0272 (J) | 0.0835 | 0.813 | 0.781 |

**Table 6.16-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Tetrachloroethene | Toluene | Trichlorofluoromethane | Trimethylbenzene[1,2,4-] |
|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6.99** | **5570** | **2010** | **62**[f] |
| **Industrial SSL** | | | | **36.4** | **57900** | **6760** | **260**[f] |
| **Construction Worker SSL** | | | | **338** | **21100** | **5820** | **688**[g] |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | NA | NA | NA | NA |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | NA | NA | NA | NA |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | NA | NA | NA | NA |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA |
| MD21-98-0035 | 21-10515 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | — | 0.0024 (J) | — | — |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | — | — | — | — |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | — | 0.0022 (J) | — | 0.0024 (J) |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | — | 0.006 | — | 0.003 (J) |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | — | — | — | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | — | — | 0.0018 (J) | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | — | — | 0.0016 (J) | — |
| MD21-01-0011 | 21-11195 | 2.6667–4.0000 | FILL | — | — | — | — |
| MD21-01-0012 | 21-11195 | 5.6667–6.6667 | FILL | — | — | — | — |
| MD21-01-0526 | 21-11195 | 12.0000–13.0000 | QBT3 | — | 0.00036 (J) | — | — |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | — | — | — | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | — | — | — | — |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | — | — | — | — |
| MD21-01-0522 | 21-11199 | 17.0000–18.0000 | QBT3 | — | 0.00044 (J) | — | — |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | — | — | 0.0014 (J) | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | — | — | — | — |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | 0.003 (J) | — | — | — |

**Table 6.16-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Tetrachloroethene | Toluene | Trichlorofluoromethane | Trimethylbenzene[1,2,4-] |
|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6.99** | **5570** | **2010** | **62**[f] |
| **Industrial SSL** | | | | **36.4** | **57900** | **6760** | **260**[f] |
| **Construction Worker SSL** | | | | **338** | **21100** | **5820** | **688**[g] |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | 0.0022 (J) | — | — | — |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | — | — | — | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | — | — | — | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | — | — | — | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | — | — | — | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | — | — | — | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | — | — | — | — |
| MD21-01-0523 | 21-11222 | 12.0000–15.0000 | FILL | — | 0.00038 (J) | — | — |
| MD21-01-0525 | 21-11222 | 17.0000–18.0000 | FILL | — | — | — | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | — | — | — | — |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | — | — | — | — |

Source: SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] — = Not detected.
[b] NA = Not analyzed.
[c] Pyrene SSLs used as surrogate based on structural similarity.
[d] BHC(gamma-) SSLs used as surrogate based on structural similarity.
[e] Endrin SSLs used as surrogate based on structural similarity.
[f] PA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table 6.16-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(i)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Thorium-228 | Thorium-230 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **2.52**[b] | **1.98b**[a] | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **2.28**[b] | **2.29**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **2.3** | **5** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **9** | **5** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **6.8** | **5** | **320000** | **220** | **43** | **160** |
| AAA4129 | 21-01672 | 0.0000–5.0000 | QBT3 | —[c] | NA[d] | — | — | — | — | — | 100.473 | — | — | — |
| AAA4131 | 21-01672 | 5.0000–10.0000 | QBT3 | 0.01 | NA | — | — | — | — | — | 989.753 | — | — | — |
| AAA4132 | 21-01672 | 10.0000–15.0000 | QBT3 | — | NA | — | — | — | — | — | 1335.58 | — | — | — |
| AAA4133 | 21-01672 | 15.0000–20.0000 | QBT3 | 0.008 | NA | — | — | — | — | — | 776.894 | — | — | — |
| MD21-02-49585 | 21-02-21261 | 0.0000–0.5000 | SOIL | 0.0616 | NA | NA | — | 1.9 | NA | NA | NA | NA | NA | NA |
| MD21-02-49586 | 21-02-21261 | 0.5000–0.6667 | SOIL | 0.0566 | NA | NA | — | 1.42 | NA | NA | NA | NA | NA | NA |
| MD21-02-49587 | 21-02-21262 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.112 | NA | NA | NA | NA | NA | NA |
| MD21-02-49589 | 21-02-21263 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.229 | NA | NA | NA | NA | NA | NA |
| MD21-02-49591 | 21-02-21264 | 0.0000–0.5000 | SOIL | 0.0577 | NA | NA | — | 2.94 | NA | NA | NA | NA | NA | NA |
| MD21-02-49592 | 21-02-21264 | 0.5000–1.0000 | SOIL | — | NA | NA | — | 0.937 | NA | NA | NA | NA | NA | NA |
| MD21-02-49599 | 21-02-21268 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 1.3 | NA | NA | NA | NA | NA | NA |
| 0121-97-1236 | 21-05355 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 2.12 | 4.38 | 0.216 | — |
| 0121-97-1238 | 21-05355 | 0.5000–1.0000 | SOIL | — | — | 0.2941 | NA | NA | — | — | 2.4 | 6.21 | 0.266 | 2.69 |
| 0121-97-1226 | 21-05357 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.11 | — | — | — |
| 0121-97-1231 | 21-05357 | 0.5000–1.0000 | SOIL | — | — | — | NA | NA | — | — | 0.1 | — | — | — |
| 0121-97-1221 | 21-05362 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.61 | 7.25 | 0.306 | 3.45 |
| 0121-97-1223 | 21-05362 | 0.5000–1.0000 | SOIL | — | — | 0.1531 | NA | NA | — | — | 0.41 | 4.95 | — | 2.39 |
| 0121-97-1224 | 21-05379 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.45 | 4.93 | — | — |
| 0121-97-1225 | 21-05379 | 0.5000–1.0000 | SOIL | — | — | — | NA | NA | — | — | 0.23 | — | — | — |
| 0121-97-1230 | 21-05389 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.11 | — | — | — |
| 0121-97-1229 | 21-05389 | 0.5000–1.0000 | SOIL | — | — | 0.2037 | NA | NA | — | — | 0.11 | — | — | — |
| 0121-97-1228 | 21-05404 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.1 | — | — | — |
| 0121-97-1235 | 21-05404 | 0.5000–1.0000 | SOIL | — | — | — | NA | NA | — | — | 0.11 | — | — | — |
| 0121-97-1239 | 21-05404 | 1.0000–1.5000 | SOIL | — | — | — | NA | NA | — | — | 0.15 | — | — | — |
| 0121-97-1237 | 21-05418 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.07 | — | — | — |
| 0121-97-1241 | 21-05418 | 0.5000–1.0000 | SOIL | — | — | — | NA | NA | — | — | 0.1 | — | — | — |
| 0121-97-1227 | 21-05422 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.16 | — | — | — |
| 0121-97-1240 | 21-05422 | 0.5000–1.0000 | SOIL | — | — | — | NA | NA | — | — | 0.15 | — | — | — |

**Table 6.16-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Thorium-228 | Thorium-230 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **2.52**[b] | **1.98b**[a] | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **2.28**[b] | **2.29**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **2.3** | **5** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **9** | **5** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **6.8** | **5** | **320000** | **220** | **43** | **160** |
| 0121-97-1222 | 21-05425 | 1.5000–2.0000 | SOIL | — | — | — | NA | NA | — | — | 0.05 | — | — | — |
| MD21-98-0049 | 21-10501 | 0.0000–0.5000 | QBT3 | — | — | — | NA | NA | — | — | 0.07 | — | NA | — |
| MD21-98-0048 | 21-10502 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.18 | — | NA | — |
| MD21-98-0047 | 21-10503 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 1.03 | — | NA | — |
| MD21-98-0045 | 21-10504 | 0.0000–0.5000 | QBT3 | — | — | — | NA | NA | — | — | 0.53 | — | NA | — |
| MD21-98-0046 | 21-10505 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.25 | — | NA | — |
| MD21-98-0043 | 21-10507 | 0.0000–0.5000 | QBT3 | — | NA | — | NA | NA | — | — | 0.23 | — | NA | — |
| MD21-98-0042 | 21-10508 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | — | — | 0.37 | 3.32 | NA | — |
| MD21-98-0041 | 21-10509 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.23 | — | NA | — |
| MD21-98-0039 | 21-10511 | 0.0000–0.5000 | QBT3 | — | — | — | NA | NA | — | — | 0.1 | — | NA | — |
| MD21-98-0038 | 21-10512 | 0.0000–0.5000 | QBT3 | — | — | — | NA | NA | — | — | 0.09 | — | NA | — |
| MD21-98-0037 | 21-10513 | 0.0000–0.5000 | QBT3 | NA | — | — | NA | NA | — | — | 0.25 | — | NA | — |
| MD21-98-0036 | 21-10514 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.63 | — | NA | — |
| MD21-98-0034 | 21-10516 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | — | — | 0.11 | — | NA | — |
| MD21-01-0001 | 21-11191 | 0.5000–1.1667 | FILL | — | — | — | — | 0.176 | — | — | — | — | — | — |
| MD21-01-0003 | 21-11191 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0002 | 21-11192 | 0.5000–1.0000 | FILL | — | — | — | — | — | — | — | 0.63 | — | — | — |
| MD21-01-0004 | 21-11192 | 3.0000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0005 | 21-11193 | 0.8333–1.3333 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| MD21-01-0007 | 21-11193 | 4.0000–5.5000 | QBT3 | — | — | — | — | — | — | — | 0.076701 | — | — | — |
| MD21-01-0008 | 21-11194 | 0.8333–1.3333 | FILL | — | — | — | — | 0.0362 | — | — | 1.58667 | — | — | — |
| MD21-01-0009 | 21-11194 | 4.0000–4.5000 | QBT3 | — | — | — | — | — | — | — | 0.347895 | — | — | — |
| MD21-01-0011 | 21-11195 | 2.6667–4.0000 | FILL | — | — | — | — | — | — | — | 147.048 | — | — | — |
| MD21-01-0012 | 21-11195 | 5.6667–6.6667 | FILL | — | — | — | — | — | — | — | 186.476 | — | — | — |
| MD21-01-0526 | 21-11195 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | 849.865 | — | — | — |
| MD21-01-0013 | 21-11196 | 3.0000–3.5000 | QBT3 | — | — | — | — | 0.059 | 2.56 | 2.27 | 1.82667 | — | — | — |
| MD21-01-0014 | 21-11196 | 4.5000–5.5000 | QBT3 | — | — | — | — | 0.024 | — | — | 3.84146 | — | — | — |
| MD21-01-0015 | 21-11197 | 2.3333–3.3333 | QBT3 | — | — | — | — | — | — | — | 1.43029 | — | — | — |
| MD21-01-0016 | 21-11197 | 5.3333–6.3333 | QBT3 | — | — | — | — | — | — | — | 3.3 | — | — | — |

**Table 6.16-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Thorium-228 | Thorium-230 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **2.52**[b] | **1.98b**[a] | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **2.28**[b] | **2.29**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **2.3** | **5** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **9** | **5** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **6.8** | **5** | **320000** | **220** | **43** | **160** |
| MD21-01-0017 | 21-11198 | 2.3333–3.3333 | QBT3 | — | — | — | — | — | — | — | 3.6 | — | — | — |
| MD21-01-0018 | 21-11198 | 5.3333–6.3333 | QBT3 | — | — | — | — | — | — | — | 0.255578 | — | — | — |
| MD21-01-0019 | 21-11199 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | 299.702 | — | — | — |
| MD21-01-0020 | 21-11199 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | 562.5 | — | — | — |
| MD21-01-0522 | 21-11199 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | 154.603 | — | — | — |
| MD21-01-0054 | 21-11200 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | 12.3711 | — | — | — |
| MD21-01-0055 | 21-11200 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | 30.4737 | — | — | — |
| MD21-01-0056 | 21-11200 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | 20.5833 | — | — | — |
| MD21-01-0302 | 21-11216 | 8.2500–9.0000 | QBT3 | — | — | — | — | — | — | — | 1220 | — | — | — |
| MD21-01-0303 | 21-11216 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | 653 | — | — | — |
| MD21-01-0309 | 21-11216 | 17.1700–18.0000 | QBT3 | — | 0.106 | — | — | — | — | — | 134.118 | — | — | — |
| MD21-01-0308 | 21-11217 | 8.0000–9.1700 | QBT3 | — | — | — | — | — | — | — | 4233.18 | — | — | — |
| MD21-01-0313 | 21-11217 | 12.0000–13.0000 | QBT3 | — | 0.0981 | — | — | — | — | — | 741.004 | — | — | — |
| MD21-01-0299 | 21-11217 | 17.0000–17.7500 | QBT3 | — | — | — | — | — | — | — | 935.618 | — | — | — |
| MD21-01-0314 | 21-11218 | 8.0000–9.0000 | QBT3 | — | 0.0831 | — | — | 0.0323 | — | — | 1297.91 | — | — | — |
| MD21-01-0315 | 21-11218 | 12.0000–13.0000 | QBT3 | — | 0.0656 | — | — | — | — | — | 2251.78 | — | — | — |
| MD21-01-0298 | 21-11218 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | 1027.23 | — | — | — |
| MD21-01-0300 | 21-11219 | 8.0000–9.0000 | QBT3 | — | 0.122 | — | — | — | — | — | 1328.42 | — | — | — |
| MD21-01-0301 | 21-11219 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | 592.534 | — | — | — |
| MD21-01-0306 | 21-11219 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | 1444.46 | — | — | — |
| MD21-01-0307 | 21-11220 | 2.0000–3.0000 | FILL | — | — | — | — | 0.0994 | — | — | 97.7586 | — | — | — |
| MD21-01-0310 | 21-11220 | 5.0000–6.0000 | FILL | — | — | — | — | 0.205 | — | — | 63.8108 | — | — | — |
| MD21-01-0311 | 21-11221 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | 72.0044 | — | — | — |
| MD21-01-0304 | 21-11221 | 7.0000–8.0000 | QBT3 | — | 0.0872 | — | — | — | — | — | 13.7615 | — | — | — |
| MD21-01-0523 | 21-11222 | 12.0000–15.0000 | FILL | — | — | — | 0.09 | — | — | — | 5.55386 | — | — | — |
| MD21-01-0525 | 21-11222 | 17.0000–18.0000 | FILL | 0.0198 | — | — | — | — | — | — | 5.49006 | — | — | — |
| RE21-08-7188 | 21-603022 | 12.0000–13.0000 | QBT3 | — | NA | — | — | — | NA | NA | 1.23172 | — | 0.0925 | — |
| RE21-08-7189 | 21-603022 | 14.0000–15.0000 | QBT3 | — | NA | — | — | — | NA | NA | 3.45235 | — | — | — |
| RE21-09-87239 | 21-603022 | 19.0000–20.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | 1.08556 | NA | NA | NA |

**Table 6.16-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Thorium-228 | Thorium-230 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **2.52**[b] | **1.98b**[a] | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **2.28**[b] | **2.29**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **2.3** | **5** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **9** | **5** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **6.8** | **5** | **320000** | **220** | **43** | **160** |
| RE21-08-7190 | 21-603023 | 8.5000–9.5000 | QBT3 | — | NA | — | — | — | NA | NA | 3.49205 | — | — | — |
| RE21-08-7191 | 21-603023 | 10.5000–11.5000 | QBT3 | — | NA | — | — | — | NA | NA | 3.07895 | — | — | — |
| RE21-08-7192 | 21-603024 | 7.5000–8.5000 | QBT3 | — | NA | — | — | — | NA | NA | 0.032996 | — | — | — |
| RE21-08-7193 | 21-603024 | 9.5000–10.5000 | QBT3 | — | — | — | — | — | NA | NA | 0.024938 | — | — | — |
| RE21-08-7194 | 21-603025 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | NA | NA | 16.9046 | — | — | — |
| RE21-08-7195 | 21-603025 | 9.5000–10.5000 | QBT3 | — | — | — | — | — | NA | NA | 29.4052 | — | — | — |
| MD21-09-8722 | 21-603025 | 14.5000–15.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | 0.453771 | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.17-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(j)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Lead | Manganese | Nickel | Nitrate | Perchlorate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **11.2** | **482** | **6.58** | **na**[a] | **na** | **0.3** | **63.5** |
| **SOIL Background Value** | | | | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **22.3** | **671** | **15.4** | **na** | **na** | **1.52** | **48.8** |
| **Residential SSL** | | | | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **400** | **10700** | **1560** | **125000** | **54.8** | **391** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **800** | **145000** | **22700** | **1820000** | **795** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **800** | **463** | **6190** | **496000** | **217** | **1550** | **92900** |
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | —[c] | — | — | — | — | — | — | — | — | — | 0.000861 (J-) | 1.56 (U) | — |
| RE21-07-2286 | 21-600514 | 2.0000–3.0000 | QBT3 | — | — | — | 2710 | 8.55 | — | — | 818 (J) | — | — | — | 1.5 (U) | 98.2 (J-) |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | — | — | 0.498 (U) | — | — | — | — | — | — | — | — | — | — |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | — | 49.6 (J) | — | 5000 | 7.78 | — | — | — | — | — | — | 0.633 (J) | — |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 1.25 | — | — | — |
| RE21-07-2290 | 21-600516 | 2.0000–3.0000 | QBT3 | — | — | — | 3680 (J+) | — | — | — | — | — | 1.16 | — | 1.48 (U) | — |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 36.5 | — | — | 1.67 | — | — | 154 (J+) |
| RE21-07-2292 | 21-600517 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 1.14 | — | 0.707 (J) | — |
| RE21-07-2293 | 21-600518 | 0.0000–0.5000 | SOIL | — | — | 0.497 (U) | — | — | — | — | — | — | 1.88 | — | — | — |
| RE21-07-2294 | 21-600518 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 1.05 | — | 1.51 (U) | — |
| RE21-07-2295 | 21-600519 | 0.0000–0.5000 | SOIL | — | — | 0.504 (U) | — | — | — | — | — | — | 1.25 | — | — | — |
| RE21-07-2296 | 21-600519 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 1.17 | — | 0.623 (J) | — |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 1.27 | — | — | 685 (J-) |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | — | 77.3 (J) | — | 8490 | — | 8.37 | — | — | — | — | 0.0014 (J-) | 1.53 (U) | 90.8 (J-) |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | 2.98 | 78.2 (J) | — | 3440 | — | 5.59 | — | — | 8.14 | — | — | 1.59 (U) | — |
| RE21-07-6180 | 21-601290 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 5.26 | — |
| RE21-07-6181 | 21-601290 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.65 | — |
| RE21-07-6182 | 21-601291 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.04 | — |
| RE21-07-6183 | 21-601291 | 14.0000–15.0000 | QBT3 | — | — | — | — | 7.37 | — | — | — | — | — | — | 5.34 | — |
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | — | — | 0.508 (U) | — | — | — | 35.7 | — | — | — | 0.000754 (J) | — | NA[d] |
| RE21-07-6185 | 21-601292 | 3.0000–4.0000 | QBT3 | — | — | — | — | 10.9 | — | 19.3 | — | — | — | 0.000567 (J) | 1.11 (J) | NA |
| RE21-07-6186 | 21-601293 | 1.0000–2.0000 | QBT3 | — | — | — | — | 8.24 | — | — | — | — | — | — | 0.789 (J) | NA |
| RE21-07-6187 | 21-601293 | 3.0000–4.0000 | QBT3 | — | — | — | — | 7.52 | — | — | — | — | — | — | 0.683 (J) | NA |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | — | — | 0.509 (U) | — | — | — | — | — | — | 5.43 (J-) | 0.0161 | — | NA |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | — | — | 0.56 (U) | — | — | — | — | — | — | 3.23 (J-) | 0.00218 (J-) | 1.68 (U) | NA |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | — | — | 0.571 (U) | — | — | — | — | — | — | — | — | 8.79 | — |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | 3.99 | 88 | — | — | — | — | 15.9 (J) | 569 | 6.72 | — | — | 8.76 | — |

**Table 6.17-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Lead | Manganese | Nickel | Nitrate | Perchlorate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **11.2** | **482** | **6.58** | **na**[a] | **na** | **0.3** | **63.5** |
| **SOIL Background Value** | | | | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **22.3** | **671** | **15.4** | **na** | **na** | **1.52** | **48.8** |
| **Residential SSL** | | | | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **3130** | **400** | **10700** | **1560** | **125000** | **54.8** | **391** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **800** | **145000** | **22700** | **1820000** | **795** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **800** | **463** | **6190** | **496000** | **217** | **1550** | **92900** |
| RE21-07-6192 | 21-601296 | 5.0000–6.0000 | QBT3 | 6.22 | 53.7 | — | — | — | 5.52 | — | — | — | — | — | 7.69 | — |
| RE21-07-6193 | 21-601296 | 7.0000–8.0000 | QBT3 | 5.19 | 61.8 | — | — | — | — | — | — | — | — | — | 6.71 | — |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | 11.6 | 57.2 |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | 4.08 | 75.5 | — | — | 7.24 | 9.71 | 45 (J) | — | — | — | — | 9.4 | 164 |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 5.42 | — |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | 11.3 (J) | — | 6.65 | — | — | 5.93 | — |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | 11.4 | 58.2 |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | — | — | 0.588 (U) | — | — | — | 76.3 (J) | — | — | — | 0.000841 (J-) | 6.7 | 122 |
| RE21-07-6200 | 21-601300 | 2.0000–3.0000 | SOIL | — | — | 0.594 (U) | — | — | — | — | — | — | — | — | 10.9 | — |
| RE21-07-6201 | 21-601300 | 4.0000–5.0000 | QBT3 | 4.28 | 99.5 | — | 3590 (J+) | 19.8 | — | — | — | — | — | — | 5.95 | — |
| RE21-07-6202 | 21-601301 | 2.0000–3.0000 | SOIL | — | — | 0.505 (U) | — | — | — | — | — | — | — | — | 3.89 | — |
| RE21-07-6203 | 21-601301 | 4.0000–5.0000 | SOIL | — | — | 0.52 (U) | — | — | — | — | — | — | — | — | 3.22 | — |
| RE21-07-6204 | 21-601302 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.41 | — |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 5.08 | — |
| RE21-07-6206 | 21-601302 | 22.0000–23.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.87 | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

**Table 6.17-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(j)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Bis(2-ethylhexyl) phthalate | Carbon Disulfide |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **347** | **1940** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **1370** | **7540** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **4760** | **5890** |
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | —[b] | NA[c] | — | NA | NA | — | 0.0166 (J) | 0.0324 (J) | — | — | NA |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | 0.0479 | NA | 0.0738 | NA | NA | 0.15 | — | 0.215 | 0.109 | — | NA |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | NA |
| RE21-08-10292 | 21-600516 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.0047 | 0.0041 | NA | NA | NA | NA | NA | NA |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | 0.0216 (J) | — | — | — | — | NA |
| RE21-08-10294 | 21-600517 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.0368 | 0.0238 | NA | NA | NA | NA | NA | NA |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | — | NA | 0.011 (J) | NA | NA | — | — | 0.0719 | — | — | NA |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | — | — | 0.00981 (J) | NA | NA | — | — | 0.0236 (J) | — | — | — |
| RE21-07-2253 | 21-600524 | 5.0000–6.0000 | QBT3 | NA | NA | NA | 0.941 | 0.369 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | — | 0.0099 | — | NA | NA | — | — | — | — | — | — |
| RE21-08-10300 | 21-600524 | 6.0000–7.0000 | QBT3 | NA | NA | NA | 0.0039 | 0.0021 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | — | — | — | NA | NA | — | — | 0.0245 (J) | 0.0131 (J) | — | — |
| RE21-08-10286 | 21-601292 | 1.0000–2.0000 | SOIL | NA | NA | NA | 0.326 | 0.26 | NA | NA | NA | NA | NA | NA |
| RE21-08-10287 | 21-601292 | 3.0000–4.0000 | QBT3 | NA | NA | NA | 0.0394 | 0.0326 | NA | NA | NA | NA | NA | NA |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | 0.0406 | — | 0.0627 | NA | NA | 0.099 | 0.102 | 0.155 | 0.0666 | — | — |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-08-10288 | 21-601297 | 3.0000–4.0000 | SOIL | NA | NA | NA | 0.013 | 0.0086 | NA | NA | NA | NA | NA | NA |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-08-10289 | 21-601297 | 5.0000–6.0000 | QBT3 | NA | NA | NA | 0.0027 (J) | 0.0024 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-08-10291 | 21-601298 | 4.5000–5.5000 | QBT3 | NA | NA | NA | 0.0016 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | — | — | — | NA | NA | — | — | — | — | 0.0878 (J) | — |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | — | — | — | NA | NA | — | — | — | — | — | — |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | 0.00287 (J) |

**Table 6.17-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chloroform | Chrysene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **5.72** | **621** | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **31.9** | **2340** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **671** | **20600** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | NA | — | 0.0377 | — | NA | NA | NA | NA | NA | NA |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | NA | 0.154 | 0.387 | 0.0363 | NA | NA | NA | NA | NA | NA |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | NA | — | 0.0139 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10292 | 21-600516 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | NA | 0.0236 (J) | 0.0368 | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10294 | 21-600517 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | NA | 0.0513 | 0.0892 | — | NA | NA | NA | NA | NA | NA |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | 0.000281 (J) | — | 0.042 | — | NA | NA | NA | NA | NA | NA |
| RE21-07-2253 | 21-600524 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | 1.08E-05 | 2.08E-05 | 4.43E-06 | 7.68E-06 | 0.0000006 (J) | 0.000000426 (J) |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | 0.000237 (J) | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10300 | 21-600524 | 6.0000–7.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | — | 0.0129 (J) | 0.0184 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10286 | 21-601292 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10287 | 21-601292 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | — | 0.108 | 0.298 | 0.027 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | — | — | 0.0234 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10288 | 21-601297 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10289 | 21-601297 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA |
| RE21-08-10291 | 21-601298 | 4.5000–5.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | — | — | 0.0263 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | — | 0.0118 (J) | 0.0197 (J) | — | NA | NA | NA | NA | NA | NA |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | — | — | — | — | NA | NA | NA | NA | NA | NA |

**Table 6.17-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[e] | **199** | **45** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[e] | **1090** | **252** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[e] | **10600** | **702** | **na** | **na** |
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0867 | NA | NA | 0.0102 (J) | NA | NA |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA |
| RE21-08-10292 | 21-600516 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA |
| RE21-08-10294 | 21-600517 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | 0.000368 (J) | — | — | NA | NA |
| RE21-07-2253 | 21-600524 | 5.0000–6.0000 | QBT3 | 4.38E-06 | 0.000000886 (J) | 0.000000175 (J) | 4.33E-06 | NA | NA | NA | NA | 8.51E-05 | 1.03E-05 |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | 0.00762 | — | — | NA | NA |
| RE21-08-10300 | 21-600524 | 6.0000–7.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA |
| RE21-08-10286 | 21-601292 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10287 | 21-601292 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | NA | NA | NA | NA | 0.0599 | — | — | 0.0122 (J) | NA | NA |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | — | — | 0.00387 (J) | — | NA | NA |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | — | 0.00299 (J) | — | NA | NA |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | — | — | 0.00353 (J) | — | NA | NA |
| RE21-08-10288 | 21-601297 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | — | 0.0034 (J) | — | NA | NA |
| RE21-08-10289 | 21-601297 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | NA | NA | NA | NA | — | — | 0.00302 (J) | — | NA | NA |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | NA | NA | NA | NA | — | — | 0.00331 (J) | — | NA | NA |
| RE21-08-10291 | 21-601298 | 4.5000–5.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | — | — | 0.00312 (J) | — | NA | NA |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | NA | NA | NA | NA | — | — | 0.00348 (J) | — | NA | NA |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA |

**Table 6.17-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzo dioxin[1,2,3,7,8-] | Pentachlorodibenzo dioxins (Total) | Pentachlorodibenzo furan[1,2,3,7,8-] | Pentachlorodibenzo furan[2,3,4,7,8-] | Pentachlorodibenzo furans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzo furan[2,3,7,8-] | Tetrachlorodibenzo furans (Totals) | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** |
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0229 (J) | 0.0346 (J) | NA | NA | NA |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.291 | 0.345 | NA | NA | NA |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | 0.000673 (J) |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-08-10292 | 21-600516 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0164 (J) | 0.0276 (J) | NA | NA | NA |
| RE21-08-10294 | 21-600517 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0491 | 0.0964 | NA | NA | NA |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | 0.0355 | 0.0348 (J) | NA | NA | 0.00177 |
| RE21-07-2253 | 21-600524 | 5.0000–6.0000 | QBT3 | 0.000000159 (J) | 1.59E-07 | 0.000000463 (J) | 0.00000035 (J) | 3.5E-06 | NA | NA | 0.000000476 (J) | 2.25E-06 | NA |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | 0.00127 |
| RE21-08-10300 | 21-600524 | 6.0000–7.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | — | 0.0139 (J) | NA | NA | — |
| RE21-08-10286 | 21-601292 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10287 | 21-601292 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | NA | NA | NA | NA | NA | 0.223 | 0.212 | NA | NA | — |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | NA | NA | NA | NA | NA | 0.0198 (J) | 0.0193 (J) | NA | NA | — |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-08-10288 | 21-601297 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-08-10289 | 21-601297 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | — |
| RE21-08-10291 | 21-601298 | 4.5000–5.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | — | 0.0318 (J) | NA | NA | — |

**Table 6.17-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzo dioxin[1,2,3,7,8-] | Pentachlorodibenzo dioxins (Total) | Pentachlorodibenzo furan[1,2,3,7,8-] | Pentachlorodibenzo furan[2,3,4,7,8-] | Pentachlorodibenzo furans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzo furan[2,3,7,8-] | Tetrachlorodibenzo furans (Totals) | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | NA | NA | NA | NA | NA | — | 0.0195 (J) | NA | NA | — |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | NA | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table 6.17-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(j)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **33** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **36** | **320000** | **220** | **43** |
| RE21-07-2285 | 21-600514 | 0.0000–0.5000 | SOIL | 0.122 | —[c] | 0.176 | 0.033319 | — | — |
| RE21-07-2286 | 21-600514 | 2.0000–3.0000 | QBT3 | — | NA[d] | 0.0904 | 0.017719 | — | — |
| RE21-07-2287 | 21-600515 | 0.0000–0.5000 | SOIL | 0.0386 | — | 0.102 | 0.009152 | — | — |
| RE21-07-2288 | 21-600515 | 2.0000–3.0000 | QBT3 | — | — | — | 0.027559 | — | — |
| RE21-07-2289 | 21-600516 | 0.0000–0.5000 | SOIL | 0.0592 | — | 0.423 | 0.004254 | — | — |
| RE21-07-2291 | 21-600517 | 0.0000–0.5000 | SOIL | — | — | 0.0838 | — | 2.74 | — |
| RE21-07-2292 | 21-600517 | 2.0000–3.0000 | QBT3 | — | — | — | 0.009617 | 3.43 | 0.251 |
| RE21-07-2293 | 21-600518 | 0.0000–0.5000 | SOIL | — | — | 0.0939 | — | — | — |
| RE21-07-2294 | 21-600518 | 2.0000–3.0000 | QBT3 | — | — | 0.0391 | — | — | — |
| RE21-07-2305 | 21-600524 | 0.0000–0.5000 | SOIL | 0.145 | NA | 0.158 | 0.032207 | 7.79 | 0.488 |
| RE21-07-2306 | 21-600524 | 2.0000–3.0000 | QBT3 | — | NA | 0.0413 | 0.030735 | 21.3 | 1.4 |
| RE21-07-2307 | 21-600524 | 5.0000–6.0000 | QBT3 | — | — | — | 0.058103 | 5.96 | 0.327 |
| RE21-07-6180 | 21-601290 | 12.0000–13.0000 | QBT3 | — | — | — | 0.127778 | — | — |
| RE21-07-6181 | 21-601290 | 14.0000–15.0000 | QBT3 | — | — | — | 0.138053 | — | — |
| RE21-07-6182 | 21-601291 | 12.0000–13.0000 | QBT3 | — | — | — | 0.354324 | 5.68 | 0.247 |
| RE21-07-6183 | 21-601291 | 14.0000–15.0000 | QBT3 | — | — | — | 0.384583 | 7.17 | 0.296 |
| RE21-07-6184 | 21-601292 | 1.0000–2.0000 | SOIL | — | — | — | 0.05631 | 21.7 | 0.799 |
| RE21-07-6185 | 21-601292 | 3.0000–4.0000 | QBT3 | — | — | — | — | 3.56 | 0.215 |
| RE21-07-6186 | 21-601293 | 1.0000–2.0000 | QBT3 | — | — | — | 0.024857 | — | — |
| RE21-07-6187 | 21-601293 | 3.0000–4.0000 | QBT3 | — | — | — | 0.022489 | — | — |
| RE21-07-6188 | 21-601294 | 0.5000–1.5000 | SOIL | — | NA | 0.0766 | 0.026355 | 8.7 | 0.557 |
| RE21-07-6189 | 21-601294 | 2.5000–3.5000 | SOIL | — | 0.144 | — | 0.161198 | 4.57 | 0.222 |
| RE21-07-6190 | 21-601295 | 3.0000–4.0000 | SOIL | — | — | — | 0.412994 | — | — |
| RE21-07-6191 | 21-601295 | 5.0000–6.0000 | QBT3 | — | — | — | 0.329569 | — | — |
| RE21-07-6192 | 21-601296 | 5.0000–6.0000 | QBT3 | — | — | — | 0.276403 | — | — |
| RE21-07-6193 | 21-601296 | 7.0000–8.0000 | QBT3 | — | — | — | 0.220721 | — | — |

**Table 6.17-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **33** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **36** | **320000** | **220** | **43** |
| RE21-07-6194 | 21-601297 | 3.0000–4.0000 | SOIL | — | — | — | 0.183452 | — | — |
| RE21-07-6195 | 21-601297 | 5.0000–6.0000 | QBT3 | — | — | — | 0.225421 | — | — |
| RE21-07-6196 | 21-601298 | 2.5000–3.5000 | QBT3 | — | — | — | 0.221317 | — | — |
| RE21-07-6197 | 21-601298 | 4.5000–5.5000 | QBT3 | — | — | — | 0.266766 | — | — |
| RE21-07-6198 | 21-601299 | 3.0000–4.0000 | SOIL | — | NA | 0.07 | 0.094419 | — | — |
| RE21-07-6199 | 21-601299 | 5.0000–6.0000 | SOIL | — | — | 0.0582 | 0.203102 | — | — |
| RE21-07-6200 | 21-601300 | 2.0000–3.0000 | SOIL | — | — | — | 0.147285 | — | — |
| RE21-07-6201 | 21-601300 | 4.0000–5.0000 | QBT3 | — | — | — | 0.128408 | — | — |
| RE21-07-6202 | 21-601301 | 2.0000–3.0000 | SOIL | — | — | — | 0.768421 | — | — |
| RE21-07-6203 | 21-601301 | 4.0000–5.0000 | SOIL | — | — | — | 0.142641 | — | — |
| RE21-07-6204 | 21-601302 | 12.0000–13.0000 | QBT3 | — | — | — | 0.387928 | — | — |
| RE21-07-6205 | 21-601302 | 17.0000–18.0000 | QBT3 | — | — | — | 0.418153 | — | — |
| RE21-07-6206 | 21-601302 | 22.0000–23.0000 | QBT3 | — | — | — | 0.280522 | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.18-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(k)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **619**[d] |
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | — | — | — | — | — | — | 7.08 (J+) |
| RE21-07-3840 | 21-600843 | 2.0000–3.0000 | QBT3 | — | — | 56.3 (J+) | — | — | 3420 | 8.73 | — | — | — | — | 10.2 (J+) |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.499 (U) | — | — | — | — | — | — | 9.74 (J+) |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 3510 | — | — | — | — | — | 8.77 (J+) |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.518 (U) | — | — | — | — | 0.618 | — | 9.13 (J+) |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | 9200 | 6.85 | 104 (J+) | 2.65 | — | 14000 | 17.5 | 4.83 | 10.6 | — | 13.7 | 16.4 (J+) |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.492 (U) | — | — | — | — | — | — | 6.76 (J+) |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 8.43 | — | — | — | 38.5 | 3.76 (J+) |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.495 (U) | — | — | — | — | — | — | 5.33 (J) |
| RE21-07-3848 | 21-600847 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.7 (J) |
| RE21-07-3849 | 21-600848 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.503 (U) | — | — | — | — | — | — | 4.95 (J) |
| RE21-07-3850 | 21-600848 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 3290 | — | — | — | — | — | 3.46 (J) |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.492 (U) | — | — | — | — | — | — | 6.8 (J) |
| RE21-07-3852 | 21-600849 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 2520 | — | — | — | — | — | 7.81 (J) |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.508 (U) | — | — | — | — | — | — | 11.6 (J) |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.59 (J) |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.497 (U) | — | — | — | — | — | — | 5.02 (J) |
| RE21-07-3856 | 21-600851 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 6.59 (J) |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.483 (U) | — | — | — | — | — | — | 5.82 (J) |
| RE21-07-3858 | 21-600852 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.63 (J) |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.488 (U) | — | — | — | — | — | — | 7.57 (J) |
| RE21-07-3860 | 21-600853 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 4.39 (J) |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.507 (U) | — | — | — | — | — | — | 7.48 (J) |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | — | — | 49.4 | — | — | 4070 | 7.64 | — | — | — | — | 8.51 (J) |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.528 (U) | — | — | — | — | 0.543 | — | 5.6 (J+) |
| RE21-07-3873 | 21-600859 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.562 (U) | — | — | — | — | — | — | 18.3 (J+) |
| RE21-07-3874 | 21-600859 | 5.0000–6.0000 | QBT3 | 11100 | 5.22 | 162 (J+) | 2.39 | — | 34000 | 15.4 | 4.38 | 10.8 | — | 14.1 | 19.1 (J+) |

**Table 6.18-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **619**[d] |
| MD21-09-8718 | 21-600859 | 10.0000–11.0000 | QBT3 | 7500 | 3.6 | 220 | — | — | 55000 | — | — | 7.9 | NA | — | NA |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.503 (U) | — | — | — | — | — | — | 5.66 (J+) |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | — | 3.38 | — | — | — | — | — | — | — | — | — | 9.68 (J+) |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | — | 2.86 | — | 1.42 | — | 3470 | — | — | 5.74 | — | — | 11.5 (J+) |
| RE21-08-7241 | 21-603037 | 8.5000–9.5000 | QBT3 | — | 3.31 | — | — | — | — | — | — | — | 0.625 | 16.8 | 7.27 |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 6.11 |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | — | — | — | 1.95 | 0.596 (U) | — | — | — | — | — | — | 28.8 |
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | 10000 | 6.24 | 101 | 1.34 | — | 2830 | 8.08 | 3.26 | 7.86 | — | 16.8 | 17.6 |
| RE21-08-7245 | 21-603039 | 7.5000–8.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 8.89 |
| RE21-08-7246 | 21-603039 | 9.5000–10.5000 | QBT3 | — | 3.88 | — | — | — | 2600 | — | — | — | — | — | 5.79 |
| RE21-08-7247 | 21-603040 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 10.3 |
| RE21-08-7248 | 21-603040 | 7.0000–8.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 2.74 |
| RE21-08-7249 | 21-603041 | 5.5000–6.5000 | SOIL | — | — | — | — | — | 6190 | — | — | — | — | — | 10.8 |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | 9.18 |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | — | 5.1 | 53.3 | — | — | 5450 | — | — | — | — | 17 | 10.2 |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | — | 4.81 | — | — | — | 4710 | — | — | — | — | — | 9.92 |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 6.48 |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 5.4 |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | — | 3.28 | — | — | — | — | 7.37 | — | — | — | — | 7.16 |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 6.97 |
| RE21-08-7257 | 21-603045 | 11.0000–12.0000 | QBT3 | — | — | — | — | — | — | 7.2 | — | — | — | — | 7.41 (J+) |
| RE21-08-7258 | 21-603045 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 7.42 (J+) |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | — | — | 88 | — | — | 3390 (J) | — | — | 15.7 | — | 13.4 | 9.06 |
| RE21-08-7260 | 21-603046 | 4.0000–5.0000 | QBT3 | — | — | 91 | — | — | 6760 (J) | 9.22 | — | — | — | — | 9.66 |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | — | — | — | — | — | — | — | — | 4.76 | — | — | 9.23 |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | — | — | — | — | — | — | — | — | 5.32 | — | — | 8.83 |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | — | — | 69.4 | — | — | 3890 | — | — | — | — | — | 19.7 (J+) |
| RE21-08-7276 | 21-603054 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | 9.8 | — | — | — | — | 4.44 (J+) |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 5.76 (J+) |
| RE21-08-7281 | 21-603056 | 11.0000–12.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 3.68 (J+) |

**Table 6.18-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **156** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **1560** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **800** | **619**[d] |
| RE21-08-7282 | 21-603056 | 16.0000–17.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 3.52 (J+) |
| RE21-08-7283 | 21-603056 | 21.0000–22.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | 3.9 (J+) |
| RE21-08-7284 | 21-603056 | 26.0000–27.0000 | QBT3 | — | — | — | — | — | 3930 (J) | — | — | — | — | — | 16.2 (J+) |
| RE21-08-7285 | 21-603056 | 31.0000–32.0000 | QBT3 | — | — | — | — | — | 3000 (J) | — | — | — | — | — | 37.3 (J+) |

**Table 6.18-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **1550** | **92900** |
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.01 (J) | — | — | — | 27.4 | — | 132 |
| RE21-07-3840 | 21-600843 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.15 | — | 1.26 (J) | — | 18.4 | — | — |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | — | — | — | — | 4.76 | — | — | — | 24.4 | — | — |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.26 | — | 0.946 (J) | — | 14.2 | — | — |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.2 | — | 1.55 (U) | — | 16.3 | — | — |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | 2210 | — | — | 18.4 | — | — | 1.52 (J) | — | 46.7 | — | — |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.84 | — | — | — | 17.9 | — | — |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.82 | — | 1.51 (U) | — | 0.661 | — | — |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.46 (J+) | — | — | — | 10.3 | — | 62.2 |
| RE21-07-3848 | 21-600847 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.88 (J+) | — | 1.49 (U) | — | 3.74 | — | — |
| RE21-07-3849 | 21-600848 | 0.0000–0.5000 | SOIL | — | — | — | — | 3.87 (J+) | — | — | — | 13.9 | — | — |
| RE21-07-3850 | 21-600848 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.89 (J+) | — | 1.49 (U) | — | 8.06 | — | — |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | — | — | — | — | 3.42 (J+) | — | — | — | 33.1 | — | — |

**Table 6.18-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **1550** | **92900** |
| RE21-07-3852 | 21-600849 | 2.0000–3.0000 | QBT3 | — | — | — | — | 2.58 (J+) | — | 1.47 (U) | — | 15.4 | — | — |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | — | — | — | — | 4.03 (J+) | 0.00181 (J) | — | — | 26 | — | — |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | — | — | — | — | 2.78 (J+) | — | 0.898 (J) | — | 9.6 | — | — |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.17 (J+) | — | — | — | 6.26 | — | — |
| RE21-07-3856 | 21-600851 | 2.0000–3.0000 | QBT3 | — | — | — | — | 3.73 (J+) | — | 0.606 (J) | — | 4.62 | — | — |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.3 (J+) | 0.000537 (J-) | — | — | 8.68 | — | — |
| RE21-07-3858 | 21-600852 | 2.0000–3.0000 | QBT3 | — | — | — | — | 2.46 (J+) | — | 0.528 (J) | — | 5.02 | — | — |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.81 (J+) | — | — | — | 16.8 | — | 52.5 |
| RE21-07-3860 | 21-600853 | 2.0000–3.0000 | QBT3 | — | — | — | — | 3.37 (J+) | — | 1.5 (U) | — | 7.03 | — | — |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | — | — | — | — | 4.58 (J+) | — | — | — | 11.6 | — | — |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | — | — | — | — | 3.48 (J+) | 0.00464 | 0.877 (J) | — | 20.3 | — | — |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.73 | 0.00492 | 1.59 (U) | — | 30.1 | — | — |
| RE21-07-3873 | 21-600859 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.00227 (J) | 1.8 | — | 36.8 | — | — |
| RE21-07-3874 | 21-600859 | 5.0000–6.0000 | QBT3 | 3840 | — | — | 18 | — | 0.00241 | 1.18 (J) | — | 98.7 | 19.2 | — |
| MD21-09-8718 | 21-600859 | 10.0000–11.0000 | QBT3 | 2900 | — | — | 8.2 | NA[f] | NA | 0.56 (U) | 1.1 (U) | 120 | — | — |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.23 (J+) | — | — | — | 12.3 | — | — |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | — | — | — | — | 2.01 (J+) | — | 1.58 (U) | — | 14.2 | — | — |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | — | — | — | 8.64 | — | — | 0.737 (J) | — | 15.4 | — | — |
| RE21-08-7241 | 21-603037 | 8.5000–9.5000 | QBT3 | — | — | — | — | 3.61 (J+) | — | 1.6 (U) | — | 9.1 | — | — |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | — | — | — | — | 3.88 (J+) | — | 1.62 (U) | — | 5.89 | — | — |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | — | — | — | — | 7.43 (J+) | — | 1.79 (U) | — | 17.7 | — | — |
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | 2510 (J+) | 552 | — | 11.4 | 5.75 (J+) | — | 1.42 (J) | — | 29.6 | — | — |
| RE21-08-7245 | 21-603039 | 7.5000–8.5000 | QBT3 | — | — | — | — | 5.28 (J+) | — | 1.53 (U) | — | 5.35 | — | — |
| RE21-08-7246 | 21-603039 | 9.5000–10.5000 | QBT3 | — | — | — | — | 3.52 (J+) | — | 1.54 (U) | — | 4.87 | — | — |
| RE21-08-7247 | 21-603040 | 5.0000–6.0000 | QBT3 | — | — | — | — | 3.46 (J+) | — | 1.66 (U) | — | 1.28 | — | — |
| RE21-08-7248 | 21-603040 | 7.0000–8.0000 | QBT3 | — | — | — | — | 2.81 (J+) | — | 1.64 (U) | — | 1.67 | — | — |
| RE21-08-7249 | 21-603041 | 5.5000–6.5000 | SOIL | — | — | — | — | 39.5 | 0.0041 (J-) | 1.55 (U) | — | 20.9 | — | — |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | — | — | — | — | 21.9 | 0.00465 (J-) | 1.56 (U) | — | 14.1 | — | — |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | — | — | — | — | 16.3 | 0.025 (J-) | 0.949 (J) | — | 18.4 | — | — |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | — | — | — | — | 13.5 | 0.0112 (J-) | 1.56 (U) | — | 15.8 | — | — |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | — | — | — | — | 6.67 | 0.000703 (J-) | 1.5 (U) | — | 4.81 | — | — |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | — | — | — | — | 4.91 | 0.00056 (J-) | 1.5 (U) | — | 3.21 | — | — |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | — | — | — | — | 0.977 (J) | 0.000752 (J-) | 1.5 (U) | — | 7.5 | — | — |

**Table 6.18-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **186000** | **1550** | **92900** |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | — | — | — | — | 0.987 (J) | 0.000729 (J-) | 1.5 (U) | — | 4.9 | — | — |
| RE21-08-7257 | 21-603045 | 11.0000–12.0000 | QBT3 | — | — | — | — | — | — | 0.873 (J) | — | 4.47 | — | — |
| RE21-08-7258 | 21-603045 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | 0.661 (J) | — | 6.49 | — | — |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | — | — | 1.74 | — | 6.8 (J-) | 0.00194 (J) | 1.57 (U) | — | 20 | — | — |
| RE21-08-7260 | 21-603046 | 4.0000–5.0000 | QBT3 | — | — | 0.136 | — | 15.6 (J-) | 0.00514 | 0.798 (J) | — | 23.4 | — | — |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | — | — | — | — | — | — | 2.37 | — | 7.34 | — | — |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | — | — | — | — | — | — | 3.26 | — | 8.75 | — | — |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | — | — | — | 8.09 | 1.52 (J-) | — | 1.98 | — | 24.4 | — | — |
| RE21-08-7276 | 21-603054 | 15.0000–16.0000 | QBT3 | — | — | — | — | 2.3 (J-) | — | 1.64 | — | 3.84 | — | — |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | — | — | — | — | 2.72 (J-) | — | 1.21 (J) | — | 5.09 | — | — |
| RE21-08-7281 | 21-603056 | 11.0000–12.0000 | QBT3 | — | — | — | — | 0.871 (J) | — | 1.45 (U) | — | 0.823 (J+) | — | — |
| RE21-08-7282 | 21-603056 | 16.0000–17.0000 | QBT3 | — | — | — | — | 0.937 (J) | — | 1.48 (U) | — | 0.3 (J+) | — | — |
| RE21-08-7283 | 21-603056 | 21.0000–22.0000 | QBT3 | — | — | — | — | — | — | 1.51 (U) | — | 0.684 (J+) | — | — |
| RE21-08-7284 | 21-603056 | 26.0000–27.0000 | QBT3 | — | — | — | — | 0.945 (J) | 0.000731 (J) | 1.13 (J) | — | 22.1 (J+) | — | — |
| RE21-08-7285 | 21-603056 | 31.0000–32.0000 | QBT3 | — | — | — | — | 0.954 | — | 0.598 (J) | — | 14.1 (J+) | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.18-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(k)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene | Dichlorobenzene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **621** | **32.2** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2340** | **180** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **20600** | **3780** |
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | —[b] | NA[c] | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | 0.0587 | NA | 0.0873 | NA | NA | 0.186 | — | 0.261 | 0.216 (J) | — | 0.199 | — |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | 0.0123 (J) | — | 0.018 (J) | NA | NA | — | — | 0.0292 (J) | — | 0.0194 (J) | 0.0304 (J) | — |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | 0.0267 (J) | — | — | 0.0202 (J) | — |
| RE21-08-10365 | 21-600847 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.0065 | 0.006 | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3848 | 21-600847 | 2.0000–3.0000 | QBT3 | — | 0.0146 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | 0.0338 (J) | — | — | 0.0353 | — |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | — | 0.00442 (J) | — | NA | NA | — | — | 0.0118 (J) | — | — | — | — |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | 0.0217 (J) | — |
| RE21-08-10367 | 21-600851 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.0094 | 0.0097 | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3893 | 21-600851 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 0.0012 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | 0.0341 | — | — | 0.0241 (J) | — |
| RE21-07-3860 | 21-600853 | 2.0000–3.0000 | QBT3 | — | 0.0141 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | — | 0.0142 | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | — | NA | 0.0106 (J) | NA | NA | — | 0.0349 (J) | 0.045 | — | — | 0.0335 (J) | — |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | 0.0141 (J) | — |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | — | 0.00419 (J) | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | — | — | — | NA | NA | — | — | — | — | — | — | — |

**Table 6.18-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene | Dichlorobenzene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **621** | **32.2** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2340** | **180** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **20600** | **3780** |
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | — | — | — | NA | NA | 0.0177 (J) | 0.139 | 0.02 (J) | — | — | 0.0164 (J) | — |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | — | — | — | NA | NA | 0.0105 (J) | — | — | — | — | — | — |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | — | — | 0.00905 (J) | NA | NA | 0.0182 (J) | 0.123 | 0.0207 (J) | — | — | 0.0174 (J) | — |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | — | — | 0.0251 (J) | NA | NA | — | 0.136 | 0.069 | 0.0148 (J) | — | 0.0509 | — |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | — | — | — | NA | NA | — | 0.113 | — | — | — | — | — |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | — | — | — | NA | NA | — | 0.107 | 0.0139 (J) | — | — | 0.00985 (J) | — |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | — | — | — | NA | NA | — | 0.112 | — | — | — | — | — |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | 0.0149 (J) | 0.0165 (J) | 0.0164 (J) | — | 0.0148 (J) | — |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | — | — | 0.0194 (J) | NA | NA | — | 0.0248 (J) | 0.0337 (J) | 0.0175 (J) | — | 0.0302 (J) | — |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | — | — | 0.0213 (J) | NA | NA | 0.0441 | 0.0357 (J) | 0.044 | 0.0263 (J) | 0.0183 (J) | 0.0408 | 0.000358 (J) |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | 0.057 | — | 0.127 | NA | NA | 0.131 | 0.107 | 0.121 | 0.0895 | — | 0.121 | — |

**Table 6.18-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8—] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8—] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,7,8,9—] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8—] | Hexachlorodibenzofuran [1,2,3,6,7,8—] | Hexachlorodibenzofuran [2,3,4,6,7,8—] | Hexachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | 0.0473 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | 0.0316 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | 0.0604 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | 0.516 | 0.0405 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | 0.0902 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | 0.0345 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10365 | 21-600847 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3848 | 21-600847 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | 0.0182 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | 0.0241 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | 0.0357 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10367 | 21-600851 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3893 | 21-600851 | 2.0000–3.0000 | QBT3 | NA | NA | 8.63E-06 | 1.59E-05 | 3.57E-06 | 6.58E-06 | 0.000000367 (J) | 2.54E-06 | 0.000000301 (J) | 0.000000207 (J) | 0.000000229 (J) | 3.2E-06 |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | 0.0119 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | 0.0493 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3860 | 21-600853 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | 0.0107 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | 0.0608 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | 0.0262 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | 0.0995 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | 0.115 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.18-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8—] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8—] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,7,8,9—] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8—] | Hexachlorodibenzofuran [1,2,3,6,7,8—] | Hexachlorodibenzofuran [2,3,4,6,7,8—] | Hexachlorodibenzofurans (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | 0.141 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7249 | 21-603041 | 5.5000–6.5000 | SOIL | 0.104 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | 0.109 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | 0.129 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | 0.209 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | 0.106 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | 0.106 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | 0.103 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | 0.0993 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | 0.041 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | 0.0761 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | 0.0212 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | 0.117 | — | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | 0.402 | 0.0576 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.18-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Indeno (1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylnaphthalene[2-] | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trimethylbenzene[1,2,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6.21** | **3210**[e] | **310**[f] | **na** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** | **62**[f] |
| **Industrial SSL** | | | | **23.4** | **14900**[e] | **4100**[f] | **na** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** | **260**[f] |
| **Construction Worker SSL** | | | | **213** | **10300**[e] | **1240**[g] | **na** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** | **688**[g] |
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0221 (J) | 0.0431 | NA | NA | NA | NA |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | — | — | NA | NA | NA | NA |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | 0.000394 (J) | — |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.035 (J) | 0.0631 | NA | NA | NA | NA |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | 0.000857 (J) | — |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | 0.186 (J) | NA | 0.00858 (J) | NA | NA | NA | 0.377 | 0.485 | NA | NA | NA | NA |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | 0.0724 | 0.0779 | NA | NA | — | — |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0197 (J) | 0.0276 (J) | NA | NA | NA | NA |
| RE21-08-10365 | 21-600847 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3848 | 21-600847 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0113 (J) | 0.0163 (J) | NA | NA | NA | NA |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0144 (J) | 0.0194 (J) | NA | NA | NA | NA |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0166 (J) | 0.0339 | NA | NA | NA | NA |
| RE21-08-10367 | 21-600851 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3893 | 21-600851 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 5.21E-05 | 8.8E-06 | 7.29E-07 | NA | NA | 0.000000154 (J) | 3.78E-07 | NA | NA |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | — | 0.0137 (J) | NA | NA | NA | NA |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0272 (J) | 0.0403 | NA | NA | NA | NA |
| RE21-07-3860 | 21-600853 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | — | — | NA | NA | NA | NA |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | 0.000539 (J) | — |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.0426 | 0.0491 | NA | NA | NA | NA |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | NA | 0.017 (J) | 0.0241 (J) | NA | NA | NA | NA |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | 0.000583 (J) | — |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | — | 0.000969 (J) | — | NA | NA | NA | — | — | NA | NA | 0.00123 | — |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |

**Table 6.18-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Indeno (1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylnaphthalene[2-] | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trimethylbenzene[1,2,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | 0.0198 (J) | — | — | NA | NA | NA | 0.021 (J) | 0.0275 (J) | NA | NA | — | — |
| RE21-08-7249 | 21-603041 | 5.5000–6.5000 | SOIL | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | 0.0137 (J) | — | — | NA | NA | NA | 0.0128 (J) | 0.0128 (J) | NA | NA | — | — |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | 0.0171 (J) | — | — | NA | NA | NA | 0.0316 (J) | 0.0357 | NA | NA | — | — |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | 0.0248 (J) | — | — | NA | NA | NA | 0.107 | 0.118 | NA | NA | — | — |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | 0.0138 (J) | — | — | NA | NA | NA | — | 0.0137 (J) | NA | NA | — | — |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | 0.0139 (J) | — | — | NA | NA | NA | 0.0181 (J) | 0.0215 (J) | NA | NA | — | — |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | — | — | — | NA | NA | NA | — | — | NA | NA | — | — |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | 0.0117 (J) | — | — | NA | NA | NA | 0.0198 (J) | 0.0316 (J) | NA | NA | — | — |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | 0.0156 (J) | — | — | NA | NA | NA | 0.0622 | 0.0608 | NA | NA | — | — |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | — | — | — | NA | NA | NA | 0.0175 (J) | 0.018 (J) | NA | NA | — | — |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | 0.0247 (J) | — | — | NA | NA | NA | 0.0826 | 0.115 | NA | NA | — | 0.000463 (J) |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | 0.0792 | — | 0.0152 (J) | NA | NA | NA | 0.399 | 0.327 | NA | NA | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table 6.18-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(k)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-07-3839 | 21-600843 | 0.0000–0.5000 | SOIL | 0.127 | —[c] | 0.096 | 0.14 | 0.022441 | — | — |
| RE21-07-3840 | 21-600843 | 2.0000–3.0000 | QBT3 | — | NA[d] | — | 0.0485 | 0.032091 | — | — |
| RE21-07-3841 | 21-600844 | 0.0000–0.5000 | SOIL | 0.0588 | — | — | 0.638 | 0.021163 | — | — |
| RE21-07-3842 | 21-600844 | 2.0000–3.0000 | QBT3 | — | NA | — | 0.0457 | 0.037146 | — | — |
| RE21-07-3843 | 21-600845 | 0.0000–0.5000 | SOIL | 0.205 | 1.78 | — | 1.13 | 0.029631 | — | — |
| RE21-07-3844 | 21-600845 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.171589 | — | — |
| RE21-07-3845 | 21-600846 | 0.0000–0.5000 | SOIL | 0.161 | NA | — | 0.0927 | 0.004391 | — | — |
| RE21-07-3846 | 21-600846 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.01776 | — | — |
| RE21-07-3847 | 21-600847 | 0.0000–0.5000 | SOIL | 0.0396 | — | — | 0.0636 | — | — | — |
| RE21-07-3849 | 21-600848 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.010816 | — | — |
| RE21-07-3850 | 21-600848 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.007052 | — | — |
| RE21-07-3851 | 21-600849 | 0.0000–0.5000 | SOIL | — | — | — | 0.175 | — | 4.92 | — |
| RE21-07-3852 | 21-600849 | 2.0000–3.0000 | QBT3 | — | NA | — | — | — | 3.79 | 0.191 |
| RE21-07-3853 | 21-600850 | 0.0000–0.5000 | SOIL | 0.0483 | — | — | 0.372 | 0.016578 | 3.88 | — |
| RE21-07-3854 | 21-600850 | 2.0000–3.0000 | QBT3 | — | 0.281 | — | 0.273 | 0.013773 | 2.16 | 0.131 |
| RE21-07-3855 | 21-600851 | 0.0000–0.5000 | SOIL | 0.0614 | — | — | 0.109 | — | — | — |
| RE21-07-3856 | 21-600851 | 2.0000–3.0000 | QBT3 | — | 0.177 | — | — | — | — | — |
| RE21-07-3857 | 21-600852 | 0.0000–0.5000 | SOIL | — | — | — | 0.0703 | — | — | — |
| RE21-07-3859 | 21-600853 | 0.0000–0.5000 | SOIL | 0.0731 | — | — | 0.478 | 0.005449 | — | — |
| RE21-07-3861 | 21-600854 | 0.0000–0.5000 | SOIL | — | — | — | 0.143 | 0.008225 | — | — |
| RE21-07-3862 | 21-600854 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.023017 | — | — |
| RE21-07-3872 | 21-600859 | 0.0000–0.5000 | SOIL | 0.094 | — | — | 0.784 | — | — | — |
| RE21-07-3873 | 21-600859 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.087833 | — | — |
| RE21-07-3874 | 21-600859 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.029032 | — | — |
| RE21-07-3875 | 21-600860 | 0.0000–0.5000 | SOIL | 0.0399 | — | — | 0.059 | 0.010881 | — | — |
| RE21-07-3876 | 21-600860 | 2.0000–3.0000 | QBT3 | — | NA | — | 2.45 | 0.05254 | — | — |
| RE21-07-3877 | 21-600860 | 5.0000–6.0000 | QBT3 | — | 0.114 | — | 0.269 | 0.058092 | — | — |
| RE21-08-7241 | 21-603037 | 8.5000–9.5000 | QBT3 | — | — | — | — | 0.351798 | — | — |

**Table 6.18-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-08-7242 | 21-603037 | 10.5000–11.5000 | QBT3 | — | — | — | — | 0.307618 | — | — |
| RE21-08-7243 | 21-603038 | 6.5000–7.5000 | SOIL | — | — | — | — | 0.754058 | — | — |
| RE21-08-7244 | 21-603038 | 8.5000–9.5000 | QBT3 | — | — | — | 0.0352 | 0.798753 | — | — |
| RE21-08-7245 | 21-603039 | 7.5000–8.5000 | QBT3 | — | — | — | — | 0.072731 | — | 0.112 |
| RE21-08-7246 | 21-603039 | 9.5000–10.5000 | QBT3 | — | — | — | — | 0.07338 | — | 0.0924 |
| RE21-08-7247 | 21-603040 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.985475 | — | — |
| RE21-08-7248 | 21-603040 | 7.0000–8.0000 | QBT3 | — | — | — | — | 0.045388 | — | — |
| RE21-08-7249 | 21-603041 | 5.5000–6.5000 | SOIL | — | — | — | 0.0542 | 0.276183 | — | — |
| RE21-08-7250 | 21-603041 | 7.5000–8.5000 | SOIL | — | — | — | 0.0572 | 0.148363 | — | — |
| RE21-08-7251 | 21-603042 | 5.5000–6.5000 | QBT3 | — | — | — | 0.0463 | 0.083042 | — | 0.0972 |
| RE21-08-7252 | 21-603042 | 7.5000–8.5000 | QBT3 | — | — | — | 0.0331 | 0.086465 | — | — |
| RE21-08-7253 | 21-603043 | 9.0000–10.0000 | QBT3 | — | — | — | 0.0332 | 0.010094 | — | — |
| RE21-08-7254 | 21-603043 | 11.0000–12.0000 | QBT3 | — | — | — | 0.0291 | 0.011427 | — | — |
| RE21-08-7255 | 21-603044 | 11.0000–12.0000 | QBT3 | — | — | — | — | 0.031763 | 2.64 | 0.157 |
| RE21-08-7256 | 21-603044 | 13.0000–14.0000 | QBT3 | — | — | — | — | 0.025924 | 2.57 | 0.11 |
| RE21-08-7257 | 21-603045 | 11.0000–12.0000 | QBT3 | — | — | — | — | 0.019177 | — | — |
| RE21-08-7258 | 21-603045 | 13.0000–14.0000 | QBT3 | — | — | — | — | 0.025065 | — | — |
| RE21-08-7259 | 21-603046 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0342 | 0.122281 | — | — |
| RE21-08-7260 | 21-603046 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.202979 | — | — |
| RE21-08-7261 | 21-603047 | 10.0000–10.5000 | QBT3 | — | — | — | — | 0.027581 | — | — |
| RE21-08-7262 | 21-603047 | 12.5000–14.5000 | QBT3 | — | — | — | — | 0.037928 | — | — |
| RE21-08-7275 | 21-603054 | 10.0000–11.0000 | QBT3 | — | — | — | 0.0496 (J-) | 0.182405 | — | — |
| RE21-08-7276 | 21-603054 | 15.0000–16.0000 | QBT3 | — | — | — | — | 0.012516 | — | 0.114 |
| RE21-08-7277 | 21-603054 | 20.0000–21.0000 | QBT3 | — | — | — | — | 0.051539 | — | — |
| RE21-08-7285 | 21-603056 | 31.0000–32.0000 | QBT3 | — | — | — | — | — | — | 0.107 |

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.19-1**
**Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-024(l)-99**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** | **619**[d] |
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | — | — | NA[f] | — | — | 13.6 |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | — | — | — | — | — | — | — | NA | — | 225(J) | 13.7 |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | 46800(J+) | — | — | 2.74(U) | — | 24.9(J) | — | NA | 27900 | 24.2(J) | 16.2 |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | — | — | — | — | — | — | — | NA | — | — | 12.1 |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | — | — | — | 0.519(U) | — | — | — | NA | — | — | 3.98 |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | — | — | — | 0.526(U) | — | — | — | NA | — | — | 10 |
| RE21-07-75345 | 21-27441 | 5.0000–5.5000 | SOIL | — | — | — | 0.549(U) | — | — | — | NA | — | — | 3.52 |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | — | — | — | 0.536(U) | — | — | — | NA | — | — | 12.2 |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | — | — | — | 0.501(U) | — | — | — | NA | — | — | 7.25 |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | — | — | — | 0.522(U) | — | — | — | NA | — | — | 11.7 |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | — | — | — | 0.544(U) | — | — | — | NA | — | 42.1(J) | 14 |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 10.3 | — | — | — | 13(J) | 5.4(J+) |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | 7.64 | — | — | — | 13.9(J) | 29.6(J+) |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | 8.1 | — | — | — | 25.1(J) | 9.7(J+) |
| RE21-07-75619 | 21-27515 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 7.72 | — | — | — | — | 13 |
| RE21-07-75620 | 21-27515 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 14.7 |
| RE21-07-75621 | 21-27515 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | 7.38 | — | — | — | — | 6.61 |
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | — | — | — | 0.526(U) | — | — | — | — | — | — | 11.6 |
| RE21-07-75623 | 21-27516 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 16.8 | 2.3 |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | — | 2.85 | — | — | — | 7.18 | — | — | — | — | 3.07 |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | — | — | — | 0.545(U) | — | — | — | — | — | 35 | 10.5 |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | — | — | — | 0.549(U) | — | — | — | — | — | 53.8 | 12.4 |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | — | — | — | 0.565(U) | — | — | — | — | — | — | 12.6 |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | — | — | — | 0.539(U) | — | — | — | — | — | — | 5.29 |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | — | — | — | 0.562(U) | — | — | — | — | — | — | 13.2 |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | — | — | — | 0.572(U) | — | — | — | — | — | — | 14.4 |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | — | — | — | 0.55(U) | — | — | — | 32.7 | — | 45.3 | 9.45(J+) |

**Table 6.19-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** | **619**[d] |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | — | — | — | 0.618(U) | — | — | — | — | — | — | 17.8(J+) |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | — | — | — | 0.549(U) | — | — | — | — | — | — | 10.3(J+) |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | — | — | — | 0.523(U) | — | — | — | — | — | — | 7.72(J+) |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | — | — | 342 | 0.703 | — | — | — | — | — | 41.1 | 12(J+) |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | — | 3.09 | — | — | — | 13.6 | — | — | — | 59.8 | 6.24(J+) |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | — | — | — | 0.556(U) | — | — | — | — | — | 53.6(J) | 11.8(J+) |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | — | — | — | 0.563(U) | — | — | — | — | — | — | 9.67(J+) |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | — | — | — | 0.578(U) | — | — | — | 36.4 | — | 312 | 10.9(J+) |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | — | — | — | 0.562(U) | 6130 | — | — | 30.9 | — | — | 10.8(J+) |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | 8950 | 3.56 | 137 | — | 2800 | 7.53 | 3.43 | 6.74 | — | 23.5 | 12.4(J+) |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | — | 3.09 | 66.4 | — | — | — | — | — | — | 11.4 | 11.2(J+) |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | — | — | — | 0.553(U) | — | — | — | — | — | 970(J) | 10.5(J+) |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | 11.3 | — | — | — | — | 8.9(J+) |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 10.9(J+) |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | — | — | — | 0.537(U) | — | — | — | — | — | — | 7.49(J+) |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | — | — | — | 0.55(U) | — | — | — | — | — | — | 10.1(J+) |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | — | — | 48.7 | — | — | 11.3 | — | 11.8 | — | 12 | 5.1(J+) |
| RE21-07-75673 | 21-27533 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 7.81 | — | — | — | — | 3.4(J+) |
| RE21-07-75674 | 21-27534 | 0.0000–0.5000 | SOIL | — | — | — | 0.449(J) | 9590 | — | — | — | — | — | 11.6(J+) |
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | — | — | — | 0.527(U) | — | — | — | — | — | — | 7.1(J+) |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | — | — | — | 0.486(U) | — | — | — | — | — | — | 8.7(J+) |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | — | — | — | 0.54(U) | — | — | — | — | — | — | 10.5(J+) |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | — | — | — | 0.526(U) | — | — | — | — | — | — | 15.3(J+) |
| RE21-07-75679 | 21-27536 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 8.32 | — | — | — | — | 12.4(J+) |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | — | — | — | 0.531(U) | — | — | — | — | — | — | 9.64(J+) |
| RE21-07-75681 | 21-27537 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 12.5(J+) |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | — | — | — | 0.55(U) | — | — | — | — | — | 24.6 | 11.3(J+) |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | — | — | — | 0.518(U) | — | — | — | — | — | — | 13.5(J+) |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | — | — | — | 0.542(U) | — | — | — | — | — | — | 11(J+) |
| RE21-07-75685 | 21-27539 | 5.0000–6.0000 | QBT3 | — | — | — | — | 2940 | 15 | 4.03 | 6.9 | — | 23.6 | 13.6(J+) |

**Table 6.19-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead | Lithium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **14500** | **11.2** | **na**[a] |
| **SOIL Background Value** | | | | **29200** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **21500** | **22.3** | **na** |
| **Residential SSL** | | | | **78100** | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **54800** | **400** | **160**[c] |
| **Industrial SSL** | | | | **1130000** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **795000** | **800** | **2000**[c] |
| **Construction Worker SSL** | | | | **40700** | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **217000** | **800** | **619**[d] |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | — | — | — | 0.546(U) | — | — | — | — | — | 22.8 | 9.5(J+) |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | — | — | — | 0.511(U) | — | — | — | — | — | — | 12(J+) |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | — | — | — | 0.551(U) | — | — | — | — | — | — | 12.7(J+) |
| RE21-07-75691 | 21-27542 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 12 | — | — | — | — | 3.7(J+) |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | — | — | — | 0.531(U) | — | — | — | — | — | 38 | 10.6(J+) |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | — | — | 51.4 | — | — | 13.6 | — | 4.96 | — | — | 8.6(J+) |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | 8930 | 2.97 | 104 | — | 3540 | 7.97 | 4.03 | 7.64 | — | 11.7 | 12.9(J+) |
| RE21-07-75695 | 21-27544 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 16.8 | — | — | — | — | 14.3(J+) |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | — | — | — | 0.991 | 9710(J) | — | — | — | — | 488(J) | 12.8(J+) |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | — | — | 68.6(J-) | — | 2330(J) | 14.4 | — | 5.48 | — | — | 9.72(J+) |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | — | — | — | 0.546(U) | — | — | — | — | — | 34.3(J) | 12.4(J+) |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | — | — | — | 0.549(U) | — | — | — | — | — | 34.3(J) | 13.4(J+) |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | — | — | — | 0.526(U) | — | — | — | — | — | — | 11.6(J+) |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | — | — | — | 0.566(U) | 6370(J) | — | — | — | — | — | 11.9(J+) |

**Table 6.19-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Potassium | Selenium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **3500** | **0.3** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **3460** | **1.52** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **na** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **na** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **na** | **1550** | **929** | **1550** | **92900** |
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.00144(J+) | — | 1.55(U) | — | — | — |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | — | — | 0.179 | — | 6.1(J-) | 0.00492(J+) | — | — | — | — | 50(J) |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | 5470 | — | — | — | 2.12(J-) | 0.0057(J+) | 4300 | 8.22(U) | — | 50 | 61.6(J) |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | — | — | — | — | — | 0.00199(J+) | — | — | — | — | — |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | — | — | — | — | — | 0.000626(J+) | — | 1.56(U) | — | — | — |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | — | — | — | — | 0.864(J-) | 0.00632(J+) | — | 1.58(U) | — | — | — |
| RE21-07-75345 | 21-27441 | 5.0000–5.5000 | SOIL | — | — | — | — | — | — | — | 1.65(U) | — | — | — |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | — | — | 0.628 | — | — | 0.00325(J+) | — | — | — | — | — |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | — | — | — | — | 2.76(J-) | 0.00307(J+) | — | — | — | — | — |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | — | — | — | — | 0.694(J-) | 0.00244(J+) | — | — | — | — | — |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | — | — | — | — | — | 0.00273(J+) | — | 1.63(U) | — | — | — |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | 1.19(J) | — | — | — |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | — | — | — | — | 1.41 | — | — | 0.935(J) | — | — | — |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | — | — | — | — | 3.8 | — | — | 0.953(J) | — | — | — |
| RE21-07-75619 | 21-27515 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | 1.54(U) | — | — | — |
| RE21-07-75620 | 21-27515 | 15.0000–16.0000 | QBT3 | — | — | — | — | 2.2(J-) | — | — | 1.58(U) | — | — | — |
| RE21-07-75621 | 21-27515 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | 1.59(U) | — | — | — |
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.00131(J) | — | — | — | — | — |
| RE21-07-75623 | 21-27516 | 4.0000–5.0000 | QBT3 | — | — | — | — | 1.17(J-) | — | — | 1.57(U) | — | — | — |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | — | — | — | — | 1.56(J-) | — | — | 1.58(U) | — | — | — |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 75 |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | — | — | 0.192 | — | — | — | — | — | — | — | 104 |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.58 | — | — | — | — | — | — |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.996(J) | — | — | — | — | — | — |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.13 | — | — | — | — | — | — |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | — | — | — | — | 1.21 | — | — | — | — | — | — |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | — | — | — | — | 1.34 | — | — | — | — | — | 108 |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | — | — | — | — | 1.58 | — | — | — | — | — | 53.5 |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | — | — | — | — | 1.5(J-) | — | — | — | — | — | 53.9 |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | — | — | — | — | 1.26(J-) | — | — | 1.79 | — | — | 384 |

**Table 6.19-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Potassium | Selenium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **3500** | **0.3** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **3460** | **1.52** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **na** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **na** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **na** | **1550** | **929** | **1550** | **92900** |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | — | — | — | — | — | 0.000609(J) | — | 1.74 | — | — | 949 |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | — | — | — | — | 1(J-) | — | — | 1.13(J) | — | — | 97 |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | — | — | — | — | 1.53 | 0.000948(J) | — | 1.53(J) | — | — | 59.2(J) |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | — | — | — | — | — | 0.00119(J) | — | — | — | — | — |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | — | — | — | — | 1.06 | — | — | — | — | — | 192 |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | — | — | — | — | 1.15 | — | — | — | — | — | — |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | 1720(J+) | — | — | 6.78 | — | — | — | 1.09(J) | — | 18.1 | 222 |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | — | — | — | — | 1.1(J-) | — | — | 1.21(J) | — | — | 227 |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | 56.3(J) |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | — | — | — | — | 1.38 | — | — | 1.64(U) | — | — | — |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 74.2(J) |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | — | — | — | — | 1.19 | — | — | — | — | — | 115(J) |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | — | — | — | — | 1.3 | 0.0012(J) | — | — | — | — | 65.7(J) |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | — | — | — | — | 1.72 | — | — | 1(J) | — | — | — |
| RE21-07-75673 | 21-27533 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 0.764(J) | — | — | — |
| RE21-07-75674 | 21-27534 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.02 | — | — | — | — | — | 91.5 |
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | — | — | — | — | 1.25 | 0.000867(J-) | — | 1.58(U) | — | — | — |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.65 | 0.00154(J-) | — | — | — | — | 53.2 |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | — | — | — | — | 1.26 | — | — | — | — | — | — |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | — | — | — | — | 1.57 | 0.000823(J-) | — | — | — | — | — |
| RE21-07-75679 | 21-27536 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 0.669(J) | — | — | — |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.27 | 0.000628(J-) | — | — | — | — | — |
| RE21-07-75681 | 21-27537 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.12(J) | — | — | 1.7(U) | — | — | — |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.00128(J-) | — | 1.59 | — | — | — |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75685 | 21-27539 | 5.0000–6.0000 | QBT3 | — | 549 | — | — | — | — | — | 0.726(J) | — | — | 117 |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 77.4 |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | — | — | — | — | 2.21 | — | — | — | — | — | — |

**Table 6.19-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Potassium | Selenium | Uranium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **3500** | **0.3** | **2.4** | **17** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **3460** | **1.52** | **1.82** | **39.6** | **48.8** |
| **Residential SSL** | | | | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **na** | **391** | **235** | **391** | **23500** |
| **Industrial SSL** | | | | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **na** | **5680** | **3410** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **na** | **1550** | **929** | **1550** | **92900** |
| RE21-07-75691 | 21-27542 | 2.0000–3.0000 | QBT3 | — | — | — | — | 1.26 | — | — | 1.57(U) | — | — | — |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 2.03 | — | — |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.55(U) | — | — | — |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | 1850(J+) | — | — | — | NA | 0.00106(J-) | — | 0.962(J) | — | 19.3 | — |
| RE21-07-75695 | 21-27544 | 4.0000–5.0000 | QBT3 | — | — | — | — | NA | — | — | 1.56(U) | — | — | — |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | — | — | — | — | 1.51 | — | — | 1.67(U) | — | — | 552(J) |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | — | — | — | — | 1.57 | — | — | 1.67(U) | — | — | — |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | — | — | — | — | 1.31 | — | — | — | — | — | 84.9(J) |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | — | — | — | — | — | 0.000731(J) | — | — | — | — | 92.4(J) |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | — | — | — | — | 1.28 | — | — | — | — | — | — |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | — | — | — | — | 1.43 | — | — | 1.59(J) | — | — | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

**Table 6.19-2**
**Summary of Organic Chemicals Detected at Consolidated Unit 21-024(I)-99**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Carbazole | Chloroform |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720** | **67500** | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **240**[b] | **5.72** |
| **Industrial SSL** | | | | **36700** | **18300** | **851000** | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **960**[b] | **31.9** |
| **Construction Worker SSL** | | | | **18600** | **6680** | **263000** | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **10800**[c] | **671** |
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | —[d] | — | — | — | — | 0.0429(J) | 0.0163(J) | — | — | — | NA[e] | — |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | — | — | — | 0.0172(J) | — | 0.0879 | 0.15 | 0.106 | — | — | NA | — |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | — | — | — | 0.0142(J) | — | 0.0848(J) | 0.098(J) | — | — | — | NA | — |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | — | — | — | 0.00847(J) | — | 0.078 | 0.0681 | — | 0.0559 | — | NA | 0.000215(J) |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | — | — | 0.00613 | 0.00868(J) | 0.17 | 0.148 | 0.158 | 0.118 | 0.117 | — | NA | — |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | 0.204 | — | 0.00532(J) | 0.382 | 1.47 | 0.995 | 1.61 | 0.449 | 0.591 | — | NA | — |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | — | — | 0.00891 | — | — | 0.0514 | 0.0179(J) | — | 0.0403 | — | NA | — |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | 0.0417 | — | — | 0.0687 | 0.219(J) | 0.223(J) | 0.307(J) | 0.228(J) | 0.111(J) | — | NA | — |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | 0.0568 | — | — | 0.102 | 0.291(J) | 0.301(J) | 0.421(J) | 0.251(J) | 0.149(J) | — | NA | — |
| MD21-09-8819 | 21-27514 | 25.0000–26.0000 | QBT3 | — | — | NA | — | 0.11(J) | 0.085(J) | 0.11(J) | — | — | — | — | NA |
| RE21-07-3963 | 21-27515 | 15.0000–16.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | 0.033(J) | — | — | — | NA | — |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | — | — | NA | 0.00773(J) | 0.0621 | 0.0518(J) | 0.121(J) | 0.0381(J) | — | — | NA | NA |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | — | — | — | 0.0149(J) | 0.0746(J) | 0.0627(J) | 0.163(J) | — | — | — | NA | — |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | — | — | NA | — | 0.0249(J) | 0.031(J) | 0.0631 | 0.0246(J) | — | — | NA | NA |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | — | — | NA | — | — | — | — | — | — | 0.0876(J) | NA | NA |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | — | — | — | 0.0104(J) | — | 0.0373(J) | 0.0761 | 0.0173(J) | — | — | NA | — |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | 0.833 | — | — | 1.37 | 3.2 | 2.99 | 3.92 | 1.24 | 1.8(J) | — | NA | — |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | 0.102 | — | — | 0.217 | 0.598 | 0.577 | 0.713 | 0.318 | — | — | NA | — |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | 1.02 | — | — | 1.49 | 3.19 | 3.12(J) | 4.8(J) | 1.29(J) | — | — | NA | — |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Carbazole | Chloroform |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720** | **67500** | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **240**[b] | **5.72** |
| **Industrial SSL** | | | | **36700** | **18300** | **851000** | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **960**[b] | **31.9** |
| **Construction Worker SSL** | | | | **18600** | **6680** | **263000** | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **10800**[c] | **671** |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | — | — | 0.35 | 0.0195(J) | 0.0517 | 0.0498 | 0.0758 | 0.0264(J) | — | — | NA | — |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | 0.0367(J) | — | — | 0.0494 | 0.158 | 0.162(J) | 0.279(J) | 0.0947(J) | — | — | NA | — |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | — | — | — | 0.00888(J) | 0.0412 | 0.0436 | 0.075 | 0.0245(J) | — | — | NA | — |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | 0.0535 | — | — | 0.0896 | 0.217 | 0.227 | 0.304 | 0.2(J) | 0.126 | — | NA | — |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | — | — | — | 0.0201 (J) | — | 0.0647 (J) | 0.0868 (J) | 0.145 (J) | 0.0376 (J) | — | NA | — |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | 0.0199 (J) | — | — | 0.0342 (J) | 0.106 | 0.168 | 0.228 | 0.0379 (J) | 0.0721 (J) | — | NA | — |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | 0.0324 (J) | — | — | 0.0551 | 0.163 | 0.217 | 0.337 | 0.0756 | — | — | NA | — |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | 0.141 | — | — | 0.202 | 0.374 | 0.34 (J) | 0.553 (J) | 0.176 (J) | — | — | NA | — |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | 0.013 (J) | — | — | 0.0175 (J) | — | 0.0465 | 0.0692 | 0.029 (J) | — | — | NA | — |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | 0.293 | — | — | 0.509 | 1.59 | 1.69 | 2.57 | 0.797 (J) | 0.898 | — | NA | — |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | 0.108 | — | — | 0.161 | 0.573 | 0.625 | 0.834 | 0.378 (J) | 0.363 | — | NA | — |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | 0.0377 | — | NA | 0.0712 | 0.236 | 0.257 | 0.315 | 0.257 (J) | 0.142 | — | NA | NA |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | 0.0124 (J) | — | — | 0.0227 (J) | — | 0.0492 | 0.0689 | — | 0.0245 (J) | — | NA | — |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | 1.51 | — | — | 2.38 | 3.88 | 3.92 | 4.6 | 2.11 (J) | 1.8 | — | NA | — |
| MD21-09-8834 | 21-27530 | 10.0000–11.0000 | QBT3 | — | — | NA | — | 0.16 (J) | 0.13 (J) | 0.18 (J) | — | 0.081 (J) | — | — | NA |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | — | — | NA | — | 0.0242 (J) | — | 0.0493 | 0.018 (J) | 0.0189 (J) | — | NA | NA |
| RE21-07-75674 | 21-27534 | 0.0000–0.5000 | SOIL | 0.143 | — | NA | 0.231 | 0.584 | 0.558 | 0.84 | 0.237 (J) | — | — | NA | NA |
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | — | — | — | 0.00875 (J) | 0.0427 | 0.0348 (J) | 0.044 | 0.0249 (J) | 0.0207 (J) | — | NA | — |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | 0.0161 (J) | — | NA | 0.0301 (J) | 0.169 | 0.19 | 0.275 | 0.126 (J) | 0.0947 | — | NA | NA |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.0146 (J) | — | 0.0135 (J) | — | — | — | NA | — |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | 0.0429 | — | NA | 0.081 | 0.36 | — | 0.7 | 0.209 | — | — | NA | NA |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | 0.0421 | — | NA | 0.0633 | — | — | 0.354 | 0.0894 | — | — | NA | NA |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | 0.0186 (J) | — | NA | 0.0568 | 0.267 | 0.0816 | 0.368 | 0.167 (J) | 0.166 | — | NA | NA |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | NA | — |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.0123 (J) | 0.0165 (J) | — | — | — | NA | — |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | 0.0191 (J) | — | NA | 0.0267 (J) | 0.15 | 0.162 | 0.257 | 0.106 (J) | 0.12 | — | NA | NA |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.0273 (J) | 0.0257 (J) | 0.0361 | — | 0.0124 (J) | — | NA | — |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | — | — | NA | — | 0.0404 | 0.0355 (J) | 0.0239 (J) | 0.0227 (J) | 0.0225 (J) | — | NA | NA |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | — | — | NA | 0.00972 (J) | 0.0555 | 0.0728 | 0.119 | 0.0438 (J) | — | — | NA | NA |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | NA | — |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Carbazole | Chloroform |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720** | **67500** | **17200** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **240**[b] | **5.72** |
| **Industrial SSL** | | | | **36700** | **18300** | **851000** | **183000** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **960**[b] | **31.9** |
| **Construction Worker SSL** | | | | **18600** | **6680** | **263000** | **66800** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **10800**[c] | **671** |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.0247 (J) | 0.0237 (J) | 0.0273 (J) | 0.0147 (J) | 0.0136 (J) | — | NA | — |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | 0.357 | 0.0122 (J) | — | 0.764 | 1.87 (J) | — | 2.67 (J) | 0.952 (J) | 0.962 (J) | — | NA | — |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0139 (J) | — | — | 0.0644 | — | 0.0307 (J) | — | NA | — |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | 0.368 | — | — | 0.871 | 1.86 (J) | — | 2.45 (J) | 1.11 (J) | 1.02 (J) | — | NA | — |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | 0.0242 (J) | — | — | 0.0356 (J) | 0.134 (J) | — | 0.226 (J) | 0.192 (J) | 0.0805 (J) | — | NA | — |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | 0.186 | — | — | 0.378 | 1.13 | — | 1.66 | 0.704 (J) | 0.532 | — | NA | — |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | 0.167 | — | — | 0.552 | 0.637 | — | 0.731 | 0.417 (J) | 0.321 | — | NA | — |
| MD21-09-8835 | 21-27547 | 7.5000–8.5000 | SOIL | — | — | NA | 0.13 (J) | 0.37 (J) | 0.29 (J) | 0.49 | 0.18 (J) | 0.18 (J) | — | 0.12 (J) | NA |
| MD21-09-8836 | 21-605278 | 0.0000–0.5000 | SOIL | — | — | NA | — | 0.29 (J) | 0.29 (J) | 0.51 (J) | 0.21 (J) | 0.21 (J) | 0.25 (J) | — | NA |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chrysene | Dibenzofuran | Dichlorobenzene[1,4-] | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **621** | **78**[f] | **32.2** | **2290** | **2290** | **na**[g] | **na** | **na** | **na** | **na** | **6.21** | **3210**[h] |
| **Industrial SSL** | | | | **2340** | **1000**[f] | **180** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **23.4** | **14900**[h] |
| **Construction Worker SSL** | | | | **20600** | **238**[i] | **3780** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **213** | **10300**[h] |
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | 0.0187(J) | — | — | 0.0414 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | 0.122 | — | — | 0.225 | — | NA | NA | NA | NA | NA | 0.128 | — |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | 0.0732 | — | — | 0.139 | — | NA | NA | NA | NA | NA | 0.124(J) | — |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | 0.0874 | — | 0.000316(J) | 0.108 | — | NA | NA | NA | NA | NA | 0.121 | — |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | 0.157 | — | — | 0.273 | — | NA | NA | NA | NA | NA | 0.144 | — |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | 1.48 | 0.0754(J) | — | 2.92 | 0.126 | NA | NA | NA | NA | NA | 0.472 | — |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | 0.0371 | — | — | 0.0583 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | 0.0156(J) | — | — | 0.0387 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | 0.241(J) | — | — | 0.51 | 0.0306(J) | NA | NA | NA | NA | NA | 0.198(J) | — |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | 0.319(J) | — | — | 0.698 | 0.0499 | NA | NA | NA | NA | NA | 0.224(J) | — |
| MD21-09-8819 | 21-27514 | 25.0000–26.0000 | QBT3 | 0.086(J) | — | — | 0.24(J) | — | NA | NA | NA | NA | NA | — | NA |
| RE21-07-3963 | 21-27515 | 15.0000–16.0000 | QBT3 | NA | NA | NA | NA | NA | 0.000000538(J) | 1.46E-06 | 0.000000634(J) | 1.18E-06 | 3.75E-07 | NA | NA |
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | 0.0202(J) | — | — | 0.0375 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | — | — | — | 0.0115(J) | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | 0.0684 | — | — | 0.126 | — | NA | NA | NA | NA | NA | 0.0277(J) | NA |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | 0.0831(J) | — | — | 0.144 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | 0.0278(J) | — | — | 0.0268(J) | — | NA | NA | NA | NA | NA | 0.0214(J) | NA |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | — | NA |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | 0.0496 | — | — | 0.107 | — | NA | NA | NA | NA | NA | 0.0142(J) | — |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | 3.24 | 0.401 | — | 8.61 | 0.724 | NA | NA | NA | NA | NA | 1.31 | — |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | 0.529 | — | — | 1.37 | 0.0932 | NA | NA | NA | NA | NA | 0.339 | — |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | 3 | 0.596 | — | 8.24 | 0.932 | NA | NA | NA | NA | NA | 1.3(J) | — |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chrysene | Dibenzofuran | Dichlorobenzene[1,4-] | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **621** | **78**[f] | **32.2** | **2290** | **2290** | **na**[g] | **na** | **na** | **na** | **na** | **6.21** | **3210**[h] |
| **Industrial SSL** | | | | **2340** | **1000**[f] | **180** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **23.4** | **14900**[h] |
| **Construction Worker SSL** | | | | **20600** | **238**[i] | **3780** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **213** | **10300**[h] |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | 0.0581 | — | — | 0.118 | — | NA | NA | NA | NA | NA | 0.026(J) | — |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | 0.194 | — | — | 0.409 | 0.0262(J) | NA | NA | NA | NA | NA | 0.0873(J) | — |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | 0.0553 | — | — | 0.102 | — | NA | NA | NA | NA | NA | 0.022(J) | 0.000463(J) |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | 0.227 | — | — | 0.51 | 0.0463 | NA | NA | NA | NA | NA | 0.169(J) | — |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | 0.0679(J) | — | — | 0.14 | — | NA | NA | NA | NA | NA | 0.12(J) | — |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | 0.101 | — | — | 0.232 | 0.0146(J) | NA | NA | NA | NA | NA | 0.087 | — |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | 0.152 | — | — | 0.322 | 0.024(J) | NA | NA | NA | NA | NA | 0.123 | — |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | 0.382 | — | — | 0.923 | 0.1 | NA | NA | NA | NA | NA | 0.168(J) | 0.000443(J) |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | 0.0582 | — | — | 0.107 | — | NA | NA | NA | NA | NA | 0.0252(J) | — |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | 1.78 | 0.108(J) | — | 4.22 | 0.238 | NA | NA | NA | NA | NA | 0.801(J) | — |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | 0.651 | — | — | 1.42 | 0.0903 | NA | NA | NA | NA | NA | 0.347(J) | — |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | 0.242 | — | — | 0.489 | 0.0308(J) | NA | NA | NA | NA | NA | 0.229(J) | NA |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | 0.0466 | — | — | 0.119 | 0.0109(J) | NA | NA | NA | NA | NA | — | — |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | 3.76 | 0.694 | — | 10.5 | 1.2 | NA | NA | NA | NA | NA | 2.03(J) | — |
| MD21-09-8834 | 21-27530 | 10.0000–11.0000 | QBT3 | 0.13(J) | — | — | 0.3(J) | — | NA | NA | NA | NA | NA | — | NA |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | 0.0381 | — | — | 0.0678 | — | NA | NA | NA | NA | NA | 0.0188(J) | NA |
| RE21-07-75674 | 21-27534 | 0.0000–0.5000 | SOIL | 0.584 | — | — | 1.41 | 0.114 | NA | NA | NA | NA | NA | 0.24(J) | NA |
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | 0.0319(J) | — | — | 0.0783 | — | NA | NA | NA | NA | NA | 0.0231(J) | — |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | 0.223 | — | — | 0.439 | 0.0114(J) | NA | NA | NA | NA | NA | 0.117(J) | NA |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | 0.014(J) | — | — | 0.0234(J) | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | 0.37 | — | — | 0.803 | 0.0319(J) | NA | NA | NA | NA | NA | 0.226 | NA |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | 0.174 | — | — | 0.427 | 0.0291(J) | NA | NA | NA | NA | NA | 0.132 | NA |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | 0.307 | — | — | 0.681 | 0.0123(J) | NA | NA | NA | NA | NA | 0.167(J) | NA |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | — | — | — | 0.0365(J) | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | 0.193 | — | — | 0.416 | 0.013(J) | NA | NA | NA | NA | NA | 0.103(J) | NA |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | 0.0248(J) | — | — | 0.0498 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | 0.0454 | — | — | 0.0748 | — | NA | NA | NA | NA | NA | 0.0208(J) | NA |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | 0.0846 | — | — | 0.156 | — | NA | NA | NA | NA | NA | 0.0392(J) | NA |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chrysene | Dibenzofuran | Dichlorobenzene[1,4-] | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **621** | **78**[f] | **32.2** | **2290** | **2290** | **na**[g] | **na** | **na** | **na** | **na** | **6.21** | **3210**[h] |
| **Industrial SSL** | | | | **2340** | **1000**[f] | **180** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **23.4** | **14900**[h] |
| **Construction Worker SSL** | | | | **20600** | **238**[i] | **3780** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **213** | **10300**[h] |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0118(J) | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | 0.0231(J) | — | — | 0.0504 | — | NA | NA | NA | NA | NA | 0.0123(J) | — |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | 1.94(J) | 0.191(J) | — | 4.6 | 0.355 | NA | NA | NA | NA | NA | 0.947(J) | — |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | 0.0583 | — | — | 0.11 | — | NA | NA | NA | NA | NA | — | — |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | 1.86(J) | 0.263(J) | — | 4.69 | 0.451 | NA | NA | NA | NA | NA | 1.07(J) | — |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | 0.166(J) | — | — | 0.354 | 0.0229(J) | NA | NA | NA | NA | NA | 0.157(J) | — |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | 1.22 | 0.117(J) | — | 2.67 | 0.174 | NA | NA | NA | NA | NA | 0.667(J) | — |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | 0.607 | 0.18(J) | — | 1.78 | 0.288 | NA | NA | NA | NA | NA | 0.379(J) | — |
| MD21-09-8835 | 21-27547 | 7.5000–8.5000 | SOIL | 0.41 | — | — | 1.1 | 0.097(J) | NA | NA | NA | NA | NA | 0.16(J) | NA |
| MD21-09-8836 | 21-605278 | 0.0000–0.5000 | SOIL | 0.28(J) | — | — | 0.71 | — | NA | NA | NA | NA | NA | 0.17(J) | NA |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **310**[f] | **45** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** | **1090**[j] |
| **Industrial SSL** | | | | **1090** | **4100**[f] | **252** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** | **3610**[j] |
| **Construction Worker SSL** | | | | **10600** | **1240**[i] | **702** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** | **3130**[j] |
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | 0.00411(J) | — | — | NA | NA | 0.0206(J) | 0.0293(J) | NA | NA | — | — |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | — | — | — | NA | NA | 0.0746 | 0.163 | NA | NA | 0.00092(J) | — |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | — | — | — | NA | NA | 0.0632 | 0.109 | NA | NA | 0.00515 | — |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | — | 0.00778(J) | — | NA | NA | 0.0323(J) | 0.0813 | NA | NA | 0.0038 | — |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | — | — | — | NA | NA | — | — | NA | NA | 0.00163 | — |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | — | — | — | NA | NA | 0.0191(J) | 0.17 | NA | NA | 0.00268 | — |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | — | 0.0251(J) | — | NA | NA | 1.54 | 2.44 | NA | NA | 0.00341 | — |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | — | — | — | NA | NA | — | — | NA | NA | 0.0028 | — |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | — | — | — | NA | NA | 0.0182(J) | 0.0429 | NA | NA | 0.00245 | — |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | — | — | — | NA | NA | — | — | NA | NA | 0.00149 | — |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | — | — | — | NA | NA | 0.0308(J) | 0.0377 | NA | NA | — | — |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | — | — | — | NA | NA | 0.332 | 0.471(J) | NA | NA | — | — |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | — | 0.00913(J) | 0.028(J) | NA | NA | 0.519 | 0.659(J) | NA | NA | — | — |
| MD21-09-8819 | 21-27514 | 25.0000–26.0000 | QBT3 | NA | — | — | NA | NA | 0.16(J) | 0.16(J) | NA | NA | NA | NA |
| RE21-07-3963 | 21-27515 | 15.0000–16.0000 | QBT3 | NA | NA | NA | 0.00000533(J) | 0.000000778(J) | NA | NA | 0.000000189(J) | 3.32E-07 | NA | NA |
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | 0.0226(J) | 0.0346(J) | NA | NA | — | — |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | — | — | — | NA | NA | — | — | NA | NA | — | — |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | — | 0.105 | NA | NA | NA | NA |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | — | 0.179(J) | NA | NA | 0.00144 | — |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | — | 0.0246(J) | NA | NA | NA | NA |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | — | — | NA | NA | 0.00137 | — |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | — | — | NA | NA | NA | NA |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | — | 0.0798 | NA | NA | — | — |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | — | 0.165 | 0.44 | NA | NA | 6.28 | 7.37 | NA | NA | — | — |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | — | 0.0161(J) | 0.0397(J) | NA | NA | 0.908 | 1.03 | NA | NA | — | — |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | — | 0.251 | 0.739 | NA | NA | 7.01 | 6.42 | NA | NA | — | — |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **310**[f] | **45** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** | **1090**[j] |
| **Industrial SSL** | | | | **1090** | **4100**[f] | **252** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** | **3610**[j] |
| **Construction Worker SSL** | | | | **10600** | **1240**[i] | **702** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** | **3130**[j] |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | — | — | — | NA | NA | 0.0814 | 0.0815 | NA | NA | — | — |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | — | — | 0.0165(J) | NA | NA | 0.309 | 0.337 | NA | NA | 0.000364(J) | — |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | — | — | — | NA | NA | 0.064 | 0.076 | NA | NA | — | — |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | — | 0.0107(J) | 0.0317(J) | NA | NA | 0.39 | 0.403 | NA | NA | — | — |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | — | — | — | NA | NA | 0.1 | 0.134(J) | NA | NA | — | — |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | 0.145 | 0.205 | NA | NA | — | — |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | — | — | — | NA | NA | 0.227 | 0.295 | NA | NA | — | — |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | — | 0.024(J) | 0.0853 | NA | NA | 0.871 | 0.71 | NA | NA | — | — |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | — | — | — | NA | NA | 0.0846 | 0.0834 | NA | NA | — | — |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | — | 0.0383 | 0.093 | NA | NA | 2.62 | 3.71 | NA | NA | — | — |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | — | 0.0194(J) | 0.0537 | NA | NA | 1 | 1.35 | NA | NA | — | — |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.331 | 0.463 | NA | NA | NA | NA |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | 0.0971 | 0.0904 | NA | NA | — | — |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | — | 0.321 | 1.22 | NA | NA | 9.28 | 7.26 | NA | NA | — | — |
| MD21-09-8834 | 21-27530 | 10.0000–11.0000 | QBT3 | NA | — | — | NA | NA | 0.16(J) | 0.22(J) | NA | NA | NA | NA |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | NA | — | — | NA | NA | 0.028(J) | 0.0601 | NA | NA | NA | NA |
| RE21-07-75674 | 21-27534 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.972 | 1.21 | NA | NA | NA | NA |
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | 0.0374 | 0.057 | NA | NA | — | — |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.191 | 0.351 | NA | NA | NA | NA |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | — | 0.0162(J) | NA | NA | — | — |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.415 | 0.673 | NA | NA | NA | NA |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.27 | 0.318 | NA | NA | NA | NA |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.293 | 0.603 | NA | NA | NA | NA |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | — | — | NA | NA | 0.000602(J) | — |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | 0.0346(J) | 0.0228(J) | NA | NA | — | — |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.193 | 0.349 | NA | NA | NA | NA |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | 0.0218(J) | 0.0421 | NA | NA | 0.00178 | 0.000381(J) |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.0237(J) | 0.0681 | NA | NA | NA | NA |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.0742 | 0.136 | NA | NA | NA | NA |

**Table 6.19-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Methylene Chloride | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **199** | **310**[f] | **45** | **na** | **na** | **1830** | **1720** | **0.000374** | **na** | **5570** | **1090**[j] |
| **Industrial SSL** | | | | **1090** | **4100**[f] | **252** | **na** | **na** | **20500** | **18300** | **0.00147** | **na** | **57900** | **3610**[j] |
| **Construction Worker SSL** | | | | **10600** | **1240**[i] | **702** | **na** | **na** | **7150** | **6680** | **0.0127** | **na** | **21100** | **3130**[j] |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | NA | NA | 0.000411(J) | — |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | 0.0253(J) | 0.0376 | NA | NA | — | — |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | — | 0.0745 | 0.173 | NA | NA | 3.67 | 3.87(J) | NA | NA | — | — |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | — | — | — | NA | NA | 0.0735 | 0.098 | NA | NA | — | — |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | — | 0.116(J) | 0.355(J) | NA | NA | 4.19 | 3.82(J) | NA | NA | — | — |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | — | — | — | NA | NA | 0.268 | 0.374(J) | NA | NA | — | — |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | — | 0.0534 | 0.16 | NA | NA | 1.85 | 2.75 | NA | NA | — | — |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | — | 0.112 | 0.3 | NA | NA | 1.89 | 1.36 | NA | NA | — | — |
| MD21-09-8835 | 21-27547 | 7.5000–8.5000 | SOIL | NA | — | — | NA | NA | 0.81 | 0.63 | NA | NA | NA | NA |
| MD21-09-8836 | 21-605278 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | 0.36(J) | 0.62(J) | NA | NA | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as a surrogate based on structural similarity.

[b] EPA Region 6 SSL (EPA 2007, 099314).

[c] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[g] na = Not available.

[h] Isopropylbenzene SSL used as a surrogate based on structural similarity.

[i] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[j] Xylenes SSL used as a surrogate based on structural similarity.

**Table 6.19-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-024(I)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-07-75339 | 21-27439 | 0.0000–0.5000 | SOIL | —[c] | — | — | 0.214(J-) | 0.193801 | — | — |
| RE21-07-75340 | 21-27439 | 3.5000–4.0000 | SOIL | — | 0.181 | 0.341(J-) | 0.439(J-) | 0.404098 | — | — |
| RE21-07-75341 | 21-27439 | 5.0000–5.5000 | SOIL | — | — | — | 0.203(J-) | 0.84779 | — | — |
| RE21-07-75342 | 21-27440 | 3.5000–4.0000 | SOIL | — | — | — | 0.049(J-) | 0.329753 | — | — |
| RE21-07-75343 | 21-27440 | 5.0000–5.5000 | SOIL | — | — | — | 0.0967(J-) | 0.193216 | — | — |
| RE21-07-75344 | 21-27441 | 3.5000–4.0000 | SOIL | 0.257 | — | — | 0.545(J-) | 0.19127 | — | — |
| RE21-07-75345 | 21-27441 | 5.0000–5.5000 | SOIL | — | — | — | — | 0.298343 | — | — |
| RE21-07-75346 | 21-27442 | 3.5000–4.0000 | SOIL | — | — | — | 0.0744(J-) | 0.679784 | — | — |
| RE21-07-75347 | 21-27442 | 5.0000–5.5000 | SOIL | — | — | — | — | 0.291388 | — | — |
| RE21-07-75348 | 21-27443 | 3.5000–4.0000 | SOIL | — | — | — | 0.0745(J-) | 0.353546 | — | — |
| RE21-07-75349 | 21-27443 | 5.5000–6.0000 | SOIL | — | — | 0.0765(J-) | 0.0358(J-) | 0.615081 | — | — |
| RE21-07-75616 | 21-27514 | 10.0000–11.0000 | QBT3 | — | — | — | 0.139 | 0.146117 | — | — |
| RE21-07-75617 | 21-27514 | 15.0000–16.0000 | QBT3 | — | — | — | 1.17 | 0.123685 | — | — |
| RE21-07-75618 | 21-27514 | 20.0000–21.0000 | QBT3 | 0.0564 | — | — | 1.16 | 0.129763 | — | — |
| MD21-09-8819 | 21-27514 | 25.0000–26.0000 | QBT3 | — | NA[d] | — | 0.106 | NA | NA | NA |
| RE21-07-75619 | 21-27515 | 10.0000–11.0000 | QBT3 | — | — | — | 0.0472 | 0.051815 | — | 0.136 |

**Table 6.19-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-07-75620 | 21-27515 | 15.0000–16.0000 | QBT3 | — | — | — | 0.0802 | 0.063777 | — | — |
| RE21-07-75621 | 21-27515 | 20.0000–21.0000 | QBT3 | — | — | — | 0.0356 | 0.146191 | — | — |
| RE21-07-75622 | 21-27516 | 2.0000–3.0000 | SOIL | 0.217 | — | 0.0434 | 9.88 | 0.022133 | — | — |
| RE21-07-75623 | 21-27516 | 4.0000–5.0000 | QBT3 | 1.66 | — | 0.35 | 66 | 0.031319 | — | — |
| RE21-07-75624 | 21-27516 | 6.0000–7.0000 | QBT3 | 0.773 | — | — | 36.2 | 0.014476 | — | — |
| RE21-07-75625 | 21-27517 | 0.0000–0.5000 | SOIL | 0.21 | — | 0.0528 | 0.924 | — | 2.61 | — |
| RE21-07-75626 | 21-27517 | 2.0000–2.5000 | SOIL | 0.473 | 0.701 | 0.0775 | 1.94 | 0.025796 | — | — |
| MD21-09-8824 | 21-27517 | 7.0000–8.0000 | QBT3 | — | — | — | 0.137 | NA | NA | NA |
| RE21-07-75627 | 21-27518 | 0.0000–0.5000 | SOIL | 0.0716 | — | — | 0.49 | 0.028763 | — | — |
| RE21-07-75628 | 21-27518 | 2.0000–2.5000 | SOIL | — | — | — | 0.0695 | 0.026667 | — | — |
| RE21-07-75629 | 21-27519 | 0.0000–0.5000 | SOIL | — | NA | — | 0.174 | 0.062908 | — | — |
| RE21-07-75630 | 21-27519 | 2.0000–2.5000 | SOIL | — | — | — | 0.179 | 0.060706 | — | — |
| RE21-07-75631 | 21-27520 | 2.0000–3.0000 | SOIL | 0.0312 | 0.207 | — | 0.724 | 0.069818 | — | — |
| RE21-07-75632 | 21-27520 | 4.0000–5.0000 | SOIL | — | — | — | 0.174 | 0.121329 | — | — |
| RE21-07-75633 | 21-27521 | 2.5000–3.5000 | SOIL | — | — | — | 0.137 | 0.129535 | — | — |
| RE21-07-75634 | 21-27521 | 4.5000–5.5000 | SOIL | — | — | — | 0.064 | 0.091728 | — | — |
| RE21-07-75635 | 21-27522 | 5.0000–6.0000 | SOIL | — | — | — | 0.515 | — | — | — |
| RE21-07-75636 | 21-27522 | 7.0000–8.0000 | QBT3 | — | — | — | 0.226 | — | — | — |

**Table 6.19-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-07-75637 | 21-27523 | 3.0000–4.0000 | SOIL | — | NA | — | 0.218 | 0.045097 | — | — |
| RE21-07-75638 | 21-27523 | 5.0000–6.0000 | SOIL | — | — | — | 0.189 | 0.130598 | — | — |
| RE21-07-75639 | 21-27524 | 2.0000–3.0000 | SOIL | — | — | — | 0.871 | 0.043065 | — | — |
| RE21-07-75640 | 21-27524 | 4.0000–5.0000 | SOIL | — | — | — | 0.331 | — | — | — |
| RE21-07-75641 | 21-27525 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0889 | 0.105094 | — | — |
| RE21-07-75642 | 21-27525 | 7.0000–8.0000 | QBT3 | — | — | — | 0.09 | 0.153594 | — | — |
| RE21-07-75643 | 21-27526 | 4.0000–5.0000 | SOIL | 3.44 | NA | — | 103 | 0.091445 | — | — |
| RE21-07-75644 | 21-27526 | 6.0000–7.0000 | QBT3 | 0.0532 | — | — | 3.9 | 0.110011 | — | — |
| RE21-07-75663 | 21-27530 | 0.0000–0.5000 | SOIL | 0.0611 | — | — | 0.494 | — | — | — |
| RE21-07-75664 | 21-27530 | 2.0000–3.0000 | SOIL | — | — | — | 0.0813 | — | — | — |
| RE21-07-75665 | 21-27530 | 5.0000–6.0000 | SOIL | — | — | — | 0.252 | 0.041611 | — | — |
| RE21-07-75672 | 21-27533 | 0.0000–0.5000 | QBT3 | 0.108 | NA | 4.9 | 0.989 | 0.037559 | — | 0.113 |
| RE21-07-75673 | 21-27533 | 2.0000–3.0000 | QBT3 | 0.0536 | — | 0.104 | 0.351 | 0.010864 | — | — |
| RE21-07-75675 | 21-27534 | 2.0000–3.0000 | SOIL | — | — | — | 0.157 | 0.034226 | — | — |
| RE21-07-75676 | 21-27535 | 0.0000–0.5000 | SOIL | 0.0579 | — | — | 0.244 | 0.010183 | — | — |
| RE21-07-75677 | 21-27535 | 2.0000–3.0000 | SOIL | — | — | — | 0.215 | — | — | — |
| RE21-07-75678 | 21-27536 | 0.0000–0.5000 | SOIL | 0.0631 | — | 0.084 | 0.219 | — | — | — |
| RE21-07-75679 | 21-27536 | 2.0000–3.0000 | QBT3 | — | — | — | 0.034 | — | — | — |

**Table 6.19-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-07-75680 | 21-27537 | 0.0000–0.5000 | SOIL | 0.0471 | — | 0.135 | 0.156 | — | — | — |
| RE21-07-75682 | 21-27538 | 0.0000–0.5000 | SOIL | 0.0636 | — | 0.0327 | 0.691 | 0.113016 | — | — |
| RE21-07-75683 | 21-27538 | 2.0000–3.0000 | SOIL | — | — | — | 0.0233 | 0.045188 | — | — |
| RE21-07-75684 | 21-27539 | 2.0000–3.0000 | SOIL | 0.0496 | — | — | 0.695 | 0.04014 | — | — |
| RE21-07-75685 | 21-27539 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0358 | 0.020975 | — | — |
| RE21-07-75686 | 21-27540 | 0.0000–0.5000 | SOIL | 0.22 | — | — | 0.994 | — | — | — |
| RE21-07-75687 | 21-27540 | 2.0000–3.0000 | SOIL | — | NA | — | 0.244 | 0.01327 | — | — |
| RE21-07-75690 | 21-27542 | 0.0000–0.5000 | SOIL | 0.0398 | — | — | 0.209 | — | 3.72 | 0.276 |
| RE21-07-75691 | 21-27542 | 2.0000–3.0000 | QBT3 | — | — | — | 0.149 | — | — | — |
| RE21-07-75692 | 21-27543 | 0.0000–0.5000 | SOIL | 0.22 | — | 0.109 | 2.16 | — | — | — |
| RE21-07-75693 | 21-27543 | 2.0000–3.0000 | QBT3 | 0.0381 | NA | — | 0.296 | — | — | — |
| RE21-07-75694 | 21-27544 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0664 | 0.046545 | — | — |
| RE21-07-75695 | 21-27544 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.022532 | — | — |
| RE21-07-75696 | 21-27545 | 3.0000–4.0000 | SOIL | 0.0436 | — | — | 2.86 | 0.254764 | — | — |
| RE21-07-75697 | 21-27545 | 5.0000–6.0000 | QBT3 | 0.0505 | — | — | 0.296 | 2.06204 | — | — |
| RE21-07-75698 | 21-27546 | 1.0000–2.0000 | SOIL | — | — | — | 0.389 | 0.026311 | — | — |
| RE21-07-75699 | 21-27546 | 4.0000–5.0000 | SOIL | — | — | — | 0.268 | 0.063433 | — | — |
| RE21-07-75700 | 21-27547 | 0.5000–1.5000 | SOIL | — | — | — | 0.178 | 0.031992 | — | — |

**Table 6.19-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| RE21-07-75701 | 21-27547 | 2.5000–3.5000 | SOIL | — | — | — | — | 0.10421 | — | — |
| MD21-09-8820 | 21-605272 | 0.0000–0.5000 | SOIL | 0.375 | — | 0.099 | 6.23 | NA | NA | NA |
| MD21-09-8821 | 21-605272 | 7.0000–8.0000 | QBT3 | — | — | — | 0.327 | NA | NA | NA |
| MD21-09-8822 | 21-605273 | 0.0000–0.5000 | SOIL | 0.0309 | — | — | 0.428 | NA | NA | NA |
| MD21-09-8823 | 21-605273 | 7.0000–8.0000 | QBT3 | — | — | — | 0.301 | NA | NA | NA |
| MD21-09-8825 | 21-605274 | 0.0000–0.5000 | SOIL | 0.078 | NA | 0.034 | 0.906 | NA | NA | NA |
| MD21-09-8826 | 21-605275 | 0.0000–0.5000 | QBT3 | 0.053(J+) | NA | 0.034 | 0.27 | NA | NA | NA |
| MD21-09-8830 | 21-605276 | 0.0000–0.5000 | SOIL | NA | NA | 0.06 | 0.251 | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.20-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(n)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-3114 | 21-600667 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | 0.535 (U) | — | — | — | — | 0.61 (J) | — |
| RE21-07-3115 | 21-600667 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 10 | — | — | — | — |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.554 (U) | — | — | — | — | — | — |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.525 (U) | — | — | — | — | — | — |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.567 (U) | 7210 | — | — | — | — | — |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | — | — | 3.47 | 99 | — | — | 2630 | 48.1 | 3.2 | 10.9 | — | — |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.529 (U) | — | — | — | — | — | — |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.581 (U) | — | 106 | — | 15.1 | — | — |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.599 (U) | — | 23.7 | — | — | — | — |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.533 (U) | — | 45.4 | — | — | — | — |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.59 (U) | — | — | — | — | — | — |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.544 (U) | — | — | — | — | — | — |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.577 (U) | — | — | — | — | — | — |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | — | — | — | 64.5 | — | — | 2410 | 21.9 | — | 6.87 | — | — |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.57 (U) | — | — | — | — | — | — |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 16.6 | — | — | — | — |
| RE21-07-3130 | 21-600675 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.541 (U) | — | — | — | — | — | — |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 24.9 | — | 5.39 | — | — |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.557 (U) | — | — | — | — | — | — |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 26.1 | — | 17.3 | — | — |
| RE21-07-3134 | 21-600677 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.536 (U) | — | — | — | 18 | — | — |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.539 (U) | — | 21.5 | — | — | — | — |
| RE21-07-3136 | 21-600678 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.541 (U) | — | — | — | — | — | — |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | — | — | 2.93 | 113 | — | — | — | 26.4 | — | 18.5 | — | — |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.531 (U) | — | — | — | — | — | — |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | — | — | 4.65 | 71.9 | — | — | — | 149 | — | 26.9 | — | — |
| RE21-07-3140 | 21-600680 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.5 (U) | 8860 | — | — | — | — | — |

**Table 6-20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | — | — | 3.76 | 110 | — | — | — | 14 | 4.4 | 15.5 | — | — |
| RE21-07-3142 | 21-600681 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.493 (U) | — | — | — | — | — | — |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.587 (U) | — | 28.5 | — | — | — | — |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | — | — | 11.1 | — | — | 1.12 | — | 289 | — | 438 | — | — |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | 341 | — | 93.9 | — | — |
| MD21-09-8759 | 21-600682 | 7.0000–8.0000 | QBT3 | NA[f] | NA | NA | NA | NA | NA | NA | 62 (J-) | NA | NA | NA | NA |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.545 (U) | — | 19.7 | — | 22.2 | — | — |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | — | — | 4.11 | 57.5 | — | — | — | 22.5 | — | 11.2 | — | — |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.541 (U) | — | — | — | — | — | — |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 20.8 | — | 43.8 | — | — |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.552 (U) | — | — | 15.1 | — | — | — |
| RE21-07-3151 | 21-600685 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 11.7 | — | — | — | — |
| RE21-07-3152 | 21-600686 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.54 (U) | — | — | — | — | — | — |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | 9660 | NA | 3.5 | 94.2 | — | — | — | 12.3 | — | 6.54 | — | — |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.504 (U) | — | — | — | — | — | — |
| RE21-07-3155 | 21-600687 | 2.0000–3.0000 | SOIL | — | NA | — | — | — | 0.54 (U) | — | — | — | — | — | — |
| RE21-07-3156 | 21-600688 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.521 (U) | — | — | — | 15.8 | — | — |
| RE21-07-3157 | 21-600688 | 2.0000–3.0000 | SOIL | — | NA | — | — | — | 0.54 (U) | — | — | — | — | — | — |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.538 (U) | — | — | — | — | — | — |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | — | NA | — | — | — | 0.542 (U) | — | 21 | — | — | — | — |
| RE21-07-3160 | 21-600690 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.53 (U) | — | — | — | — | — | — |
| RE21-07-3161 | 21-600690 | 2.0000–3.0000 | QBT3 | — | NA | 3.33 | — | — | — | — | 10.9 | — | — | — | — |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | 0.525 (U) | — | — | — | 22.4 | — | — |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | 7470 | NA | 3.52 | 73.4 | — | — | — | 12.6 | — | 11.7 | — | — |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | — | NA | — | — | — | — | — | 21 | — | — | — | — |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | — | NA | 3.48 | 57.7 | — | — | — | 25.2 | — | — | — | — |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.524 (U) | — | 25.1 | — | 21.7 | — | — |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | — | — | 16.6 | — | — | — | — | 27.2 | — | 43.9 | — | — |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | — | — | 2.99 | 46.8 (J) | — | — | — | 28.7 | — | 16.8 | — | — |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.551 (U) | — | — | — | 17.4 | — | — |

**Table 6-20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.538 (U) | — | 43.6 | — | — | — | — |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | 7600 (J+) | — | 3.3 | 80.5 (J) | 1.48 | — | 2460 | 55 | — | 10.4 | — | — |
| MD21-09-8760 | 21-600695 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | 24 (J-) | NA | NA | NA | NA |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.512 (U) | — | — | — | — | — | — |
| RE21-07-3266 | 21-600710 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.541 (U) | — | — | — | — | — | — |
| RE21-07-3268 | 21-600711 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.556 (U) | — | — | — | — | — | — |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.58 (U) | — | — | — | — | — | — |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.553 (U) | — | — | — | — | — | — |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.52 (U) | — | — | — | — | — | — |
| RE21-07-3272 | 21-600713 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 13.8 | — | — | — | — |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.547 (U) | — | — | — | — | — | — |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | — | — | — | 69.6 | — | — | — | 9.49 | — | — | — | — |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.561 (U) | — | — | — | — | — | — |
| RE21-07-3276 | 21-600715 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 8.33 | — | — | — | — |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.533 (U) | — | — | — | — | — | — |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3280 | 21-600717 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 10.1 | — | — | — | — |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.572 (U) | — | — | — | — | — | 21700 |
| RE21-07-3282 | 21-600718 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 7.28 | — | — | — | — |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 3.9 | 6190 (J) | 48.9 (J) | — | 156 | — | — |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.525 (U) | — | 23.8 (J) | — | 23.7 | — | — |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | 21.4 | 0.663 | — |
| RE21-07-3286 | 21-600720 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.547 (U) | — | — | — | — | — | — |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.59 (U) | — | — | — | — | — | — |
| RE21-07-3288 | 21-600721 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.562 (U) | — | — | — | — | — | — |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.715 | — | 79.7 (J) | — | 84.9 | — | — |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.546 (U) | — | 30.7 (J) | — | 18.8 | — | — |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.511 (U) | — | — | — | — | — | — |

**Table 6-20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.524 (U) | — | — | — | — | — | — |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.522 (U) | — | — | — | — | — | — |
| RE21-07-3294 | 21-600724 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 7.91 (J) | — | — | — | — |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.566 (U) | — | — | — | — | — | — |
| RE21-07-3296 | 21-600725 | 2.0000–3.0000 | QBT3 | — | — | 4 | 80.4 (J) | — | — | 2250 (J) | 22.8 (J) | — | 5.96 | — | — |
| RE21-07-3297 | 21-600726 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.492 (U) | — | — | — | — | — | — |
| RE21-07-3298 | 21-600726 | 2.0000–3.0000 | QBT3 | — | — | — | 83.3 (J) | — | — | 3010 (J) | 16.5 (J) | — | — | — | — |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3318 | 21-600735 | 2.0000–3.0000 | QBT3 | 11000 (J+) | — | 4.21 | 104 | — | — | — | 19.1 | 5.72 | 6.25 | — | 14900 |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | — | — | — | 62.2 | — | — | — | 22.4 | — | — | — | — |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | — | 26.1 (J-) | — | — | — | 2.29 | — | 62.8 (J) | — | 123 | — | — |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.528 (U) | — | 46.1 (J) | — | 55.4 | — | — |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | — | — | 3.12 | — | — | — | — | 25.1 (J) | — | 24 | — | — |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.555 (U) | — | — | — | — | — | — |
| RE21-07-3324 | 21-600737 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 8.67 | — | — |
| RE21-07-3325 | 21-600737 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 8.27 | — | — | — | — |
| RE21-07-6248 | 21-601304 | 2.5000–3.5000 | SOIL | — | — | — | — | — | 0.604 (U) | — | — | — | — | — | — |
| RE21-07-6249 | 21-601304 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 5.8 | — | — |
| RE21-07-6250 | 21-601305 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | — | — | 5.59 | — | — |
| RE21-07-6251 | 21-601305 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 7.35 | — | — | — | — |
| RE21-07-6252 | 21-601306 | 1.0000–2.0000 | QBT3 | — | — | — | 47 | — | — | — | 7.51 | — | 6 | — | — |
| RE21-07-6253 | 21-601306 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | 11.5 | — | 5.07 | — | — |
| RE21-07-6254 | 21-601307 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-6255 | 21-601307 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | — | NA | — | — | — | — | — | — | — | 18.2 | — | — |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | — | NA | — | — | — | — | — | 8.82 | — | 6.64 | — | — |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | — | NA | — | 63.5 | — | — | 2730 | 16.5 | — | — | — | — |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | — | NA | — | — | — | — | — | 9.64 | — | — | — | — |
| RE21-07-6260 | 21-601310 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 7.44 | — | — | 2.52 | — |
| RE21-07-6261 | 21-601310 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |

**Table 6-20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **14500** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **21500** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **156** | **77.9** | **na**[a] | **219**[b] | **23**[c] | **3130** | **1560** | **54800** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **2260** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **22700** | **795000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **144** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **6190** | **217000** |
| RE21-07-6262 | 21-601311 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 7.84 | — | — | — | — |
| RE21-07-6263 | 21-601311 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-6264 | 21-601312 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | 10 | — | 6.42 | — | — |
| RE21-07-6265 | 21-601312 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 11.6 | — | — | — | — |
| RE21-07-6270 | 21-601315 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | 9.84 | — | — | — | — |
| RE21-07-6271 | 21-601315 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-6272 | 21-601315 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8761 | 21-605252 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 220 (J-) | NA | 180 | NA | NA |

**Table 6.20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-3114 | 21-600667 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 0.000582 (J-) | — | — | — | — |
| RE21-07-3115 | 21-600667 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 0.872 (J) | — | — | — |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.5 (J-) | — | — | — | — | — |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.42 (J-) | 0.000856 (J-) | — | — | — | — |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 52.3 |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | 12.4 | — | — | — | 8.72 | — | 0.000975 (J-) | 1.49 (J) | — | — | — |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | 1.74 (U) | — | — | — |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.5 (J-) | 0.000635 (J-) | — | — | — | — |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.38 (J-) | — | 1.77 (U) | — | — | — |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 1.73 (U) | — | — | — |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | — | — | — | — | 7.14 | — | — | 1.04 (J) | — | — | — |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 2.25 (J-) | — | — | — | — | — |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 0.659 (J) | — | — | — |
| RE21-07-3130 | 21-600675 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 1.62 (U) | — | — | — |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.58 (U) | — | — | — |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 2.93 | — | 1.67 (U) | — | — | — |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | 12.7 | — | — | — | — | — | 0.000712 (J) | 1.54 (U) | — | — | — |
| RE21-07-3134 | 21-600677 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 9.68 (J-) | — | — | — | — | — |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 20.7 | 0.001 (J) | 1.62 (U) | — | — | — |
| RE21-07-3136 | 21-600678 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 2.61 | — | 1.62 (U) | — | — | — |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | 17.5 | — | — | — | — | 2.11 (J-) | — | 1.64 (U) | — | — | — |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 2.47 | — | 1.59 (U) | — | — | — |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | 16.3 | — | — | — | — | 1.12 (J-) | — | 1.61 (U) | — | 22.7 | 140 |
| RE21-07-3140 | 21-600680 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.01 (J-) | — | — | — | — | — |

**Table 6.20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | 17.4 | — | — | — | 6.61 | 3.37 | 0.000704 (J) | 1.63 (U) | — | 19.9 | — |
| RE21-07-3142 | 21-600681 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.5 | — | 1.76 (U) | — | — | — |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | 369 | — | — | 0.19 | — | 1.63 (J-) | — | 1.82 (U) | — | — | 387 |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | 41.3 | — | — | — | — | — | — | 1.58 (U) | — | — | 119 |
| MD21-09-8759 | 21-600682 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | 23.8 | — | — | — | — | — | — | — | — | — | 69.3 |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 1.42 | — | 1.58 (U) | — | — | — |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 2.33 (J-) | — | — | — | — | 104 |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | 54.5 | — | — | — | — | — | — | 1.58 (U) | — | — | 69.8 |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | — | — | 1280 (J-) | — | — | — | — | — | — | — | — |
| RE21-07-3151 | 21-600685 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.7 (U) | — | — | — |
| RE21-07-3152 | 21-600686 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 53.5 |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.64 (U) | — | 17.5 | — |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 0.00085 (J) | — | — | — | — |
| RE21-07-3155 | 21-600687 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.03 (J-) | — | 1.62 (U) | — | — | — |
| RE21-07-3156 | 21-600688 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.02 (J-) | — | 1.56 (U) | — | — | — |
| RE21-07-3157 | 21-600688 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.65 (J-) | — | 1.62 (U) | — | — | — |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 109 |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | 1.63 (U) | — | — | 60.4 |
| RE21-07-3160 | 21-600690 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.07 (J-) | 0.000941 (J) | 1.59 (U) | — | — | — |
| RE21-07-3161 | 21-600690 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 0.000739 (J) | 1.62 (U) | — | — | — |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 1.57 (U) | — | — | 67.9 |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 1.12 | 0.00106 (J) | 1.7 (U) | — | — | — |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 1.62 (U) | — | — | 253 |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 1.09 (J-) | — | 1.64 (U) | — | — | — |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 3.8 | — | 1.57 (U) | — | — | 63.3 (J-) |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.46 | — | 1.66 (U) | — | — | 157 (J-) |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | 12.7 (J) | — | — | — | — | — | — | 1.58 (U) | — | — | 86.7 (J-) |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.55 | — | 1.65 (U) | — | — | 93.2 (J-) |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | 101 (J-) |

**Table 6.20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | — | — | — | — | 7.06 | — | — | 1.7 (U) | — | — | — |
| MD21-09-8760 | 21-600695 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 0.904 (J-) | — | 1.53 (U) | — | — | — |
| RE21-07-3266 | 21-600710 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.06 (J) | — | — | — |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.38 (J-) | — | — | — | — | 101 |
| RE21-07-3268 | 21-600711 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | 1.67 (U) | — | — | — |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | 43.9 | — | — | — | — | 1.13 (J-) | — | 1.53 (J) | — | — | 115 |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 0.921 (J-) | — | — | — | — | — |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 0.000526 (J) | 1.56 (U) | — | — | 61.8 |
| RE21-07-3272 | 21-600713 | 2.0000–3.0000 | QBT3 | 16 | — | 655 | — | — | — | 0.0012 (J) | 1.64 (U) | — | — | — |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | 26.1 | — | — | — | — | — | — | — | — | — | 139 |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.02 (J) | — | — | — |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | 37.4 | — | — | — | — | — | — | 1.68 | — | — | 113 |
| RE21-07-3276 | 21-600715 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.03 (J) | — | — | — |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.43 (J-) | — | — | — | — | — |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 0.652 (J) | — | — | — |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 170 |
| RE21-07-3280 | 21-600717 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.61 (U) | — | — | — |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.38 (J-) | — | — | — | — | 82.3 |
| RE21-07-3282 | 21-600718 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | 42.8 | — | — | 0.154 | — | 3.93 (J-) | — | — | 1.17 | — | 915 (J) |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | — | — | — | 0.115 | — | 1.46 (J-) | — | — | — | — | 102 (J) |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 2.17 (J-) | — | — | — | — | 138 (J) |
| RE21-07-3286 | 21-600720 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | 26.5 | — | — | — | — | 1.27 (J-) | — | — | — | — | 73.7 (J) |
| RE21-07-3288 | 21-600721 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | 31.9 | — | — | — | — | 3.98 (J-) | — | — | — | — | 213 (J) |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | 61.2 (J) |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.22 (J-) | — | 1.53 (U) | — | — | — |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.06 (J-) | — | — | — | — | — |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 3.12 (J-) | 0.000546 (J) | — | — | — | — |

**Table 6.20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-3294 | 21-600724 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.64 (U) | — | — | — |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 4.45 (J-) | — | 1.7 (U) | — | — | 64.9 (J) |
| RE21-07-3296 | 21-600725 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 0.838 (J) | — | — | — |
| RE21-07-3297 | 21-600726 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.53 (J-) | — | — | — | — | — |
| RE21-07-3298 | 21-600726 | 2.0000–3.0000 | QBT3 | 11.7 | — | — | — | — | — | — | 0.899 (J) | — | — | — |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | 25.9 | — | — | — | — | — | — | 1.59 (U) | — | — | 130 |
| RE21-07-3318 | 21-600735 | 2.0000–3.0000 | QBT3 | 20.6 | 1830 | — | — | 8.49 | — | — | 1.13 (J) | — | 21.5 | 91.3 |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | 0.000558 (J) | 1.6 (U) | — | — | 65.1 |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | 77.5 | — | — | 0.207 | 17 (J-) | 1.46 (J-) | — | — | — | — | 570 (J) |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | 28.2 | — | — | — | — | — | — | 1.58 (U) | — | — | 110 (J) |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | 23.3 | — | — | — | — | — | — | 1.73 (U) | — | — | 92.5 (J) |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.72 | — | 1.67 (U) | — | — | 139 (J-) |
| RE21-07-3324 | 21-600737 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | 1.63 (U) | — | — | 74.2 (J-) |
| RE21-07-3325 | 21-600737 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 1.64 (U) | — | — | — |
| RE21-07-6248 | 21-601304 | 2.5000–3.5000 | SOIL | — | — | — | — | — | 0.864 (J-) | — | 1.81 (U) | — | — | 112 |
| RE21-07-6249 | 21-601304 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | 0.741 (J-) | — | 0.624 (J) | — | — | — |
| RE21-07-6250 | 21-601305 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | 0.725 (J-) | — | 0.68 (J) | — | — | 91.6 |
| RE21-07-6251 | 21-601305 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 0.953 (J) | — | — | 152 |
| RE21-07-6252 | 21-601306 | 1.0000–2.0000 | QBT3 | — | — | — | — | — | — | — | 1.28 (J) | — | — | — |
| RE21-07-6253 | 21-601306 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | 0.853 (J) | — | — | — |
| RE21-07-6254 | 21-601307 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | 0.658 (J-) | — | 0.785 (J) | — | — | 119 |
| RE21-07-6255 | 21-601307 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | — | — | 1.72 (U) | — | — | 90.8 |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | — | — | — | — | — | — | — | 2.06 | — | — | 99.4 |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | 1.95 | — | — | — |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | 1.53 | — | 2.83 | — | — | — |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | 1.23 | — | 1.86 | — | — | — |
| RE21-07-6260 | 21-601310 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 1.81 (U) | — | — | — |
| RE21-07-6261 | 21-601310 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | 1.78 (U) | — | — | — |
| RE21-07-6262 | 21-601311 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | 1.78 (U) | — | — | — |
| RE21-07-6263 | 21-601311 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | 0.79 (J) | — | — | — |
| RE21-07-6264 | 21-601312 | 4.0000–5.0000 | QBT3 | 34.7 | — | — | — | — | — | — | 0.679 (J) | — | — | — |

**Table 6.20-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **11.2** | **1690** | **482** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **17** | **63.5** |
| **SOIL Background Value** | | | | **22.3** | **4610** | **671** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **39.6** | **48.8** |
| **Residential SSL** | | | | **400** | **na** | **10700** | **23**[c] | **1560** | **125000** | **54.8** | **391** | **391** | **391** | **23500** |
| **Industrial SSL** | | | | **800** | **na** | **145000** | **310**[c] | **22700** | **1820000** | **795** | **5680** | **5680** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **800** | **na** | **463** | **92.9**[d] | **6190** | **496000** | **217** | **1550** | **1550** | **1550** | **92900** |
| RE21-07-6265 | 21-601312 | 6.0000–7.0000 | QBT3 | 129 | — | — | — | — | — | — | 1.67 (U) | — | — | — |
| RE21-07-6270 | 21-601315 | 3.0000–4.0000 | QBT3 | — | — | — | — | — | — | — | 1.79 (U) | — | — | — |
| RE21-07-6271 | 21-601315 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | — | — | 1.78 (U) | — | — | — |
| RE21-07-6272 | 21-601315 | 13.0000–14.0000 | QBT3 | — | — | — | — | — | — | — | 1.69 (U) | — | — | — |
| MD21-09-8761 | 21-605252 | 0.0000–0.5000 | SOIL | 34 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 280 |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.20-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(n)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Chloroform | Chrysene | Di-n-butylphthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **2600**[b] | **5.72** | **621** | **6110** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **9100**[b] | **31.9** | **2340** | **68400** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **47600**[c] | **671** | **20600** | **23800** |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | —[d] | NA[e] | 0.00992 (J) | NA | — | — | — | — | — | — | — | NA | 0.0251 (J) | — |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | — | — | 0.011 (J) | NA | — | — | — | — | — | — | — | — | 0.0172 (J) | — |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | 0.0242 (J) | 0.0427 | — | — | — | — | NA | 0.0251 (J) | — |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | — | 0.00418 (J) | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | 0.0186 (J) | NA | 0.0322 (J) | NA | — | 0.0475 | 0.059 | — | 0.0257 (J) | — | — | NA | 0.0505 | — |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | — | NA | 0.00958 (J) | NA | — | 0.0398 (J) | 0.0526 | — | 0.0197 (J) | — | — | NA | 0.0311 (J) | — |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0265 (J) | — | 0.0418 (J) | — | — | — | — | NA | 0.0249 (J) | — |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | — | 0.00512 (J) | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | 0.0184 (J) | 0.0305 (J) | — | — | — | — | NA | 0.0196 (J) | — |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | — | NA | 0.0143 (J) | NA | — | 0.0504 | 0.0841 | — | — | — | — | NA | 0.0494 | — |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | 0.00052 (J) | — | — |
| RE21-07-3188 | 21-600676 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 0.0065 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | — | 0.00332 (J) | — | NA | — | — | 0.0291 (J) | — | 0.0161 (J) | — | — | — | 0.027 (J) | — |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | 0.0118 (J) | — | — | — | — | NA | — | — |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | — | — | 0.00905 (J) | NA | — | — | 0.0337 (J) | — | — | — | — | 0.000276 (J) | 0.0209 (J) | — |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | 0.018 (J) | 0.0313 (J) | — | — | — | — | — | 0.0187 (J) | — |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | — | NA | 0.0334 (J) | NA | 0.4 | 0.54 (J) | 0.955 (J) | 0.353 (J) | — | 0.177 (J) | — | NA | 0.562 | — |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | — | — | 0.00765 (J) | NA | 0.0416 | 0.0435 (J) | 0.0946 (J) | 0.042 (J) | — | — | — | — | 0.0496 | — |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Chloroform | Chrysene | Di-n-butylphthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **2600**[b] | **5.72** | **621** | **6110** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **9100**[b] | **31.9** | **2340** | **68400** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **47600**[c] | **671** | **20600** | **23800** |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | — | NA | 0.0117 (J) | NA | 0.0624 | 0.138 | 0.169 | 0.033 (J) | 0.0676 (J) | — | — | NA | 0.0778 | — |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | 0.0201 (J) | 0.0332 (J) | — | — | — | — | — | 0.0226 (J) | — |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.064 | 0.146 | 0.216 | 0.0354 (J) | — | — | — | NA | 0.0804 | — |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | — | — | 0.0222 (J) | NA | 0.16 | 0.163 | 0.256 | 0.117 (J) | — | — | — | — | 0.19 | — |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | 0.0112 (J) | — | — | — | — | NA | — | — |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | 0.0177 (J) | 0.0315 (J) | 0.0166 (J) | — | — | — | NA | — | — |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | — | — | 0.0101 (J) | NA | — | 0.0456 | 0.0809 | 0.0527 | — | — | — | — | 0.0329 (J) | — |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | — | NA | 0.0154 (J) | NA | 0.0171 (J) | 0.0166 (J) | 0.0207 (J) | 0.0113 (J) | 0.0145 (J) | — | — | NA | 0.0198 (J) | — |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | — | NA | 0.0247 (J) | NA | 0.0199 (J) | 0.0184 (J) | 0.0323 (J) | 0.016 (J) | — | — | — | NA | 0.0208 (J) | — |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | 0.116 (J) | 0.161 (J) | — | — | — | — | NA | 0.0482 | — |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | — | — | 0.0134 (J) | NA | 0.12 | 0.214 (J) | 0.339 (J) | 0.0819 (J) | — | 0.122 (J) | — | — | 0.154 | — |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | — | — | — | NA | 0.0479 | 0.119 | 0.169 | — | — | — | — | — | 0.0612 | — |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | — | NA | 0.00776 (J) | NA | — | — | 0.0109 (J) | — | — | — | — | NA | — | — |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | 0.0851 | — | — | — | — | NA | 0.0426 | — |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | — | NA | 0.00892 (J) | NA | — | 0.0805 (J) | 0.172 (J) | 0.0535 (J) | — | — | — | NA | 0.107 | — |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0296 (J) | — | 0.0748 | — | — | — | — | NA | 0.0382 | 0.0513 (J) |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | — | NA | 0.0115 (J) | NA | 0.0743 | 0.117 (J) | 0.306 (J) | 0.133 (J) | — | — | — | NA | 0.172 | — |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | — | — | — | NA | — | — | 0.0132 (J) | — | — | — | — | — | — | — |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0575 | 0.0731 (J) | 0.166 (J) | 0.0504 (J) | — | — | — | NA | 0.1 | — |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | 0.0507 (J) | — | — | — | — | NA | 0.0315 (J) | — |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | — | — | — | NA | 0.0803 | 0.0819 (J) | 0.127 (J) | 0.0599 (J) | — | — | — | — | 0.0889 | — |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Chloroform | Chrysene | Di-n-butylphthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **2600**[b] | **5.72** | **621** | **6110** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **9100**[b] | **31.9** | **2340** | **68400** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **47600**[c] | **671** | **20600** | **23800** |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0264 (J) | — | 0.0601 | — | — | — | — | NA | 0.0333 (J) | — |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | 0.0186 (J) | — | — | — | — | NA | 0.0152 (J) | — |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.753 (J) | — | 1.28 (J) | — | — | — | — | NA | 0.824 (J) | — |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | 0.0448 (J+) | — | 0.155 (J+) | NA | 1.04 (J+) | — | 2.45 (J) | 0.761 (J) | — | 0.699 (J+) | 0.759 (J) | — | 1.52 (J+) | 0.27 (J+) |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | — | NA | 0.0288 (J) | NA | 0.278 (J) | — | 0.681 (J) | 0.271 (J) | — | 0.267 (J) | — | NA | 0.444 (J) | — |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0493 | — | 0.0759 | 0.0378 (J) | 0.0261 (J) | — | — | NA | 0.0586 | — |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | 0.0186 (J) | NA | 0.0592 | NA | 0.558 | — | 0.962 (J) | 0.349 (J) | 0.401 (J) | 0.409 | — | NA | 0.698 | 0.0799 (J) |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | — | — | 0.0194 (J) | NA | 0.148 | — | 0.32 | 0.0892 | — | — | — | — | 0.194 | — |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0561 | — | 0.117 | 0.0538 (J) | — | — | — | NA | 0.0642 | — |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | — | — | — | NA | — | — | 0.0216 (J) | — | — | — | — | — | — | — |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0291 (J) | — | 0.06 | — | — | — | — | NA | 0.036 | — |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.0304 (J) | — | 0.0401 | — | — | — | — | NA | 0.0327 (J) | — |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | 0.0933 | 0.229 | 0.102 | — | — | — | NA | 0.0962 | — |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | — | — | 0.0102 (J) | NA | 0.0599 | — | 0.108 | 0.0449 | — | — | — | — | 0.0801 | — |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | — | NA | — | NA | 0.625 | — | 1.09 | 0.474 (J) | 0.452 | — | — | NA | 0.995 | — |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | — | — | 0.153 (J) | NA | 1.12 | — | 1.87 (J) | 1.2 (J) | 0.771 (J) | 1.12 | — | 0.000253 (J) | 1.62 | — |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | 0.115 | — | 0.365 | NA | 1.01 | — | 1.6 | 0.426 | — | 0.147 (J) | 0.182 (J) | — | 1.1 | — |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | — | — | 0.0248 (J) | NA | — | 0.21 | 0.343 | 0.0973 | — | — | — | — | 0.203 | — |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | — | — | — | NA | — | 0.0685 | 0.112 | 0.0398 | — | — | — | — | 0.0742 | — |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | — | 0.0113 (J) | — | NA | — | — | — | — | — | — | — | — | — | — |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | — | 0.0231 (J) | — | NA | — | — | — | — | — | — | — | — | — | — |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Ethylbenzene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorobenzene | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **69.7** | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **na** | **3.04** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **385** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **12** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **6630** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **103** | **na** | **na** | **na** | **na** |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | NA | 0.0572 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | — | 0.0462 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | NA | 0.0487 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | 0.00027 (J) | 0.0331 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | NA | 0.0185 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | — | 0.0209 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | NA | 0.132 | 0.0162 (J) | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | NA | 0.0796 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | NA | 0.049 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | NA | 0.0404 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | NA | 0.0936 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3188 | 21-600676 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 0.000249 | 0.000421 | 0.000031 | 0.00000242 (J) | 0.000112 | NA | 0.00000121 (J) | 8.25E-06 | 0.00000178 (J) | 3.41E-05 |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | — | 0.0455 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | NA | 0.0141 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | — | 0.037 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | — | 0.0283 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | NA | 0.588 | — | NA | NA | NA | NA | NA | 0.0962 (J) | NA | NA | NA | NA |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | — | 0.0725 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | NA | 0.119 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | — | 0.0457 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | NA | 0.0987 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Ethylbenzene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorobenzene | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **69.7** | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **na** | **3.04** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **385** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **12** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **6630** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **103** | **na** | **na** | **na** | **na** |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | — | 0.287 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | NA | 0.0118 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | — | 0.0117 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | NA | 0.0146 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | — | 0.0266 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | NA | 0.0353 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | NA | 0.0402 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | NA | 0.0579 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | — | 0.199 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | — | 0.0867 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | NA | 0.0171 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | — | 0.0125 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | NA | 0.0167 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | NA | 0.0426 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | NA | 0.154 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | NA | 0.0512 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | NA | 0.124 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | NA | 0.134 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | NA | 0.0391 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | — | 0.117 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | NA | 0.0389 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | NA | 0.0185 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | NA | 1.08 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Ethylbenzene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorobenzene | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **69.7** | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **na** | **3.04** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **385** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **12** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **6630** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **103** | **na** | **na** | **na** | **na** |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | — | 2.04 (J+) | 0.0506 (J+) | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | NA | 0.502 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | NA | 0.0906 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | NA | 1.03 | 0.0177 (J) | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | — | 0.303 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | NA | 0.0917 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | — | 0.0169 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | NA | 0.0554 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | NA | 0.0497 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | NA | 0.0825 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | — | 0.0976 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | NA | 1.09 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | — | 1.76 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | — | 2.32 | 0.112 | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | NA | 0.0146 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | — | 0.275 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | — | 0.0904 | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | — | 0.0125 (J) | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | — | — | — | NA | NA | NA | NA | NA | — | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[g] | **199** | **45** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[g] | **1090** | **252** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[g] | **10600** | **702** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | 0.00805 | — | — | NA | NA | NA | NA | NA |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | 0.000526 (J) | — | — | NA | NA | NA | NA | NA |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | 0.00261 | — | — | NA | NA | NA | NA | NA |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | 0.00469 | 0.00232 (J) | — | NA | NA | NA | NA | NA |
| RE21-07-3188 | 21-600676 | 2.0000–3.0000 | QBT3 | 0.00000106 (J) | 0.000000742 (J) | 0.00000139 (J) | 0.000041 | NA | NA | NA | NA | 0.00254 | 9.04E-05 | 1.33E-06 | 0.000000168 (J) | 0.000000287 (J) |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | 0.000604 (J) | — | — | NA | NA | NA | NA | NA |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.25 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.0329 (J) | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.082 | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0811 | NA | NA | — | NA | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[g] | **199** | **45** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[g] | **1090** | **252** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[g] | **10600** | **702** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | 0.0763 (J) | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.014 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.0427 | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | 0.0127 | — | — | NA | NA | NA | NA | NA |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0144 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.116 (J) | 0.000283 (J) | — | 0.0145 (J) | NA | NA | NA | NA | NA |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | 0.000355 (J) | — | — | NA | NA | NA | NA | NA |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0457 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.109 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.044 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | 0.0484 (J) | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Isopropyltoluene[4-] | Methylene Chloride | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **6.21** | **3210**[g] | **199** | **45** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **23.4** | **14900**[g] | **1090** | **252** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **213** | **10300**[g] | **10600** | **702** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.808 (J) | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.29 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0357 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.336 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.0866 | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0489 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0749 | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.45 (J) | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | 0.854 (J) | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | 0.445 | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | NA | NA | — | NA | NA | NA | NA | NA |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | 0.0926 | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | 0.0343 (J) | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | NA | NA | NA | NA | — | — | — | — | NA | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloro-1,2,2-trifluoroethane[1,1,2-] | Trimethylbenzene[1,2,4-] | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **1830** | **1720** | **8970** | **0.000045** | **na** | **0.000374** | **na** | **5570** | **104000** | **62**[b] | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **na** | **20500** | **18300** | **51200** | **0.000204** | **na** | **0.00147** | **na** | **57900** | **339000** | **260**[b] | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **na** | **7150** | **6680** | **30300** | **0.000284** | **na** | **0.0127** | **na** | **21100** | **298000** | **688**[c] | **27500** | **3130**[h] |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | NA | 0.0413 | 0.0655 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | NA | 0.039 | 0.0422 | — | NA | NA | NA | NA | 0.000573 (J) | — | — | — | — |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | NA | 0.0296 (J) | 0.04 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | NA | 0.0222 (J) | 0.0358 (J) | — | NA | NA | NA | NA | 0.00647 | — | — | 0.000318 (J) | 0.000822 (J) |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | NA | 0.014 (J) | 0.0147 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | NA | 0.0139 (J) | 0.0173 (J) | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | NA | 0.114 | 0.11 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | NA | — | — | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | NA | 0.0426 | 0.0738 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | NA | — | — | — | NA | NA | NA | NA | 0.00143 | — | — | — | — |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | NA | 0.0279 (J) | 0.0491 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.00207 | — | — | — | — |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | NA | 0.0184 (J) | 0.0408 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.000371 (J) | — | — | — | — |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.000468 (J) | — | — | — | — |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | NA | 0.0542 | 0.121 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.00425 | — | — | — | — |
| RE21-07-3188 | 21-600676 | 2.0000–3.0000 | QBT3 | 5.06E-06 | NA | NA | NA | 0.000000317 (J) | 1.2E-06 | 0.000000208 (J) | 1.14E-06 | NA | NA | NA | NA | NA |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | NA | 0.0264 (J) | 0.0565 | — | NA | NA | NA | NA | 0.000735 (J) | — | — | — | — |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | NA | — | 0.0115 (J) | — | NA | NA | NA | NA | 0.000524 (J) | — | — | — | — |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | NA | — | 0.0137 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | NA | 0.0316 (J) | 0.055 | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | NA | 0.0138 (J) | 0.0368 | — | NA | NA | NA | NA | 0.00208 | — | — | — | — |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | NA | — | — | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | NA | 0.235 | 0.942 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | NA | 0.0331 (J) | 0.0855 | — | NA | NA | NA | NA | 0.000802 (J) | — | — | — | — |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | NA | 0.0507 | 0.145 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | NA | 0.0263 (J) | 0.0492 | — | NA | NA | NA | NA | 0.00158 | — | — | — | — |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | NA | 0.0395 | 0.136 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloro-1,2,2-trifluoroethane[1,1,2-] | Trimethylbenzene[1,2,4-] | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **1830** | **1720** | **8970** | **0.000045** | **na** | **0.000374** | **na** | **5570** | **104000** | **62**[b] | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **na** | **20500** | **18300** | **51200** | **0.000204** | **na** | **0.00147** | **na** | **57900** | **339000** | **260**[b] | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **na** | **7150** | **6680** | **30300** | **0.000284** | **na** | **0.0127** | **na** | **21100** | **298000** | **688**[c] | **27500** | **3130**[h] |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | NA | 0.133 | 0.315 | — | NA | NA | NA | NA | 0.000545 (J) | — | — | — | — |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | NA | — | 0.0143 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | NA | — | 0.0191 (J) | — | NA | NA | NA | NA | 0.000364 (J) | — | — | — | — |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | NA | — | 0.0124 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | NA | — | 0.0113 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | NA | — | 0.0304 (J) | — | NA | NA | NA | NA | 0.00054 (J) | — | — | — | — |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | NA | — | 0.0332 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.000753 (J) | — | — | — | — |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | NA | — | 0.0356 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.00045 (J) | — | — | — | — |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | NA | 0.021 (J) | 0.0836 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | NA | 0.0765 | 0.258 | — | NA | NA | NA | NA | — | 0.00207 (J) | — | — | — |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | NA | 0.0287 (J) | 0.0895 | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | NA | 0.0113 (J) | 0.0228 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | NA | — | 0.0124 (J) | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | 0.00672 | — | 0.000262 (J) | 0.00085 (J) | 0.000882 (J) |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | NA | — | 0.0133 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | NA | 0.0129 (J) | 0.0467 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | NA | 0.0725 | 0.148 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | NA | — | — | — | NA | NA | NA | NA | 0.00102 (J) | — | — | — | — |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | NA | 0.0171 (J) | 0.0565 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | NA | 0.0456 | 0.142 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | NA | 0.0456 | 0.122 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | NA | 0.014 (J) | 0.0499 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | NA | 0.0382 | 0.163 | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | NA | 0.0126 (J) | 0.0444 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | NA | — | 0.0202 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | NA | 0.539 (J) | 1.82 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.20-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Styrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloro-1,2,2-trifluoroethane[1,1,2-] | Trimethylbenzene[1,2,4-] | Xylene[1,2-] | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **1830** | **1720** | **8970** | **0.000045** | **na** | **0.000374** | **na** | **5570** | **104000** | **62**[b] | **9550** | **1090**[h] |
| **Industrial SSL** | | | | **na** | **20500** | **18300** | **51200** | **0.000204** | **na** | **0.00147** | **na** | **57900** | **339000** | **260**[b] | **31500** | **3610**[h] |
| **Construction Worker SSL** | | | | **na** | **7150** | **6680** | **30300** | **0.000284** | **na** | **0.0127** | **na** | **21100** | **298000** | **688**[c] | **27500** | **3130**[h] |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | NA | 0.958 (J+) | 3.44 (J+) | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | NA | 0.229 | 0.77 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | NA | 0.0324 (J) | 0.0949 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | NA | 0.412 | 1.51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | NA | 0.117 | 0.3 | — | NA | NA | NA | NA | — | — | — | — | 0.00034 (J) |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | NA | 0.0315 (J) | 0.118 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | NA | — | 0.0219 (J) | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | NA | 0.0219 (J) | 0.0609 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | NA | 0.0284 (J) | 0.0782 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | NA | 0.0289 (J) | 0.0868 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | NA | 0.0601 | 0.113 | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | NA | 0.497 | 1.43 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | NA | 0.995 | 3.56 | 0.000566 (J) | NA | NA | NA | NA | 0.000404 (J) | — | — | — | 0.000621 (J) |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | NA | 1.64 | 2.91 | — | NA | NA | NA | NA | — | — | — | — | 0.000419 (J) |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | NA | — | 0.0193 (J) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | NA | 0.107 | 0.327 | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | NA | 0.0348 (J) | 0.101 | — | NA | NA | NA | NA | 0.000418 (J) | — | — | — | — |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | — | — | — | — | — |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | NA | — | — | — | NA | NA | NA | NA | — | — | — | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

[g] Isopropylbenzene SSL used as surrogate based on structural similarity.

[h] SSLs for xylenes used as surrogate based on structural similarity.

**Table 6.20-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(n)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3114 | 21-600667 | 0.0000–0.5000 | SOIL | 0.0383 | —[c] | — | 0.448 | 0.08016 | — | NA[d] | — |
| RE21-07-3115 | 21-600667 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0222 | 0.069015 | — | — | — |
| RE21-07-3116 | 21-600668 | 0.0000–0.5000 | SOIL | — | — | — | 0.258 | 0.056152 | — | — | — |
| RE21-07-3117 | 21-600668 | 2.0000–3.0000 | SOIL | — | 1.08 | — | 0.227 | 0.112684 | — | — | — |
| RE21-07-3118 | 21-600669 | 0.0000–0.5000 | SOIL | 0.0301 | — | — | 0.138 | 0.083258 | — | — | — |
| RE21-07-3119 | 21-600669 | 2.0000–3.0000 | QBT3 | 0.0384 | 0.177 | — | 2.5 | 0.075563 | 6.54 | 0.76 | — |
| MD21-09-8765 | 21-600669 | 7.0000–8.0000 | SOIL | NA | NA | — | 0.042 | NA | NA | NA | NA |
| RE21-07-3120 | 21-600670 | 0.0000–0.5000 | SOIL | — | — | — | 0.0763 | 0.049389 | — | — | — |
| RE21-07-3121 | 21-600670 | 2.0000–3.0000 | SOIL | 0.0512 | — | — | 0.311 | 0.129112 | 8.53 | 0.463 | — |
| RE21-07-3122 | 21-600671 | 0.0000–0.5000 | SOIL | 0.0514 | — | — | 0.557 | 0.095151 | 3.59 | 0.228 | — |
| RE21-07-3123 | 21-600671 | 2.0000–3.0000 | SOIL | — | — | — | 0.0394 | — | 3.71 | 0.223 | — |
| RE21-07-3124 | 21-600672 | 0.0000–0.5000 | SOIL | 0.0445 | — | — | 0.21 | 0.116675 | — | — | — |
| RE21-07-3125 | 21-600672 | 2.0000–3.0000 | SOIL | — | — | — | 0.0311 | 0.056461 | 3.32 | 0.217 | — |
| RE21-07-3126 | 21-600673 | 0.0000–0.5000 | SOIL | 0.0816 | — | — | 0.852 | 0.070569 | — | — | — |
| RE21-07-3127 | 21-600673 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0729 | 0.043772 | 2.88 | 0.18 | — |
| RE21-07-3128 | 21-600674 | 0.0000–0.5000 | SOIL | 0.119 | — | — | 1.66 | — | — | — | — |
| RE21-07-3129 | 21-600674 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0842 | 0.081565 | — | — | — |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3130 | 21-600675 | 0.0000–0.5000 | SOIL | — | — | — | 0.0547 | 0.032298 | — | — | — |
| RE21-07-3131 | 21-600675 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0855 | 0.029329 | 2.2 | 0.133 | — |
| RE21-07-3132 | 21-600676 | 0.0000–0.5000 | SOIL | 0.103 | — | — | 0.657 | 0.096553 | — | — | — |
| RE21-07-3133 | 21-600676 | 2.0000–3.0000 | QBT3 | — | — | — | 0.183 | 0.144569 | 2.41 | 0.145 | — |
| RE21-07-3134 | 21-600677 | 0.0000–0.5000 | SOIL | 0.0304 | — | — | 0.296 | 0.058481 | — | — | — |
| RE21-07-3135 | 21-600677 | 2.0000–3.0000 | SOIL | — | NA | — | 0.41 | 0.200209 | — | — | — |
| RE21-07-3136 | 21-600678 | 0.0000–0.5000 | SOIL | — | NA | — | 0.151 | 0.066854 | — | — | — |
| RE21-07-3137 | 21-600678 | 2.0000–3.0000 | QBT3 | — | — | — | 0.337 | 0.513873 | — | 0.144 | — |
| RE21-07-3138 | 21-600679 | 0.0000–0.5000 | SOIL | — | — | — | 0.503 | 0.071522 | — | — | — |
| RE21-07-3139 | 21-600679 | 2.0000–3.0000 | QBT3 | — | — | — | 0.248 | 0.336264 | — | — | — |
| RE21-07-3140 | 21-600680 | 0.0000–0.5000 | SOIL | — | — | — | 0.0566 | 0.032744 | — | — | — |
| RE21-07-3141 | 21-600680 | 2.0000–3.0000 | QBT3 | — | 0.105 | — | 0.853 | 0.140089 | — | 0.0958 | — |
| RE21-07-3142 | 21-600681 | 0.0000–0.5000 | SOIL | — | NA | — | 0.171 | 0.009338 | — | — | — |
| RE21-07-3143 | 21-600681 | 2.0000–3.0000 | SOIL | — | 0.0698 | — | 0.243 | 0.10434 | — | — | — |
| RE21-07-3144 | 21-600682 | 0.0000–0.5000 | SOIL | 0.182 | — | 0.0312 | 0.728 | 0.140544 | 8.95 | 0.563 | — |
| RE21-07-3145 | 21-600682 | 2.0000–3.0000 | SOIL | 0.0477 | 0.218 | — | 0.387 | 0.099976 | — | — | — |
| RE21-07-3146 | 21-600683 | 0.0000–0.5000 | SOIL | 0.108 | — | 0.0232 | 2.57 | 0.092021 | 3.45 | — | — |
| RE21-07-3147 | 21-600683 | 2.0000–3.0000 | QBT3 | — | 0.104 | — | 0.312 | 0.0727 | 2.42 | 0.122 | — |
| RE21-07-3148 | 21-600684 | 0.0000–0.5000 | SOIL | 0.0547 | — | — | 0.173 | 0.104942 | — | — | — |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3149 | 21-600684 | 2.0000–3.0000 | QBT3 | — | — | — | 0.131 | 0.077003 | — | 0.0921 | — |
| RE21-07-3150 | 21-600685 | 0.0000–0.5000 | SOIL | — | NA | — | 0.0963 | 0.065419 | — | — | — |
| RE21-07-3151 | 21-600685 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.244473 | — | — | — |
| RE21-07-3152 | 21-600686 | 0.0000–0.5000 | SOIL | — | — | — | 0.0853 | 0.109314 | — | — | — |
| RE21-07-3153 | 21-600686 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.194208 | — | — | — |
| RE21-07-3154 | 21-600687 | 0.0000–0.5000 | SOIL | — | — | — | 0.0659 | 0.063728 | — | — | — |
| RE21-07-3155 | 21-600687 | 2.0000–3.0000 | SOIL | — | — | — | 0.0209 | 0.291399 | — | — | — |
| RE21-07-3156 | 21-600688 | 0.0000–0.5000 | SOIL | — | — | — | 0.112 | 0.033012 | 2.91 | — | — |
| RE21-07-3157 | 21-600688 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.484324 | — | — | — |
| RE21-07-3158 | 21-600689 | 0.0000–0.5000 | SOIL | — | — | — | 0.0801 | 0.047639 | 3.08 | — | — |
| RE21-07-3159 | 21-600689 | 2.0000–3.0000 | SOIL | — | NA | — | 0.0862 | 0.142681 | 2.93 | — | — |
| RE21-07-3160 | 21-600690 | 0.0000–0.5000 | SOIL | — | — | — | 0.136 | 0.056511 | — | — | — |
| RE21-07-3161 | 21-600690 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.165152 | — | — | — |
| RE21-07-3162 | 21-600691 | 0.0000–0.5000 | SOIL | 0.115 | — | — | 0.299 | 0.066132 | — | — | — |
| RE21-07-3163 | 21-600691 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.146356 | — | — | — |
| RE21-07-3164 | 21-600692 | 0.0000–0.5000 | SOIL | 0.0428 | — | — | 0.283 | 0.07852 | 3.9 | 0.217 | — |
| RE21-07-3165 | 21-600692 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0367 | 0.044239 | 5.27 | 0.414 | — |
| RE21-07-3169 | 21-600694 | 0.0000–0.5000 | SOIL | 0.043 | — | — | 0.284 | 0.051653 | — | — | — |
| RE21-07-3170 | 21-600694 | 2.0000–3.0000 | SOIL | 0.0347 | — | — | 0.46 | 0.082834 | 2.89 | — | — |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3171 | 21-600694 | 5.0000–6.0000 | QBT3 | — | — | — | 0.133 | 0.088199 | — | — | — |
| RE21-07-3172 | 21-600695 | 0.0000–0.5000 | SOIL | — | — | — | 0.108 | 0.040694 | — | — | — |
| RE21-07-3173 | 21-600695 | 2.0000–3.0000 | SOIL | 0.0274 | — | — | 0.174 | 0.048142 | 7.81 | 0.377 | — |
| RE21-07-3174 | 21-600695 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.084973 | 13 | 0.965 | — |
| MD21-09-8760 | 21-600695 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | 2.83 | — | — |
| RE21-07-3265 | 21-600710 | 0.0000–0.5000 | SOIL | — | — | — | 0.128 | 0.016124 | — | — | — |
| RE21-07-3266 | 21-600710 | 2.0000–3.0000 | QBT3 | — | — | — | 0.018 | 0.022054 | — | — | — |
| RE21-07-3267 | 21-600711 | 0.0000–0.5000 | SOIL | 0.0754 | — | — | 0.411 | 0.044265 | — | — | — |
| RE21-07-3268 | 21-600711 | 2.0000–3.0000 | SOIL | — | — | — | 0.0524 | 0.259919 | — | — | — |
| RE21-07-3269 | 21-600712 | 0.0000–0.5000 | SOIL | 0.0748 | — | — | 0.871 | 0.090632 | — | — | — |
| RE21-07-3270 | 21-600712 | 2.0000–3.0000 | SOIL | — | — | — | 0.0721 | 0.103562 | — | — | — |
| RE21-07-3271 | 21-600713 | 0.0000–0.5000 | SOIL | 0.0847 | — | — | 0.576 | 0.030908 | — | — | — |
| RE21-07-3272 | 21-600713 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0458 | 0.251049 | — | — | — |
| RE21-07-3273 | 21-600714 | 0.0000–0.5000 | SOIL | 0.119 | — | — | 2.41 | 0.114024 | — | — | — |
| RE21-07-3274 | 21-600714 | 2.0000–3.0000 | QBT3 | — | — | — | 0.132 | 0.162932 | — | — | — |
| RE21-07-3275 | 21-600715 | 0.0000–0.5000 | SOIL | 0.0962 | — | — | 1.57 | 0.077119 | — | — | — |
| RE21-07-3276 | 21-600715 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.136962 | — | — | — |
| RE21-07-3277 | 21-600716 | 0.0000–0.5000 | SOIL | 0.0502 | — | — | 0.148 | 0.025893 | — | — | — |
| RE21-07-3278 | 21-600716 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0757 | 0.044326 | — | — | — |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3279 | 21-600717 | 0.0000–0.5000 | SOIL | 0.111 | — | — | 0.786 | 0.031964 | — | — | — |
| RE21-07-3280 | 21-600717 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.055087 | — | — | — |
| RE21-07-3281 | 21-600718 | 0.0000–0.5000 | SOIL | — | — | — | 0.12 | 0.042937 | — | — | — |
| RE21-07-3282 | 21-600718 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.243689 | — | — | — |
| RE21-07-3283 | 21-600719 | 0.0000–0.5000 | SOIL | 0.0546 | NA | — | 0.113 | 0.669124 | — | — | — |
| RE21-07-3284 | 21-600719 | 2.0000–3.0000 | SOIL | — | — | — | 0.0503 | 0.125745 | — | — | — |
| RE21-07-3285 | 21-600720 | 0.0000–0.5000 | SOIL | 0.035 | NA | — | 0.144 | 0.508864 | — | — | — |
| RE21-07-3286 | 21-600720 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.432242 | — | — | — |
| RE21-07-3287 | 21-600721 | 0.0000–0.5000 | SOIL | 0.138 | — | — | 2.73 | 0.13528 | — | — | — |
| RE21-07-3288 | 21-600721 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.314227 | — | — | — |
| RE21-07-3289 | 21-600722 | 0.0000–0.5000 | SOIL | 0.0384 | — | — | 0.136 | 0.401895 | — | — | — |
| RE21-07-3290 | 21-600722 | 2.0000–3.0000 | SOIL | — | NA | — | — | 1.33756 | — | — | — |
| RE21-07-3291 | 21-600723 | 0.0000–0.5000 | SOIL | 0.0556 | — | — | 0.166 | 0.223565 | — | — | — |
| RE21-07-3292 | 21-600723 | 2.0000–3.0000 | SOIL | — | — | — | 0.0897 | 0.228055 | — | — | — |
| RE21-07-3293 | 21-600724 | 0.0000–0.5000 | SOIL | 0.0867 | — | — | 0.448 | 0.183428 | — | — | — |
| RE21-07-3294 | 21-600724 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.104298 | — | — | — |
| RE21-07-3295 | 21-600725 | 0.0000–0.5000 | SOIL | 0.05 | NA | — | 0.283 | 0.059312 | — | — | — |
| RE21-07-3296 | 21-600725 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.24973 | — | — | — |
| RE21-07-3297 | 21-600726 | 0.0000–0.5000 | SOIL | 0.0437 | NA | — | — | 0.079279 | — | — | — |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3298 | 21-600726 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.175504 | — | — | — |
| RE21-07-3317 | 21-600735 | 0.0000–0.5000 | SOIL | 0.268 | — | — | 0.497 | 0.024912 | — | — | — |
| RE21-07-3318 | 21-600735 | 2.0000–3.0000 | QBT3 | — | — | — | 0.131 | 0.188837 | — | — | — |
| RE21-07-3319 | 21-600735 | 5.0000–6.0000 | QBT3 | — | NA | — | 0.113 | 0.151341 | — | — | — |
| RE21-07-3320 | 21-600736 | 0.0000–0.5000 | SOIL | 0.0542 | NA | 0.0268 | 0.122 | 5.64444 | — | — | — |
| RE21-07-3321 | 21-600736 | 2.0000–3.0000 | SOIL | — | 0.16 | — | 0.258 | 0.559615 | — | — | — |
| RE21-07-3322 | 21-600736 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0477 | 3.10059 | — | — | — |
| RE21-07-3323 | 21-600737 | 0.0000–0.5000 | SOIL | — | — | — | 0.246 | 0.085364 | — | — | — |
| RE21-07-3324 | 21-600737 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0372 | 0.132351 | — | — | — |
| RE21-07-3325 | 21-600737 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.170393 | — | — | — |
| RE21-07-6248 | 21-601304 | 2.5000–3.5000 | SOIL | — | — | — | — | 0.404677 | — | — | — |
| RE21-07-6249 | 21-601304 | 4.5000–5.5000 | QBT3 | — | — | — | — | 0.201557 | — | — | — |
| RE21-07-6250 | 21-601305 | 3.0000–4.0000 | QBT3 | — | — | — | — | 0.712924 | — | — | — |
| RE21-07-6251 | 21-601305 | 5.0000–6.0000 | QBT3 | — | — | — | — | 1.087 | — | — | — |
| RE21-07-6252 | 21-601306 | 1.0000–2.0000 | QBT3 | — | — | — | — | 0.144881 | — | — | — |
| RE21-07-6253 | 21-601306 | 3.0000–4.0000 | QBT3 | — | — | — | — | 0.061468 | — | — | — |
| RE21-07-6254 | 21-601307 | 3.5000–4.5000 | QBT3 | — | — | — | — | 0.158483 | — | — | — |
| RE21-07-6255 | 21-601307 | 5.5000–6.5000 | QBT3 | — | — | — | — | 0.179083 | — | 0.105 | — |
| RE21-07-6256 | 21-601308 | 3.0000–4.0000 | SOIL | — | — | — | 0.0493 | 18.6782 | — | — | — |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-6257 | 21-601308 | 5.0000–6.0000 | QBT3 | — | — | — | — | 12.3545 | — | — | — |
| RE21-07-6258 | 21-601309 | 3.5000–4.5000 | QBT3 | — | — | — | 0.107 | 0.351628 | — | — | — |
| RE21-07-6259 | 21-601309 | 5.5000–6.5000 | QBT3 | — | — | — | — | 0.348889 | — | — | — |
| RE21-07-6260 | 21-601310 | 6.0000–7.0000 | QBT3 | — | — | — | — | 2.29613 | — | — | — |
| RE21-07-6261 | 21-601310 | 8.0000–9.0000 | QBT3 | — | — | — | — | 2.98182 | — | — | — |
| RE21-07-6262 | 21-601311 | 6.0000–7.0000 | QBT3 | — | — | — | — | 0.516893 | — | 0.0934 | — |
| RE21-07-6263 | 21-601311 | 8.0000–9.0000 | QBT3 | — | — | — | — | 0.486708 | — | — | — |
| RE21-07-6264 | 21-601312 | 4.0000–5.0000 | QBT3 | — | — | — | — | 0.683499 | — | — | — |
| RE21-07-6265 | 21-601312 | 6.0000–7.0000 | QBT3 | — | — | — | — | 0.685145 | — | 0.0918 | — |
| RE21-07-6270 | 21-601315 | 3.0000–4.0000 | QBT3 | — | — | — | — | 0.874938 | — | 0.11 | — |
| RE21-07-6271 | 21-601315 | 8.0000–9.0000 | QBT3 | — | — | — | — | 0.791876 | — | — | — |
| RE21-07-6272 | 21-601315 | 13.0000–14.0000 | QBT3 | — | — | — | — | 0.967107 | — | — | — |
| MD21-09-8758 | 21-605251 | 0.0000–0.5000 | SOIL | — | NA | — | 0.377 | NA | NA | NA | NA |
| MD21-09-8761 | 21-605252 | 0.0000–0.5000 | SOIL | 0.151 | NA | NA | NA | NA | 5.54 | 0.219 | 2.58 |
| MD21-09-8764 | 21-605253 | 0.0000–0.5000 | SOIL | NA | NA | 0.038 | 3.13 | NA | NA | NA | NA |

**Table 6.20-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| MD21-09-12458 | 21-608021 | 0.0000–0.5000 | SOIL | NA | NA | 0.0298 | 3.33 | NA | NA | NA | NA |
| MD21-10-4657 | 21-609833 | 0.0000–0.5000 | SOIL | NA | NA | 0.035 | 4.58 | NA | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.

Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

**Table 6.21-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-024(o)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Barium | Cadmium | Chromium | Copper | Cyanide (Total) | Lead | Manganese | Nitrate | Perchlorate | Selenium | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **46** | **1.63** | **7.14** | **4.66** | **0.5** | **11.2** | **482** | **na**[a] | **na** | **0.3** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **295** | **0.4** | **19.3** | **14.7** | **0.5** | **22.3** | **671** | **na** | **na** | **1.52** | **1.82** | **48.8** |
| **Residential SSL** | | | | **78100** | **15600** | **77.9** | **219**[b] | **3130** | **1560** | **400** | **10700** | **125000** | **54.8** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **1130000** | **224000** | **1120** | **2920**[b] | **45400** | **22700** | **800** | **145000** | **1820000** | **795** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **4350** | **309** | **449**[b] | **12400** | **6190** | **800** | **463** | **496000** | **217** | **1550** | **929** | **92900** |
| RE21-07-74952 | 21-27346 | 0.0000–0.5000 | SOIL | —[c] | — | 0.468 (J) | — | — | — | 28.8 | — | — | 0.000811 (J-) | 1.67 (U) | 3.55 (J-) | 85 |
| RE21-07-74953 | 21-27346 | 2.0000–2.5000 | QBT3 | 8830 (J+) | — | — | 11.1 | 5.63 | — | — | — | — | — | 1.78 (U) | — | — |
| RE21-07-74955 | 21-27347 | 0.0000–0.5000 | SOIL | — | — | 0.426 (J) | — | — | 1.33 | 31.6 | — | 3.38 | 0.00113 (J-) | 1.7 (U) | — | 192 |
| RE21-07-74956 | 21-27347 | 2.0000–2.5000 | QBT3 | 9840 (J+) | 46.6 | — | 9.75 | 5.25 | — | — | — | 0.768 (J) | — | 1.69 (U) | — | — |
| RE21-07-74958 | 21-27348 | 0.0000–0.5000 | SOIL | — | — | 2.13 | — | 15.7 | — | 52.9 | — | 3.34 | 0.00141 (J-) | 1.68 (U) | 5.13 (J-) | 136 |
| RE21-07-74959 | 21-27348 | 2.0000–2.5000 | QBT3 | — | — | — | 15.5 | 5.21 | — | — | — | 1.18 | — | 1.55 (U) | — | — |
| RE21-07-74960 | 21-27349 | 0.0000–0.5000 | SOIL | — | — | 0.694 | — | — | — | 40.6 | — | 38 | 0.000973 (J-) | — | — | 116 |
| RE21-07-74961 | 21-27349 | 2.0000–2.5000 | SOIL | — | — | 0.432 (J) | — | — | — | — | 699 | 14 | — | 1.57 (U) | — | 49.1 |
| RE21-07-74962 | 21-27350 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 24.9 | — | 20 | 0.000654 (J-) | 1.59 (U) | — | 75.5 |
| RE21-07-74963 | 21-27350 | 2.0000–2.5000 | QBT3 | — | — | — | 24.7 | — | — | — | — | 16.1 | 0.000759 (J-) | 1.55 (U) | — | — |
| RE21-07-74964 | 21-27351 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 1.63 | 0.000539 (J-) | 1.57 (U) | — | — |
| RE21-07-74965 | 21-27351 | 2.0000–2.5000 | SOIL | — | — | 0.512 (U) | — | — | — | — | — | 2.15 | — | 1.54 (U) | — | — |
| RE21-07-74966 | 21-27352 | 0.0000–0.5000 | SOIL | — | — | 0.602 | — | — | — | 31.9 | — | 2.11 | — | 1.62 (U) | — | 96.3 |
| RE21-07-74967 | 21-27352 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | 0.766 (J) | — | 1.55 (U) | — | — |
| RE21-07-74968 | 21-27353 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 1.72 | 0.00105 (J-) | 1.6 (U) | 2.67 (J-) | — |
| RE21-07-74969 | 21-27353 | 2.0000–2.5000 | SOIL | — | — | 0.505 (U) | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74970 | 21-27354 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | 0.927 (J) | 0.000551 (J-) | 1.6 (U) | — | — |
| RE21-07-74971 | 21-27354 | 2.0000–2.5000 | SOIL | — | — | 0.501 (U) | — | — | — | — | — | — | — | — | — | — |
| RE21-07-74972 | 21-27355 | 0.0000–0.5000 | SOIL | — | — | 0.626 | — | — | — | 37.7 | — | 3.46 | 0.00124 (J-) | 1.53 (U) | — | 115 |
| RE21-07-74973 | 21-27355 | 2.0000–2.5000 | SOIL | — | — | 0.517 (U) | — | — | — | — | — | 1.22 | — | 1.55 (U) | — | — |
| RE21-07-74974 | 21-27356 | 0.0000–0.5000 | SOIL | — | — | 0.527 (U) | — | — | — | — | — | 1.71 | — | 1.58 (U) | — | — |
| RE21-07-74975 | 21-27356 | 2.0000–2.5000 | SOIL | — | — | 0.493 (U) | — | — | — | — | — | — | — | — | — | — |
| MD21-09-7574 | 21-605202 | 0.0000–0.5000 | SOIL | NA[d] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 110 |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] — = Not detected or not detected above BV.
[d] NA = Not analyzed.

**Table 6.21-2**
**Summary of Organic Chemicals Detected at SWMU 21-024(o)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **2.22** | **6.21** | **0.621** | **6.21** | **1720** [a] | **62.1** | **240000** [b] | **347** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300** [a] | **234** | **2500000** [b] | **1370** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **75.8** | **213** | **21.3** | **213** | **6680** [a] | **2060** | **952000** [c] | **4760** |
| RE21-07-74952 | 21-27346 | 0.0000–0.5000 | SOIL | — [d] | NA [e] | 0.0395 | NA | 0.173 | 0.166 (J) | 0.389 (J) | — | — | — | — |
| RE21-07-74953 | 21-27346 | 2.0000–2.5000 | QBT3 | 0.0495 | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-74955 | 21-27347 | 0.0000–0.5000 | SOIL | 0.0877 | NA | 0.173 | NA | 0.406 | 0.357 (J) | — | — | 0.775 (J) | — | 0.119 (J) |
| RE21-07-74956 | 21-27347 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-74958 | 21-27348 | 0.0000–0.5000 | SOIL | 0.0702 | NA | 0.13 | NA | 0.44 | 0.452 (J) | 0.985 (J) | 0.237 (J) | — | — | 0.0937 (J) |
| RE21-07-74959 | 21-27348 | 2.0000–2.5000 | QBT3 | 0.0156 (J) | 0.00268 (J) | — | NA | 0.0249 (J) | — | — | — | — | — | — |
| RE21-07-74960 | 21-27349 | 0.0000–0.5000 | SOIL | 0.0558 | NA | 0.115 | NA | 0.239 (J) | 0.234 (J) | 0.518 (J) | — | — | — | — |
| RE21-07-74961 | 21-27349 | 2.0000–2.5000 | SOIL | — | — | 0.0447 | NA | — | — | — | — | — | — | — |
| RE21-07-74962 | 21-27350 | 0.0000–0.5000 | SOIL | — | NA | 0.0155 (J) | NA | 0.0702 | 0.0766 (J) | 0.141 (J) | — | 0.0448 (J) | — | — |
| RE21-07-74963 | 21-27350 | 2.0000–2.5000 | QBT3 | — | — | — | NA | — | — | — | — | — | — | 0.0796 (J) |
| RE21-07-74965 | 21-27351 | 2.0000–2.5000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-74966 | 21-27352 | 0.0000–0.5000 | SOIL | — | NA | 0.0206 (J) | NA | 0.0853 | — | — | — | — | — | — |
| RE21-07-74967 | 21-27352 | 2.0000–2.5000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-74968 | 21-27353 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | — | — |
| RE21-07-74969 | 21-27353 | 2.0000–2.5000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-74970 | 21-27354 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | — | — |
| RE21-07-74972 | 21-27355 | 0.0000–0.5000 | SOIL | 0.0843 | NA | 0.158 | NA | 0.32 | 0.273 (J) | 0.582 (J) | — | — | — | — |
| RE21-07-4030 | 21-27355 | 2.0000–2.5000 | QBT3 | NA | NA | NA | 0.0201 | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-74973 | 21-27355 | 2.0000–2.5000 | SOIL | — | — | — | NA | — | — | — | — | — | — | — |
| RE21-07-74974 | 21-27356 | 0.0000–0.5000 | SOIL | — | NA | — | NA | — | — | — | — | — | 0.589 (J) | — |

**Table 6.21-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chrysene | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorobenzene | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **621** | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **3.04** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **2340** | **24400** | **24400** | **na** | **na** | **na** | **na** | **12** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **20600** | **8910** | **8910** | **na** | **na** | **na** | **na** | **103** | **na** | **na** | **na** |
| RE21-07-74952 | 21-27346 | 0.0000–0.5000 | SOIL | 0.196 | 0.388 | 0.0251 (J) | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74953 | 21-27346 | 2.0000–2.5000 | QBT3 | — | 0.0391 | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74955 | 21-27347 | 0.0000–0.5000 | SOIL | 0.396 | 0.837 | 0.122 | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74956 | 21-27347 | 2.0000–2.5000 | QBT3 | — | 0.013 (J) | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74958 | 21-27348 | 0.0000–0.5000 | SOIL | 0.553 | 1.02 | 0.0832 | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74959 | 21-27348 | 2.0000–2.5000 | QBT3 | 0.0228 (J) | 0.0447 | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74960 | 21-27349 | 0.0000–0.5000 | SOIL | 0.291 (J) | 0.478 | 0.0734 | NA | NA | NA | NA | 0.0892 (J) | NA | NA | NA |
| RE21-07-74961 | 21-27349 | 2.0000–2.5000 | SOIL | — | 0.0797 | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74962 | 21-27350 | 0.0000–0.5000 | SOIL | 0.0907 | 0.146 | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74963 | 21-27350 | 2.0000–2.5000 | QBT3 | — | 0.0184 (J) | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74965 | 21-27351 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74966 | 21-27352 | 0.0000–0.5000 | SOIL | 0.119 | 0.199 | 0.0122 (J) | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74967 | 21-27352 | 2.0000–2.5000 | SOIL | — | 0.0327 (J) | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74968 | 21-27353 | 0.0000–0.5000 | SOIL | — | 0.0634 | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74969 | 21-27353 | 2.0000–2.5000 | SOIL | — | — | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74970 | 21-27354 | 0.0000–0.5000 | SOIL | 0.0228 (J) | 0.0292 (J) | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74972 | 21-27355 | 0.0000–0.5000 | SOIL | 0.293 | 0.634 | 0.127 | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-4030 | 21-27355 | 2.0000–2.5000 | QBT3 | NA | NA | NA | 4.89E-06 | 1.24E-05 | 0.00000117 (J) | 2.67E-06 | NA | 1.07E-06 | 0.000000196 (J) | 0.000000179 (J) |
| RE21-07-74973 | 21-27355 | 2.0000–2.5000 | SOIL | 0.0367 (J) | 0.0589 | — | NA | NA | NA | NA | — | NA | NA | NA |
| RE21-07-74974 | 21-27356 | 0.0000–0.5000 | SOIL | — | — | — | NA | NA | NA | NA | — | NA | NA | NA |

**Table 6.21-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzofurans (Total) | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofurans (Totals) | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **310**[b] | **45** | **na** | **na** | **na** | **na** | **1830** | **1720** | **na** | **5570** |
| **Industrial SSL** | | | | **na** | **4100**[b] | **252** | **na** | **na** | **na** | **na** | **20500** | **18300** | **na** | **57900** |
| **Construction Worker SSL** | | | | **na** | **1240**[c] | **702** | **na** | **na** | **na** | **na** | **7150** | **6680** | **na** | **21100** |
| RE21-07-74952 | 21-27346 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.231 | 0.382 | NA | NA |
| RE21-07-74953 | 21-27346 | 2.0000–2.5000 | QBT3 | NA | — | — | NA | NA | NA | NA | 0.0241 (J) | 0.0499 (J) | NA | 0.00204 |
| RE21-07-74955 | 21-27347 | 0.0000–0.5000 | SOIL | NA | 0.0439 | 0.0853 | NA | NA | NA | NA | 0.73 | 0.914 | NA | NA |
| RE21-07-74956 | 21-27347 | 2.0000–2.5000 | QBT3 | NA | — | — | NA | NA | NA | NA | — | 0.015 (J) | NA | 0.00321 |
| RE21-07-74958 | 21-27348 | 0.0000–0.5000 | SOIL | NA | 0.0302 (J) | 0.0598 | NA | NA | NA | NA | 0.734 | 0.983 | NA | NA |
| RE21-07-74959 | 21-27348 | 2.0000–2.5000 | QBT3 | NA | — | — | NA | NA | NA | NA | 0.0416 | 0.0588 (J) | NA | 0.000905 (J) |
| RE21-07-74960 | 21-27349 | 0.0000–0.5000 | SOIL | NA | 0.0263 (J) | 0.0462 | NA | NA | NA | NA | 0.489 | 0.518 (J) | NA | NA |
| RE21-07-74961 | 21-27349 | 2.0000–2.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.0754 | 0.0924 (J) | NA | 0.01 (J+) |
| RE21-07-74962 | 21-27350 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.0814 | 0.135 | NA | NA |
| RE21-07-74963 | 21-27350 | 2.0000–2.5000 | QBT3 | NA | — | — | NA | NA | NA | NA | — | 0.0354 (J) | NA | 0.00126 |
| RE21-07-74965 | 21-27351 | 2.0000–2.5000 | SOIL | NA | — | — | NA | NA | NA | NA | — | — | NA | 0.00085 (J+) |
| RE21-07-74966 | 21-27352 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.135 | 0.231 | NA | NA |
| RE21-07-74967 | 21-27352 | 2.0000–2.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.0194 (J) | 0.0402 | NA | 0.000713 (J+) |
| RE21-07-74968 | 21-27353 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.0383 | 0.065 | NA | NA |
| RE21-07-74969 | 21-27353 | 2.0000–2.5000 | SOIL | NA | — | — | NA | NA | NA | NA | — | — | NA | 0.00105 (J+) |
| RE21-07-74970 | 21-27354 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.0127 (J) | 0.034 (J) | NA | NA |
| RE21-07-74972 | 21-27355 | 0.0000–0.5000 | SOIL | NA | 0.052 | 0.104 | NA | NA | NA | NA | 0.682 | 0.715 | NA | NA |
| RE21-07-4030 | 21-27355 | 2.0000–2.5000 | QBT3 | 2.36E-06 | NA | NA | 4.31E-05 | 0.00000267 (J) | 0.000000333 (J) | 3.1E-06 | NA | NA | 8.49E-07 | NA |
| RE21-07-74973 | 21-27355 | 2.0000–2.5000 | SOIL | NA | — | — | NA | NA | NA | NA | 0.0366 | 0.0667 (J) | NA | 0.000658 (J+) |
| RE21-07-74974 | 21-27356 | 0.0000–0.5000 | SOIL | NA | — | — | NA | NA | NA | NA | — | — | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

**Table 6.21-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(o)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium |
|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** |
| RE21-07-74952 | 21-27346 | 0.0000–0.5000 | SOIL | —[c] | — | — | 1.16 | — |
| RE21-07-74953 | 21-27346 | 2.0000–2.5000 | QBT3 | — | 0.0664 | — | 0.212 | — |
| RE21-07-74955 | 21-27347 | 0.0000–0.5000 | SOIL | 0.0432 | — | — | 2.21 | — |
| RE21-07-74958 | 21-27348 | 0.0000–0.5000 | SOIL | 0.0446 | — | — | 2.01 | 0.021444 |
| RE21-07-74959 | 21-27348 | 2.0000–2.5000 | QBT3 | — | NA[d] | — | 0.471 | 0.012056 |
| RE21-07-74960 | 21-27349 | 0.0000–0.5000 | SOIL | 0.0348 | — | — | 0.674 | 0.017737 |
| RE21-07-74961 | 21-27349 | 2.0000–2.5000 | SOIL | — | NA | — | 0.233 | — |
| RE21-07-74962 | 21-27350 | 0.0000–0.5000 | SOIL | 0.0941 | — | — | 1.62 | — |
| RE21-07-74963 | 21-27350 | 2.0000–2.5000 | QBT3 | — | — | — | 0.176 | 0.011641 |
| RE21-07-74964 | 21-27351 | 0.0000–0.5000 | SOIL | 0.0201 | — | — | 0.502 | — |
| RE21-07-74965 | 21-27351 | 2.0000–2.5000 | SOIL | — | — | — | 0.0608 | — |
| RE21-07-74966 | 21-27352 | 0.0000–0.5000 | SOIL | 0.0489 | — | 0.0846 | 5.18 | — |
| RE21-07-74967 | 21-27352 | 2.0000–2.5000 | SOIL | — | NA | — | 0.147 | — |
| RE21-07-74968 | 21-27353 | 0.0000–0.5000 | SOIL | 0.0404 | — | — | 1.17 | — |
| RE21-07-74970 | 21-27354 | 0.0000–0.5000 | SOIL | 0.0366 | — | — | 0.554 | — |
| RE21-07-74971 | 21-27354 | 2.0000–2.5000 | SOIL | — | — | — | 0.0307 | — |
| RE21-07-74972 | 21-27355 | 0.0000–0.5000 | SOIL | 0.0653 | — | — | 0.519 | — |
| RE21-07-74973 | 21-27355 | 2.0000–2.5000 | SOIL | — | — | — | 0.0492 | — |
| RE21-07-74974 | 21-27356 | 0.0000–0.5000 | SOIL | — | — | — | 0.12 | 0.019258 |
| RE21-07-74975 | 21-27356 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.003818 |
| MD21-09-7573 | 21-605201 | 0.0000–0.5000 | SOIL | 0.07 | NA | NA | NA | NA |
| MD21-09-7574 | 21-605202 | 0.0000–0.5000 | SOIL | NA | NA | — | 2.37 | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.22-1**
**Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-026(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **400** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | —[c] | — | — | NA[d] | — | — | — | — | — | — |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | — | — | — | NA | — | 5690 | 8 (J) | — | — | — |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | — | — | — | NA | — | — | — | — | — | — |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | — | — | — | NA | — | 2530 | — | 9.29 | — | — |
| RE21-07-75730 | 21-27551 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 8970 (J) | — | — | — | — |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | 5990 (J) | — | — | — | — |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | 8490 (J) | — | — | — | — |
| RE21-07-75734 | 21-27552 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.516 (U) | — | — | — | — | — |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.524 (U) | — | — | — | — | — |
| RE21-07-75736 | 21-27552 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75737 | 21-27553 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 13900 | — | — | — | — |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 7170 | — | — | — | — |
| RE21-07-75739 | 21-27553 | 5.0000–6.0000 | QBT3 | — | — | 3.11 | 102 (J+) | — | 37000 | 8.44 | 5.08 | — | — |
| MD21-09-8729 | 21-27553 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | 2700 | NA | NA | NA | NA |
| RE21-07-75752 | 21-27554 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.48 (U) | — | — | — | — | — |
| RE21-07-75753 | 21-27554 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | 4970 (J+) | 13 | — | — | — |
| RE21-07-75754 | 21-27554 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | 3120 (J+) | 13.2 | — | — | — |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.523 (U) | — | — | — | — | — |
| RE21-07-75744 | 21-27555 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.567 (U) | — | — | — | — | — |
| RE21-07-75746 | 21-27556 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | 10.6 | — | — | — |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.632 (U) | — | — | — | — | — |
| RE21-07-75748 | 21-27557 | 2.0000–2.5000 | QBT3 | 13200 | — | 2.95 | 48.1 | — | — | 10.7 | 4.69 | — | — |
| RE21-07-75749 | 21-27558 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.542 (U) | — | — | — | — | — |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75755 | 21-27559 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.483 (U) | — | — | — | — | — |
| RE21-07-75756 | 21-27559 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | — | 11.3 | — | — | — |

**Table 6.22-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **400** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** |
| RE21-07-75757 | 21-27559 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | 3120 (J+) | 11.9 | — | — | — |
| RE21-07-75765 | 21-27560 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.552 (U) | — | — | — | — | — |
| RE21-07-75766 | 21-27560 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75767 | 21-27561 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.532 (U) | — | — | — | — | — |
| RE21-07-75768 | 21-27561 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.566 (U) | — | — | — | — | — |
| RE21-07-75769 | 21-27562 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75770 | 21-27562 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | 17.1 | — | — | — |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.546 (U) | — | — | — | — | — |
| RE21-07-75772 | 21-27563 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.511 (U) | — | — | — | — | — |
| RE21-07-75773 | 21-27564 | 9.5000–10.5000 | QBT3 | — | — | — | — | — | 8450 (J+) | — | — | — | 267 (J) |
| RE21-07-75774 | 21-27564 | 11.5000–12.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 82.8 (J) |
| RE21-07-75775 | 21-27565 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | 4150 (J) | — | — | — | — |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | — | — | — | 59.1 | — | 19200 (J) | — | — | — | 17.6 |
| RE21-07-75777 | 21-27566 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | 4410 (J) | — | — | — | — |
| RE21-07-75778 | 21-27566 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | 3390 (J) | — | — | — | — |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | — | — | — | 46.2 | — | 8320 (J) | — | — | — | — |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | 11100 (J) | — | — | — | — |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.412 (J) | 10500 (J) | — | 31.1 | — | — |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | 7940 (J) | — | 7.72 | — | 96.6 |
| RE21-07-75806 | 21-27570 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | — | — | — | — | 26.4 |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 11000 (J) | — | — | — | — |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | 42800 (J) | 9.23 | 8.14 | — | 35.8 |
| RE21-07-75809 | 21-27571 | 5.5000–6.5000 | QBT3 | — | — | 3.06 | — | — | 6280 (J) | 23.9 | — | — | 103 |
| RE21-07-75810 | 21-27572 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | — | — | — | 0.54 (U) | — |
| RE21-07-75811 | 21-27572 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | 0.54 (U) | — |
| RE21-07-75812 | 21-27572 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | — | — | — | 0.51 (U) | — |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | — | — | — | — |
| RE21-07-75814 | 21-27573 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | 8.6 | — | — | — |
| RE21-07-75815 | 21-27574 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | — | — | — | — |
| RE21-07-75816 | 21-27574 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | 10 | — | — | — |

**Table 6.22-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **400** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | — | — | — | — |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | — | 9.5 | — | — |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | — | 1.5 (J-) | 11.9 | 708 | 12.1 | NA | 252 | 556 | 1.9 (J) | 249 |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | — | — | — | 90.5 | — | NA | 33.2 | 49.8 | — | 23.5 |
| RE21-07-75821 | 21-27577 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | — | — | — | — |
| RE21-07-75822 | 21-27577 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | — | — | 0.52 (U) | — |
| RE21-07-75823 | 21-27578 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | — | — | — | — |
| RE21-07-75824 | 21-27578 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | — | — | 0.55 (U) | — |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | — | 0.94 (J-) | — | 392 | 4.4 | NA | 124 | 292 | 2.7 (J) | 118 |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | 12.8 | 29.3 | 0.54 (U) | 12.7 |
| RE21-07-75827 | 21-27580 | 0.0000–0.5000 | SOIL | — | — | — | — | — | NA | — | — | — | — |
| RE21-07-75828 | 21-27580 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | 10.8 | — | 0.54 (U) | — |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | — | — | — | 61.3 | — | 13900 (J) | — | — | — | — |
| RE21-07-75830 | 21-27581 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | 11700 (J) | — | — | — | — |
| MD21-09-8731 | 21-605238 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | 5800 | NA | NA | NA | NA |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | 0.58 (U) | NA |

**Table 6.22-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **48.8** |
| **Residential SSL** | | | | **na** | **23**[e] | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **na** | **310**[e] | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **na** | **92.9**[f] | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **92900** |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | — | — | — | 2.54 | — | — | — | — | — |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | — | — | — | — | — | 1.51 (U) | — | — | — |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | — | — | — | — | — | 1.52 (U) | — | — | — |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | — | 0.158 | — | — | — | 1.51 (U) | — | — | — |
| RE21-07-75730 | 21-27551 | 10.0000–11.0000 | QBT3 | — | — | — | — | 0.000788 (J) | 1.53 (U) | — | — | — |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | — | — | — | — | 0.000607 (J) | 0.675 (J) | — | — | — |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | — | — | — | — | 0.000956 (J) | 1.52 (U) | — | — | — |
| RE21-07-75734 | 21-27552 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.55 (U) | — | — | — |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.57 (U) | — | — | — |
| RE21-07-75736 | 21-27552 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.000627 (J) | 0.674 (J) | — | — | — |
| RE21-07-75737 | 21-27553 | 0.0000–0.5000 | SOIL | — | — | — | 1.25 | — | 1.57 (U) | — | — | — |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | — | — | — | — | 0.00134 (J) | 1.68 (U) | — | — | — |
| RE21-07-75739 | 21-27553 | 5.0000–6.0000 | QBT3 | 2970 | — | 6.86 | — | 0.00094 (J-) | 1.64 (U) | — | — | — |
| MD21-09-8729 | 21-27553 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75752 | 21-27554 | 0.0000–0.5000 | SOIL | — | — | — | 1.43 | — | — | — | — | — |
| RE21-07-75753 | 21-27554 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | 1.51 (U) | — | — | — |
| RE21-07-75754 | 21-27554 | 4.5000–5.5000 | QBT3 | — | — | — | — | 0.00154 (J+) | 1.57 (U) | — | — | — |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | — | — | — | 1.88 | 0.000991 (J) | — | — | — | — |
| RE21-07-75744 | 21-27555 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.000675 (J) | 1.57 (U) | — | — | — |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | — | — | — | 1.53 | — | — | — | — | — |
| RE21-07-75746 | 21-27556 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 0.66 (J) | — | — | — |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | — | — | — | 1.4 | — | 1.9 (U) | — | — | — |
| RE21-07-75748 | 21-27557 | 2.0000–2.5000 | QBT3 | 1900 (J+) | — | — | — | — | 0.868 (J) | — | — | — |
| RE21-07-75749 | 21-27558 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.62 (U) | — | — | — |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | 1.69 (U) | — | — | — |
| RE21-07-75755 | 21-27559 | 0.0000–0.5000 | SOIL | — | — | — | 1.08 | — | — | — | — | — |
| RE21-07-75756 | 21-27559 | 2.5000–3.5000 | QBT3 | — | — | — | — | — | 1.64 (U) | — | — | — |
| RE21-07-75757 | 21-27559 | 4.5000–5.5000 | QBT3 | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-07-75765 | 21-27560 | 0.0000–0.5000 | SOIL | — | — | — | 1.37 | — | 1.65 (U) | — | — | — |
| RE21-07-75766 | 21-27560 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.71 (U) | — | — | — |

**Table 6.22-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **48.8** |
| **Residential SSL** | | | | **na** | **23**[e] | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **na** | **310**[e] | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **na** | **92.9**[f] | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **92900** |
| RE21-07-75767 | 21-27561 | 0.0000–0.5000 | SOIL | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-07-75768 | 21-27561 | 2.0000–3.0000 | SOIL | — | — | — | 1.4 | — | 1.7 (U) | — | — | — |
| RE21-07-75769 | 21-27562 | 0.0000–0.5000 | SOIL | — | — | — | 2.62 | — | 1.56 (U) | — | — | — |
| RE21-07-75770 | 21-27562 | 2.0000–3.0000 | QBT3 | — | — | — | 1.85 | 0.000929 (J-) | 0.845 (J) | — | — | — |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | — | — | — | 1.54 | — | 1.64 (U) | — | — | — |
| RE21-07-75772 | 21-27563 | 2.0000–3.0000 | SOIL | — | — | — | — | — | 1.53 (U) | — | — | — |
| RE21-07-75773 | 21-27564 | 9.5000–10.5000 | QBT3 | — | — | — | — | 0.00471 (J+) | 0.659 (J) | — | — | — |
| RE21-07-75774 | 21-27564 | 11.5000–12.5000 | QBT3 | — | — | — | — | 0.00132 (J-) | 1.51 (U) | — | — | — |
| RE21-07-75775 | 21-27565 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | 1.45 (U) | — | — | — |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | 1.6 (U) | — | — | — |
| RE21-07-75777 | 21-27566 | 12.0000–13.0000 | QBT3 | — | — | — | 1.22 | 0.00414 (J-) | 1.46 (U) | — | — | — |
| RE21-07-75778 | 21-27566 | 14.0000–15.0000 | QBT3 | — | — | — | 1.23 | 0.00268 (J-) | 1.53 (U) | — | — | — |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | — | — | — | — | 0.000811 (J) | 0.646 (J) | — | — | — |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | — | — | — | 2.21 | 0.00352 | 1.6 (U) | — | — | — |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | — | 0.842 | — | 2.21 | — | — | — | — | 109 (J-) |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | 1.63 (U) | — | — | — |
| RE21-07-75806 | 21-27570 | 5.5000–6.5000 | QBT3 | — | — | — | — | 0.000823 (J) | 1.54 (U) | — | — | — |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | — | 0.171 | — | 2.41 | — | 1.54 (U) | — | — | — |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | — | — | — | — | — | 1.55 (U) | — | — | — |
| RE21-07-75809 | 21-27571 | 5.5000–6.5000 | QBT3 | — | — | — | — | — | 1.58 (U) | — | — | 65 (J-) |
| RE21-07-75810 | 21-27572 | 0.0000–0.5000 | QBT3 | — | — | — | — | — | 0.54 (U) | — | — | — |
| RE21-07-75811 | 21-27572 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-75812 | 21-27572 | 5.0000–6.0000 | QBT3 | — | — | — | — | — | 0.32 (J) | — | — | — |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | — | — | — | 2 (J) | — | — | — | — | — |
| RE21-07-75814 | 21-27573 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.38 (J) | — | — | — |
| RE21-07-75815 | 21-27574 | 0.0000–0.5000 | SOIL | — | — | — | 1.8 (J) | — | — | — | — | — |
| RE21-07-75816 | 21-27574 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.33 (J) | — | — | — |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | — | — | — | 0.69 (J) | — | — | — | — | — |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | — | 0.22 | — | — | — | — | 2.6 | — | — |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | — | **12.5** | 62.6 | 9.8 (J) | — | 1.9 | 40.3 | 12.9 | 1640 |

**Table 6.22-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Magnesium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Silver | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **1690** | **0.1** | **6.58** | **na** | **na** | **0.3** | **1** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **4610** | **0.1** | **15.4** | **na** | **na** | **1.52** | **1** | **1.82** | **48.8** |
| **Residential SSL** | | | | **na** | **23**[e] | **1560** | **125000** | **54.8** | **391** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **na** | **310**[e] | **22700** | **1820000** | **795** | **5680** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **na** | **92.9**[f] | **6190** | **496000** | **217** | **1550** | **1550** | **929** | **92900** |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | — | 0.82 | 12.1 | 0.98 (J) | — | — | 3.1 | — | 202 |
| RE21-07-75821 | 21-27577 | 0.0000–0.5000 | SOIL | — | — | — | 2.6 (J) | — | — | — | — | — |
| RE21-07-75822 | 21-27577 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-75823 | 21-27578 | 0.0000–0.5000 | SOIL | — | 0.12 | — | 4.9 (J) | — | — | 1.2 | — | — |
| RE21-07-75824 | 21-27578 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 0.34 (J) | — | — | — |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | — | **14.7** | 36.6 | 5.8 (J) | — | 1.6 | 42.2 | 19.2 | 568 |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | — | 0.88 | 7 | — | — | — | 2 | 2.5 | 73.7 |
| RE21-07-75827 | 21-27580 | 0.0000–0.5000 | SOIL | — | — | — | 2.6 (J) | — | — | — | — | — |
| RE21-07-75828 | 21-27580 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | 0.833 (J) | — | — | — |
| RE21-07-75830 | 21-27581 | 12.0000–13.0000 | QBT3 | — | — | — | — | 0.000551 (J) | 1.03 (J) | — | — | — |
| MD21-09-8731 | 21-605238 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 1.4 (J) | — | NA |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

[e] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table 6.22-2**
**Summary of Organic Chemicals Detected at Consolidated Unit 21-026(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **240000**[b] | **347** | **2600**[b] |
| **Industrial SSL** | | | | **36700** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2500000**[b] | **1370** | **9100**[b] |
| **Construction Worker SSL** | | | | **18600** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **952000**[c] | **4760** | **47600**[c] |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | —[d] | — | NA[e] | NA | — | — | 0.0153 (J) | — | — | — | — | — |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | — | — | NA | NA | 0.0291 (J) | 0.0184 (J) | 0.0297 (J) | — | — | — | — | — |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | — | — | NA | NA | 0.0142 (J) | — | 0.0124 (J) | — | — | — | — | — |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | — | — | NA | NA | 0.124 | 0.0893 | 0.153 | 0.0371 (J) | 0.0564 | — | 0.0839 (J) | — |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | 0.281 | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | 0.501 (J) | — | — |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | 0.44 (J) | — | — |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | 0.481 (J) | — | — |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | 0.392 (J) | — | — |
| RE21-07-583 | 21-27558 | 2.0000–3.0000 | QBT3 | NA | NA | 0.0044 | 0.0031 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | 0.0123 (J) | — | — | — | — | — |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | — | — | NA | NA | — | — | 0.0108 (J) | — | — | — | — | — |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | 0.0837 | 0.162 | 0.0429 | 0.0718 | — | 0.16 (J) | — |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | 0.0553 | — | — | — | 0.0937 (J) | — |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | — | — | NA | NA | 0.081 (J) | 0.06 (J) | 0.062 (J) | — | 0.07 (J) | — | — | — |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | — | — |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | 0.12 (J) | 0.069 (J) |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | 0.15 (J) | 0.55 (J) | NA | NA | 5.5 | 4.3 (J) | 5.7 (J) | 2.1 (J) | 4.6 (J) | — | 4.2 | 0.84 |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | — | 0.04 (J) | NA | NA | 0.47 | 0.36 (J) | 0.44 | 0.16 (J) | 0.36 (J) | — | 0.24 (J) | 0.071 (J) |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | 0.24 (J) | 0.65 | NA | NA | 5.9 | 4.4 (J) | 6 (J) | 2.1 (J) | 4.2 (J) | — | 2.7 | 1.2 |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | — | 0.073 (J) | NA | NA | 0.28 (J) | 0.22 (J) | 0.2 (J) | 0.089 (J) | 0.28 (J) | — | 0.14 (J) | 0.14 (J) |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | — | — | NA | NA | — | — | — | — | — | — | — | — |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | — | — | NA | NA | — | — | — | — | — | — | 0.078 (J) | — |

**Table 6.22-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Chloroform | Chrysene | Di-n-butylphthalate | Di-n-octylphthalate | Dibenz(a,h)anthracene | Dibenzofuran | Dichlorobenzene[1,4-] | Dimethylphenol[2,4-] | Ethylbenzene | Fluoranthene | Fluorene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **5.72** | **621** | **6110** | **2400**[f] | **0.621** | **78**[b] | **32.2** | **1220** | **69.7** | **2290** | **2290** |
| **Industrial SSL** | | | | **31.9** | **2340** | **68400** | **27000**[f] | **2.34** | **1000**[b] | **180** | **13700** | **385** | **24400** | **24400** |
| **Construction Worker SSL** | | | | **671** | **20600** | **23800** | **4760**[g] | **21.3** | **238**[c] | **3780** | **4760** | **6630** | **8910** | **8910** |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | — | 0.0248 (J) | — | — | — | — | — | — | — | 0.0287 (J) | — |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | — | — | — | — | — | — | — | — | — | 0.0109 (J) | — |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | — | 0.121 | — | — | — | — | — | — | — | 0.143 | — |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | — | — | — | NA | — | — |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-583 | 21-27558 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | — | — | — | NA | 0.0137 (J) | — |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | NA | 0.104 | — | — | — | — | — | — | NA | 0.079 | — |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | 0.000254 (J) | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | NA | 0.0387 | 0.0621 (J) | — | — | — | — | — | NA | 0.0346 | — |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | 0.000219 (J) | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | NA | 0.082 (J) | — | — | — | — | — | — | NA | 0.089 (J) | — |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | NA | — | 0.04 (J) | — | — | — | — | — | NA | — | — |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | NA | 6 | 0.31 (J) | 0.1 (J) | 0.83 (J) | — | — | — | NA | 6 | 0.12 (J) |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | — | 0.51 | — | — | — | — | — | — | — | 0.52 | — |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | NA | 6 | 0.85 | — | 0.84 (J) | 0.055 (J) | 0.064 (J) | 0.063 (J) | NA | 6.7 | 0.17 (J) |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | — | 0.3 (J) | 0.069 (J) | — | — | — | — | — | 0.00043 (J) | 0.44 | — |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | — |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | NA | — | — | — | — | — | — | — | NA | — | — |

**Table 6.22-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trimethylbenzene[1,2,4-] | Xylene (Total) | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na**[h] | **na** | **na** | **6.21** | **na** | **1830** | **1720** | **5570** | **62**[b] | **1090** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **na** | **na** | **23.4** | **na** | **20500** | **18300** | **57900** | **260**[b] | **3610** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **213** | **na** | **7150** | **6680** | **21100** | **688**[c] | **3130** | **313**[i] |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | NA | NA | NA | — | NA | — | 0.024 (J) | — | — | NA | — |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | NA | NA | NA | — | NA | — | — | — | — | NA | 0.000283 (J) |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | NA | NA | NA | — | NA | 0.0219 (J) | 0.124 | — | — | NA | 0.000279 (J) |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | NA | NA | NA | — | NA | — | — | 0.000311 (J) | — | NA | 0.000292 (J) |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | NA | NA | NA | — | NA | — | — | 0.00042 (J) | — | NA | 0.000357 (J) |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | NA | NA | NA | — | NA | — | — | — | — | NA | — |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | NA | NA | NA | — | NA | — | — | — | 0.000413 (J) | NA | — |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | NA | NA | NA | — | NA | — | — | — | — | NA | — |
| RE21-07-583 | 21-27558 | 2.0000–3.0000 | QBT3 | 0.00000158 (J) | 3.06E-06 | 4.78E-07 | NA | 9.95E-06 | NA | NA | NA | NA | NA | NA |
| RE21-07-75771 | 21-27563 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | 0.0114 (J) | NA | NA | NA | NA |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | NA | NA | NA | — | NA | — | — | — | — | NA | — |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | NA | NA | NA | — | NA | — | — | 0.000471 (J) | — | NA | — |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | NA | NA | NA | — | NA | — | — | 0.00369 | — | NA | — |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.0393 | NA | — | 0.0849 | NA | NA | NA | NA |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | NA | NA | NA | — | NA | — | — | — | — | NA | — |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | 0.0405 | NA | NA | NA | NA |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | NA | NA | NA | — | NA | — | — | — | — | NA | — |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | 0.089 (J) | NA | NA | NA | NA |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | NA | NA | NA | — | NA | — | — | — | — | — | NA |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | NA | NA | NA | 2.2 (J) | NA | 1.8 (J) | 5.4 | NA | NA | NA | NA |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 0.19 (J) | NA | 0.13 (J) | 0.49 | — | — | — | NA |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | NA | NA | NA | 2.1 (J) | NA | 2.2 | 6 | NA | NA | NA | NA |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | NA | NA | NA | 0.084 (J) | NA | 0.24 (J) | 0.36 | — | 0.00049 (J) | 0.0015 (J) | NA |

**Table 6.22-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Phenanthrene | Pyrene | Toluene | Trimethylbenzene[1,2,4-] | Xylene (Total) | Xylene[1,3-]+Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na**[h] | **na** | **na** | **6.21** | **na** | **1830** | **1720** | **5570** | **62**[b] | **1090** | **1090**[i] |
| **Industrial SSL** | | | | **na** | **na** | **na** | **23.4** | **na** | **20500** | **18300** | **57900** | **260**[b] | **3610** | **3610**[i] |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **213** | **na** | **7150** | **6680** | **21100** | **688**[c] | **3130** | **313**[i] |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | NA | NA | NA | — | NA | — | — | 0.00246 | — | NA | — |
| MD21-09-8734 | 21-605240 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | NA | — | — | NA | NA | NA | NA |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] EPA regional screening level (carcinogens multiplied by 10 to adjust to 10-5 risk) (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] EPA Region 6 SSL (EPA 2005, 091002).

[g] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[h] na = Not available.

[i] Xylenes SSLs used as surrogate based on structural similarity.

**Table 6.22-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-026(a)-99**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-75726 | 21-27550 | 0.0000–0.5000 | SOIL | 0.194 | —[c] | — | 0.221 | 0.028501 | — | — | — |
| RE21-07-75727 | 21-27550 | 4.3300–5.3300 | QBT3 | 0.568 | — | 0.0304 | 1.38 | 0.069662 | — | — | — |
| RE21-07-75728 | 21-27550 | 6.3300–7.3300 | QBT3 | 0.0777 | — | — | 0.0546 | 0.064266 | — | — | — |
| RE21-07-75729 | 21-27550 | 9.3300–10.3300 | QBT3 | 0.336 | — | — | 0.432 | 0.053788 | — | — | — |
| RE21-07-75730 | 21-27551 | 10.0000–11.0000 | QBT3 | — | — | — | — | 0.048368 | — | — | — |
| RE21-07-75731 | 21-27551 | 15.0000–16.0000 | QBT3 | — | — | — | — | 0.030543 | — | — | — |
| RE21-07-75732 | 21-27551 | 20.0000–21.0000 | QBT3 | — | — | — | — | 0.049667 | — | — | — |
| RE21-07-75735 | 21-27552 | 2.0000–3.0000 | SOIL | — | 0.108 | — | — | 0.013359 | — | — | — |
| RE21-07-75736 | 21-27552 | 5.0000–6.0000 | QBT3 | — | — | — | — | 0.019133 | — | — | — |
| RE21-07-75737 | 21-27553 | 0.0000–0.5000 | SOIL | 0.196 | — | — | 0.165 | — | — | — | — |
| RE21-07-75738 | 21-27553 | 2.0000–3.0000 | SOIL | 0.104 | — | — | 0.123 | 0.042743 | — | — | — |
| RE21-07-75739 | 21-27553 | 5.0000–6.0000 | QBT3 | — | — | — | 0.0939 | 0.052417 | — | — | — |
| RE21-07-75752 | 21-27554 | 0.0000–0.5000 | SOIL | — | — | — | 0.0631 | 0.003666 | — | — | — |
| RE21-07-75753 | 21-27554 | 2.5000–3.5000 | QBT3 | — | — | — | — | 0.014357 | — | — | — |
| RE21-07-75754 | 21-27554 | 4.5000–5.5000 | QBT3 | — | — | — | — | 0.018578 | — | — | — |
| RE21-07-75743 | 21-27555 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.038739 | — | — | — |
| RE21-07-75744 | 21-27555 | 2.0000–2.5000 | QBT3 | — | 0.33 | — | — | 0.137131 | — | — | — |
| RE21-07-75745 | 21-27556 | 0.0000–0.5000 | SOIL | — | — | — | 0.468 | — | — | — | — |
| RE21-07-75746 | 21-27556 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.043904 | — | — | — |
| RE21-07-75747 | 21-27557 | 0.0000–0.5000 | SOIL | — | — | 0.073 | — | — | — | — | — |
| RE21-07-75748 | 21-27557 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.033955 | — | — | — |
| RE21-07-75749 | 21-27558 | 0.0000–0.5000 | SOIL | — | — | — | 0.105 | 0.037091 | — | — | — |
| RE21-07-75750 | 21-27558 | 2.0000–2.5000 | QBT3 | — | — | — | — | 0.063699 | — | — | — |
| RE21-07-75755 | 21-27559 | 0.0000–0.5000 | SOIL | — | — | — | — | 0.003199 | — | — | — |
| RE21-07-75756 | 21-27559 | 2.5000–3.5000 | QBT3 | — | — | — | — | 0.029128 | — | — | — |
| RE21-07-75757 | 21-27559 | 4.5000–5.5000 | QBT3 | — | — | — | — | 0.016753 | — | — | — |
| RE21-07-75766 | 21-27560 | 2.0000–3.0000 | SOIL | — | — | — | 0.0671 | 0.028452 | — | — | — |

**Table 6.22-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-75768 | 21-27561 | 2.0000–3.0000 | SOIL | — | 0.139 | — | — | — | — | — | — |
| RE21-07-75769 | 21-27562 | 0.0000–0.5000 | SOIL | — | — | — | 0.127 | 0.022418 | — | — | — |
| RE21-07-75770 | 21-27562 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.091826 | — | — | — |
| RE21-07-75772 | 21-27563 | 2.0000–3.0000 | SOIL | — | 0.0691 | — | — | 0.019399 | — | — | — |
| RE21-07-75773 | 21-27564 | 9.5000–10.5000 | QBT3 | 0.0508 | 0.119 | — | 0.303 | 0.022498 | — | — | — |
| RE21-07-75774 | 21-27564 | 11.5000–12.5000 | QBT3 | — | — | — | — | 0.003926 | — | — | — |
| RE21-07-75775 | 21-27565 | 12.0000–13.0000 | QBT3 | — | — | — | — | 0.062563 | — | — | — |
| RE21-07-75776 | 21-27565 | 14.0000–15.0000 | QBT3 | — | — | — | 0.0338 | 0.032353 | — | — | — |
| RE21-07-75777 | 21-27566 | 12.0000–13.0000 | QBT3 | — | — | — | 0.043 | 0.016385 | — | — | — |
| RE21-07-75778 | 21-27566 | 14.0000–15.0000 | QBT3 | — | — | — | — | 0.016279 | — | — | — |
| RE21-07-75781 | 21-27568 | 10.0000–11.0000 | QBT3 | — | — | — | — | 0.052654 | — | — | — |
| RE21-07-75782 | 21-27568 | 12.0000–13.0000 | QBT3 | — | NA[d] | — | — | 0.059384 | — | — | — |
| RE21-07-75804 | 21-27570 | 0.0000–0.5000 | SOIL | 4.19 | — | 0.125 | 3.74 | 0.28166 | — | — | — |
| RE21-07-75805 | 21-27570 | 3.5000–4.5000 | QBT3 | — | — | — | 0.0527 | 0.092848 | — | — | — |
| RE21-07-75806 | 21-27570 | 5.5000–6.5000 | QBT3 | — | — | — | — | 0.035245 | — | — | — |
| RE21-07-75807 | 21-27571 | 0.0000–0.5000 | SOIL | 0.271 | — | — | 0.468 | 0.05425 | — | — | — |
| RE21-07-75808 | 21-27571 | 3.5000–4.5000 | QBT3 | 0.0718 | — | — | 0.109 | 0.08406 | — | — | — |
| RE21-07-75809 | 21-27571 | 5.5000–6.5000 | QBT3 | — | — | — | — | 0.093882 | — | — | — |
| RE21-07-75810 | 21-27572 | 0.0000–0.5000 | QBT3 | — | — | — | — | 0.0082 | — | — | — |
| RE21-07-75811 | 21-27572 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.0396 | — | — | — |
| RE21-07-75812 | 21-27572 | 5.0000–6.0000 | QBT3 | — | — | — | NA | 0.0128 | — | — | — |
| RE21-07-75813 | 21-27573 | 0.0000–0.5000 | SOIL | — | — | — | 0.077 | — | — | — | — |
| RE21-07-75815 | 21-27574 | 0.0000–0.5000 | SOIL | 0.0418 | — | — | — | — | — | — | — |
| RE21-07-75816 | 21-27574 | 2.0000–3.0000 | QBT3 | — | — | — | — | 0.02 | — | — | — |
| RE21-07-75817 | 21-27575 | 0.0000–0.5000 | SOIL | 0.0296 | — | — | 0.169 | — | — | — | — |
| RE21-07-75818 | 21-27575 | 2.0000–3.0000 | QBT3 | 0.177 | — | 0.25 | 1.08 | 0.053 | — | — | — |
| RE21-07-75819 | 21-27576 | 0.0000–0.5000 | SOIL | 58.1 | — | 3.24 | 83.5 | 6.12 | 12.6 | 0.65 | 3.44 |
| RE21-07-75820 | 21-27576 | 2.0000–3.0000 | QBT3 | 1.09 | — | 0.082 | 2.33 | 0.701 | — | — | — |
| RE21-07-75821 | 21-27577 | 0.0000–0.5000 | SOIL | 0.182 | — | — | 0.369 | — | — | — | — |

**Table 6.22-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SSL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SSL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SSL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-75822 | 21-27577 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0391 | 0.0165 | — | — | — |
| RE21-07-75823 | 21-27578 | 0.0000–0.5000 | SOIL | 0.087 | — | — | 0.138 | 0.0343 | — | — | — |
| RE21-07-75825 | 21-27579 | 0.0000–0.5000 | SOIL | 5.99 | — | 2.35 | 20.5 | 0.538 | 43.1 | 1.8 | 5.2 |
| RE21-07-75826 | 21-27579 | 2.0000–3.0000 | QBT3 | 0.131 | — | 0.079 | 0.508 | 0.106 | 3.39 | 0.212 | — |
| RE21-07-75827 | 21-27580 | 0.0000–0.5000 | SOIL | — | — | — | 0.126 | 0.0082 | — | — | — |
| RE21-07-75828 | 21-27580 | 2.0000–3.0000 | QBT3 | — | — | NA | — | 0.0162 | — | — | — |
| RE21-07-75829 | 21-27581 | 10.0000–11.0000 | QBT3 | — | NA | — | — | 0.063362 | — | — | — |
| RE21-07-75830 | 21-27581 | 12.0000–13.0000 | QBT3 | — | — | — | — | 0.038859 | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.23-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-027(a)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** |
| **SOIL Background Value** | | | | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** |
| **Residential SSL** | | | | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **400** |
| **Industrial SSL** | | | | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** |
| **Construction Worker SSL** | | | | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | —[c] | — | — | 2.86 | — | 509 | 148 | — | 57 |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 27.8 | 8.25 | — | — |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | — | — | — | 2.03 | — | 146 | 31.5 | — | 24.5 |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 15.6 | — | — | 12.8 |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | — | — | — | 2 | — | 187 | 60.5 | — | 53.4 |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | 32.7 | 6.16 | — | 12.2 |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | NA[d] | — | — | 0.457 (J) | — | 82.4 | 17.6 | — | 22.7 (J) |
| RE21-07-3901 | 21-600864 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | 10.5 | — | — | — |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | NA | — | — | 0.696 | — | 42.2 | — | — | 37.6 (J) |
| RE21-07-3903 | 21-600865 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | 12 | — | — | — |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | NA | — | — | 0.502 (U) | — | — | — | — | — |
| RE21-07-3905 | 21-600866 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | NA | — | — | 0.805 | — | 105 | — | — | — |
| RE21-07-3907 | 21-600867 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | NA | — | — | 0.468 (J) | — | 105 | — | — | — |
| RE21-07-3909 | 21-600868 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | — | — | — | — |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | NA | — | — | 2.07 | — | 152 | 40.7 | — | 24.5 (J) |
| RE21-07-3917 | 21-600872 | 2.0000–3.0000 | QBT3 | NA | — | — | — | — | 13.6 | 4.7 | — | — |
| RE21-07-3918 | 21-600872 | 5.0000–6.0000 | QBT3 | NA | — | — | — | — | 9.95 | — | — | — |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | — | — | — | — | — | — | — | — | — |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | — | — | — | 0.515 (U) | — | — | — | — | — |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | — | 6.45 | 95.6 | — | 2820 | 503 | 47.2 | — | 37.7 |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | — | 4.2 | 61.8 | — | — | 81.2 | 16.1 | — | 19.4 |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | — | 9.28 | — | 0.542 (U) | — | — | — | — | — |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | — | — | — | 0.568 (U) | — | — | — | — | — |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | — | — | — | 0.585 (U) | — | — | — | — | — |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | — | — | — | 0.605 (U) | — | — | — | — | — |

**Table 6.23-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Copper | Cyanide (Total) | Lead |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **4.66** | **0.5** | **11.2** |
| **SOIL Background Value** | | | | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **14.7** | **0.5** | **22.3** |
| **Residential SSL** | | | | **31.3** | **3.9** | **15600** | **77.9** | **na**[a] | **219**[b] | **3130** | **1560** | **400** |
| **Industrial SSL** | | | | **454** | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **45400** | **22700** | **800** |
| **Construction Worker SSL** | | | | **124** | **65.4** | **4350** | **309** | **na** | **449**[b] | **12400** | **6190** | **800** |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | 1.8 (J-) | — | — | 0.66 | — | 561 (J) | NA | 0.52 (UJ) | 41.9 (J-) |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | — | — | — | — | — | 116 | NA | 0.51 (UJ) | 13.3 (J-) |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | — | — | — | 0.791 | — | 80.7 | 77.8 | — | 35.6 |
| RE21-07-5871 | 21-601229 | 6.0000–7.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5872 | 21-601229 | 11.0000–12.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| RE21-07-5876 | 21-601229 | 21.0000–22.0000 | QBT3 | — | — | — | — | — | — | — | — | — |
| MD21-09-8838 | 21-605279 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | — | — | NA | 18 |
| MD21-09-8839 | 21-605280 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 140 (J+) | NA | NA | NA |
| MD21-09-12456 | 21-608020 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 76 (J) | NA | NA | NA |

**Table 6.23-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lithium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na** | **0.1** | **6.58** | **na** | **na** | **0.3** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **na** | **0.1** | **15.4** | **na** | **na** | **1.52** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **160**[e] | **23**[e] | **1560** | **125000** | **54.8** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **2000**[e] | **310**[e] | **22700** | **1820000** | **795** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **619**[f] | **92.9**[f] | **6190** | **496000** | **217** | **1550** | **186000** | **1550** | **92900** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | 11 | 0.213 | — | 3.57 | — | — | 43.2 (J) | — | 398 |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | 4.14 | — | — | 3 | — | 1.46 (U) | 4.13 (J) | — | — |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | 7.31 | — | — | 6.78 | 0.00364 | — | 26.7 (J) | — | 128 |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | 4.65 | — | — | — | — | 1.5 (U) | 4.55 (J) | — | — |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | 15.3 | 0.457 | — | 13.9 | 0.000884 (J) | — | 38.5 (J) | — | 209 |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | 3.41 | — | — | 3.95 | — | 0.923 (J) | 8.18 (J) | — | — |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | 8.99 | — | — | 3.19 | — | — | 16.2 | — | — |
| RE21-07-3901 | 21-600864 | 2.0000–3.0000 | QBT3 | 3.5 | — | — | 2.08 | — | 1.48 (U) | 2.6 | — | — |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | 9.02 | — | — | 2.98 | — | — | 11.7 | — | 52.9 |
| RE21-07-3903 | 21-600865 | 2.0000–3.0000 | QBT3 | 4.25 | — | — | — | 0.00135 (J) | 1.49 (U) | 4.77 | — | — |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | 8.21 | — | — | 2.6 | — | — | 3.06 | — | — |
| RE21-07-3905 | 21-600866 | 2.0000–3.0000 | QBT3 | 1.86 (J) | — | — | — | — | 0.562 (J) | 1.17 | — | — |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | 6.73 | 0.224 | — | 3.11 | — | — | 11.6 | — | 59.8 |
| RE21-07-3907 | 21-600867 | 2.0000–3.0000 | QBT3 | 2.33 | — | — | — | — | 1.49 (U) | 0.703 | — | — |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | 9.11 | — | — | 3.1 | 0.000581 (J) | — | 12.5 | — | 58.9 |
| RE21-07-3909 | 21-600868 | 2.0000–3.0000 | QBT3 | 5.1 | — | — | — | — | 0.594 (J) | 6.79 | — | — |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | 9.37 | — | — | 3.92 | — | — | 20.3 | — | 160 |
| RE21-07-3917 | 21-600872 | 2.0000–3.0000 | QBT3 | 4.05 | — | — | — | — | 1.45 (U) | 3.2 | — | — |
| RE21-07-3918 | 21-600872 | 5.0000–6.0000 | QBT3 | 4.45 | — | — | 2.1 | — | 1.5 (U) | 2.34 | — | — |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | 12 | — | — | 4.59 | 0.00178 (J+) | 2.34 | 20.4 | — | 148 |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | 15.3 | — | — | 2.73 | 0.00231 (J+) | 2.13 | 25.7 | — | 73.5 |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | 13.6 | 0.487 | 11.9 | 3.03 | — | 2.75 | 24.9 | 22.2 | 175 |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | 8.81 | — | — | 1.84 | — | 2.95 | 14.8 | — | — |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | 18.1 | — | — | 1.22 | — | 4 | 32.8 | — | 66.6 |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | 13 | — | — | — | — | 2.83 | 21.4 | — | — |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | 14.3 | — | — | — | — | — | 33.9 | — | 100 |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | 11.1 | — | — | 1.81 | — | 1.81 (U) | 18 | — | 278 |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | 5.2 | 0.598 (J+) | — | 1.6 | — | — | 23.3 (J) | — | 698 (J) |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | 2.1 (J) | 0.274 (J+) | — | 1.8 | — | — | 11.5 | — | 176 |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | 8.31 (J+) | 0.333 | — | 4.54 | — | 4.09 | 16 | — | 349 |

**Table 6.23-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Lithium | Mercury | Nickel | Nitrate | Perchlorate | Selenium | Strontium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na** | **0.1** | **6.58** | **na** | **na** | **0.3** | **na** | **17** | **63.5** |
| **SOIL Background Value** | | | | **na** | **0.1** | **15.4** | **na** | **na** | **1.52** | **na** | **39.6** | **48.8** |
| **Residential SSL** | | | | **160**[e] | **23**[e] | **1560** | **125000** | **54.8** | **391** | **46900** | **391** | **23500** |
| **Industrial SSL** | | | | **2000**[e] | **310**[e] | **22700** | **1820000** | **795** | **5680** | **681000** | **5680** | **341000** |
| **Construction Worker SSL** | | | | **619**[f] | **92.9**[f] | **6190** | **496000** | **217** | **1550** | **186000** | **1550** | **92900** |
| RE21-07-5871 | 21-601229 | 6.0000–7.0000 | QBT3 | 5.43 (J+) | — | — | — | — | 1.8 | 1.19 | — | — |
| RE21-07-5872 | 21-601229 | 11.0000–12.0000 | QBT3 | 4.49 (J+) | — | — | — | — | 1.33 (J) | 0.573 | — | — |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | 5.34 (J+) | — | — | — | — | 1.87 | 0.96 | — | — |
| RE21-07-5876 | 21-601229 | 21.0000–22.0000 | QBT3 | 5.29 (J+) | — | — | — | — | 1.35 (J) | 0.502 (J) | — | — |
| MD21-09-8838 | 21-605279 | 0.0000–0.5000 | QBT3 | NA | — | NA | NA | NA | NA | NA | NA | — |
| MD21-09-8839 | 21-605280 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-12456 | 21-608020 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

[e] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table 6.23-2**
**Summary of Organic Chemicals Detected at SWMU 21-027(a)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butanone[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **39600** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **369000** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **148000** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | 0.0481 | NA[b] | 0.0776 | NA | NA | 0.336 | 0.372 | 0.586 | 0.18 | —[c] | — | NA |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | — | NA | 0.0173 (J) | NA | NA | 0.2 | 0.24 | 0.375 | 0.162 | — | — | NA |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | 0.0557 (J) | NA | 0.0906 (J) | NA | NA | 0.713 | 0.819 | 1.55 | 0.457 | — | 0.287 (J) | NA |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | 0.0639 | 0.0273 (J) | — | — | NA |
| RE21-08-10373 | 21-600864 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10374 | 21-600864 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | 0.042 | — | 0.0848 | 0.0346 (J) | — | — | NA |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | NA |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | — | NA | 0.00724 (J) | NA | NA | — | — | 0.137 | — | — | — | NA |
| RE21-08-10375 | 21-600867 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10376 | 21-600867 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | — | NA | — | NA | NA | — | — | — | — | — | — | NA |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | 0.0227 (J) | NA | 0.0323 (J) | NA | NA | 0.201 | — | 0.387 | 0.137 (J) | — | — | NA |
| RE21-07-3925 | 21-600872 | 0.0000–0.5000 | SOIL | NA | NA | NA | 0.0518 | 0.0284 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10371 | 21-600872 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | — | — | — | NA | NA | 0.0223 (J) | — | — | — | — | — | — |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | — | — | — | NA | NA | 0.0189 (J) | — | — | — | — | — | — |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | 0.0457 | — | 0.0542 | NA | NA | 0.339 | 0.378 (J) | 0.616 (J) | 0.19 (J) | 0.244 (J) | — | — |
| RE21-08-10372 | 21-601225 | 1.0000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | — | — | — | NA | NA | 0.0196 (J) | — | 0.033 (J) | — | — | — | — |
| RE21-07-5893 | 21-601225 | 3.0000–4.0000 | QBT3 | NA | NA | NA | 0.0095 | 0.0069 | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-12457 | 21-601225 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | — | — | 0.0113 (J) | NA | NA | 0.0537 (J) | — | — | — | — | — | — |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acetone | Anthracene | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Butanone[2-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **67500** | **17200** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **39600** |
| **Industrial SSL** | | | | **36700** | **851000** | **183000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **369000** |
| **Construction Worker SSL** | | | | **18600** | **263000** | **66800** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **148000** |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | — | 0.0269 (J) | — | NA | NA | — | — | — | — | — | — | 0.00581 (J) |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | — | — | — | NA | NA | — | — | 0.0493 (J) | — | — | — | — |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | — | — | — | NA | NA | — | — | 0.04 (J) | — | — | 0.044 (J) | — |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | 0.0188 (J) | — | 0.0343 (J) | NA | NA | 0.141 | 0.155 | 0.36 | 0.092 | — | — | — |
| RE21-08-10369 | 21-601229 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10370 | 21-601229 | 6.0000–7.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-8597 | 21-601229 | 11.0000–12.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | — | — | — | NA | NA | — | — | — | — | — | — | — |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Carbon Disulfide | Chrysene | Di-n-butylphthalate | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **1940** | **621** | **6110** | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **7540** | **2340** | **68400** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **5890** | **20600** | **23800** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | NA | 0.386 | — | 0.873 | 0.0344 | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | NA | 0.272 | — | 0.422 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0108 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | NA | 0.801 | — | 1.84 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | NA | 0.0274 (J) | — | 0.0544 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10373 | 21-600864 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 1.15E-05 | 2.56E-05 | 2.57E-06 | 0.000000244 (J) | 6.38E-06 | 0.000000323 (J) | 0.000000642 (J) |
| RE21-08-10374 | 21-600864 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | — | 1.6E-07 | — | — | — | — | — |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | NA | 0.047 | — | 0.0738 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | NA | — | — | 0.012 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | NA | 0.0771 | — | 0.133 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10375 | 21-600867 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.000000613 (J) | 1.28E-06 | 0.000000177 (J) | — | 3.9E-07 | — | — |
| RE21-08-10376 | 21-600867 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | 0.000000125 (J) | 1.25E-07 | — | — | — | — | — |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | NA | 0.0273 (J) | — | 0.0469 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | NA | 0.232 | — | 0.461 | 0.0156 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-3925 | 21-600872 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 0.0837 | 0.201 | 0.0109 | 0.000799 | 0.0518 | 0.000499 | 0.00304 |
| RE21-08-10371 | 21-600872 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | 0.000000362 (J) | 7.35E-07 | — | — | — | — | — |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | — | 0.0206 (J) | — | 0.0214 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | — | — | — | 0.0209 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | — | 0.442 | — | 1.3 | 0.0295 (J) | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10372 | 21-601225 | 1.0000–2.0000 | QBT3 | NA | NA | NA | NA | NA | 0.00031 | 0.000668 | 7.56E-05 | 6.38E-06 | 0.00035 | 3.7E-06 | 1.45E-05 |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | — | 0.0208 (J) | — | 0.0396 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5893 | 21-601225 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | NA | 0.00132 | 0.00279 | 0.000152 (J) | 1.42E-05 | 0.000726 (J) | 6.38E-06 | 3.79E-05 |
| MD21-09-12457 | 21-601225 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | 0.000162 | 0.000338 | 1.52E-05 | 0.00000159 (J) | 5.96E-05 | 0.00000173 (J) | 4.98E-06 |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | — | 0.0688 (J) | — | 0.134 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | — | — | — | 0.0122 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Carbon Disulfide | Chrysene | Di-n-butylphthalate | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **1940** | **621** | **6110** | **2290** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **7540** | **2340** | **68400** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **5890** | **20600** | **23800** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | — | 0.063 (J) | 0.12 (J) | 0.048 (J) | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | — | — | 0.036 (J) | — | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | — | 0.17 | 0.0572 (J) | 0.359 | — | NA | NA | NA | NA | NA | NA | NA |
| RE21-08-10369 | 21-601229 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | 0.00482 | 0.00983 | 0.000058 | 6.12E-06 | 0.000252 | 3.49E-06 | 2.26E-05 |
| RE21-08-10370 | 21-601229 | 6.0000–7.0000 | SOIL | NA | NA | NA | NA | NA | 0.000447 | 0.000912 | 1.85E-05 | 0.0000021 (J) | 0.000076 | 0.00000201 (J) | 7.71E-06 |
| MD21-09-8597 | 21-601229 | 11.0000–12.0000 | QBT3 | NA | NA | NA | NA | NA | 8.52E-05 | 0.000182 | 6.09E-06 | — | 2.34E-05 | 0.000000936 (J) | 0.00000208 (J) |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | 0.00585 | — | — | — | — | NA | NA | NA | NA | NA | NA | NA |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** | **45** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** | **252** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **213** | **702** | **na** | **na** | **na** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.229 | — | NA | NA | NA |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.213 | — | NA | NA | NA |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.721 | — | NA | NA | NA |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.0218 (J) | — | NA | NA | NA |
| RE21-08-10373 | 21-600864 | 0.0000–0.5000 | SOIL | 0.000000564 (J) | 6.05E-06 | 0.000000278 (J) | 0.0000002 (J) | — | 0.000000229 (J) | 3.01E-06 | NA | NA | 8.85E-05 | 5.49E-06 | 0.000000239 (J) |
| RE21-08-10374 | 21-600864 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | NA | NA | 0.000000522 (J) | — | — |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-08-10375 | 21-600867 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 1.1E-07 | NA | NA | 0.00000441 (J) | 0.000000395 (J) | — |
| RE21-08-10376 | 21-600867 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | NA | NA | 0.000000475 (J) | — | — |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.115 (J) | — | NA | NA | NA |
| RE21-07-3925 | 21-600872 | 0.0000–0.5000 | SOIL | 0.00129 | 0.0212 | 0.000279 | 0.000296 | 7.85E-05 | 0.000619 | 0.0135 | NA | NA | 0.35 | 0.0351 | 0.000247 |
| RE21-08-10371 | 21-600872 | 2.0000–3.0000 | QBT3 | — | — | — | — | — | — | — | NA | NA | 0.00000179 (J) | — | — |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | 0.195 (J) | 0.0143 (J) | NA | NA | NA |
| RE21-08-10372 | 21-601225 | 1.0000–2.0000 | QBT3 | 6.85E-06 | 9.52E-05 | 4.27E-06 | 3.13E-06 | 0.000000806 (J) | 4.23E-06 | 0.00011 | NA | NA | 0.00217 | 0.000184 | 0.0000023 (J) |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5893 | 21-601225 | 3.0000–4.0000 | QBT3 | 1.61E-05 | 0.000259 | 4.92E-06 | 3.82E-06 | 0.00000129 (J) | 6.92E-06 | 0.000205 | NA | NA | 0.0152 | 0.000503 (J) | 3.22E-06 |
| MD21-09-12457 | 21-601225 | 7.0000–8.0000 | QBT3 | 4.01E-06 | 4.49E-05 | 0.000000809 (J) | 0.000000689 (J) | 0.00000023 (J) | 0.00000109 (J) | 2.42E-05 | NA | NA | 0.00139 | 4.54E-05 | 0.00000157 (J) |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** | **45** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** | **252** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **213** | **702** | **na** | **na** | **na** |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 0.0733 | — | NA | NA | NA |
| RE21-08-10369 | 21-601229 | 1.0000–2.0000 | SOIL | 0.000011 | 0.000334 | 0.00000219 (J) | 0.00000168 (J) | 0.000000587 (J) | 0.00000234 (J) | 6.12E-05 | NA | NA | 0.0353 | 0.000141 | 0.00000165 (J) |
| RE21-08-10370 | 21-601229 | 6.0000–7.0000 | SOIL | 4.44E-06 | 0.000069 | 0.00000105 (J) | 0.000000854 (J) | 0.000000316 (J) | 0.00000126 (J) | 2.63E-05 | NA | NA | 0.00364 | 0.000046 | 0.00000145 (J) |
| MD21-09-8597 | 21-601229 | 11.0000–12.0000 | QBT3 | 0.00000162 (J) | 1.78E-05 | — | — | — | — | 5.81E-06 | NA | NA | 0.000879 (J) | 2.15E-05 | 0.000000601 (J) |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | — | — | NA | NA | NA |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Tetrachloroethene | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000045** | **na** | **0.000374** | **na** | **6.99** | **5570** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.000204** | **na** | **0.00147** | **na** | **36.4** | **57900** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.000284** | **na** | **0.0127** | **na** | **338** | **21100** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.415 | 0.759 | NA | NA | NA | NA | NA | NA |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | NA | NA | — | 0.000401 (J) |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0989 | 0.405 | NA | NA | NA | NA | NA | NA |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.611 | 1.72 | NA | NA | NA | NA | NA | NA |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | NA | NA | — | 0.000414 (J) |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0153 (J) | 0.0458 | NA | NA | NA | NA | NA | NA |
| RE21-08-10373 | 21-600864 | 0.0000–0.5000 | SOIL | 4.79E-07 | — | — | 1.9E-06 | NA | NA | — | — | 0.00000015 (J) | 6.07E-07 | NA | NA |
| RE21-08-10374 | 21-600864 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | — | — | — | — | NA | NA |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0206 (J) | 0.0648 | NA | NA | NA | NA | NA | NA |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | 0.0109 (J) | NA | NA | NA | NA | NA | NA |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0509 | 0.124 | NA | NA | NA | NA | NA | NA |
| RE21-08-10375 | 21-600867 | 0.0000–0.5000 | SOIL | — | — | — | — | NA | NA | — | — | — | — | NA | NA |
| RE21-08-10376 | 21-600867 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | — | — | — | — | NA | NA |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0142 (J) | 0.045 | NA | NA | NA | NA | NA | NA |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.207 | 0.316 | NA | NA | NA | NA | NA | NA |
| RE21-07-3925 | 21-600872 | 0.0000–0.5000 | SOIL | 0.002 | 3.03E-05 | 8.49E-05 | 0.00225 | NA | NA | 2.59E-05 | 0.00021 | 9.24E-06 | 0.000427 | NA | NA |
| RE21-08-10371 | 21-600872 | 2.0000–3.0000 | QBT3 | — | — | — | — | NA | NA | — | — | — | — | NA | NA |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | — | 0.0274 (J) | NA | NA | NA | NA | — | 0.000341 (J+) |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | NA | NA | NA | NA | — | 0.0235 (J) | NA | NA | NA | NA | 0.000227 (J) | 0.00066 (J+) |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | NA | NA | NA | NA | 0.597 | 1.1 | NA | NA | NA | NA | — | 0.000785 (J+) |
| RE21-08-10372 | 21-601225 | 1.0000–2.0000 | QBT3 | 1.79E-05 | 0.000000767 (J) | — | 4.12E-05 | NA | NA | 0.000000429 (J) | 1.58E-06 | 0.00000077 (J) | 9.55E-06 | NA | NA |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | NA | NA | NA | NA | 0.0239 (J) | 0.0325 (J) | NA | NA | NA | NA | — | 0.00117 |
| RE21-07-5893 | 21-601225 | 3.0000–4.0000 | QBT3 | 2.79E-05 | 0.000000503 (J) | 0.00000143 (J) | 2.76E-05 | NA | NA | 5.99E-07 | 4.23E-06 | 0.000000302 (J) | 6.43E-06 | NA | NA |
| MD21-09-12457 | 21-601225 | 7.0000–8.0000 | QBT3 | 8.85E-06 | 0.000000131 (J) | 0.000000234 (J) | 7.43E-06 | NA | NA | 0.000000412 (J) | 2.66E-06 | — | 1.6E-06 | NA | NA |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | NA | NA | NA | NA | 0.0745 | 0.153 (J) | NA | NA | NA | NA | 0.000781 (J) | — |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | NA | NA | NA | NA | — | — | NA | NA | NA | NA | — | 0.000448 (J) |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | NA | NA | NA | NA | — | 0.0293 (J) | NA | NA | NA | NA | 0.00078 (J) | — |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | NA | NA | NA | NA | — | — | NA | NA | NA | NA | 0.00559 | — |

**Table 6.23-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) | Tetrachloroethene | Toluene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000045** | **na** | **0.000374** | **na** | **6.99** | **5570** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.000204** | **na** | **0.00147** | **na** | **36.4** | **57900** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.000284** | **na** | **0.0127** | **na** | **338** | **21100** |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | 0.04 (J) | NA | NA | NA | NA | — | — |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | NA | NA | NA | NA | 0.176 | 0.309 | NA | NA | NA | NA | — | — |
| RE21-08-10369 | 21-601229 | 1.0000–2.0000 | SOIL | 1.51E-05 | — | 0.00000072 (J) | 1.18E-05 | NA | NA | 0.000000358 (J) | 2.74E-06 | 0.000000178 (J) | 3.96E-06 | NA | NA |
| RE21-08-10370 | 21-601229 | 6.0000–7.0000 | SOIL | 8.71E-06 | 0.000000171 (J) | 0.000000425 (J) | 6.07E-06 | NA | NA | — | 5.24E-07 | — | 1.02E-06 | NA | NA |
| MD21-09-8597 | 21-601229 | 11.0000–12.0000 | QBT3 | 2.54E-06 | — | — | 1.6E-06 | NA | NA | 0.000000115 (J) | 2.84E-07 | — | — | NA | NA |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | NA | NA | — | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] NA = Not analyzed.

[c] — = Not detected.

[d] na = Not available.

**Table 6.23-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-027(a)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-3894 | 21-600861 | 0.0000–0.5000 | SOIL | 54.5 (J) | —[c] | 22.6 | 144 | — | 38.7 | 1.9 | 2.39 |
| RE21-07-3895 | 21-600861 | 2.0000–3.0000 | QBT3 | 0.865 | — | 1.23 | 4.7 | — | 3.27 | 0.246 | — |
| RE21-07-3896 | 21-600862 | 0.0000–0.5000 | SOIL | 16.7 (J) | — | 28.3 | 96.4 | — | 11.8 | 0.656 | — |
| RE21-07-3897 | 21-600862 | 2.0000–3.0000 | QBT3 | 0.674 | — | 1.52 | 3.32 | — | 2.7 | 0.193 | — |
| RE21-07-3898 | 21-600863 | 0.0000–0.5000 | SOIL | 24.7 | — | 27.9 | 159 | 0.108889 | 51.9 | 2.74 | — |
| RE21-07-3899 | 21-600863 | 2.0000–3.0000 | QBT3 | 1.01 | — | 1.52 | 4.56 | — | 2.65 | 0.186 | — |
| RE21-07-3900 | 21-600864 | 0.0000–0.5000 | SOIL | 2.54 | — | 2.23 | 14.7 | — | 4.68 | 0.361 | — |
| RE21-07-3901 | 21-600864 | 2.0000–3.0000 | QBT3 | 0.279 | — | 0.324 | 1.37 | — | — | 0.124 | — |
| RE21-07-3902 | 21-600865 | 0.0000–0.5000 | SOIL | 6.64 | — | 7.09 | 39.1 | — | 8.11 | 0.411 | — |
| RE21-07-3903 | 21-600865 | 2.0000–3.0000 | QBT3 | 0.269 | — | 0.401 | 1.25 | — | — | 0.116 | — |
| RE21-07-3904 | 21-600866 | 0.0000–0.5000 | SOIL | 0.235 | — | 0.282 | 1.2 | — | 3.5 | — | 2.77 |
| RE21-07-3905 | 21-600866 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0329 | — | — | 0.101 | — |
| RE21-07-3906 | 21-600867 | 0.0000–0.5000 | SOIL | 7.11 | — | 8.52 | 33.8 | 0.019911 | 7.65 | 0.454 | — |
| RE21-07-3907 | 21-600867 | 2.0000–3.0000 | QBT3 | 0.3 | — | 0.482 | 1.67 | — | — | 0.105 | — |
| RE21-07-3908 | 21-600868 | 0.0000–0.5000 | SOIL | 5.57 | — | 2.23 | 28.9 | — | 4.35 | 0.209 | — |
| RE21-07-3909 | 21-600868 | 2.0000–3.0000 | QBT3 | 0.0699 | — | 0.068 | 0.353 | — | — | — | — |
| RE21-07-3916 | 21-600872 | 0.0000–0.5000 | SOIL | 15.1 | — | 22.3 | 72.9 | 0.018326 | 25.9 | 1.26 | — |
| RE21-07-3917 | 21-600872 | 2.0000–3.0000 | QBT3 | 0.574 | — | 0.815 | 2.74 | — | — | 0.0994 | — |
| RE21-07-3918 | 21-600872 | 5.0000–6.0000 | QBT3 | 0.463 | — | 0.831 | 3.44 | — | — | — | — |
| RE21-07-5860 | 21-601224 | 1.0000–2.0000 | SOIL | 1.43 | 0.179 | 0.753 | 13.4 | 0.01811 | — | — | — |
| RE21-07-5861 | 21-601224 | 3.0000–4.0000 | SOIL | 1.65 | — | 0.593 | 14.4 | 0.021812 | — | — | — |
| MD21-09-8594 | 21-601224 | 8.0000–9.0000 | QBT3 | 0.05 | NAd | — | 0.123 | NA | NA | NA | NA |
| RE21-07-5862 | 21-601225 | 1.0000–2.0000 | QBT3 | 27.7 | 0.302 | 4.85 | 168 | 0.061462 | 12.7 | 0.866 | — |
| RE21-07-5863 | 21-601225 | 3.0000–4.0000 | QBT3 | 2.75 | NA | 0.598 | 17.7 | — | 2.87 | — | — |
| RE21-07-5864 | 21-601226 | 2.5000–3.5000 | SOIL | 3.01 | — | 1.1 | 46.4 | 0.277904 | — | — | — |

**Table 6.23-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** | **1.93** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** | **2.29** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** | **87** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** | **430** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** | **160** |
| RE21-07-5865 | 21-601226 | 4.5000–5.5000 | SOIL | 0.0775 | — | — | 0.497 | 0.71619 | — | — | — |
| MD21-09-8599 | 21-601226 | 9.5000–10.5000 | QBT3 | NA | NA | NA | NA | 0.400616 | NA | NA | NA |
| RE21-07-5866 | 21-601227 | 1.5000–2.5000 | SOIL | 0.828 | — | 0.192 | 5.38 | — | 2.66 | 0.202 | — |
| RE21-07-5867 | 21-601227 | 3.5000–4.5000 | SOIL | 2.39 | — | 0.746 | 14.1 | — | 2.79 | — | — |
| MD21-09-8593 | 21-601227 | 8.5000–9.5000 | QBT3 | — | NA | 0.0278 | 0.169 | NA | NA | NA | NA |
| RE21-07-5868 | 21-601228 | 2.0000–3.0000 | SOIL | 12.1 | 0.239 | 11.5 | 113 | — | — | NA | — |
| RE21-07-5869 | 21-601228 | 4.0000–5.0000 | QBT3 | — | — | — | 27.9 | — | — | — | — |
| RE21-07-5870 | 21-601229 | 1.0000–2.0000 | SOIL | 35.9 | 0.452 | 89.4 (J) | 143 | 0.014984 | 4.5 | 0.258 | — |
| RE21-07-5871 | 21-601229 | 6.0000–7.0000 | QBT3 | — | — | — | 0.0272 | 0.012764 | — | — | — |
| RE21-07-5873 | 21-601229 | 16.0000–17.0000 | QBT3 | — | — | — | 0.0974 | — | — | — | — |
| MD21-09-8838 | 21-605279 | 0.0000–0.5000 | QBT3 | — | NA | — | 0.211 | NA | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 6.24-1**
**Summary of Inorganic Chemicals above BVs at SWMU 21-027(c)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Lead | Manganese | Mercury | Nitrate | Perchlorate | Selenium | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **11.2** | **482** | **0.1** | **na**[a] | **na** | **0.3** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **22.3** | **671** | **0.1** | **na** | **na** | **1.52** | **1.82** | **48.8** |
| **Residential SSL** | | | | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **400** | **10700** | **23**[c] | **125000** | **54.8** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **800** | **145000** | **310**[c] | **1820000** | **795** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **800** | **463** | **92.9**[d] | **496000** | **217** | **1550** | **929** | **92900** |
| RE21-07-75115 | 21-27399 | 3.0000–4.0000 | SOIL | —[e] | — | — | — | — | — | 32.9 (J+) | 90.4 | — | 0.37 | — | 0.000649 (J) | — | — | 137 (J+) |
| RE21-07-75116 | 21-27399 | 5.0000–6.0000 | SOIL | — | — | 0.541 (U) | — | — | — | 26 (J+) | 35.1 | — | 0.129 | — | — | — | 2.04 | 79.2 (J+) |
| RE21-07-75117 | 21-27399 | 8.0000–9.0000 | QBT3 | 3.4 | 97 (J+) | — | — | — | 4.56 | 9.16 (J+) | 24.8 | 546 (J+) | — | — | — | 1.67 (U) | — | — |
| RE21-07-75121 | 21-27401 | 0.0000–0.5000 | SOIL | — | — | 0.417 (J) | 21500 (J) | — | — | — | — | — | — | — | — | — | — | 62.6 (J-) |
| RE21-07-75122 | 21-27401 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 60.2 (J-) |
| RE21-07-75123 | 21-27402 | 0.0000–0.5000 | SOIL | — | — | 0.719 | — | — | — | — | 61.5 | — | — | 0.851 (J-) | — | 1.61 (U) | — | 102 (J-) |
| RE21-07-75124 | 21-27402 | 2.0000–2.5000 | SOIL | — | — | — | — | — | — | — | 66.3 | — | — | — | — | 1.66 (U) | — | 56.2 (J-) |
| RE21-07-75125 | 21-27403 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 0.968 (J-) | — | — | — | — |
| RE21-07-75126 | 21-27403 | 2.0000–2.5000 | SOIL | — | — | 0.548 | — | — | — | — | 31 | — | — | — | — | 1.58 (U) | — | 57 (J-) |
| RE21-07-75127 | 21-27404 | 0.0000–0.5000 | SOIL | — | — | 0.491 (J) | — | — | — | 17.7 | 31.6 | — | 0.111 | — | — | 1.68 (U) | — | 108 (J-) |
| RE21-07-75128 | 21-27404 | 2.0000–2.5000 | SOIL | — | — | — | — | 52.3 | — | — | — | — | — | 0.843 (J-) | — | 1.65 (U) | — | 58 (J-) |
| RE21-07-75129 | 21-27405 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | 1.81 (U) | — | — |
| RE21-07-75130 | 21-27405 | 2.0000–2.5000 | SOIL | — | — | 0.576 (U) | — | 36.5 | — | — | — | — | — | — | — | 1.73 (U) | — | — |
| RE21-07-75131 | 21-27406 | 0.0000–0.5000 | SOIL | — | — | 0.522 (J) | — | — | — | — | 34.4 | — | — | — | — | — | 2.77 | 86.3 (J-) |
| RE21-07-75132 | 21-27406 | 2.0000–2.5000 | SOIL | — | — | 0.519 (U) | 8230 (J) | — | — | — | — | — | — | — | — | 1.56 (U) | — | — |
| RE21-07-75133 | 21-27407 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | — | — | — | 1.02 (J-) | — | — | — | — |
| RE21-07-75134 | 21-27407 | 2.0000–2.5000 | SOIL | — | — | 0.5 (U) | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75135 | 21-27408 | 0.0000–0.5000 | SOIL | — | — | 0.533 (U) | — | — | — | — | — | — | — | 0.859 (J-) | — | 1.6 (U) | — | — |
| RE21-07-75136 | 21-27408 | 2.0000–2.5000 | SOIL | — | — | 0.53 (U) | — | — | — | — | — | — | — | — | — | 1.59 (U) | — | — |
| RE21-07-75137 | 21-27409 | 0.0000–0.5000 | SOIL | — | — | 0.511 (U) | — | — | — | — | — | — | — | 0.788 (J-) | — | 1.53 (U) | — | — |
| RE21-07-75138 | 21-27409 | 2.0000–2.5000 | SOIL | — | — | 0.5 (U) | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75139 | 21-27410 | 0.0000–0.5000 | SOIL | — | — | 0.502 (U) | — | — | — | — | — | — | — | 1.04 (J-) | — | — | — | — |
| RE21-07-75140 | 21-27410 | 2.0000–2.5000 | SOIL | — | — | 0.514 (U) | — | — | — | — | — | — | — | — | — | 1.54 (U) | — | — |
| RE21-07-75141 | 21-27411 | 0.0000–0.5000 | SOIL | — | — | 0.514 (U) | — | — | — | — | — | — | — | — | — | 1.54 (U) | — | — |
| RE21-07-75142 | 21-27411 | 2.0000–2.5000 | SOIL | — | — | 0.514 (U) | — | — | — | — | — | — | — | — | — | 1.54 (U) | — | — |
| RE21-07-75143 | 21-27412 | 0.0000–0.5000 | SOIL | — | — | 0.534 (U) | — | — | — | — | 78.5 | — | — | 0.879 (J) | — | 1.6 (U) | — | — |
| RE21-07-75144 | 21-27412 | 2.0000–2.5000 | SOIL | — | — | 0.512 (U) | — | — | — | — | 114 | — | — | — | — | 1.53 (U) | — | — |

**Table 6.24-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Lead | Manganese | Mercury | Nitrate | Perchlorate | Selenium | Uranium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **11.2** | **482** | **0.1** | **na**[a] | **na** | **0.3** | **2.4** | **63.5** |
| **SOIL Background Value** | | | | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **22.3** | **671** | **0.1** | **na** | **na** | **1.52** | **1.82** | **48.8** |
| **Residential SSL** | | | | **3.9** | **15600** | **77.9** | **na** | **219**[b] | **23**[c] | **3130** | **400** | **10700** | **23**[c] | **125000** | **54.8** | **391** | **235** | **23500** |
| **Industrial SSL** | | | | **17.7** | **224000** | **1120** | **na** | **2920**[b] | **300**[c] | **45400** | **800** | **145000** | **310**[c] | **1820000** | **795** | **5680** | **3410** | **341000** |
| **Construction Worker SSL** | | | | **65.4** | **4350** | **309** | **na** | **449**[b] | **34.9**[d] | **12400** | **800** | **463** | **92.9**[d] | **496000** | **217** | **1550** | **929** | **92900** |
| MD21-09-8715 | 21-27412 | 4.0000–5.0000 | QBT3 | NA[f] | NA | NA | NA | NA | NA | NA | 120 (J) | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-12452 | 21-27412 | 7.0000–8.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | 100 | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75145 | 21-27413 | 2.5000–3.5000 | SOIL | — | — | — | — | — | — | 35.3 (J+) | 44.9 | — | — | — | — | — | 3.92 | 231 (J+) |
| RE21-07-75146 | 21-27413 | 4.5000–5.5000 | SOIL | — | — | 0.585 (U) | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75147 | 21-27414 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 26.9 | — | — | 2.75 | 0.00155 (J) | — | — | 51.5 (J+) |
| RE21-07-75148 | 21-27414 | 3.0000–4.0000 | SOIL | — | — | 0.538 (U) | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75151 | 21-27414 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | — | 25.9 | — | — | — | — | 1.63 (U) | — | — |
| RE21-07-75149 | 21-27415 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | — | 24.8 | — | — | 1.88 | 0.00104 (J) | — | — | 60.1 (J+) |
| RE21-07-75150 | 21-27415 | 3.0000–4.0000 | SOIL | — | — | 0.545 (U) | — | — | — | — | — | — | — | — | — | — | — | — |
| RE21-07-75153 | 21-27415 | 5.0000–6.0000 | SOIL | — | — | 0.547 (U) | — | — | — | — | — | — | 0.895 | — | 0.000663 (J) | — | — | — |
| MD21-09-8714 | 21-605234 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | 120 | NA | NA | NA | NA | NA | NA | NA |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

**Table 6.24-2**
**Summary of Organic Chemicals Detected at SWMU 21-027(c)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Acetone | Anthracene | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3440** | **1720**[a] | **67500** | **17200** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **240000**[b] | **347** | **621** |
| **Industrial SSL** | | | | **36700** | **18300**[a] | **851000** | **183000** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **2500000**[b] | **1370** | **2340** |
| **Construction Worker SSL** | | | | **18600** | **6680**[a] | **263000** | **66800** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **952000**[c] | **4760** | **20600** |
| RE21-07-75115 | 21-27399 | 3.0000–4.0000 | SOIL | —[d] | — | — | — | NA[e] | — | — | — | — | — | — | — | — |
| RE21-07-75116 | 21-27399 | 5.0000–6.0000 | SOIL | — | — | — | — | NA | — | — | 0.255 (J) | — | — | — | — | 0.179 (J) |
| RE21-07-75117 | 21-27399 | 8.0000–9.0000 | QBT3 | — | — | 0.00417 (J) | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75121 | 21-27401 | 0.0000–0.5000 | SOIL | 0.032 (J) | — | NA | 0.0493 | NA | 0.3 (J) | 0.295 (J) | 0.693 (J) | — | — | — | — | 0.449 (J) |
| RE21-07-75122 | 21-27401 | 2.0000–2.5000 | SOIL | 0.0216 (J) | — | — | 0.0683 | NA | 0.301 (J) | 0.353 (J) | 0.508 (J) | NA | 0.228 (J) | — | — | 0.397 (J) |
| RE21-07-75123 | 21-27402 | 0.0000–0.5000 | SOIL | 0.565 | — | NA | 0.949 | NA | 3.08 (J) | 2.43 (J) | 5.67 (J) | 1.12 (J) | — | 0.306 (J) | 0.296 (J) | 3.18 (J) |
| RE21-07-75124 | 21-27402 | 2.0000–2.5000 | SOIL | 0.0412 | — | 0.0112 (J) | 0.0704 | NA | 0.373 (J) | 0.354 (J) | 0.745 (J) | NA | NA | 0.256 (J) | 0.156 (J) | 0.432 (J) |
| RE21-07-75125 | 21-27403 | 0.0000–0.5000 | SOIL | 0.0557 | — | NA | 0.0842 | NA | 0.491 (J) | 0.499 (J) | 1.12 (J) | 0.34 (J) | — | — | 48.8 | 0.594 (J) |
| RE21-07-75126 | 21-27403 | 2.0000–2.5000 | SOIL | 0.0215 (J) | — | — | 0.0368 (J) | NA | 0.239 | 0.26 (J) | 0.532 (J) | 0.194 (J) | — | — | 0.0767 (J) | 0.304 |
| RE21-07-75127 | 21-27404 | 0.0000–0.5000 | SOIL | — | — | NA | 0.0108 (J) | NA | — | 0.0885 (J) | 0.179 (J) | — | — | — | — | 0.109 |
| RE21-07-75128 | 21-27404 | 2.0000–2.5000 | SOIL | — | — | — | 0.0106 (J) | NA | — | NA | NA | NA | NA | — | — | — |
| RE21-07-75129 | 21-27405 | 0.0000–0.5000 | SOIL | — | — | NA | — | NA | — | — | 0.0252 (J) | — | 0.0212 (J) | — | — | 0.0236 (J) |
| RE21-07-75130 | 21-27405 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | — | NA | NA | NA | NA | — | 0.34 (J) | — |
| RE21-07-75131 | 21-27406 | 0.0000–0.5000 | SOIL | — | — | NA | — | NA | — | 0.0537 (J) | 0.103 (J) | — | — | — | — | — |
| RE21-07-75133 | 21-27407 | 0.0000–0.5000 | SOIL | — | — | NA | — | NA | — | — | 0.0127 (J) | — | — | — | 0.159 (J) | 0.0154 (J) |
| RE21-07-75134 | 21-27407 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75135 | 21-27408 | 0.0000–0.5000 | SOIL | — | — | NA | — | NA | — | — | 0.0135 (J) | — | 0.0116 (J) | — | — | — |
| RE21-07-75136 | 21-27408 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75138 | 21-27409 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75140 | 21-27410 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-5087 | 21-27411 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0016 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75141 | 21-27411 | 0.0000–0.5000 | SOIL | — | — | NA | — | NA | — | 0.0301 (J) | 0.0569 (J) | — | — | — | — | 0.0352 |
| RE21-07-75142 | 21-27411 | 2.0000–2.5000 | SOIL | — | — | 0.00546 | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75144 | 21-27412 | 2.0000–2.5000 | SOIL | — | — | 0.0044 (J) | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75145 | 21-27413 | 2.5000–3.5000 | SOIL | — | 0.0206 (J) | — | 0.0209 (J) | NA | 0.0909 | — | — | — | — | — | — | 0.107 |
| RE21-07-75146 | 21-27413 | 4.5000–5.5000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | 0.079 (J) | — |
| RE21-07-75151 | 21-27414 | 5.0000–6.0000 | SOIL | — | — | — | 0.0153 (J) | NA | — | 0.0537 (J) | 0.102 (J) | — | — | — | — | 0.0603 |
| RE21-07-75149 | 21-27415 | 0.0000–0.5000 | SOIL | — | — | NA | — | NA | — | — | 0.319 (J) | — | — | — | — | 0.223 (J) |
| RE21-07-75150 | 21-27415 | 3.0000–4.0000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | — | — |
| RE21-07-75153 | 21-27415 | 5.0000–6.0000 | SOIL | — | — | — | — | NA | — | — | — | — | — | — | — | — |

**Table 6.24-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Di-n-butylphthalate | Dibenzofuran | Dichlorobenzene[1,4-] | Fluoranthene | Fluorene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,7,8,9-] | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6110** | **78**[b] | **32.2** | **2290** | **2290** | **na**[f] | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** |
| **Industrial SSL** | | | | **68400** | **1000**[b] | **180** | **24400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** |
| **Construction Worker SSL** | | | | **23800** | **238**[c] | **3780** | **8910** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **213** |
| RE21-07-75115 | 21-27399 | 3.0000–4.0000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75116 | 21-27399 | 5.0000–6.0000 | SOIL | — | — | — | 0.358 (J) | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75117 | 21-27399 | 8.0000–9.0000 | QBT3 | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75121 | 21-27401 | 0.0000–0.5000 | SOIL | — | — | — | 0.626 | 0.0244 (J) | NA | NA | NA | NA | NA | NA | NA | 0.186 (J) |
| RE21-07-75122 | 21-27401 | 2.0000–2.5000 | SOIL | — | — | — | 0.48 | 0.0232 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75123 | 21-27402 | 0.0000–0.5000 | SOIL | 0.0925 (J) | 0.25 (J) | — | 5.78 | 0.48 | NA | NA | NA | NA | NA | NA | NA | 1.11 (J) |
| RE21-07-75124 | 21-27402 | 2.0000–2.5000 | SOIL | — | — | — | 0.599 | 0.0281 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75125 | 21-27403 | 0.0000–0.5000 | SOIL | — | — | — | 0.924 | 0.0382 | NA | NA | NA | NA | NA | NA | NA | 0.302 (J) |
| RE21-07-75126 | 21-27403 | 2.0000–2.5000 | SOIL | — | — | — | 0.526 | 0.0159 (J) | NA | NA | NA | NA | NA | NA | NA | 0.17 (J) |
| RE21-07-75127 | 21-27404 | 0.0000–0.5000 | SOIL | 0.506 | — | — | 0.153 | — | NA | NA | NA | NA | NA | NA | NA | 0.0428 (J) |
| RE21-07-75128 | 21-27404 | 2.0000–2.5000 | SOIL | 0.0391 (J) | — | — | 0.0153 (J) | — | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75129 | 21-27405 | 0.0000–0.5000 | SOIL | — | — | — | 0.0384 (J) | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75130 | 21-27405 | 2.0000–2.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | NA |
| RE21-07-75131 | 21-27406 | 0.0000–0.5000 | SOIL | — | — | — | 0.0679 | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75133 | 21-27407 | 0.0000–0.5000 | SOIL | 0.0381 (J) | — | — | 0.0142 (J) | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75134 | 21-27407 | 2.0000–2.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75135 | 21-27408 | 0.0000–0.5000 | SOIL | — | — | — | 0.0211 (J) | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75136 | 21-27408 | 2.0000–2.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75138 | 21-27409 | 2.0000–2.5000 | SOIL | — | — | 0.000427 (J) | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75140 | 21-27410 | 2.0000–2.5000 | SOIL | — | — | 0.000302 (J) | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-5087 | 21-27411 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | 5.16E-06 | 1.13E-05 | 0.0000012 (J) | 3.55E-06 | 0.000000191 (J) | 8.81E-07 | 1.13E-06 | NA |
| RE21-07-75141 | 21-27411 | 0.0000–0.5000 | SOIL | — | — | — | 0.0501 | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75142 | 21-27411 | 2.0000–2.5000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75144 | 21-27412 | 2.0000–2.5000 | SOIL | — | — | 0.000461 (J) | 0.0114 (J) | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75145 | 21-27413 | 2.5000–3.5000 | SOIL | 0.103 (J) | — | — | 0.152 | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75146 | 21-27413 | 4.5000–5.5000 | SOIL | — | — | — | 0.0281 (J) | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75151 | 21-27414 | 5.0000–6.0000 | SOIL | — | — | — | 0.112 | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75149 | 21-27415 | 0.0000–0.5000 | SOIL | — | — | — | 0.426 | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75150 | 21-27415 | 3.0000–4.0000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |
| RE21-07-75153 | 21-27415 | 5.0000–6.0000 | SOIL | — | — | — | — | — | NA | NA | NA | NA | NA | NA | NA | — |

**Table 6.24-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Isopropyltoluene[4-] | Methylene Chloride | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3210**[g] | **199** | **310**[b] | **45** | **na** | **na** | **na** | **1830** | **1720** | **na** | **5570** | **45.7** |
| **Industrial SSL** | | | | **14900**[g] | **1090** | **4100**[b] | **252** | **na** | **na** | **na** | **20500** | **18300** | **na** | **57900** | **253** |
| **Construction Worker SSL** | | | | **1030**[g] | **10600** | **1240**[c] | **702** | **na** | **na** | **na** | **7150** | **6680** | **na** | **21100** | **4600** |
| RE21-07-75115 | 21-27399 | 3.0000–4.0000 | SOIL | — | 0.00477 (J) | — | — | NA | NA | NA | — | — | NA | 0.00146 | — |
| RE21-07-75116 | 21-27399 | 5.0000–6.0000 | SOIL | — | 0.00293 (J) | — | — | NA | NA | NA | 0.224 (J) | 0.244 (J) | NA | 0.000459 (J) | — |
| RE21-07-75117 | 21-27399 | 8.0000–9.0000 | QBT3 | — | — | — | — | NA | NA | NA | — | — | NA | — | — |
| RE21-07-75121 | 21-27401 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.362 | 1.03 (J) | NA | NA | NA |
| RE21-07-75122 | 21-27401 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | 0.387 | 0.965 (J) | NA | 0.000639 (J) | — |
| RE21-07-75123 | 21-27402 | 0.0000–0.5000 | SOIL | NA | NA | 0.0794 | 0.223 | NA | NA | NA | 4.98 | 9.91 (J) | NA | NA | NA |
| RE21-07-75124 | 21-27402 | 2.0000–2.5000 | SOIL | 0.00162 (J) | — | — | — | NA | NA | NA | 0.426 | 1.11 (J) | NA | 0.00516 (J) | — |
| RE21-07-75125 | 21-27403 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.594 | 1.78 (J) | NA | NA | NA |
| RE21-07-75126 | 21-27403 | 2.0000–2.5000 | SOIL | 0.0003 (J) | — | — | — | NA | NA | NA | 0.268 | 0.663 | NA | 0.00123 | — |
| RE21-07-75127 | 21-27404 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.0798 | 0.218 | NA | NA | NA |
| RE21-07-75128 | 21-27404 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | 0.0338 (J) | NA | 0.00207 | — |
| RE21-07-75129 | 21-27405 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.0158 (J) | 0.0459 | NA | NA | NA |
| RE21-07-75130 | 21-27405 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | 0.0173 (J) | NA | 0.000695 (J) | — |
| RE21-07-75131 | 21-27406 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.0258 (J) | 0.131 (J) | NA | NA | NA |
| RE21-07-75133 | 21-27407 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | — | 0.0237 (J) | NA | NA | NA |
| RE21-07-75134 | 21-27407 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | — | NA | 0.00355 | 0.00188 |
| RE21-07-75135 | 21-27408 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | — | 0.0266 (J) | NA | NA | NA |
| RE21-07-75136 | 21-27408 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | — | NA | 0.000619 (J) | — |
| RE21-07-75138 | 21-27409 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | — | NA | 0.000861 (J) | — |
| RE21-07-75140 | 21-27410 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | — | NA | 0.000927 (J) | — |
| RE21-07-5087 | 21-27411 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 4.96E-05 | 0.00000218 (J) | 3.1E-07 | NA | NA | 8.49E-08 | NA | NA |
| RE21-07-75141 | 21-27411 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.0199 (J) | 0.0698 | NA | NA | NA |
| RE21-07-75142 | 21-27411 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | — | NA | 0.000551 (J) | — |
| RE21-07-75144 | 21-27412 | 2.0000–2.5000 | SOIL | — | — | — | — | NA | NA | NA | — | — | NA | 0.0013 | 0.000874 (J) |
| RE21-07-75145 | 21-27413 | 2.5000–3.5000 | SOIL | — | — | — | — | NA | NA | NA | 0.086 | 0.152 | NA | 0.000378 (J) | — |
| RE21-07-75146 | 21-27413 | 4.5000–5.5000 | SOIL | — | — | — | — | NA | NA | NA | 0.0151 (J) | 0.0225 (J) | NA | 0.000387 (J) | — |
| RE21-07-75151 | 21-27414 | 5.0000–6.0000 | SOIL | — | — | — | — | NA | NA | NA | 0.0722 | 0.0884 | NA | 0.000358 (J) | — |

**Table 6.24-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Isopropyltoluene[4-] | Methylene Chloride | Methylnaphthalene[2-] | Naphthalene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzofurans (Totals) | Toluene | Trichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **3210**[g] | **199** | **310**[b] | **45** | **na** | **na** | **na** | **1830** | **1720** | **na** | **5570** | **45.7** |
| **Industrial SSL** | | | | **14900**[g] | **1090** | **4100**[b] | **252** | **na** | **na** | **na** | **20500** | **18300** | **na** | **57900** | **253** |
| **Construction Worker SSL** | | | | **1030**[g] | **10600** | **1240**[c] | **702** | **na** | **na** | **na** | **7150** | **6680** | **na** | **21100** | **4600** |
| RE21-07-75149 | 21-27415 | 0.0000–0.5000 | SOIL | NA | NA | — | — | NA | NA | NA | 0.205 (J) | 0.367 | NA | NA | NA |
| RE21-07-75150 | 21-27415 | 3.0000–4.0000 | SOIL | — | 0.00699 (J+) | — | — | NA | NA | NA | — | — | NA | 0.000404 (J+) | — |
| RE21-07-75153 | 21-27415 | 5.0000–6.0000 | SOIL | — | 0.00634 | — | — | NA | NA | NA | — | — | NA | 0.00124 | — |

Source: SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] Pyrene SSL used as surrogate based on structural similarity.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

[g] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table 6.24-3**
**Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-027(c)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **na** | **1.98** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **5.7** | **750** | **170** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **1900** | **440000** | **1500** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **800** | **320000** | **220** |
| RE21-07-75115 | 21-27399 | 3.0000–4.0000 | SOIL | 0.988 | NA[c] | 1.12 | 0.112 | 19.7 | —[d] | — | — |
| RE21-07-75116 | 21-27399 | 5.0000–6.0000 | SOIL | 0.736 | — | 0.138 | 0.0783 | 20.4 | — | — | — |
| RE21-07-75117 | 21-27399 | 8.0000–9.0000 | QBT3 | 0.155 | — | — | — | 3.82 | — | — | — |
| RE21-07-75121 | 21-27401 | 0.0000–0.5000 | SOIL | 0.82 | — | — | 0.169 | 17.8 | — | 0.031667 | — |
| RE21-07-75122 | 21-27401 | 2.0000–2.5000 | SOIL | 0.446 | — | — | 0.0638 | 7.85 | — | 0.021565 | — |
| RE21-07-75123 | 21-27402 | 0.0000–0.5000 | SOIL | 1.08 | — | — | 0.138 | 5.3 | — | — | — |
| RE21-07-75124 | 21-27402 | 2.0000–2.5000 | SOIL | 1.2 | — | 0.345 | 0.144 | 12.5 | — | 0.046101 | — |
| RE21-07-75125 | 21-27403 | 0.0000–0.5000 | SOIL | — | NA | — | — | 1.24 | — | 0.04843 | — |
| RE21-07-75126 | 21-27403 | 2.0000–2.5000 | SOIL | 1.4 | NA | 0.207 | 0.242 | 43.3 | — | 0.021744 | — |
| RE21-07-75127 | 21-27404 | 0.0000–0.5000 | SOIL | 0.496 | — | — | — | 5.38 | — | — | — |
| RE21-07-75128 | 21-27404 | 2.0000–2.5000 | SOIL | — | — | — | — | 0.528 | — | 0.058588 | — |
| RE21-07-75129 | 21-27405 | 0.0000–0.5000 | SOIL | — | NA | NA | — | 0.483 | — | — | — |
| RE21-07-75130 | 21-27405 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.622 | — | 0.037605 | — |
| RE21-07-75131 | 21-27406 | 0.0000–0.5000 | SOIL | 0.533 | NA | — | 0.0648 | 8.59 | — | — | — |
| RE21-07-75132 | 21-27406 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.202 | — | 0.016752 | — |
| RE21-07-75133 | 21-27407 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.349 | — | — | — |
| RE21-07-75134 | 21-27407 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.0541 | — | 0.012992 | — |
| RE21-07-75135 | 21-27408 | 0.0000–0.5000 | SOIL | 0.0904 | NA | — | — | 0.469 | — | 0.017146 | — |
| RE21-07-75137 | 21-27409 | 0.0000–0.5000 | SOIL | 3.59 | — | — | 0.248 | 11.2 | — | — | 3.31 |
| RE21-07-75138 | 21-27409 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.493 | 0.189 | — | — |
| RE21-07-75139 | 21-27410 | 0.0000–0.5000 | SOIL | — | NA | — | — | 0.319 | 2.97 | 0.029693 | — |
| RE21-07-75140 | 21-27410 | 2.0000–2.5000 | SOIL | — | NA | — | — | 0.0596 | — | — | — |
| RE21-07-75141 | 21-27411 | 0.0000–0.5000 | SOIL | 0.0635 | NA | — | — | 1.06 | — | 0.015127 | — |
| RE21-07-75142 | 21-27411 | 2.0000–2.5000 | SOIL | 0.0347 | NA | — | — | 0.221 | — | — | — |
| RE21-07-75143 | 21-27412 | 0.0000–0.5000 | SOIL | — | NA | — | 0.0673 | 0.0688 | — | — | — |
| RE21-07-75145 | 21-27413 | 2.5000–3.5000 | SOIL | 0.0971 | NA | — | — | 3.26 | — | — | — |
| RE21-07-75146 | 21-27413 | 4.5000–5.5000 | SOIL | — | — | — | — | 0.773 | — | 0.039 | — |

**Table 6.24-3 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-134 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Strontium-90 | Tritium | Uranium-234 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **na** | **na** | **1.98** |
| **SOIL Background Value** | | | | **0.013**[b] | **na** | **1.65**[b] | **0.023**[b] | **0.054**[b] | **1.31**[b] | **na** | **2.59** |
| **Residential SAL** | | | | **30** | **2.4** | **5.6** | **37** | **33** | **5.7** | **750** | **170** |
| **Industrial SAL** | | | | **180** | **9.7** | **23** | **240** | **210** | **1900** | **440000** | **1500** |
| **Construction Worker SAL** | | | | **34** | **7.7** | **18** | **40** | **36** | **800** | **320000** | **220** |
| RE21-07-75147 | 21-27414 | 0.0000–0.5000 | SOIL | 0.643 | NA | — | 0.0551 | 11 | — | — | — |
| RE21-07-75148 | 21-27414 | 3.0000–4.0000 | SOIL | 0.173 | — | NA | — | 3.93 | — | — | — |
| RE21-07-75151 | 21-27414 | 5.0000–6.0000 | SOIL | 0.672 | NA | NA | — | 15.1 | — | — | — |
| RE21-07-75149 | 21-27415 | 0.0000–0.5000 | SOIL | 1.91 | 0.141 | NA | 0.0809 | 7.72 | — | — | — |
| RE21-07-75150 | 21-27415 | 3.0000–4.0000 | SOIL | 0.166 | — | — | 0.0286 | 5.76 | — | 0.017389 | — |
| RE21-07-75153 | 21-27415 | 5.0000–6.0000 | SOIL | 0.407 | — | — | 0.0725 | 11.6 | — | — | — |
| MD21-09-8712 | 21-605232 | 0.0000–0.5000 | SOIL | 0.115 | NA | NA | — | 2.98 | NA | NA | NA |
| MD21-09-8713 | 21-605233 | 4.0000–5.0000 | QBT3 | 0.114 | — | — | — | 0.443 | NA | NA | NA |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] NA = Not analyzed.
[d] — = Not detected or not detected above BV/FV.

**Table 6.25-1**
**Summary of Inorganic Chemicals above BVs at AOC C-21-027**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Lead | Magnesium | Nickel | Nitrate | Perchlorate | Selenium | Silver | Thallium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **7340** | **0.5** | **2.79** | **46** | **1.63** | **2200** | **7.14** | **3.14** | **4.66** | **0.5** | **11.2** | **1690** | **6.58** | **na[a]** | **na** | **0.3** | **1** | **1.1** | **63.5** |
| **SOIL Background Value** | | | | **29200** | **0.83** | **8.17** | **295** | **0.4** | **6120** | **19.3** | **8.64** | **14.7** | **0.5** | **22.3** | **4610** | **15.4** | **na** | **na** | **1.52** | **1** | **0.73** | **48.8** |
| **Residential SSL** | | | | **78100** | **31.3** | **3.9** | **15600** | **77.9** | **na** | **219[b]** | **23[c]** | **3130** | **1560** | **400** | **na** | **1560** | **125000** | **54.8** | **391** | **391** | **5.16** | **23500** |
| **Industrial SSL** | | | | **1130000** | **454** | **17.7** | **224000** | **1120** | **na** | **2920[b]** | **300[c]** | **45400** | **22700** | **800** | **na** | **22700** | **1820000** | **795** | **5680** | **5680** | **74.9** | **341000** |
| **Construction Worker SSL** | | | | **40700** | **124** | **65.4** | **4350** | **309** | **na** | **449[b]** | **34.9[d]** | **12400** | **6190** | **800** | **na** | **6190** | **496000** | **217** | **1550** | **1550** | **20.4** | **92900** |
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | —[e] | — | — | — | — | 9100 | 20 | — | — | — | — | — | — | — | 0.00037 (J) | — | — | 1 (U) | 53 |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.00014 (J) | — | 1.1 (U) | 1.1 (U) | 87 |
| MD21-09-9092 | 21-605337 | 10.0000–11.0000 | QBT3 | — | 2.2 (UJ) | — | — | — | 5600 | 19 | — | — | — | — | — | — | — | 0.00012 (J) | 0.54 (U) | 1.1 (U) | — | — |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | — | — | — | — | — | — | 67 | — | — | — | — | — | — | 29 (J-) | 0.00035 (J) | — | — | 1 (U) | 52 |
| MD21-09-9094 | 21-605338 | 5.0000–6.0000 | SOIL | — | — | — | — | 0.56 (U) | — | — | — | — | — | — | — | — | — | 0.00018 (J) | — | 1.1 (U) | 1.1 (U) | — |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | — | — | — | — | — | — | 16 | — | — | — | — | — | — | — | 0.00015 (J) | 0.54 (U) | 1.1 (U) | — | — |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | — | 2.24 | — | — | 0.648 | — | — | — | — | — | 30.2 | — | — | 1.22 | 0.000625 (J+) | — | — | — | 625 |
| MD21-09-9097 | 21-605339 | 2.0000–3.0000 | QBT3 | — | 1.35 | — | 51.6 | — | 28800 (J+) | 10.5 | — | — | — | — | — | — | — | 0.00063 (J+) | 1 (U) | — | — | — |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | — | 0.904 (J) | — | — | — | — | — | — | — | 0.797 | — | — | — | 21.9 | 0.00817 (J+) | — | — | — | — |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | — | 0.965 (J) | — | — | — | — | 20.1 | — | — | 0.807 | — | — | — | 14.1 | 0.00575 (J+) | — | — | — | — |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | — | 1.02 (J) | — | — | — | — | — | — | — | 0.63 | — | — | — | 39.1 | 0.00369 (J+) | — | — | — | — |
| MD21-09-9103 | 21-605341 | 2.0000–3.0000 | SOIL | — | — | — | — | — | — | — | — | — | — | — | — | — | 78.6 | 0.00826 (J+) | — | — | — | — |
| MD21-09-9105 | 21-605342 | 0.0000–0.5000 | QBT3 | — | 2 (U) | — | — | — | — | — | — | — | — | 14 (J) | — | — | — | 0.00019 (J) | 0.5 (U) | — | — | — |
| MD21-09-9106 | 21-605342 | 2.0000–3.0000 | QBT3 | — | 2 (U) | — | — | — | — | — | — | — | — | — | — | — | — | 0.0046 | 0.49 (U) | — | — | — |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | — | 0.99 (U) | — | — | — | 27000 | — | — | — | 0.54 (U) | 32 | — | — | 38 | 0.00068 | — | 1.1 (U) | 1.1 (U) | 56 |
| MD21-10-7820 | 21-610684 | 5.0000–6.0000 | QBT3 | 8400 | 0.53 (U) | 3.2 | 120 | — | 5600 | 10 (J) | 3.5 | 5.1 | 0.6 (U) | — | 1800 | 9.2 | 1.8 (J) | 0.00015 (J) | 0.6 (U) | 1.2 (U) | 1.2 (U) | — |
| MD21-10-7821 | 21-610684 | 10.0000–11.0000 | QBT3 | — | — | — | 100 | — | 9700 | 9.8 (J) | — | — | 0.59 (U) | 12 | — | 7.7 | 1.9 (J) | 0.00014 (J) | 0.59 (U) | 1.2 (U) | 1.2 (U) | — |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] na = Not available.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

**Table 6.25-2**
**Summary of Organic Chemicals Detected at AOC C-21-027**

| Sample ID | Location ID | Depth (ft) | Media | Acetone | Aroclor-1254 | Aroclor-1260 | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Bis(2-ethylhexyl)phthalate | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **67500** | **1.12** | **2.22** | **6.21** | **0.621** | **6.21** | **1720**[a] | **62.1** | **347** | **621** |
| **Industrial SSL** | | | | **851000** | **8.26** | **8.26** | **23.4** | **2.34** | **23.4** | **18300**[a] | **234** | **1370** | **2340** |
| **Construction Worker SSL** | | | | **263000** | **4.36** | **75.8** | **213** | **21.3** | **213** | **6680**[a] | **2060** | **4760** | **20600** |
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | —[b] | NA[c] | NA | 0.16 (J) | 0.16 (J) | 0.24 (J) | 0.1 (J) | 0.097 (J) | — | 0.15 (J) |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | 0.013 (J) | NA | NA | — | — | — | — | — | — | — |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | 0.083 (J) | — | — | 0.071 (J) | — |
| MD21-10-7825 | 21-605338 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | 0.016 (J) | NA | NA | — | — | — | — | — | — | — |
| MD21-10-7826 | 21-605339 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | — | NA | NA | — | 0.0108 (J) | 0.0278 (J) | — | — | — | — |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | — | — | — | — | — |
| MD21-09-12897 | 21-605340 | 2.0000–3.0000 | SOIL | NA | 0.0024 (J) | 0.0025 (J) | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | — | NA | NA | — | — | — | — | — | 0.0744 (J) | — |
| MD21-10-7816 | 21-605340 | 5.0000–6.0000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | — | NA | NA | — | — | — | — | — | — | — |
| MD21-10-7832 | 21-605342 | 0.0000–0.5000 | QBT3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | NA | NA | NA | — | — | 0.094 (J) | — | — | 0.1 (J) | — |
| MD21-10-7833 | 21-610686 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 6.25-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Di-n-butylphthalate | Fluoranthene | Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | Heptachlorodibenzodioxins (Total) | Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | Heptachlorodibenzofurans (Total) | Hexachlorodibenzodioxin [1,2,3,4,7,8-] | Hexachlorodibenzodioxin [1,2,3,6,7,8-] | Hexachlorodibenzodioxin [1,2,3,7,8,9-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **6110** | **2290** | **na**[d] | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **68400** | **24400** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **23800** | **8910** | **na** | **na** | **na** | **na** | **na** | **na** | **na** | **na** |
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | — | 0.23 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | — | 0.086 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-7825 | 21-605338 | 0.0000–0.5000 | SOIL | NA | NA | 0.00046 | 0.000988 | 3.49E-05 | 2.76E-06 | 0.000105 | 1.08E-05 | 1.57E-05 | 9.79E-06 |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | — | — | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-7826 | 21-605339 | 0.0000–0.5000 | SOIL | NA | NA | 0.000323 | 0.000694 | 5.93E-05 | 4.25E-06 | 0.000194 | 3.17E-06 | 1.07E-05 | 4.91E-06 |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | 0.0732 (J) | 0.0229 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | — | — | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-09-12897 | 21-605340 | 2.0000–3.0000 | SOIL | NA | NA | 0.00148 | 0.00354 | 0.000296 | 2.53E-05 | 0.00135 | 5.81E-06 | 4.39E-05 | 9.86E-06 |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | — | 0.0125 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-7816 | 21-605340 | 5.0000–6.0000 | QBT3 | NA | NA | 0.00495 | 0.0109 | 0.000982 | 8.99E-05 | 0.00469 | 2.44E-05 | 0.00019 | 3.76E-05 |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | — | 0.0259 (J) | NA | NA | NA | NA | NA | NA | NA | NA |
| MD21-10-7832 | 21-605342 | 0.0000–0.5000 | QBT3 | NA | NA | 0.00016 | 0.000344 | 2.11E-05 | 0.00000149 (J) | 5.73E-05 | 0.00000218 (J) | 6.03E-06 | 4.64E-06 |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | — | 0.15 (J) | 0.000137 | 0.000293 | 0.00002 | 2.79E-06 | 5.82E-05 | 0.0000014 (J) | 3.61E-06 | 2.96E-06 |
| MD21-10-7833 | 21-610686 | 0.0000–0.5000 | SOIL | NA | NA | 0.0227 | 0.0433 | 0.00164 | 0.00015 | 0.00642 | 0.000131 | 0.000542 | 0.000275 |

**Table 6.25-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Hexachlorodibenzodioxins (Total) | Hexachlorodibenzofuran [1,2,3,4,7,8-] | Hexachlorodibenzofuran [1,2,3,6,7,8-] | Hexachlorodibenzofuran [1,2,3,7,8,9-] | Hexachlorodibenzofuran [2,3,4,6,7,8-] | Hexachlorodibenzofurans (Total) | Indeno(1,2,3-cd)pyrene | Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | Pentachlorodibenzodioxin [1,2,3,7,8-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **6.21** | **na** | **na** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **23.4** | **na** | **na** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **na** | **na** | **213** | **na** | **na** | **na** |
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | 0.091 (J) | NA | NA | NA |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-10-7825 | 21-605338 | 0.0000–0.5000 | SOIL | 0.000162 | 0.00000156 (J) | 0.00000185 (J) | NA | 2.94E-06 | 5.93E-05 | NA | 0.00482 | 7.34E-05 | 3.46E-06 |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-10-7826 | 21-605339 | 0.0000–0.5000 | SOIL | 7.99E-05 | 0.00000163 (J) | 0.00000158 (J) | 0.000000341 (J) | 2.51E-06 | 6.27E-05 | NA | 0.00389 | 0.000149 | 0.00000152 (J) |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-09-12897 | 21-605340 | 2.0000–3.0000 | SOIL | 0.000211 | 6.19E-06 | 3.84E-06 | — | 8.13E-06 | 0.000315 | NA | 0.0199 | 0.00145 | — |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-10-7816 | 21-605340 | 5.0000–6.0000 | QBT3 | 0.000857 | 2.22E-05 | 1.43E-05 | 4.43E-06 | 3.14E-05 | 0.00119 | NA | 0.0783 | 0.00309 | 0.000011 |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | NA | NA | — | NA | NA | NA |
| MD21-10-7832 | 21-605342 | 0.0000–0.5000 | QBT3 | 7.14E-05 | 0.000000896 (J) | 0.00000106 (J) | — | 0.0000015 (J) | 2.67E-05 | NA | 0.0016 | 4.97E-05 | 0.00000145 (J) |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | 3.56E-05 | 6.98E-06 | 0.00000246 (J) | 0.000000647 (J) | 3.09E-06 | 4.78E-05 | — | 0.00132 | 5.14E-05 | 0.00000099 (J) |
| MD21-10-7833 | 21-610686 | 0.0000–0.5000 | SOIL | 0.00503 | 6.57E-05 | 6.59E-05 | 1.62E-05 | 0.000112 | 0.00235 | NA | 0.209 (J—) | 0.00402 | 6.04E-05 |

**Table 6.25-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Pentachlorodibenzodioxins (Total) | Pentachlorodibenzofuran [1,2,3,7,8-] | Pentachlorodibenzofuran [2,3,4,7,8-] | Pentachlorodibenzofurans (Totals) | Phenanthrene | Pyrene | Tetrachlorodibenzodioxin [2,3,7,8-] | Tetrachlorodibenzodioxins (Total) | Tetrachlorodibenzofuran [2,3,7,8-] | Tetrachlorodibenzofurans (Totals) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Residential SSL** | | | | **na** | **na** | **na** | **na** | **1830** | **1720** | **0.000045** | **na** | **0.000374** | **na** |
| **Industrial SSL** | | | | **na** | **na** | **na** | **na** | **20500** | **18300** | **0.000204** | **na** | **0.00147** | **na** |
| **Construction Worker SSL** | | | | **na** | **na** | **na** | **na** | **7150** | **6680** | **0.000284** | **na** | **0.0127** | **na** |
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | 0.34 (J) | NA | NA | NA | NA |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | NA | NA | NA | NA | — | — | NA | NA | NA | NA |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | 0.2 (J) | NA | NA | NA | NA |
| MD21-10-7825 | 21-605338 | 0.0000–0.5000 | SOIL | 2.55E-05 | 0.000000393 (J) | NA | 2.49E-05 | NA | NA | 5.99E-07 | 3.15E-06 | — | 7.32E-06 |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | NA | NA | NA | NA | — | — | NA | NA | NA | NA |
| MD21-10-7826 | 21-605339 | 0.0000–0.5000 | SOIL | 1.02E-05 | 0.000000258 (J) | 0.000000509 (J) | 1.56E-05 | NA | NA | 5.09E-07 | 1.74E-06 | — | 4.39E-06 |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | NA | NA | NA | NA | 0.0117 (J) | 0.0258 (J) | NA | NA | NA | NA |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | — | 0.0108 (J) | NA | NA | NA | NA |
| MD21-09-12897 | 21-605340 | 2.0000–3.0000 | SOIL | 6.96E-06 | 0.000000344 (J) | 0.000000931 (J) | 3.59E-05 | NA | NA | 0.000000392 (J) | 0.0000015 (J) | — | 6.14E-06 |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | NA | NA | NA | NA | — | 0.0157 (J) | NA | NA | NA | NA |
| MD21-10-7816 | 21-605340 | 5.0000–6.0000 | QBT3 | 5.04E-05 | 0.00000119 (J) | 0.00000154 (J) | 0.000144 | NA | NA | 1.27E-06 | 4.58E-06 | — | 1.72E-05 |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | NA | NA | NA | NA | 0.0178 (J) | 0.0275 (J) | NA | NA | NA | NA |
| MD21-10-7832 | 21-605342 | 0.0000–0.5000 | QBT3 | 1.03E-05 | 0.00000024 (J) | 0.000000398 (J) | 8.5E-06 | NA | NA | 0.000000252 (J) | 1.24E-06 | — | 3.03E-06 |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | 6.97E-06 | 0.00000168 (J) | 8.29E-06 | 6.64E-05 | — | 0.13 (J) | — | 7.94E-07 | 3.84E-06 | 3.21E-05 |
| MD21-10-7833 | 21-610686 | 0.0000–0.5000 | SOIL | 0.000535 | 7.65E-06 | 1.94E-05 | 0.000527 | NA | NA | 5.82E-06 | 6.04E-05 | 2.52E-06 | 0.000134 |

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] Pyrene SSL used as surrogate based on structural similarity.
[b] — = Not detected.
[c] NA = Not analyzed.
[d] na = Not available.

**Table 6.25-3**
**Summary of Radionuclides Detected or Detected above BV/FVs at AOC C-21-027**

| Sample ID | Location ID | Depth (ft) | Media | Americium-241 | Cesium-137 | Plutonium-238 | Plutonium-239/240 | Tritium | Uranium-234 | Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|---|
| **QBT3 Background Value** | | | | **na**[a] | **na** | **na** | **na** | **na** | **1.98** | **0.09** |
| **SOIL Background Value** | | | | **0.013**[b] | **1.65**[b] | **0.023**[b] | **0.054**[b] | **na** | **2.59** | **0.2** |
| **Residential SAL** | | | | **30** | **5.6** | **37** | **33** | **750** | **170** | **17** |
| **Industrial SAL** | | | | **180** | **23** | **240** | **210** | **440000** | **1500** | **87** |
| **Construction Worker SAL** | | | | **34** | **18** | **40** | **36** | **320000** | **220** | **43** |
| MD21-09-9090 | 21-605337 | 0.0000–0.5000 | SOIL | 0.189 | —[c] | 0.063 | 1.66 | — | — | — |
| MD21-09-9091 | 21-605337 | 5.0000–6.0000 | SOIL | — | — | — | 0.172 | — | — | — |
| MD21-09-9092 | 21-605337 | 10.0000–11.0000 | QBT3 | 0.039 | — | — | 0.213 | — | — | — |
| MD21-09-9093 | 21-605338 | 0.0000–0.5000 | SOIL | 0.341 | — | 0.152 | 3.72 | — | — | — |
| MD21-09-9094 | 21-605338 | 5.0000–6.0000 | SOIL | — | — | — | 0.108 | — | — | — |
| MD21-09-9095 | 21-605338 | 10.0000–11.0000 | QBT3 | — | — | — | 0.262 | — | — | — |
| MD21-09-9096 | 21-605339 | 0.0000–1.0000 | SOIL | 0.853 | 0.534 | 0.0831 | 13.8 | 0.011872 | — | — |
| MD21-09-9097 | 21-605339 | 2.0000–3.0000 | QBT3 | — | — | — | 0.248 | — | — | — |
| MD21-09-9099 | 21-605340 | 0.0000–0.5000 | SOIL | 0.263 | — | 0.0376 | 3.5 (J) | — | — | — |
| MD21-09-9100 | 21-605340 | 2.0000–3.0000 | SOIL | 0.94 | 0.336 | 0.118 | 9.72 | — | — | — |
| MD21-10-7816 | 21-605340 | 5.0000–6.0000 | QBT3 | 2.74 | NA[d] | 0.245 | 20.3 | NA | NA | NA |
| MD21-09-9102 | 21-605341 | 0.0000–0.5000 | SOIL | 0.368 | — | 0.0428 | 4.31 | — | — | 0.223 |
| MD21-09-9103 | 21-605341 | 2.0000–3.0000 | SOIL | 0.13 | — | — | 1.19 (J) | — | — | — |
| MD21-09-9105 | 21-605342 | 0.0000–0.5000 | QBT3 | 0.05 | 0.301 | — | 0.518 | — | — | — |
| MD21-09-9106 | 21-605342 | 2.0000–3.0000 | QBT3 | — | — | — | 0.0194 | — | — | — |
| MD21-10-7817 | 21-610682 | 0.0000–0.5000 | SOIL | NA | NA | 3.54 | 295 | NA | NA | NA |
| MD21-10-7818 | 21-610683 | 0.0000–1.0000 | SOIL | NA | NA | 0.039 | 6.75 | NA | NA | NA |
| MD21-10-7819 | 21-610684 | 0.0000–0.5000 | SOIL | 0.416 | — | 0.097 | 8.76 | 0.488141 (J-) | 5.19 | 0.273 |
| MD21-10-7820 | 21-610684 | 5.0000–6.0000 | QBT3 | — | — | — | 0.137 | — | — | — |
| MD21-10-7821 | 21-610684 | 10.0000–11.0000 | QBT3 | — | — | — | 0.363 | — | — | — |

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

**Table 8.0-1**
**Summary of Field Characterization Activities and Risk-Screening Results**

| Site | Nature and Extent Defined? | Extent Sampling Required? | Risk-Screening Assessments Performed? | Meets Acceptable Potential Hazard, Risk, or Dose Level? | Corrective Actions Complete? | Remediation Necessary? |
|---|---|---|---|---|---|---|
| AOC 21-002(b) | Yes | No | Yes | Yes | Yes | No |
| Consolidated Unit 21-003-99 | No | Yes | No | High potential | No | No |
| Consolidated Unit 21-006(c)-99 | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-009 | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-012(b) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-013(c) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-022(f) | Yes | No | Yes | Yes | Yes | No |
| Consolidated Unit 21-022(h)-99 | No | Yes | Yes | No | No | Yes, limited soil removal |
| Consolidated Unit 21-023(a)-99 | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-024(a) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(b) | Yes | No | Yes | No | No | Yes, limited soil removal |
| SWMU 21-024(c) | No | Yes | No | High potential | No | No |
| SWMU 21-024(d) | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-024(e) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(g) | No | Yes (>10 ft bgs) | Yes | Yes | No | No |
| SWMU 21-024(h) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(i) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(j) | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(k) | No | Yes | No | High potential | No | No |
| Consolidated Unit 21-024(l)-99 | Yes | No | Yes | Yes | Yes | No |
| SWMU 21-024(n) | No | Yes | No | High potential | No | No |
| SWMU 21-024(o) | Yes | No | Yes | Yes | Yes | No |
| Consolidated Unit 21-026(a)-99 | No | Yes | Yes | No | No | Yes, limited soil removal |
| SWMU 21-027(a) | Yes | No | Yes | No | No | Yes, limited soil removal |
| SWMU 21-027(c) | Yes | No | Yes | Yes | Yes | No |
| AOC C-21-027 | No | Yes | No | Unknown | No | Unknown |
| **Total Sites** | **15** | **11** | **21** | **17** | **13** | **4** |

# Appendix A

*Acronyms and Abbreviations,*
*Metric Conversion Table, and Data Qualifier Definitions*

## A-1.0 ACRONYMS AND ABBREVATIONS

| | |
|---|---|
| %R | percent recovery |
| %RSD | percent relative standard deviation |
| AK | acceptable knowledge |
| ALARA | as low as reasonably acceptable |
| AOC | area of concern |
| ASTDR | Agency for Toxic Substances and Disease Registry |
| AUF | area use factor |
| BCG | Biota Concentration Guide (DOE) |
| bgs | below ground surface |
| BH | borehole |
| BV | background value |
| CCB | continuing calibration blank |
| CCV | continuing calibration verification |
| CMP | corrugated metal pipe |
| cmp | counts per minute |
| COC | chain of custody |
| COPC | chemical of potential concern |
| COPEC | chemical of potential ecological concern |
| CSM | conceptual site model |
| D&D | decontamination and decommissioning |
| DAF | dilution attenuation factor |
| DDT | dichlorophenyltrichloroethylene |
| DER | duplicate error ratio |
| DL | detection limit |
| DOE | Department of Energy (U.S.) |
| DP | Delta Prime |
| dpm | disintegrations per minute |
| DRO | diesel range organic |
| EDL | estimated detection limit |
| Eh | oxidation-reduction potential |
| EP | Environmental Programs Directorate |
| EPC | exposure point concentration |

| | |
|---|---|
| EPA | Environmental Protection Agency (U.S.) |
| EQL | estimated quantitation limit |
| ESL | ecological screening level |
| eV | electronvolt |
| FD | field duplicate |
| FTB | field trip blank |
| FV | fallout value |
| GPS | global-positioning system |
| HI | hazard index |
| HQ | hazard quotient |
| HR | home range |
| HSA | hollow-stem auger |
| ICB | initial calibration blank |
| ICPES | inductively coupled plasma emission spectroscopy |
| ICS | interference check sample |
| ICV | initial calibration verification |
| I.D. | inside diameter |
| IDL | instrument detection limit |
| IDW | investigation-derived waste |
| IS | internal standard |
| $K_d$ | distribution coefficient |
| $K_{oc}$ | organic carbon partition coefficient |
| $K_{ow}$ | octanol/water partition coefficient |
| LAL | lower acceptance level |
| LANL | Los Alamos National Laboratory |
| LASL | Los Alamos Scientific Laboratory |
| LCS | laboratory control sample |
| LOAEL | lowest observed adverse effect level |
| LLW | low-level waste |
| MDA | material disposal area |
| MDL | method detection limit |
| MS | matrix spike |
| MSD | matrix spike duplicate |
| NMED | New Mexico Environment Department |

| | |
|---|---|
| NMSA | New Mexico Statutes Annotated |
| NOAEL | no observed adverse effect level |
| NPDES | National Pollution Discharge Elimination System |
| PAH | polycyclic aromatic hydrocarbon |
| PCB | polychlorinated biphenyl |
| PID | photoionization detector |
| PAUF | population area use factor |
| PPE | personal protective equipment |
| PQL | practical quantitation limit |
| PRG | preliminary remediation goal |
| QA | quality assurance |
| QC | quality control |
| QP | quality procedure |
| RCRA | Resource Conservation and Recovery Act |
| RCT | radiological control technician |
| RDA | recommended daily allowance |
| RESRAD | residual radioactivity (model) |
| RfD | reference dose |
| RFI | RCRA facility investigation |
| RL | reporting limit |
| RPD | relative percent difference |
| RPF | Records Processing Facility |
| RRF | relative response factor |
| SAL | screening action level |
| SCL | sample collection log |
| SF | slope factor |
| SMO | Sample Management Office |
| SOP | standard operating procedure |
| SOW | statement of work |
| SSL | soil screening level |
| SSO | site safety officer |
| SVOC | semivolatile organic compound |
| SWMU | solid waste management unit |
| T&E | threatened and endangered |

| | |
|---|---|
| TA | technical area |
| TAL | target analyte list (EPA) |
| TCDD | tetrachlorodibenzo-p-dioxin[2,3,7,8] |
| TEF | toxicity equivalency factor |
| TPH | total petroleum hydrocarbons |
| TPU | total propagated uncertainty |
| TRV | toxicity reference values |
| TSCA | Toxic Substances Control Act |
| UAL | upper acceptance level |
| UCL | upper confidence limit |
| VCA | voluntary corrective action |
| VCP | vitrified clay pipe |
| VOC | volatile organic compound |
| WCSF | waste characterization strategy form |

## A-2.0 METRIC CONVERSION TABLE

| Multiply SI (Metric) Unit | by | To Obtain U.S. 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) |

## A-3.0 DATA QUALIFIER DEFINITIONS

| Data Qualifier | Definition |
|---|---|
| U | The analyte was analyzed for but not detected. |
| J | The analyte was positively identified, and the associated numerical value is estimated to be more uncertain than would normally be expected for that analysis. |
| J+ | The analyte was positively identified, and the result is likely to be biased high. |
| J- | The analyte was positively identified, and the result is likely to be biased low. |
| UJ | The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit. |
| R | The data are rejected as a result of major problems with quality assurance/quality control (QA/QC) parameters. |

# Appendix B

*Field Methods*

## B-1.0 INTRODUCTION

This appendix summarizes field methods used during the 2009– investigation at Delta Prime (DP) Site Aggregate Area at Los Alamos National Laboratory (the Laboratory). Table B-1.0-1 summarizes the methods and the following sections provide more detail of the field methods for DP Site Aggregate Area. All activities were conducted in accordance with the applicable Environmental Programs Directorate standard operating procedures (SOPs) and quality procedures (QPs), available at the following URL: http://www.lanl.gov/environment/all/qa/adep.shtml.

## B-2.0 EXPLORATORY DRILLING CHARACTERIZATION

No exploratory drilling characterization was conducted during the 2009 investigation activities. All drilling was conducted for the purpose of collecting investigation samples.

## B-3.0 FIELD-SCREENING METHODS

This section summarizes the field-screening methods used during the 2009 sampling activities. The field-screening results are presented in Tables 3.1-2 and 3.1-3 of the investigation report.

### B-3.1 Field Screening for VOCs

Organic vapor screening was conducted using a photoionization detector (PID) in accordance with SOP-6.33, Headspace Vapor Screening with a Photoionization Detector. Samples at AOC C-21-027 were field screened for volatile organic compounds (VOCs) using a MiniRae 2000 PID with an 11.7 electronvolt (eV) lamp. A total of four PIDs, bench calibrated yearly by the vendor, were field calibrated by field personnel using 100 ppm isobutylene as a span calibration gas. Field-screening results were recorded in sample collection logs (Appendix G on DVD).

### B-3.2 Field Screening for Radioactivity

Immediately upon separating the split-spoon core barrel, each core was screened for radioactivity, targeting alpha and beta/gamma emitters. Screening was conducted by a radiation control technician (RCT) using an Eberline E-600 radiation meter with an SHP-380AB alpha and beta/gamma scintillation detector held within 1-in. of the core barrel. The Eberline E 600 with attachment SHP-380AB consists of a dual phosphor plate covered by two mylar windows housed in a light-excluding metal body. The phosphor plate is a plastic scintillator for the detection of beta and gamma emissions and is thinly coated with zinc sulfide for the detection of alpha emissions. The operational range varies from trace emissions to 1 million disintegrations per minute (dpm). Field-screening results were recorded in sample collection logs (Appendix G on DVD).

## B-4.0 BOREHOLE ABANDONMENT

All boreholes greater than 20 ft in depth were abandoned by filling them with a bentonite/concrete mixture. The boreholes were pressure-grouted from the bottom of the borehole to the surface in accordance with EP-ERSS-SOP-5034, Monitoring Well and Borehole Abandonment. Shallow holes (<20 ft) were abandoned by placing bentonite chips in the borehole up to 2–3 ft from the ground surface. The chips were hydrated and then 2–3 ft of concrete or clean soil was placed on top.

All cuttings from the boreholes were placed in appropriate waste containers. Logs for the boreholes drilled at the diesel spill site, tank 21-57, are provided in Appendix E.

## B-5.0 FIELD INSTRUMENT CALIBRATION

All instruments were calibrated before use. Several environmental factors affected the instruments' integrity, including air temperature, atmospheric pressure, wind speed, and humidity. Calibration of the PID was conducted by the site-safety officer (SSO). Calibration of the Eberline E-600 was conducted by the RCT. All calibrations were performed according to the manufacturers' specifications and requirements.

### B-5.1 PID Calibration

The PID was calibrated both to ambient air and a standard reference gas (100 ppm isobutylene). The ambient-air calibration determined the zero point of the instrument sensor calibration curve in ambient air. Calibration with the standard reference gas determined a second point of the sensor calibration curve. Each calibration was within 3% of 100 ppm isobutylene, qualifying the instrument for use.

The following calibration information was recorded daily on operational calibration logs:

- instrument ID number
- final span settings
- date and time
- concentration and type of calibration gas used (isobutylene at 100 ppm)
- name of the SSO performing the calibration

All calibration procedures for the MiniRAE 2000 PID met the manufacturer's specifications for standard reference gas calibration.

### B-5.2 Eberline E-600 Instrument Calibration

The Eberline E-600 was calibrated daily by the RCT before local background levels for radioactivity were measured. The instrument was calibrated using plutonium-239 and chloride-36 sources for alpha and beta emissions, respectively. The following five checks were performed as part of the calibration procedures: calibration date, physical damage, battery, response to a source of radioactivity, and background. All calibrations performed for the Eberline E-600 met the manufacturer's specifications, the requirements of QP-5.2, Control of Measuring and Test Equipment, and the applicable radiation detection instrument manual.

## B-6.0 SURFACE AND SUBSURFACE SAMPLING

This section summarizes the methods used for collecting samples for laboratory analysis, including surface soil and subsurface tuff. The samples were collected according to the approved investigation work plans (LANL 2004, 087461; NMED 2005, 089314; LANL 2006, 092079; LANL 2008, 102760; NMED 2009, 104978).

### B-6.1 Surface Soil Sampling Methods

Surface samples were collected from 0 to 0.5 ft below ground surface (bgs) in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. A hand auger was used to collect material in varying increments. Samples were placed in a stainless-steel bowl prior to transfer to sterile sample collection jars or bags for transport to the Sample Management Office (SMO). In accordance with SOP-5061, Field Decontamination of Drilling and Sampling Equipment, the sample collection tools were decontaminated immediately before and after each sample was collected.

### B-6.2 Subsurface Rock Sampling Methods

The subsurface rock samples were collected using a hollow-stem auger (HSA) drill rig in accordance with SOP-06.26, Core Barrel Sampling for Subsurface Earth Materials, or using a hand auger in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. A total of three HSA drilling rigs were used: two track mounted LAR-75 (limited access rigs) manufactured by D&R Services and one truck mounted Central Mine Equipment-50. Borehole samples were collected in a stainless-steel split-spoon core-barrel sampler that retrieved core in 2.5-ft or 5-ft intervals. The samples collected, listed by location and depth, are presented in Tables 4.2-1 through 4.2-25 of this investigation report.

Samples for VOC analysis were immediately placed into sample jars to minimize the loss of subsurface VOCs during the sample collection process and transferred directly to sterile sample collection jars or bags for transport to the SMO. In accordance with SOP-5061, Field Decontamination of Drilling and Sampling Equipment, the sample collection tools were decontaminated immediately before each sample was collected.

### B-6.3 Quality Assurance/Quality Control Samples

Quality assurance/quality control (QA/QC) samples for soil and tuff were collected in accordance with SOP-5059, Field Quality Control Samples. Field duplicate samples were collected at a frequency of at least 1 duplicate sample for every 10 samples. Field rinsate samples were collected from sampling equipment at a frequency of at least 1 rinsate sample for every 10 samples. Field trip blanks were collected at a frequency of 1 for every 10 samples for VOC samples only.

### B-6.4 Sample Documentation and Handling

Field personnel completed a sample collection log and chain-of-custody (COC) form for each sample set. Sample containers were sealed with signed COC seals and placed in coolers at approximately 4°C. Samples were packaged with preservatives, as necessary, depending upon the analytical method to be used, packed, handled, and shipped in accordance with SOP-5057, Handling, Packaging, and Transporting Field Samples, and SOP-5056, Sample Containers and Preservation.

Swipe samples were collected from the exterior of sample containers and analyzed by the RCT before the sample containers were removed from the site. Samples were transported to the SMO in sealed coolers before they were shipped to the analytical laboratory. The SMO reviewed and approved the sample collection logs and COC forms and accepted custody of the samples.

### B-6.5 Decontamination of Sampling Equipment

Decontamination activities were performed in accordance with SOP-5061, Field Decontamination of Drilling and Sampling Equipment, and SOP-5059, Field Quality Control Samples. The hand auger and hollow-stem auger equipment that made (or could have made) contact with sample material were

decontaminated after each core was retrieved and logged. Decontamination included wiping the equipment with a household-strength cleaning spray and sterile paper towels. Decontamination of the drilling equipment was conducted before mobilization of the drill rig to another borehole to avoid cross-contamination between samples and borehole locations.

## B-7.0 GEODETIC SURVEYING

All sampling locations were surveyed according to SOP-5028, Coordinating and Evaluating Geodetic Surveys. Global-positioning system (GPS) surveys were performed with the Laboratory-owned real-time kinematic GPS. This unit consists of a Trimble 5700 base-station receiver, Trimble Zephyr base-station antenna, Trimble HPB450 base-station radio, Trimble TSC2 survey controller, Pacific Crest HPB450 repeater radio, and a Trimble R8 integrated rover radio/antenna/receiver. A Trimble VX total station/laser scanner, paired with a TSC2 survey controller was used to fulfill those surveying requirements not possible with GPS. Horizontal accuracy of the monumented control points is within 0.1 ft. The differential GPS instrument referenced from Laboratory control points is accurate within 0.2 ft.

## B-8.0 DEVIATIONS FROM WORK PLAN

The following deviations from the approved work plans (LANL 2004, 087461; NMED 2005, 089314; LANL 2006, 092079; LANL 2008, 102760; NMED 2009, 104978) occurred during sample collection:

- At Consolidated Unit 21-003-99 and Solid Waste Management Unit (SWMU) 21-024(c), samples from location 5 were not collected as directed by the Phase II work plan (LANL 2008, 104989). This area was excavated during the polychlorinated biphenyl (PCB) site remediation activities. At location 21-25763, cobalt was analyzed instead of copper. Mercury was inadvertently analyzed for at this location.
- At SWMU 21-024(g), boreholes at locations 2 and 9 could not be advanced past 11.5 ft because of auger refusal; therefore, samples were collected at 11.5 ft rather than at 15 ft bgs as prescribed in the work plan.
- At Consolidated Unit 21-024(l)-99, the samples from location 2 were inadvertently analyzed for cesium-137 and strontium-90 in the 0–0.5 ft depth interval. The sample collected at the 7- to 8-ft interval was inadvertently analyzed for americium-241, strontium-90, and isotopic plutonium.
- Area of Concern (AOC) C-21-027 investigation was added to the Phase II investigation activities. This site was previously addressed in the DP Site Aggregate Area supplemental work plan (LANL 2006, 092079). This site is collocated with SWMU 21-027(a) and could be addressed at the same time as Phase II investigation activities.
- At AOC C-21-027, samples from location 5 were not collected as directed by the DP Site Aggregate Area supplemental work plan (LANL 2006, 092079) because samples had already been collected from this area as part of activities at adjoining SWMU 21-027(a) and Consolidated Unit 21-006(c)-99 (locations 21-600866 and 21-605256).
- At AOC C-21-027, dioxin and furans were only analyzed for in samples from location 4 because this area was previously sampled as part of SWMU 21-027(a) extent sampling (location 21-605279).

## B-9.0 WASTE

Six waste streams were generated during field activities and included

- contact waste,
- drill cuttings,
- PCB remediation waste <50 ppm,
- PCB remediation waste >500 ppm,
- PCB-remediation debris containing asbestos, and
- municipal solid waste.

Appendix D contains the details of the wastes generated.

## B-10.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

LANL (Los Alamos National Laboratory), August 2004. "Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-04-5009, Los Alamos, New Mexico. (LANL 2004, 087461)

LANL (Los Alamos National Laboratory), April 2006. "Supplemental Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-06-1508, Los Alamos, New Mexico. (LANL 2006, 092079)

LANL (Los Alamos National Laboratory), March 2008. "Delta Prime Site Aggregate Area Investigation Report, Revision 1," Los Alamos National Laboratory document LA-UR-08-1834, Los Alamos, New Mexico. (LANL 2008, 102760)

NMED (New Mexico Environment Department), April 13, 2005. "Approval with Modifications for the Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," New Mexico Environment Department letter to D. Gregory (DOE LASO) and G.P. Nanos (LANL Director) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2005, 089314)

NMED (New Mexico Environment Department), January 12, 2009. "Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

**Table B-1.0-1**
**Summary of Field Investigation Methods**

| Method | Summary |
|---|---|
| Spade and Scoop Collection of Soil Samples | This method is typically used to collect shallow (i.e., approximately 0-12 in.) soil or sediment samples. The spade-and-scoop method involved digging a hole to the desired depth, as prescribed in the sampling and analysis plan, and collecting a discrete grab sample. The sample was placed in a clean stainless-steel bowl before it was transferred to various sample containers. |
| Hand-Auger Sampling | This method is typically used for sampling soil or sediment at depths of less than 10–15 ft but may in some cases be used to collect samples of weathered or nonwelded tuff. The method involved hand-turning a stainless-steel bucket auger (typically 3–4 in. inside diameter), creating a vertical hole that was advanced to the desired sample depth. When the desired depth was reached, the auger was decontaminated before advancing the hole through the sample depth. The sample material was transferred from the auger bucket to a stainless-steel sampling bowl before the various required sample containers were filled. |
| Headspace Vapor Screening | Individual soil, tuff, or sediment samples were field screened for VOCs by placing a portion of the sample in a plastic sample bag or in a glass container with a foil-sealed cover. The container was sealed and gently shaken and allowed to equilibrate for 5 min. The sample was then screened by inserting a PID probe into the container and measuring and recording any detected vapors. PIDs must use lamps with voltage of 11.7 eV. |
| Handling, Packaging, and Shipping of Samples | Field team members sealed and labeled samples before packing and ensured that the sample containers and the containers used for transport were free of external contamination.<br>Field team members packaged all samples to minimize the possibility of breakage during transportation.<br>After all environmental samples were collected, packaged, and preserved, a field team member transported them either to the SMO or to an SMO-approved radiation screening laboratory under COC. The SMO arranged for shipping samples to analytical laboratories.<br>The field team member must inform the SMO and/or the radiation screening laboratory coordinator when levels of radioactivity were in the action-level or limited-quantity ranges. |
| Sample Control and Field Documentation | The collection, screening, and transport of samples were documented on standard forms generated by the SMO. These forms included sample collection logs, COC forms, and sample container labels. Collection logs were completed at the time of sample collection and were signed by the sampler and a reviewer who verified the logs for completeness and accuracy. Corresponding labels were initialed and applied to each sample container, and custody seals were placed around container lids or openings. The COC forms were completed and assigned to verify the samples had not been left unattended. |
| Field Quality Control Samples | Field quality control samples were collected as follows:<br>Field Duplicates: at a frequency 10%; collected at the same time as a regular sample and submitted for the same analyses<br>Equipment Rinsate Blank: at a frequency of 10%; collected by rinsing sampling equipment with deionized water, which was collected in a sample container and submitted for laboratory analysis<br>Trip Blanks: required for all field events that include collecting samples for VOC analysis. Trip blanks containers of certified clean sand that were opened and kept with the other sample containers during the sampling process |

**Table B-1.0-1 (continued)**

| Method | Summary |
|---|---|
| Field Decontamination of Drilling and Sampling Equipment | Dry decontamination is the preferred method to minimize the generation of liquid waste. Dry decontamination methods included the use of a wire brush or other tool to remove soil or other material adhering to the sampling equipment, followed by the use of a commercial cleaning agent (nonacid, waxless cleaners) and paper wipes. Dry decontamination was followed by wet decontamination if necessary. |
| Containers and Preservation of Samples | Specific requirements/processes for sample containers, preservation techniques, and holding times are based on U.S. Environmental Protection Agency guidance for environmental sampling, preservation, and QA. Specific requirements for each sample were printed on the sample collection logs provided by the SMO (size and type of container [e.g., glass, amber glass, and polyethylene]). All samples were preserved by being placed in insulated containers with ice to maintain a temperature of 4˚C. Nitric acid and other preservatives were also applied to the media or analytical requests. |
| Coordinating and Evaluating Geodetic Surveys | Geodetic surveys focused on obtaining survey data of acceptable quality to use during project investigations. Geodetic surveys were conducted with a Trimble 5700 differential GPS. The survey data conformed to Laboratory Information Architecture project standards IA-CB02, Geographic Information System Horizontal Spatial Reference System, and IA-D802, Geospatial Positioning Accuracy Standard for A/E/C/ and Facility Management. All coordinates were expressed as State Plain Coordinate System 83, NM Central, U.S. feet coordinates. All elevation data were reported relative to the National Geodetic Vertical Datum of 1983. |
| Management of Environmental Restoration Project Waste, Waste Characterization | Investigation-derived waste (IDW) was managed, characterized, and stored in accordance with an approved waste characterization strategy form that documented site history, field activities, and the characterization approach for each waste stream managed. Waste characterization was adequate to comply with on-site or off-site waste acceptance criteria. All stored IDW was marked with appropriate signage and labels. Drummed IDW was stored on pallets to prevent deterioration of containers. Generators were required to reduce the volume of waste generated by as much as was technically and economically feasible. The means to store, control, and transport each potential waste type and its classification were determined before the start of field operations that generated waste. A waste storage area was established before waste was generated. Waste storage areas located in controlled areas of the laboratory were controlled as needed to prevent inadvertent addition or management of wastes by unauthorized personnel. Each container of waste generated was individually labeled with waste classification, item identification number, and radioactivity (if applicable), immediately following containerization. All waste was segregated by classification and compatibility to prevent cross-contamination. |

# Appendix C

*Photographs of*
*Phase II Investigation Activities at DP Site Aggregate Area*



**PCB site outfall sampling**



**PCB site outfall sampling**



**PCB site outfall sampling**



**PCB site outfall sampling**



**PCB site asphalt debris**



**PCB site regraded after remediation**



**PCB site regraded after remediation**



**PCB site regraded after remediation**



**PCB site excavation area sampling**




**PCB site excavation**



**PCB site excavation**




**PCB site excavation**



**PCB site outfall excavation**



**PCB site outfall excavation**




**PCB site outfall excavation**



**PCB site outfall excavation**



**PCB site outfall excavation**




**PCB site excavation and preparation**



**PCB site excavation and preparation**



**PCB site excavated material storage**




**PCB site excavation**



**PCB site excavation areas**



**PCB site excavation areas**



**PCB site excavation areas**



**PCB site excavation areas**



**PCB site power pole removal**



**PCB site waste removal**



**PCB site waste removal**



**PCB site outfall confirmation sampling**

# Appendix D

*Management of Investigation-Derived Waste*

## D-1.0 INTRODUCTION

This appendix contains the waste management records for the investigation-derived waste (IDW) generated while implementing the approved DP Site Phase II work plan (LANL 2008, 104989; NMED 2009, 104978) and the supplemental work plan (LANL 2006, 092079) at Technical Area 21 (TA-21) of Los Alamos National Laboratory (the Laboratory).

All IDW was managed in accordance with Standard Operating Procedure (SOP) 5238, Characterization and Management of Environmental Program Waste. This SOP incorporates the waste management requirements of applicable U.S Environmental Protection Agency and New Mexico Environment Department (NMED) regulations, U.S Department of Energy orders, and Laboratory requirements.

Consistent with SOP-5238, a waste characterization strategy form (WCSF) was prepared to address characterization approaches, on-site management, and final disposition options for wastes. Analytical data and information on wastes generated during previous investigations and/or acceptable knowledge (AK) were used to complete the WCSF. The WCSF is included in this appendix as Attachment D-1 (on CD).

The selection of waste containers was based on appropriate U.S. Department of Transportation requirements, waste types, and estimated volumes of IDW generated. Immediately following containerization, each waste container was individually labeled with a unique identification number and with information regarding waste classification, contents, and date generated. Wastes were staged in clearly marked, appropriately constructed waste accumulation areas. Waste accumulation area posting, regulated storage duration, and inspection requirements were based on the type of IDW and its classification. Container and storage requirements were detailed in the WCSF and approved before waste was generated.

Investigation activities were conducted in a manner that minimizes the generation of waste. Waste minimization was accomplished by implementing the most recent version of the Laboratory's hazardous waste minimization report.

## D-2.0 WASTE STREAMS

The IDW streams generated and managed during the DP Site Phase II sampling and polychlorinated biphenyl (PCB) site remediation are described below and summarized in Table D-2.0-1.

- Contact waste: This waste stream includes spent personal protective equipment (PPE), material used in dry decontamination of sampling equipment (e.g., paper towels), and plastic bags. These wastes were containerized in rolloff bins with the PCB-remediation waste and stored at an area of contamination approved by NMED on February 12, 2009. Characterization of this waste was conducted using AK based on site characterization sampling. The waste was characterized as PCB-contamination waste and was disposed at Energy Solutions in Clive, Utah.
- Drill cuttings (IDW): This waste stream consists of soil and rock cuttings generated from the drilling of boreholes. These wastes were containerized in drums and supersacks and stored at the point of generation. This waste was characterized using direct sampling. All drill cuttings met the criteria for land application in the NMED-approved Notice of Intent Decision Tree for Land application of Investigation Derived Waste Solids from Construction of Wells/Boreholes. Approximately 8 $yd^3$ of this stream was land-applied on-site at Technical Area 21.

- PCB-remediation waste <50 ppm: This waste stream consists of excavated soil and associated contact waste from the PCB site [Consolidated Unit 21-003-99 and SWMU 21-024(c)]. These wastes were stored on-site within the area of contamination approved by NMED on February 12, 2009. They were stockpiled with appropriate stormwater best management practices (BMPs) until they were shipped off-site for disposal. The waste was characterized using the analytical results from site characterization and direct sampling of the waste. Approximately 1335 $yd^3$ of PCB-remediation waste (<50 ppm) was disposed of at Energy Solutions in Clive, Utah.
- PCB-remediation waste >500 ppm: This waste stream consists of excavated soil and associated contact waste from the PCB site [Consolidated Unit 21-003-99 and SWMU 21-024(c)]. These wastes were containerized in rolloff bins and stored within an area of contamination approved by NMED on February 12, 2009. This waste was characterized using the analytical results from site characterization and direct sampling for waste characterization. Approximately 45 $yd^3$ of PCB-remediation waste (>500 ppm) was disposed of at Energy Solutions in Clive, Utah.
- PCB-remediation debris containing asbestos: This waste stream consists of debris (piping, concrete, asphalt, metal, etc.) generated during the remediation of the PCB site. These wastes were containerized in rolloff bins and stored at an area of contamination approved by NMED on February 12, 2009. This waste was characterized using the analytical results from site characterization and direct sampling of the waste. Approximately 15$yd^3$ of PCB-contaminated waste was disposed of at Energy Solutions in Clive, Utah.
- Municipal Solid Waste (MSW): This waste stream consists of noncontact trash and debris and empty sample preservation containers. It was stored in plastic bags and disposed of at the Los Alamos County landfill.

## D.3.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

LANL (Los Alamos National Laboratory), April 2006. "Supplemental Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-06-1508, Los Alamos, New Mexico. (LANL 2006, 092079)

LANL (Los Alamos National Laboratory), December 2008. "Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," Los Alamos National Laboratory document LA-UR-08-7794, Los Alamos, New Mexico. (LANL 2008, 104989)

NMED (New Mexico Environment Department), January 12, 2009. "Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

**Table D-2.0-1**
**Summary of IDW Generation and Management**

| Waste Stream | Waste Type | Volume | Characterization Method | On-Site Management | Disposition |
|---|---|---|---|---|---|
| Contact Waste | Low-level waste (LLW), PCB-containing | Negligible | AK based on sampling of drill cuttings and investigation samples | Plastic bags | Energy Solutions in Clive, Utah |
| Drill Cuttings | Not applicable | 8 $yd^3$ | Direct sampling | Drums or supersacks | Energy Solutions in Clive, Utah |
| PCB Remediation Waste <50 ppm | LLW, PCB-containing | 1335 $yd^3$ | Direct sampling | Stockpiled with BMPs | Energy Solutions in Clive, Utah |
| PCB Remediation Waste >500 ppm | LLW, PCB-containing | 50 $yd^3$ | Direct sampling | Rolloff containers | Energy Solutions in Clive, Utah |
| Debris | LLW, PCB, asbestos containing | 15 $yd^3$ | AK of site characterization samples and direct sampling | Rolloff containers | Energy Solutions in Clive, Utah |
| Municipal Solid | MSW | Negligible | AK | Plastic bags | Los Alamos Municipal Landfill |

# Attachment D-1

*Waste Characterization Strategy Form*
*(on CD included with this document)*

# Appendix E

*Diesel Tank 21-57 Spill Site Investigation*

## E-1.0 INTRODUCTION

In 2002 and 2003, site assessments were conducted regarding a potential fuel-oil leak into the subsurface surrounding the underground pipelines connected to aboveground diesel tank 21-57 at Technical Area 21 (TA-21) (Figure E-1.0-1). The 2009 investigation described in this appendix further characterizes the site and assesses current conditions and extent of contamination at the site.

## E-2.0 FIELD ACTIVITIES

Two boreholes were installed and sampled at the diesel spill site, tank 21-57, in August and September 2009. These boreholes are shown in Figure E-1.0-1. They were drilled next to previously installed boreholes. The total depth of the borehole sampling was determined by field-screening results. Table E-2.0-1 shows the field-screening results.

The PetroFLAG test kit results, borehole logs, field book, and waste characterization form are attached to this appendix as Attachment E-1 (on CD).

## E-3.0 RESULTS

Tables E-3.0-1 and E-3.0-2 show the samples collected at the site and the analytical results, respectively.

The extent of diesel contamination is defined at the site. Concentrations of semivolatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) diesel range organics (DRO), and volatile organic compounds (VOCs) decreased with depth (Figure E-1.0-1 and Table E-3.0-2). TPH-DRO sampling results from additional characterization activities in 2009 appear to be consistent with sampling results from site assessment work completed in 2002 and 2003.

## E-4.0 REFERENCE

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

NMED (New Mexico Environment Department), December 2009. "Technical Background Document for Development of Soil Screening Levels, Revision 5.0," with revised Table A-1, New Mexico Environment Department, Hazardous Waste Bureau and Ground Water Quality Bureau Voluntary Remediation Program, Santa Fe, New Mexico. (NMED 2009, 108070)

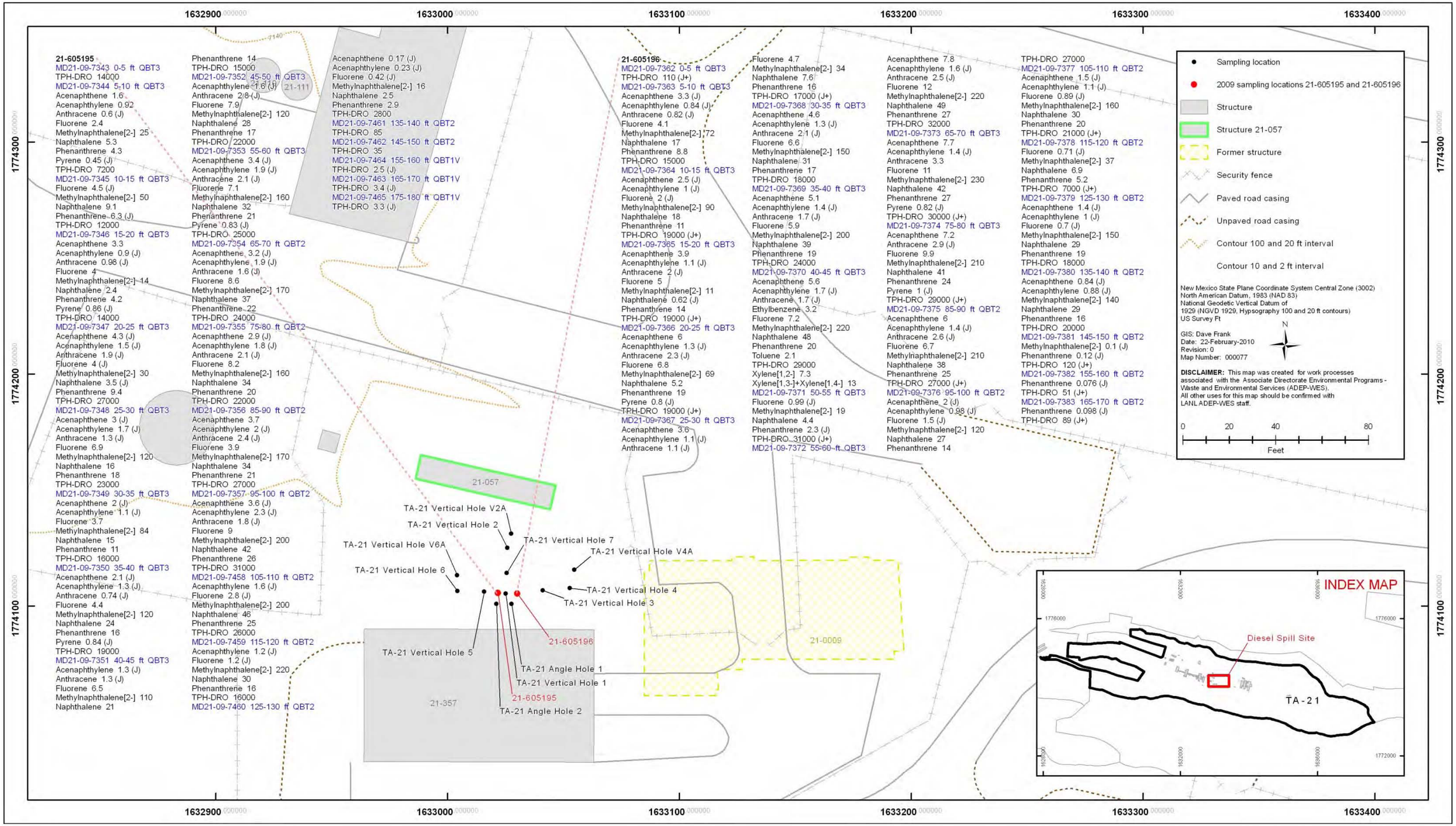



**Figure E-1.0-1 Diesel spill site within TA-21 and 2009 sampling results**

**Table E-2.0-1**
**Diesel Tank 21-57 Spill 2009 Field-Screening Results**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Photoionization Detector Background (ppm) | Photoionization Detector (ppm) | Alpha Background (dpm*) | Alpha (dpm) | Beta Background (dpm) | Beta/Gamma (dpm) |
|---|---|---|---|---|---|---|---|---|---|
| 21-605195 | 0 | 5 | V-1A | 0 | 1.1 | 59 | 48 | 1937 | 2370 |
| 21-605195 | 5 | 10 | V-1A | 0 | 198 | 59 | 75 | 1937 | 2520 |
| 21-605195 | 10 | 15 | V-1A | 0 | 183 | 59 | 62 | 1937 | 2460 |
| 21-605195 | 15 | 20 | V-1A | 0 | 324 | 59 | 69 | 1937 | 2470 |
| 21-605195 | 20 | 25 | V-1A | 0 | 144 | 59 | 61 | 1937 | 2030 |
| 21-605195 | 25 | 30 | V-1A | 0 | 135 | 59 | 69 | 1937 | 2360 |
| 21-605195 | 30 | 35 | V-1A | 0 | 253 | 59 | 48 | 1937 | 2230 |
| 21-605195 | 35 | 40 | V-1A | 0 | 278 | 59 | 48 | 1937 | 2610 |
| 21-605195 | 40 | 45 | V-1A | 0 | 278 | 59 | 34 | 1937 | 2420 |
| 21-605195 | 45 | 50 | V-1A | 0 | 151 | 59 | 75 | 1937 | 2410 |
| 21-605195 | 45 | 50 | V-1A | 0 | 151 | 59 | 75 | 1937 | 2410 |
| 21-605195 | 55 | 60 | V-1A | 0 | 101 | 59 | 41 | 1937 | 2470 |
| 21-605195 | 65 | 70 | V-1A | 0 | 324 | 69 | 20 | 2490 | 2500 |
| 21-605195 | 75 | 80 | V-1A | 0 | 321 | 69 | 69 | 2490 | 2620 |
| 21-605195 | 85 | 90 | V-1A | 0 | 253 | 69 | 89 | 2490 | 2530 |
| 21-605195 | 95 | 100 | V-1A | 0 | 182 | 69 | 48 | 2490 | 2540 |
| 21-605195 | 105 | 110 | V-1A | 0 | 560 | 69 | 48 | 2490 | 2430 |
| 21-605195 | 115 | 120 | V-1A | 0 | 600 | 69 | 69 | 2480 | 2520 |
| 21-605195 | 125 | 130 | V-1A | 0 | 175 | 69 | 48 | 2490 | 2700 |
| 21-605195 | 135 | 140 | V-1A | 0.8 | 171 | 35 | 6 | 1521 | 662 |
| 21-605195 | 145 | 150 | V-1A | 0.8 | 52.5 | 35 | 10 | 1521 | 1208 |
| 21-605195 | 145 | 150 | V-1A | 0.8 | 52.5 | 35 | 10 | 1521 | 1208 |
| 21-605195 | 155 | 160 | V-1A | 1 | 2.3 | 35 | 48 | 1521 | 258 |
| 21-605195 | 165 | 170 | V-1A | 1 | 4.6 | 35 | 20 | 1521 | 2470 |
| 21-605195 | 175 | 180 | V-1A | 0.9 | 8.4 | 35 | 48 | 1521 | 2410 |
| 21-605195 | 185 | 190 | V-1A | 0.7 | 9 | 69 | 48 | 2800 | 2720 |
| 21-605195 | 195 | 200 | V-1A | 0.7 | 8.3 | 69 | 75 | 2800 | 2940 |
| 21-605196 | 0 | 5 | V-1B | 0.7 | 48.8 | 31 | 49.55 | 1071 | 2000 |
| 21-605196 | 0 | 5 | V-1B | 0.7 | 48.8 | 31 | 49.55 | 1071 | 2000 |

**Table E-2.0-1 (continued)**

| Location Number | Sample Top Depth Interval (ft) | Sample Bottom Depth Interval (ft) | Work Plan Location ID | Photoionization Detector Background (ppm) | Photoionization Detector (ppm) | Alpha Background (dpm*) | Alpha (dpm) | Beta Background (dpm) | Beta/Gamma (dpm) |
|---|---|---|---|---|---|---|---|---|---|
| 21-605196 | 5 | 10 | V-1B | 0.7 | 551 | 31 | 31 | 1071 | 1071.5 |
| 21-605196 | 10 | 15 | V-1B | 0.7 | 538 | 31 | 42.2 | 1071 | 2840 |
| 21-605196 | 15 | 20 | V-1B | 1 | 576 | 31 | 0 | 1071 | 2330 |
| 21-605196 | 20 | 25 | V-1B | 1.5 | 349 | 31 | 9.93 | 1071 | 1957 |
| 21-605196 | 25 | 30 | V-1B | 1.2 | 439 | 31 | 52.5 | 1071 | 2535 |
| 21-605196 | 30 | 35 | V-1B | 0.8 | 796 | 31 | 10.9 | 1071 | 1608 |
| 21-605196 | 35 | 40 | V-1B | 1.3 | 520 | 31 | 10.9 | 1071 | 1603 |
| 21-605196 | 40 | 45 | V-1B | 1.5 | 578 | 31 | 16.98 | 1071 | 1675 |
| 21-605196 | 40 | 45 | V-1B | 1.5 | 478 | 31 | 16.98 | 1071 | 1675 |
| 21-605196 | 50 | 55 | V-1B | 1.5 | 730 | 31 | 0 | 1531 | 1675 |
| 21-605196 | 55 | 60 | V-1B | 1.5 | 760 | 31 | 16.98 | 1531 | 1542 |
| 21-605196 | 65 | 70 | V-1B | 1.5 | 637 | 31 | 0 | 1531 | 2150 |
| 21-605196 | 75 | 80 | V-1B | 1 | 690 | 31 | 30 | 531 | 2180 |
| 21-605196 | 75 | 80 | V-1B | 1 | 690 | 31 | 30 | 1531 | 2180 |
| 21-605196 | 85 | 90 | V-1B | 0.6 | 582 | 55 | 34 | 2920 | 2630 |
| 21-605196 | 95 | 100 | V-1B | 0.9 | 532 | 55 | 55 | 2920 | 2980 |
| 21-605196 | 105 | 110 | V-1B | 0.8 | 411 | 55 | 55 | 2920 | 2990 |
| 21-605196 | 115 | 120 | V-1B | 0.7 | 246 | 55 | 96 | 2920 | 2940 |
| 21-605196 | 125 | 130 | V-1B | 0.9 | 302 | 55 | 55 | 2920 | 2820 |
| 21-605196 | 135 | 140 | V-1B | 1.1 | 408 | 55 | 82 | 2920 | 2630 |
| 21-605196 | 145 | 150 | V-1B | 1 | 82.6 | 55 | 96 | 2920 | 3110 |
| 21-605196 | 145 | 150 | V-1B | 1 | 82.6 | 55 | 96 | 2920 | 3110 |
| 21-605196 | 155 | 160 | V-1B | 0.7 | 46.2 | 40 | 33 | 1590 | 2300 |
| 21-605196 | 165 | 170 | V-1B | 0.8 | 54.8 | 40 | 117 | 1590 | 3000 |
| 21-605196 | 175 | 180 | V-1B | 0.9 | 2.3 | 40 | 117 | 1590 | 3290 |
| 21-605196 | 185 | 190 | V-1B | 0.9 | 2.4 | 40 | 62 | 1590 | 3160 |
| 21-605196 | 195 | 200 | V-1B | 0.8 | 4.3 | 40 | 62 | 1590 | 2950 |
| 21-605196 | 195 | 200 | V-1B | 0.8 | 4.3 | 40 | 62 | 1590 | 2950 |

* dpm = Disintegrations per minute.

**Table E-3.0-1**
**Samples Collected and Analyses Requested at the Diesel Spill Site, Tank 21-57**

| Sample ID | Location ID | Depth (ft) | Media | Field Quality Control Type | SVOCs | TPH-DRO | VOCs |
|---|---|---|---|---|---|---|---|
| MD21-09-7471 | 21-605195 | 0.0000–0.0000 | na[a] | FTB[b] | —[c] | — | 09-2935[d] |
| MD21-09-7472 | 21-605195 | 0.0000–0.0000 | na | FTB | — | — | 09-2971 |
| MD21-09-7473 | 21-605195 | 0.0000–0.0000 | na | FTB | — | — | 09-2978 |
| MD21-09-7474 | 21-605195 | 0.0000–0.0000 | na | FTB | — | — | 09-2995 |
| MD21-09-7343 | 21-605195 | 0.0000–5.0000 | QBT3 | na | 09-2935 | 09-2935 | 09-2935 |
| MD21-09-7344 | 21-605195 | 5.0000–10.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7345 | 21-605195 | 10.0000–15.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7346 | 21-605195 | 15.0000–20.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7347 | 21-605195 | 20.0000–25.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7348 | 21-605195 | 25.0000–30.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7349 | 21-605195 | 30.0000–35.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7350 | 21-605195 | 35.0000–40.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7351 | 21-605195 | 40.0000–45.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7330 | 21-605195 | 45.0000–50.0000 | QBT3 | FD[e] | 09-2935 | 09-2935 | — |
| MD21-09-7352 | 21-605195 | 45.0000–50.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7353 | 21-605195 | 55.0000–60.0000 | QBT3 | na | 09-2935 | 09-2935 | — |
| MD21-09-7354 | 21-605195 | 65.0000–70.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7355 | 21-605195 | 75.0000–80.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7356 | 21-605195 | 85.0000–90.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7357 | 21-605195 | 95.0000–100.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7458 | 21-605195 | 105.0000–110.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7459 | 21-605195 | 115.0000–120.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7460 | 21-605195 | 125.0000–130.0000 | QBT2 | na | 09-2971 | 09-2971 | — |
| MD21-09-7461 | 21-605195 | 135.0000–140.0000 | QBT2 | na | 09-2978 | 09-2978 | — |
| MD21-09-7332 | 21-605195 | 145.0000–150.0000 | QBT2 | FD | 09-2978 | 09-2978 | 09-2978 |
| MD21-09-7462 | 21-605195 | 145.0000–150.0000 | QBT2 | na | 09-2978 | 09-2978 | 09-2978 |
| MD21-09-7464 | 21-605195 | 155.0000–160.0000 | QBT1V | na | 09-2978 | 09-2978 | — |
| MD21-09-7463 | 21-605195 | 165.0000–170.0000 | QBT1V | na | 09-2978 | 09-2978 | — |
| MD21-09-7465 | 21-605195 | 175.0000–180.0000 | QBT1V | na | 09-2978 | 09-2978 | — |
| MD21-09-7466 | 21-605195 | 185.0000–190.0000 | QBT1V | na | 09-2995 | 09-2995 | — |
| MD21-09-7467 | 21-605195 | 195.0000–200.0000 | QBT1V | na | 09-2995 | 09-2995 | 09-2995 |
| MD21-09-7475 | 21-605196 | 0.0000–0.0000 | na | FTB | — | — | 09-3000 |
| MD21-09-7476 | 21-605196 | 0.0000–0.0000 | na | FTB | — | — | 09-3000 |
| MD21-09-7477 | 21-605196 | 0.0000–0.0000 | na | FTB | — | — | 09-3006 |
| MD21-09-7333 | 21-605196 | 0.0000–5.0000 | QBT3 | FD | 09-3000 | 09-3000 | 09-3000 |
| MD21-09-7362 | 21-605196 | 0.0000–5.0000 | QBT3 | na | 09-3000 | 09-3000 | 09-3000 |

**Table E-3.0-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Field Quality Control Type | SVOCs | TPH-DRO | VOCs |
|---|---|---|---|---|---|---|---|
| MD21-09-7363 | 21-605196 | 5.0000–10.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7364 | 21-605196 | 10.0000–15.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7365 | 21-605196 | 15.0000–20.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7366 | 21-605196 | 20.0000–25.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7367 | 21-605196 | 25.0000–30.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7368 | 21-605196 | 30.0000–35.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7369 | 21-605196 | 35.0000–40.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7334 | 21-605196 | 40.0000–45.0000 | QBT3 | FD | 09-3000 | 09-3000 | 09-3000 |
| MD21-09-7370 | 21-605196 | 40.0000–45.0000 | QBT3 | na | 09-3000 | 09-3000 | 09-3000 |
| MD21-09-7371 | 21-605196 | 50.0000–55.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7372 | 21-605196 | 55.0000–60.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7373 | 21-605196 | 65.0000–70.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7331 | 21-605196 | 75.0000–80.0000 | QBT3 | FD | 09-3000 | 09-3000 | — |
| MD21-09-7374 | 21-605196 | 75.0000–80.0000 | QBT3 | na | 09-3000 | 09-3000 | — |
| MD21-09-7375 | 21-605196 | 85.0000–90.0000 | QBT2 | na | 09-3000 | 09-3000 | — |
| MD21-09-7376 | 21-605196 | 95.0000–100.0000 | QBT2 | na | 09-3000 | 09-3000 | — |
| MD21-09-7377 | 21-605196 | 105.0000–110.0000 | QBT2 | na | 09-3000 | 09-3000 | — |
| MD21-09-7378 | 21-605196 | 115.0000–120.0000 | QBT2 | na | 09-3000 | 09-3000 | — |
| MD21-09-7379 | 21-605196 | 125.0000–130.0000 | QBT2 | na | 09-3000 | 09-3000 | — |
| MD21-09-7380 | 21-605196 | 135.0000–140.0000 | QBT2 | na | 09-3000 | 09-3000 | — |
| MD21-09-7335 | 21-605196 | 145.0000–150.0000 | QBT2 | FD | 09-3000 | 09-3000 | 09-3000 |
| MD21-09-7381 | 21-605196 | 145.0000–150.0000 | QBT2 | na | 09-3000 | 09-3000 | 09-3000 |
| MD21-09-7382 | 21-605196 | 155.0000–160.0000 | QBT2 | na | 09-3006 | 09-3006 | — |
| MD21-09-7383 | 21-605196 | 165.0000–170.0000 | QBT2 | na | 09-3006 | 09-3006 | — |
| MD21-09-7384 | 21-605196 | 175.0000–180.0000 | QBT1V | na | 09-3006 | 09-3006 | — |
| MD21-09-7385 | 21-605196 | 185.0000–190.0000 | QBT1V | na | 09-3006 | 09-3006 | — |
| MD21-09-7336 | 21-605196 | 195.0000–200.0000 | QBT1V | FD | 09-3006 | 09-3006 | 09-3006 |
| MD21-09-7386 | 21-605196 | 195.0000–200.0000 | QBT1V | na | 09-3006 | 09-3006 | 09-3006 |

[a] na = Not available.

[b] FTB = Field trip blank.

[c] — = Not analyzed.

[d] Laboratory request number.

[e] FD = Field duplicate.

**Table E-3.0-2**
**Organics Detected at Diesel Spill Site, Tank 21-57**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Anthracene | Ethylbenzene | Fluorene | Methylnaphthalene[2-] | Naphthalene | Phenanthrene | Pyrene | Toluene | TPH-DRO | Xylene[1,2-] | Xylene[1,3] +Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Residential Soil Screening Levels | | | | **3440** | **1720** | **17200** | **69.7** | **2290** | **310**[a] | **45** | **1830** | **1720** | **5570** | **520**[b] | **9550** | **1090** |
| MD21-09-7343 | 21-605195 | 0.0000–5.0000 | QBT3 | —[c] | — | — | — | — | — | — | — | — | — | 14000 | — | — |
| MD21-09-7344 | 21-605195 | 5.0000–10.0000 | QBT3 | 1.6 | 0.92 | 0.6 (J) | NA[d] | 2.4 | 25 | 5.3 | 4.3 | 0.45 (J) | NA | 7200 | NA | NA |
| MD21-09-7345 | 21-605195 | 10.0000–15.0000 | QBT3 | — | — | — | NA | 4.5 (J) | 50 | 9.1 | 6.3 (J) | — | NA | 12000 | NA | NA |
| MD21-09-7346 | 21-605195 | 15.0000–20.0000 | QBT3 | 3.3 | 0.9 (J) | 0.98 (J) | NA | 4 | 14 | 2.4 | 4.2 | 0.86 (J) | NA | 14000 | NA | NA |
| MD21-09-7347 | 21-605195 | 20.0000–25.0000 | QBT3 | 4.3 (J) | 1.5 (J) | 1.9 (J) | NA | 4 (J) | 30 | 3.5 (J) | 9.4 | — | NA | 27000 | NA | NA |
| MD21-09-7348 | 21-605195 | 25.0000–30.0000 | QBT3 | 3 (J) | 1.7 (J) | 1.3 (J) | NA | 6.9 | 120 | 16 | 18 | — | NA | 23000 | NA | NA |
| MD21-09-7349 | 21-605195 | 30.0000–35.0000 | QBT3 | 2 (J) | 1.1 (J) | — | NA | 3.7 | 84 | 15 | 11 | — | NA | 16000 | NA | NA |
| MD21-09-7350 | 21-605195 | 35.0000–40.0000 | QBT3 | 2.1 (J) | 1.3 (J) | 0.74 (J) | NA | 4.4 | 120 | 24 | 16 | 0.84 (J) | NA | 19000 | NA | NA |
| MD21-09-7351 | 21-605195 | 40.0000–45.0000 | QBT3 | — | 1.3 (J) | 1.3 (J) | NA | 6.5 | 110 | 21 | 14 | — | NA | 15000 | NA | NA |
| MD21-09-7352 | 21-605195 | 45.0000–50.0000 | QBT3 | — | 1.6 (J) | 2.8 (J) | NA | 7.9 | 120 | 28 | 17 | — | NA | 22000 | NA | NA |
| MD21-09-7353 | 21-605195 | 55.0000–60.0000 | QBT3 | 3.4 (J) | 1.9 (J) | 2.1 (J) | NA | 7.1 | 160 | 32 | 21 | 0.83 (J) | NA | 25000 | NA | NA |
| MD21-09-7354 | 21-605195 | 65.0000–70.0000 | QBT2 | 3.2 (J) | 1.9 (J) | 1.6 (J) | NA | 8.6 | 170 | 37 | 22 | — | NA | 24000 | NA | NA |
| MD21-09-7355 | 21-605195 | 75.0000–80.0000 | QBT2 | 2.9 (J) | 1.8 (J) | 2.1 (J) | NA | 8.2 | 160 | 34 | 20 | — | NA | 22000 | NA | NA |
| MD21-09-7356 | 21-605195 | 85.0000–90.0000 | QBT2 | 3.7 | 2 (J) | 2.4 (J) | NA | 3.9 | 170 | 34 | 21 | — | NA | 27000 | NA | NA |
| MD21-09-7357 | 21-605195 | 95.0000–100.0000 | QBT2 | 3.6 (J) | 2.3 (J) | 1.8 (J) | NA | 9 | 200 | 42 | 26 | — | NA | 31000 | NA | NA |
| MD21-09-7458 | 21-605195 | 105.0000–110.0000 | QBT2 | — | 1.6 (J) | — | NA | 2.8 (J) | 200 | 46 | 25 | — | NA | 26000 | NA | NA |
| MD21-09-7459 | 21-605195 | 115.0000–120.0000 | QBT2 | — | 1.2 (J) | — | NA | 1.2 (J) | 220 | 30 | 16 | — | NA | 16000 | NA | NA |
| MD21-09-7460 | 21-605195 | 125.0000–130.0000 | QBT2 | 0.17 (J) | 0.23 (J) | — | NA | 0.42 (J) | 16 | 2.5 | 2.9 | — | NA | 2800 | NA | NA |
| MD21-09-7461 | 21-605195 | 135.0000–140.0000 | QBT2 | — | — | — | NA | — | — | — | — | — | NA | 85 | NA | NA |
| MD21-09-7462 | 21-605195 | 145.0000–150.0000 | QBT2 | — | — | — | — | — | — | — | — | — | — | 35 | — | — |
| MD21-09-7464 | 21-605195 | 155.0000–160.0000 | QBT1V | — | — | — | NA | — | — | — | — | — | NA | 2.5 (J) | NA | NA |
| MD21-09-7463 | 21-605195 | 165.0000–170.0000 | QBT1V | — | — | — | NA | — | — | — | — | — | NA | 3.4 (J) | NA | NA |
| MD21-09-7465 | 21-605195 | 175.0000–180.0000 | QBT1V | — | — | — | NA | — | — | — | — | — | NA | 3.3 (J) | NA | NA |
| MD21-09-7362 | 21-605196 | 0.0000–5.0000 | QBT3 | — | — | — | — | — | — | — | — | — | — | 110 (J+) | — | — |
| MD21-09-7363 | 21-605196 | 5.0000–10.0000 | QBT3 | 3.3 (J) | 0.84 (J) | 0.82 (J) | NA | 4.1 | 72 | 17 | 8.8 | — | NA | 15000 | NA | NA |
| MD21-09-7364 | 21-605196 | 10.0000–15.0000 | QBT3 | 2.5 (J) | 1 (J) | — | NA | 2 (J) | 90 | 18 | 11 | — | NA | 19000 (J+) | NA | NA |
| MD21-09-7365 | 21-605196 | 15.0000–20.0000 | QBT3 | 3.9 | 1.1 (J) | 2 (J) | NA | 5 | 11 | 0.62 (J) | 14 | — | NA | 19000 (J+) | NA | NA |
| MD21-09-7366 | 21-605196 | 20.0000–25.0000 | QBT3 | 6 | 1.3 (J) | 2.3 (J) | NA | 6.8 | 69 | 5.2 | 19 | 0.8 (J) | NA | 19000 (J+) | NA | NA |
| MD21-09-7367 | 21-605196 | 25.0000–30.0000 | QBT3 | 3.6 | 1.1 (J) | 1.1 (J) | NA | 4.7 | 34 | 7.6 | 16 | — | NA | 17000 (J+) | NA | NA |
| MD21-09-7368 | 21-605196 | 30.0000–35.0000 | QBT3 | 4.6 | 1.3 (J) | 2.1 (J) | NA | 6.6 | 150 | 31 | 17 | — | NA | 18000 | NA | NA |
| MD21-09-7369 | 21-605196 | 35.0000–40.0000 | QBT3 | 5.1 | 1.4 (J) | 1.7 (J) | NA | 5.9 | 200 | 39 | 19 | — | NA | 24000 | NA | NA |

**Table E-3.0-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Acenaphthene | Acenaphthylene | Anthracene | Ethylbenzene | Fluorene | Methylnaphthalene[2-] | Naphthalene | Phenanthrene | Pyrene | Toluene | TPH-DRO | Xylene[1,2-] | Xylene[1,3] +Xylene[1,4-] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Residential Soil Screening Levels | | | | **3440** | **1720** | **17200** | **69.7** | **2290** | **310**[a] | **45** | **1830** | **1720** | **5570** | **520**[b] | **9550** | **1090** |
| MD21-09-7370 | 21-605196 | 40.0000–45.0000 | QBT3 | 5.6 | 1.7 (J) | 1.7 (J) | 3.2 | 7.2 | 220 | 48 | 20 | — | 2.1 | 29000 | 7.3 | 13 |
| MD21-09-7371 | 21-605196 | 50.0000–55.0000 | QBT3 | — | — | — | NA | 0.99 (J) | 19 | 4.4 | 2.3 (J) | — | NA | 31000 (J+) | NA | NA |
| MD21-09-7372 | 21-605196 | 55.0000–60.0000 | QBT3 | 7.8 | 1.6 (J) | 2.5 (J) | NA | 12 | 220 | 49 | 27 | — | NA | 32000 | NA | NA |
| MD21-09-7373 | 21-605196 | 65.0000–70.0000 | QBT3 | 7.7 | 1.4 (J) | 3.3 | NA | 11 | 230 | 42 | 27 | 0.82 (J) | NA | 30000 (J+) | NA | NA |
| MD21-09-7374 | 21-605196 | 75.0000–80.0000 | QBT3 | 7.2 | — | 2.9 (J) | NA | 9.9 | 210 | 41 | 24 | 1 (J) | NA | 29000 (J+) | NA | NA |
| MD21-09-7375 | 21-605196 | 85.0000–90.0000 | QBT2 | 6 | 1.4 (J) | 2.6 (J) | NA | 6.7 | 210 | 38 | 25 | — | NA | 27000 (J+) | NA | NA |
| MD21-09-7376 | 21-605196 | 95.0000–100.0000 | QBT2 | 2 (J) | 0.98 (J) | — | NA | 1.5 (J) | 120 | 27 | 14 | — | NA | 27000 | NA | NA |
| MD21-09-7377 | 21-605196 | 105.0000–110.0000 | QBT2 | 1.5 (J) | 1.1 (J) | — | NA | 0.89 (J) | 160 | 30 | 20 | — | NA | 21000 (J+) | NA | NA |
| MD21-09-7378 | 21-605196 | 115.0000–120.0000 | QBT2 | — | — | — | NA | 0.71 (J) | 37 | 6.9 | 5.2 | — | NA | 7000 (J+) | NA | NA |
| MD21-09-7379 | 21-605196 | 125.0000–130.0000 | QBT2 | 1.4 (J) | 1 (J) | — | NA | 0.7 (J) | 150 | 29 | 19 | — | NA | 18000 | NA | NA |
| MD21-09-7380 | 21-605196 | 135.0000–140.0000 | QBT2 | 0.84 (J) | 0.88 (J) | — | NA | — | 140 | 29 | 16 | — | NA | 20000 | NA | NA |
| MD21-09-7381 | 21-605196 | 145.0000–150.0000 | QBT2 | — | — | — | — | — | 0.1 (J) | — | 0.12 (J) | — | — | 120 (J+) | — | — |
| MD21-09-7382 | 21-605196 | 155.0000–160.0000 | QBT2 | — | — | — | NA | — | NA | — | 0.076 (J) | — | NA | 51 (J+) | NA | NA |
| MD21-09-7383 | 21-605196 | 165.0000–170.0000 | QBT2 | — | — | — | NA | — | NA | — | 0.098 (J) | — | NA | 89 (J+) | NA | NA |

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A. All soil screening levels are from NMED (2009, 108070) unless otherwise noted.

[a] U.S. Environmental Protection Agency regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] From NMED TPH screening guidance (http://www.nmenv.state.nm.us/HWB/Guidance_docs/NMED%20TPH%20Guidance%2010-2006.pdf).

[c] — = Not detected.

[d] NA = Not analyzed.

# Attachment E-1

*PetroFLAG Test Kit Results, Borehole Logs,*
*Field Book, and Waste Characterization Form*
*(on CD included with this document)*

# Appendix F

*Analytical Program*

## F-1.0 INTRODUCTION

This appendix summarizes the inorganic chemical, radionuclide, and organic chemical analytical methods, the quality assurance (QA)/quality control (QC), and data validation procedures used. The QA/QC procedures were implemented in accordance with the requirements of the Los Alamos National Laboratory (LANL or the Laboratory) "Quality Assurance Project Plan Requirements for Sampling and Analysis" (LANL 1996, 054609) and the Laboratory's analytical services statement of work (SOW) for contract laboratories (LANL 1995, 049738; LANL 2000, 071233).

The results of the QA/QC activities were used to estimate accuracy, bias, and precision of the analytical measurements. QC samples included method blanks, blank spikes, matrix spikes (MSs), and laboratory control samples (LCSs) to assess accuracy. The analytical services SOW describes the type and frequency of QC analyses (LANL 2000, 071233). Other QC factors, such as sample preservation and holding times, were also assessed. Evaluating these QC indicators allows estimates to be made of the accuracy, bias, and precision of the analytical results.

The following standard operating procedures (SOPs) were used for data validation:

- SOP-5161, Routine Validation of Volatile Organic Compound (VOC) Analytical Data
- SOP-5162, Routine Validation of Semivolatile Organic Compound (SVOC) Analytical Data
- SOP-5163, Routine Validation of Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data
- SOP-5165, Routine Validation of Metals Analytical Data
- SOP-5166, Routine Validation of Gamma Spectroscopy, Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Analytical Data
- SOP-5168, Routine Validation of LC/MS/MS High Explosive Analytical Data
- SOP-5169, Routine Validation of Dioxin Furan Analytical Data (EPA Method 1618 and SW-846 EPA Method 8290)
- SOP-5171, Routine Validation of Total Petroleum Hydrocarbons Gasoline Range Organics/Diesel Range Organics Analytical Data (Method 80151B)
- SOP-5191, Routine Validation of LC/MS/MS Perchlorate Analytical Data (SW-846 EPA Method 6850)

A focused data validation was performed for all the data packages (also referred to as request numbers). The focused data validation followed the same procedure discussed above and included a more detailed review of the raw data generated by the analytical laboratory. Appendix A lists the data qualifier definitions.

Some analytical results were rejected for various reasons and are not usable for the purposes of this report. The remaining Phase II data, including qualified data, lend themselves to evaluation and interpretation. The following sections provide summaries of the analytical methods for inorganic chemicals, radionuclides, and organic chemicals. Only the Phase II sampling is addressed in the following sections; the Phase I report (LANL 2008, 102760, Appendix E) previously discussed the Phase I data.

Historical data were revalidated to current data-quality standards for this report. Therefore, analytical results and qualifiers for historical data presented in this document may not be identical to the analytical

results and qualifiers for the historical data presented in the Phase I report (LANL 2008, 102760; NMED 2008, 102290) and used to develop the approved Phase II investigation work plan (LANL 2008, 104989; NMED 2009, 104978). As a result, some data previously presented may now be excluded from the current data set because they are no longer valid and are not presented in this report. Table F-1.0-1 presents the changes that were made to data as a result of revalidation. Table F-1.0-2 presents the data that were excluded from Consolidated Unit 21-003-99 and Solid Waste Management Unit (SWMU) 21-013(c) data sets presented in the Phase I report (LANL 2008, 102760; NMED 2008, 102290). Locations sampled in the 1990s (Table F-1.0-2) were resampled within 5 ft laterally during the Phase I investigation; therefore, only the valid Phase I data are included in the data sets presented in this Phase II report.

## F-2.0 INORGANIC CHEMICAL ANALYSIS METHODS

The primary methods used for the analysis of inorganic chemicals are U.S. Environmental Protection Agency (EPA) SW-846 Method 6010B and EPA SW-846 Method 6020. Arsenic, cyanide (total), mercury and perchlorate are analyzed by different methods. Table F-2.0-1 lists the analytical methods used for inorganic chemicals.

### F-2.1 Inorganic Chemical QA/QC Samples

LCSs, method blanks, MS samples, laboratory duplicate samples, interference check samples (ICSs), and serial dilution samples were analyzed to assess accuracy and precision of inorganic chemical analyses. Each of these QA/QC sample types is described in the analytical services SOW (LANL 2000, 071233) and is briefly described in the following sections.

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 National Functional Guidelines (EPA 1994, 048639) if the individual LCS recoveries were not within method-specific acceptable criteria. LCS recoveries should fall into the control limits of 75%–125% (LANL 2000, 071233).

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing. It is extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks serve as a measurement of bias and potential cross-contamination. All target analyte results should be below the contract-required detection limit (LANL 2000, 071233).

MS samples are used to assess the accuracy of inorganic chemical analyses. An MS sample provides information about the effect of each sample matrix on the sample preparation procedures and analytical technique. The spike sample recoveries should be within the acceptance range of 75%–125% (LANL 2000, 071233).

Laboratory duplicate samples assess the precision of inorganic chemical analyses. All relative percent differences (RPDs) between the sample and laboratory duplicate should be ±35% (LANL 2000, 071233).

ICSs verify interelement and background correction factors at the beginning and end of each analysis run.

Serial dilution samples are used to determine the concentration of an analyte when serial dilution is employed. The purpose of such dilution is to bring the concentration of an analyte in the sample within the range of the analysis or to increase the precision of the detected result.

The validation of inorganic chemical data using QA/QC samples and other methods results in the assignment of various qualifiers to individual sampling results or the rejection of the data. The inorganic chemical data were qualified using the appropriate SOPs, and the qualifiers do not affect the usability of the sampling results (except for R-qualified results). The qualified data (except R-qualified data) were used as reported. Table F-2.1-1 summarizes the qualified inorganic chemical data by site.

### F-2.2 Rejected Data

There were no rejected inorganic chemical data for the Phase II samples.

## F-3.0 SUMMARY OF RADIONUCLIDE ANALYSIS

The primary method used for the analysis of radionuclides is gamma spectroscopy, EPA SW-846 Method 901.1, but a variety of methods were used for individual radionuclides (e.g., isotopic uranium was analyzed by alpha spectroscopy). Samples were analyzed for one or more of the following: gamma-emitting radionuclides: americium-241, strontium-90, tritium, isotopic plutonium, and isotopic uranium. Table F-3.0-1 lists the analytical methods used for radionuclides.

### F-3.1 Radionuclide QA/QC Samples

Radionuclides with reported values less than the minimum detectable activity were qualified as not detected (U). Each radionuclide result was also compared with the corresponding total propagated uncertainty. If the result was not greater than 3 times the total propagated uncertainty, the radionuclide was qualified as not detected (U).

The precision and bias of radiochemical analyses performed at external laboratories were assessed using MS samples, LCSs, method blanks, laboratory duplicates, and tracers. The analytical services SOW (LANL 2000, 071233) specify that spike sample recoveries should be within ±25% of the certified value. LCSs were analyzed to assess the accuracy of radionuclide analyses. The LCSs serve as a monitor of the overall performance of each step during the analysis, including the radiochemical separation preparation. The analytical services SOW (LANL 2000, 071233) specify that the LCS recoveries should be within ±25% of the certified value. Method blanks are also used to assess bias. The analytical services SOW (LANL 2000, 071233) specify that the method blank concentration should not exceed the required minimum detectable activity.

The validation of radionuclide data using QA/QC samples and other criteria can result in the assignment of various qualifiers to individual sampling results or in the rejection of the data. The radionuclide data were qualified using the appropriate SOPs, and the qualifiers do not affect the usability of the sampling results (except for R-qualified results). The qualified data (except rejected [R-qualified] data) were used as reported. Table F-3.1-1 summarizes the qualified radionuclide data.

### F-3.2 Rejected Data

Table F-3.2-1 summarizes the rejected radionuclide data that were not used to characterize extent or evaluate potential dose.

Americium-241 and tritium data were rejected in one sample at SWMU 21-024(d). Because these data were rejected, extent has not been defined at this SWMU.

Cesium-134 data in two samples was rejected at Area of Concern C-21-027. The usable data were reported as nondetects at this site. Cesium-134 is not a chemical of potential concern at the site and does not affect the determination of nature and extent.

## F-4.0 ORGANIC CHEMICAL ANALYSIS METHODS

Samples were analyzed for one or more of the following organic chemical analytical suites: volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), explosive compounds, polychlorinated biphenyls (PCBs), and dioxins/furans. Table F-4.0-1 lists the analytical methods used for organic chemicals.

### F-4.1 Organic Chemical QA/QC Samples

Calibration verifications, instrument-performance checks, LCSs, method blanks, MS samples, surrogates, and internal standards (ISs) were analyzed to assess the accuracy and precision of the organic chemical analyses. The analytical services SOW define each of these QA/QC sample types (LANL 2000, 071233). The following section briefly describes these sample types.

Calibration verification, consisting of initial and continuing verification, is the establishment of a quantitative relationship between the response of the analytical procedure and the concentration of the target analyte. The initial calibration verifies the accuracy of the calibration curve and the individual calibration standards used to perform the calibration. The continuing calibration ensures the initial calibration is still holding and is correct as the instrument is used to process samples. The continuing calibration also serves to determine whether analyte identification criteria, such as retention times and spectral matching, have been met.

Instrument performance checks consist of both background and check source counts for the proportional and liquid scintillation counters and check source counts and full width at half-maximum determinations for the gamma spectrometers.

The LCS is a sample of a known matrix that has been spiked with compounds that are representative of the target analytes, and it serves as a monitor of the overall performance of a “controlled” sample. On a daily basis, the LCS is the primary demonstration of the ability to analyze samples with good qualitative and quantitative accuracy. The analytical results for the samples were qualified according to National Functional Guidelines (EPA 1999, 066649) if the individual LCS recoveries were not within method-specific acceptable criteria. LCS recoveries should fall into the control limits of 75%–125% (LANL 2000, 071233).

A method blank is 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 extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks are used to assess the potential for sample contamination during extraction and analysis. All target analytes should be below the contract-required detection limit in the method blank (LANL 2000, 071233).

MS samples are used to measure the ability to recover prescribed analytes from a native sample matrix. MS samples are aliquots of the submitted samples spiked with a known concentration of the target analyte(s). Spiking typically occurs before sample preparation and analysis. The spike sample recoveries should be within the acceptance range of 75%–125% (LANL 2000, 071233).

A surrogate compound (surrogate) is an organic chemical compound used in the analyses of organic target analytes that is similar in composition and behavior to the target analytes but 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 the extraction and analysis. The recovery percentage of the surrogates must be within specified ranges, or the results may be rejected or assigned a qualifier (LANL 2000, 071233).

ISs are chemical compounds added to every blank, sample, and standard extract at a known concentration. The ISs compensate for analyte concentration changes that might occur during storage of the extract and quantitation variations that can occur during analysis. ISs are used as the basis for quantitation of target analytes. The percent recovery (%R) for ISs should be within the range of 50%–200% (LANL 2000, 071233).

The validation of organic chemical data using QA/QC samples and other methods can result in the assignment of various qualifiers to individual sample results or the rejection of the data. The organic chemical data were qualified using the appropriate SOPs, and the qualifiers do not affect the usability of the sampling results (except for R-qualified results). The qualified data (except R-qualified data) were used as reported. Table F-4.1-1 summarizes the qualified organic chemical data.

### F-4.2 Rejected Data

Table F-4.2-1 summarizes the rejected organic chemical data. The rejected data were not used to characterize nature and extent or potential risk and do not affect the determination of extent or the evaluation of risk at the sites.

Various organic chemical results were qualified as rejected (R). Most of these results were reported as not detected and/or other usable data were available.

## F-5.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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LANL (Los Alamos National Laboratory), March 2008. “Delta Prime Site Aggregate Area Investigation Report, Revision 1,” Los Alamos National Laboratory document LA-UR-08-1834, Los Alamos, New Mexico. (LANL 2008, 102760)

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NMED (New Mexico Environment Department), January 12, 2009. “Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1,” New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

**Table F-1.0-1**
**Phase I Data Changes as a Result of Revalidation**

| AOC/SWMU | Sample ID | Analyte | Reporting Qualifier Changes |
|---|---|---|---|
| 21-022(f) | RE21-08-8720 | Acetone | J to U |
| | RE21-08-8726 | Acetone | J to U |
| | RE21-08-8727 | Acetone | J to U |
| | RE21-08-8728 | Acetone | J to U |
| 21-024(e) | RE21-07-74617 | Acetone | J to U |
| 21-024(j) | RE 21-07-6190 | Acetone | J to U |

**Table F-1.0-2**
**Vintage Pre-Phase I and II Data Removed from Data Sets**

| SWMU/ Consolidated Unit Data Set | Sample ID | Location ID |
|---|---|---|
| 21-003-99 | AAB8961 | 21-01884 |
| | AAB8966 | 21-01885 |
| | AAB8971 | 21-01886 |
| | AAB8976 | 21-01887 |
| | AAB8981 | 21-01888 |
| | AAB8983 | 21-01888 |
| | AAB8986 | 21-01889 |
| | AAB8991 | 21-01890 |
| | AAB8996 | 21-01891 |
| | AAB8998 | 21-01891 |
| | AAB9001 | 21-01892 |
| | AAB9003 | 21-01892 |
| | AAB9005 | 21-01892 |
| 21-013(c) | AAB7101 | 21-01908 |
| | AAB7102 | 21-01908 |
| | AAB7105 | 21-01909 |
| | AAB7106 | 21-01909 |
| | AAB7109 | 21-01910 |
| | AAB7110 | 21-01910 |
| | AAB7113 | 21-01911 |
| | AAB7114 | 21-01911 |
| | AAB7117 | 21-01912 |
| | AAB7118 | 21-01912 |
| | AAB7121 | 21-01913 |
| | AAB7122 | 21-01913 |
| | AAB7125 | 21-01914 |
| | AAB7126 | 21-01914 |
| | AAB7129 | 21-01915 |
| | AAB7130 | 21-01915 |
| | AAB7133 | 21-01916 |
| | AAB7134 | 21-01916 |
| | AAB7137 | 21-01917 |
| | AAB7138 | 21-01917 |

**Table F-2.0-1**
**Inorganic Chemical Analytical Methods**

| Analytical Method | Analytical Description | Analytical Suite |
|---|---|---|
| EPA Method 300 | Ion chromatography | Nitrate |
| SW-846:6850 | High-performance liquid chromatography/mass spectrometry | Perchlorate |
| SW-846: 6010/6010A/6010B | Inductively coupled plasma emission spectrometry (ICPES)—atomic emission spectroscopy | Aluminum, antimony, arsenic, barium, beryllium, boron, calcium, cadmium, cobalt, chromium, copper, iron, lead, lithium, magnesium, manganese, mercury, nickel, potassium, selenium, silicon, sodium, silver, thallium, titanium, uranium, vanadium, and zinc (target analyte list [TAL] metals) |
| SW-846:6020 | ICPES | Aluminum, antimony, arsenic, barium, beryllium, boron, calcium, cadmium, cobalt, chromium, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, sodium, silicon, silver, thallium, titanium, vanadium, and zinc (TAL metals) |
| SW-846:7060 | Graphite furnace atomic absorption | Arsenic |
| SW-846:9012a | Colorimetric method | Cyanide (total) |
| SW-846:7471A | Cold vapor atomic absorption | Mercury |

**Table F-2.1-1**
**Qualified Inorganic Chemical Data**

| SWMU/AOC/ Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-002(b) | METALS | 3 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-003-99 and 21-024(c) | ANION | 1 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-003-99 and 21-024(c) | METALS | 6 | J | The sample result was reported as detected between the instrument detection limit (IDL) and the estimated detection limit (EDL). |
| 21-003-99 and 21-024(c) | METALS | 2 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-003-99 and 21-024(c) | METALS | 2 | J- | The associated matrix spike recovery was < the lower acceptance limit (LAL) but >10%. |
| 21-003-99 and 21-024(c) | METALS | 5 | J+ | The associated matrix spike recovery was > the upper acceptance limit (UAL). |
| 21-003-99 and 21-024(c) | METALS | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-006(c)-99 | ANION | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the initial calibration blank (ICB)/continuing calibration blank (CCB), which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-009 | ANION | 5 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-012(b) | ANION | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-012(b) | METALS | 1 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-012(b) | METALS | 1 | J- | The associated matrix spike recovery was < LAL but >10%. |
| 21-013(c) | METALS | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank. |

**Table F-2.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-022(h)-99 | METALS | 1 | J | The sample result was reported as detected between the IDL and the EDL. |
| 21-024(a) | METALS | 1 | J | The sample result was reported as detected between the IDL and the EDL. |
| 21-024(a) | METALS | 1 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-024(b) | ANION | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-024(d) | ANION | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-024(d) | METALS | 2 | J | The sample result was reported as detected between the IDL and the EDL. |
| 21-024(d) | METALS | 1 | J | The sample and the duplicate sample results were ≥5 times the reporting limit (RL) and the duplicate RPD was > >35%. |
| 21-024(d) | METALS | 1 | J | Serial dilution sample RPD was >10% and the sample results was >50 times the method detection limit (MDL) (>100 times the MDL for ICPMS). |
| 21-024(d) | METALS | 1 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-024(h) | METALS | 3 | J | The sample result was reported as detected between the IDL and the EDL. |
| 21-024(h) | METALS | 3 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-024(h) | METALS | 1 | UJ | The associated matrix spike recovery was < the LAL but >10%. |
| 21-024(k) | METALS | 1 | J | The sample result was reported as detected between the IDL and the EDL. |
| 21-024(k) | METALS | 2 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-024(k) | METALS | 1 | J- | The associated matrix spike recovery was < the LAL but >10%. |
| 21-024(l)-99 | METALS | 3 | J | The sample result was reported as detected between the IDL and the EDL. |
| 21-024(l)-99 | METALS | 1 | U | The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| 21-024(n) | METALS | 4 | J- | The associated matrix spike recovery was < the LAL but >10%. |

**Table F-2.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-026(a)-99 | METALS | 1 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| C-21-027 | ANION | 2 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| C-21-027 | ANION | 1 | J- | The associated MS recovery was < the LAL but >10%. |
| C-21-027 | ANION | 5 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| C-21-027 | ANION | 1 | UJ | The associated matrix spike recovery was < the LAL but >10%. |
| C-21-027 | HEX_CR | 6 | UJ | The associated matrix spike recovery was < the LAL but >10%. |
| C-21-027 | METALS | 15 | J | The sample result was reported as detected between the IDL and the EDL. |
| C-21-027 | METALS | 2 | J | The sample and the duplicate sample results were ≥5 times the RL and the duplicate RPD was >35%. |
| C-21-027 | METALS | 23 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| C-21-027 | METALS | 21 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| C-21-027 | METALS | 5 | J- | The associated matrix spike recovery was < the LAL but >10%. |
| C-21-027 | METALS | 26 | J+ | The associated matrix spike recovery was > the UAL. |
| C-21-027 | METALS | 7 | U | The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| C-21-027 | METALS | 3 | U | The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| C-21-027 | METALS | 15 | U | The sample result is ≤5 times the concentration of the related analyte in the trip blank, equipment blank, or rinsate, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| C-21-027 | METALS | 1 | UJ | The associated matrix spike recovery was < the LAL but >10%. |
| C-21-027 | PERCHLORATE | 9 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| C-21-027 | PERCHLORATE | 6 | J+ | The MS/MS duplicate (MSD) %R was >125%. Qualify all associated detects as J+. |
| C-21-027 | WET_CHEM | 1 | J | Qualification of the data via data validation did not occur because of QC requirements. |

**Table F-2.1-1 (continued)**

| SWMU/AOC/ Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-027(a) | METALS | 1 | J | The sample and the duplicate sample results were ≥5 times the RL and the duplicate RPD was >35%. |
| 21-027(a) | METALS | 2 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| 21-027(a) | METALS | 2 | J+ | The associated matrix spike recovery was > the UAL. |
| 21-027(c) | METALS | 1 | J | The sample and the duplicate sample results were ≥5 times the RL and the duplicate RPD was >35%. |

**Table F-3.0-1**
**Radionuclide Analytical Methods**

| Analytical Method | Analytical Description | Target Compound List |
|---|---|---|
| HASL-300: Am-241 | Alpha spectroscopy | Americium-241 |
| EPA Method: 901.1<br>Generic: Gamma Spec | Gamma Spectroscopy | Americium-241, cesium-137, cesium-134, cobalt-60, europium-152, ruthenium-106, sodium-22, uranium-235 |
| EPA Method: 906.0<br>LA-10300-M, Vol. 1:R230 | Liquid scintillation | Tritium |
| HASL-300: ISOPU | Alpha spectroscopy | Isotopic plutonium |
| HASL-300: ISOU | Alpha spectroscopy | Isotopic uranium |
| EPA Method: 905.0<br>ASTM:D5811-95M | Gas proportional counting | Strontium-90 |

**Table F-3.1-1**
**Qualified Radionuclide Data**

| SWMU/AOC/ Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-006(c)-99 | H3 | 4 | J | Associated duplicate sample has duplicate error ratio or relative error ratio greater than the analytical laboratory's acceptance limits. |
| 21-024(l)-99 | Americium-241 | 1 | J+ | The tracer %R value is greater than the upper acceptance limit. |
| C-21-027 | H3 | 1 | J- | The associated matrix spike recovery was <10%. |
| C-21-027 | H3 | 2 | UJ | The associated matrix spike recovery was <10%. |
| C-21-027 | Isotopic plutonium | 2 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |

**Table F-3.2-1**
**Rejected Radionuclide Data**

| SWMU/AOC | Analyte | Reporting Qualifier | Count | Reason |
|---|---|---|---|---|
| 21-024(d) | Americium-241 | R | 1 | The associated MS recovery was <10%. |
| 21-024(d) | Tritium | R | 1 | The associated MS recovery was <10%. |
| C-21-027 | Cesium-134 | R | 2 | The analyte is rejected because spectral interferences prevent positive identification of the analytes. |

**Table F-4.0-1**
**Organic Chemical Analytical Methods**

| Analytical Method | Analytical Description | Target Compound List |
|---|---|---|
| EPA SW-846: 8321A and 8330 | High performance liquid chromatography | Explosive compounds |
| EPA SW-846:8270B<br>EPA SW-846:8270C | SVOCs | Analytical services SOW (LANL 2000, 071233) |
| EPA SW-846:8260B–Analysis | VOCs | Analytical services SOW (LANL 2000, 071233) |
| SW-846:8290–Analysis | Dioxins, furans | Analytical services SOW (LANL 2000, 071233) |
| EPA Method 3540–Extraction<br>EPA SW-846:8082–Analysis | PCBs | Analytical services SOW (LANL 2000, 071233) |

**Table F-4.1-1**
**Qualified Organic Chemical Data**

| SWMU/AOC/Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-002(b) | SVOC | 2 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-002(b) | SVOC | 4 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the percent relative standard deviation (%RSD) criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-003-99 and 21-024(c) | PCB | 60 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-003-99 and 21-024(c) | PCB | 6 | J | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-003-99 and 21-024(c) | PCB | 66 | J | The initial calibration verification (ICV) and/or continuing calibration verification (CCV) were recovered outside the method-specific limits. |
| 21-003-99 and 21-024(c) | PCB | 19 | J | The multicomponent standard was not analyzed within 72 h of the initial analysis. |
| 21-003-99 and 21-024(c) | PCB | 5 | J- | The surrogate is < the LAL but ≥10 %R. |
| 21-003-99 and 21-024(c) | PCB | 16 | UJ | The surrogate is < the LAL but ≥10%R. |
| 21-003-99 and 21-024(c) | PCB | 44 | UJ | The ICV and/or CCV were recovered outside the method-specific limits. |
| 21-003-99 and 21-024(c) | SVOC | 2 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-003-99 and 21-024(c) | SVOC | 2 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-013(c) | SVOC | 10 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-013(c) | SVOC | 8 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-023(a)-99 | SVOC | 2 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-023(a)-99 | SVOC | 1 | J | The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. |
| 21-023(a)-99 | SVOC | 5 | UJ | The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. |

**Table F-4.1-1 (continued)**

| SWMU/AOC/Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-023(a)-99 | SVOC | 3 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(d) | SVOC | 2 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-024(d) | SVOC | 3 | J | The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. |
| 21-024(d) | SVOC | 3 | J | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(d) | SVOC | 3 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(g) | SVOC | 6 | UJ | The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. |
| 21-024(g) | SVOC | 6 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(h) | SVOC | 2 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(k) | SVOC | 1 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(k) | SVOC | 9 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(l)-99 | SVOC | 28 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-024(l)-99 | SVOC | 5 | J | The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. |
| 21-024(l)-99 | SVOC | 1 | UJ | The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration. |

**Table F-4.1-1 (continued)**

| SWMU/AOC/Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| 21-024(l)-99 | SVOC | 9 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(n) | SVOC | 10 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-024(n) | VOC | 1 | UJ | The ICV and/or CCV were recovered outside the method-specific limits. |
| 21-026(a)-99 | SVOC | 1 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-026(a)-99 | SVOC | 7 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-027(a) | DIOXIN_FURAN | 1 | J | The ICV and/or CCV were recovered outside the method specific limits. |
| 21-027(a) | DIOXIN_FURAN | 15 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| 21-027(a) | SVOC | 4 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| 21-027(c) | SVOC | 1 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| C-21-027 | DIOXIN_FURAN | 1 | J | The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times. |
| C-21-027 | DIOXIN_FURAN | 28 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| C-21-027 | DIOXIN_FURAN | 1 | J- | The laboratory must spike all samples with the sample fortification solution and all sample extracts with recovery standard solution. The recovery acceptance criterion for each compound is 40%–135%. The fortification sample %R was <40% but >10%. |
| C-21-027 | HEXP | 3 | UJ | If the MS/ MS duplicate RPD was >30%, and the acceptance criteria are not reported, recovery limits of 70%–130% and an RPD of ≤30% should be used as the criteria. For solid and waste samples, it may be appropriate to accept an RPD of up to 40% based on professional judgment. |
| C-21-027 | PCB | 2 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| C-21-027 | SVOC | 29 | J | Qualification of the data via data validation did not occur because of QC requirements. |

**Table F-4.1-1 (continued)**

| SWMU/AOC/Consolidated Unit | Analytical Suite | Count | Reporting Qualifier | Description |
|---|---|---|---|---|
| C-21-027 | SVOC | 1 | J | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| C-21-027 | SVOC | 6 | UJ | The LCS %R was < the LAL but >10%. |
| C-21-027 | SVOC | 65 | UJ | The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995. |
| C-21-027 | VOC | 2 | J | Qualification of the data via data validation did not occur because of QC requirements. |
| C-21-027 | VOC | 7 | U | The sample result is ≤5 times (10 times for common organic laboratory contaminants) the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank. |
| C-21-027 | VOC | 30 | UJ | The ICV and/or CCV were recovered outside the method-specific limits. |

**Table F-4.2-1**
**Rejected Organic Chemical Data**

| SWMU/AOC/Consolidated Unit | Analyte | Reporting Qualifier | Count | Reason Description |
|---|---|---|---|---|
| 21-002(b) | Benzoic Acid | R | 1 | The LCS %R was <10%. |
| 21-003-99 and 21-024(c) | Aroclor-1254 | R | 1 | The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit. |
| 21-006(c)-99 | Acetone | R | 1 | The affected analytes were analyzed with a relative response factor (RRF) of <0.05 in the initial calibration and/or CCV. |
| 21-013(c) | Benzoic Acid | R | 2 | The LCS %R was <10%. |
| 21-024(d) | Benzoic Acid | R | 1 | The LCS %R was <10%. |
| 21-024(k) | Benzoic Acid | R | 2 | The LCS %R was <10%. |
| 21-024(n) | Acetone | R | 1 | The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV. |
| 21-026(a)-99 | Benzoic Acid | R | 1 | The LCS %R was <10%. |
| C-21-027 | Acetone | R | 3 | The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV. |
| C-21-027 | Benzoic Acid | R | 3 | The LCS %R was <10%. |
| C-21-027 | Butanone[2-] | R | 12 | The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV. |
| C-21-027 | Hexachlorodibenzofuran [1,2,3,7,8,9-] | R | 1 | The IS retention time and qualitative criteria for target compound identification were not met. |
| C-21-027 | Pentachlorodibenzofuran [2,3,4,7,8-] | R | 1 | The IS retention time and qualitative criteria for target compound identification were not met. |

# Appendix G

*Analytical Suites and Results and Analytical Reports*
*(on DVD included with this document)*

# Appendix H

*Risk Assessments*

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**Attachments**

Attachment H-1 ProUCL Files (on CD included with this document)

Attachment H-2 Ecological Scoping Checklists

## H-1.0 INTRODUCTION

This appendix presents the results of the human health and ecological risk-screening evaluations conducted in support of environmental characterization of the Delta Prime (DP) Site Aggregate Area located on DP Mesa within Technical Area 21 (TA-21) at Los Alamos National Laboratory (LANL or the Laboratory) (Figure 1.1-1 of the investigation report). The following sites are evaluated.

## H-2.0 BACKGROUND

### H-2.1 Site Descriptions and Operational History

TA-21 was used primarily for plutonium research, metal production, and related activities from 1945 to 1978. Since 1978, various administrative and research activities have been conducted at TA-21. The current land use is industrial, and it will remain industrial for the reasonably foreseeable future.

The following information on site descriptions and operational history is for sites where nature and extent have been defined. Consolidated Unit 21-006(c)-99 and SWMU 21-024(d) do not have vertical extent determined; however, additional samples will be collected will be at depths greater than are relevant for the risk scenarios and do not result in complete exposure pathways to receptors. Therefore, the additional samples to be collected will not affect the risk-screening results. Additionally, of the three SWMUs that make up Consolidated Unit 21-022(h)-99, only SWMU 21-022(h) is evaluated for risk because sampling at SWMU 21-022(i) will occur after building 21-002 is removed, and all samples collected at SWMU 21-022(j) are at depths deeper than are relevant for exposure.

### H-2.2 AOC 21-002(b), Drum Storage Area

AOC 21-002(b) is a former drum storage structure (structure 21-38) that consisted of three tin-siding walls, a roof, and a concrete floor. The north side of the structure was open. Fifty-five–gallon drums were stored upright within the structure and on the ground immediately outside the building. The contents of the drums stored in this structure are not known, and there are no documented spills or leaks from the drums.

#### Operational History

- 1945—Structure 21-038 was built southeast of a shop (building 21-031) to be used for drum storage (LANL 1991, 007529, p. 14-58). However, an engineering drawing shows structure 21-038 as a paint storage shed (LASL 1949, 096013).
- 1966—Structure 21-038 underwent decontamination and decommissioning (D&D) activities (LANL 1991, 007529, p. 14-58).

### H-2.3 Consolidated Unit 21-006(c)-99, Seepage Pits, Drainline, and Outfall

Consolidated Unit 21-006(c)-99 consists of SWMUs 21-006(a), 21-006(b), 21-006(c), and 21-006(d). These SWMUs are inactive underground seepage pits associated with buildings 21-002 and 21-003. In addition to a seepage pit, SWMU 21-006(b) also includes a drainline and outfall from the seepage pit.

**Operational History**

SWMU 21-006(a) consists of an unmarked underground seepage pit of approximately 0.1 acre, located between building 21-002 and former building 21-003.

- ~1945—The seepage pit was installed. According to the TA-21 Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) work plan (LANL 1991, 007529, p. 18-14), the pit received Hanford container wash water, bomb electrolytic decontamination solution (ethylene glycol, phosphoric acid, and plutonium), and chemical makeup room wastewater. Approximately 12 gal. of decontamination solution may have been emptied into the drain in room 322 each day.
- Documentation is not available indicating when use of the seepage pit ended.
- The pit was apparently backfilled and is not visible. Documentation is not available indicating whether the pit was located on the north or south side of the corridor that connected the buildings. If it was on the south side, it may be the same pit as SWMUs 21-006(c) and 21-006(d).

SWMU 21-006(b) consists of a brick manhole placed within a trench (structure 21-118), including a drainline and outfall (LANL 1991, 007529; p. 15-103). The drainline and pit were installed to receive ether waste from the ethyl ether extraction process as part of the original TA-21 plutonium purification process (Christensen and Maraman 1969, 004779, p. 8).

- 1945—The manhole and associated lines were installed during the construction of building 21-003 (LANL 1991, 007529; p. 15-103). A 3-in. cast-iron drainline exited the southeast side of building 21-002 and extended approximately 160 ft southward to structure 21-118. A 2-in. cast-iron outlet line ran approximately 100 ft southward from the pit to an outfall approximately 8 ft above the surface of a bench below the mesa top.
- September 1945—The ether extraction process was discontinued (Christensen and Maraman 1969, 004779, p. 48).
- Documentation is not available indicating when use of the pit ended.

SWMUs 21-006(c) and 21-006(d) are thought to be the same site because descriptions place them in proximity (LANL 1991, 007529, p. 18-10). SWMU 21-006(c) consists of a seepage pit located 15 ft outside the door to the bomb-cleaning room (room 322) at building 21-003. The pit reportedly received a bomb electrolytic decontamination solution from a drain in room 322. The pit is thought to be partially or entirely beneath current building 21-313 and/or the remaining central corridor portion of building 21-003. As with SWMUs 21-006(a) and 21-006(b), the period of operation has not been found in any available documentation. SWMU 21-006(d) may have been associated with a concrete pad and French drain system called the 21-272 dock. Waste from a second-story chemical makeup room was reportedly dumped or pumped into a stone-filled seepage pit, most likely the pit identified as SWMU 21-006(c).

### H-2.4 SWMU 21-009, Waste Treatment Laboratory

SWMU 21-009 is a former waste treatment laboratory (building 21-33) that was a 16-ft × 48-ft wood-frame structure with a 12-ft ceiling and a wooden floor built on concrete pillars.

**Operational History**

- 1948—Building 21-033 (a waste treatment laboratory) was constructed (LANL 1991, 007529, p. 17-29). Research into methods of recovering additional plutonium from waste streams was conducted at building 21-033 (LANL 1991, 007529, p. 3-1).
- 1965—Building 21-033 underwent D&D activities (LANL 1991, 007529, p. 17-29).

### H-2.5 SWMU 21-012(b), Dry Well and Pipelines

SWMU 21-012(b) consists of two concrete steam blowdown pits, a separate drainline that drained each pit toward the southern edge of DP Mesa, a seepage pit filled with river stones, a drywell, an outfall pipe associated with floor drains in building 21-009, and piping conveying effluent between structures.

**Operational History**

- 1945—Building 21-009 was built to serve as a steam plant.
- 1945–1971—Boiler blowdown was discharged through 3-in. steel drainlines into two concrete pits (structures 21-266 and 21-267, 10 $ft^2$ × unknown depth), each of which was drained by a 6-in. steel drainline that discharged effluent to the southern edge of DP Mesa. Effluent from building 21-009 floor drains was directed into a 6-in. vitrified clay pipe (VCP) that discharged on the mesa.
- 1971—Boiler blowdown was routed to an aboveground tank, and overflow went through a 3-in. steel drainline into a 6-$ft^2$, 2-ft-deep seepage pit filled with river stones.
- 1980—A 4-$ft^2$ × 54-ft-deep drywell was constructed to replace the seepage pit.
- 1985—Building 21-009 was removed and replaced with a new steam plant, building 21-357. The area was regraded (LANL 1991, 007529, pp. 17-37–17-40).

### H-2.6 SWMU 21-013(c), Surface Disposal Area

SWMU 21-013(c) is a former surface disposal area located at the eastern end of DP Mesa. The site consisted of mounds of earth; an excavated trench; and an earthen berm that contained scattered concrete, asphalt, and metal debris. Four large concrete pylons and several piles of soil, asphalt, and concrete also were located at the site. Other surface debris included glass, scrap metal, wood, cans, paper, and plastic. The SWMU had been disturbed in the past and appeared to contain only building materials. It is not known when the materials were disposed of at this site.

**Operational History**

- The dates of operation are not known (LANL 1990, 007512).
- 1988—As a result of a site visit, this inactive surface disposal area was identified as a SWMU northeast of the high-temperature chemistry building (21-209). It was noted that the area was disturbed and appeared to contain building debris (LANL 1991, 007529, p. 14-65).

### H-2.7 SWMU 21-022(f), Sump and Pipeline

SWMU 21-022(f) is an inactive sump (structure 21-173) and a pipeline. The sump received industrial waste from laboratory sinks in building 21-152 (a research laboratory) and from building 21-370 (a mechanical equipment building).

**Operational History**

- 1945—Building 21-152 was originally built to serve as a laboratory for polonium initiator research and production. A sump (structure 21-173) conveyed liquid effluent that originated from the building's laboratory sinks through a 6-in.-diameter steel pipe to Material Disposal Area (MDA) U (LASL 1946, 024460; Francis 2001, 076211). The brick-lined sump was approximately 5 ft 4 in. in diameter and located approximately 13 ft from the northeast corner of building 21-152 (LASL 1945, 001093; LASL 1946, 024460). The depth of the sump is a minimum of 6 ft 10 in. bgs.
- 1965—The sump (structure 21-173) was connected to manhole 21-221, which connects to the Waste Disposal Plant (building 21-257) (Francis 2001, 076211).

### H-2.8 Consolidated Unit 21-022(h)-99, Sumps, Drainline, and Outfall

Consolidated Unit 21-022(h)-99 consists of SWMU 21-022(h), a sump, drainline, and outfall that received industrial wastewater and drainage from floor and roof drains of the plutonium fuel service building 21-150; SWMU 21-022(i), a sump located in the equipment room of building 21-002; and SWMU 21-022(j), a sump that received drainage from the equipment room of building 21-003. SWMU 21-022(h) is evaluated for risk; however, SWMUs 21-022(i) and 21-022(j) are not evaluated. SWMU 21-022(i) sampling will occur after building 21-002 is removed, and all samples collected at SWMU 21-022(j) are deeper than the risk scenarios address.

**Operational History**

SWMU 21-022(h) consists of a sump (structure 21-202), drainline, and outfall.

- 1961–1962—Structure 21-202 was constructed of 36-in.-diameter corrugated metal pipe (CMP) to receive industrial wastewater and drainage from the building 21-150 basement floor and roof drains and route effluent through a 24-in.-diameter pipe that discharged to Los Alamos Canyon (LANL 1991, 007529, p. 18-55).
- 1991—The outfall discharged only treated cooling water from this time forward, and no documentation of removal of structures is available (LANL 1991, 007529, p. 15-53).

### H-2.9 Consolidated Unit 21-023(a)-99, Septic Systems

Consolidated Unit 21-023(a)-99 consists of SWMU 21-023(a), a septic tank and drainlines that reportedly serviced a janitor's mop sink in building 21-003; SWMU 21-023(b), a septic tank and drainlines that received wastewater from the shower room in building 21-003; and SWMU 21-023(d), a septic tank and drainlines that received industrial waste and sewage from building 21-003.

**Operational History**

SWMU 21-023(a) consists of a steel-reinforced concrete septic tank, and 4-in.-diameter cast-iron inlet and outlet lines connected to existing waste lines to the north and manhole 21-274 to the south (Andrews and Eshleman 1999, 071295).

- 1945—Building 21-003 was constructed. Documentation of the septic system construction date is not available.
- 1966—Septic tank (structure 21-225, 5 ft × 9 ft × 6 ft deep) and lines were removed when additions were made to building 21-003 and the new sewage treatment plant opened.

SWMU 21-023(b) consists of a septic tank (structure 21-142) and 4-in.-diameter cast-iron inlet and outlet lines connected to structure 21-084, which connected to existing waste lines to the north and manhole 21-274 to the south (Andrews and Eshleman 1999, 071295).

- 1945—Building 21-003 and the septic system were constructed.
- 1966—Septic tank (500-gal., approximately 6.5-ft-diameter, circular) and lines may have been removed when the new sewage treatment plant opened.

SWMU 21-023(d) consists of a septic tank and 4-in.-diameter cast-iron inlet and outlet lines that were probably connected to the north to the 4-in.-diameter line leading to the treatment facilities (building 21-035) and to the south to manhole 21-273 (Andrews and Eshleman 1999, 071295).

- 1960—The 5-ft × 3-ft × 5.5-ft-deep steel-reinforced concrete septic tank (structure 21-187) was installed under room 364 of building 21-003 and received industrial waste and sewage.
- ~1966—The septic tank was bypassed and the pipeline was connected to the new sewage treatment plant.
- 1966—The septic tank and lines were removed when additions were made to building 21-003 and the new sewage treatment plant opened.

### H-2.10 SWMU 21-024(a), Septic System

SWMU 21-024(a) is an inactive septic system that previously routed sewage from the old steam plant (building 21-009) through a septic tank (structure 21-53) to the surface on the south rim of DP Mesa above Los Alamos Canyon (LASL 1946, 071281; LASL 1958, 001519).

#### Operational History

- 1945—A steam plant (building 21-009) was built, and the septic system was constructed at the same time (LASL 1958, 001519). The reinforced concrete septic tank measured 9 ft × 5.75 ft × 7.25 ft deep (structure 21-053). The inlet line is a 6-in.-diameter VCP, and the outlet line is a 4- or 6-in.-diameter VCP.
- 1966—The septic system was no longer used and was left in place.
- 1985—Building 21-009 was removed and replaced with a new steam plant, building 21-357. The area was regraded, but documentation is not available indicating if the piping or tank was removed.

### H-2.11 SWMU 21-024(b), Septic System

SWMU 21-024(b) is a septic tank, pipelines, and associated outfall that formerly routed sewage from building 21-017 (a passageway connecting buildings 21-004 and 21-005).

**Operational History**

- 1945—Building 21-017 (a passageway) was constructed and the sanitary sewer system routed sewage through a reinforced concrete septic tank 9 ft × 5.75 ft × 7.25 ft deep (structure 21-055) to the surface soil south of building 21-005 (LASL 1946, 071281; LANL 1991, 007529, p. 15-34). The inlet and outlet pipelines are 6-in.- and 4-in.-diameter VCP, respectively (LASL 1946, 071281).
- 1969—Building 21-017 underwent D&D activities (LANL 1991, 007529, p. 15-34).

### H-2.12 SWMU 21-024(d), Septic System

SWMU 21-024(d) is an inactive septic tank, pipelines, and associated outfall that routed sewage from an office building (building 21-001) to the south rim of the mesa above Los Alamos Canyon.

**Operational History**

- 1945—Building 21-001 was constructed as an office building and the sanitary sewer system routed sewage via 6-in.-diameter VCP lines (LASL 1946, 071281) through a reinforced concrete 17.5-ft × 9.5-ft × 8.83-ft-deep septic tank (structure 21-106), until the pipe surfaced on the south rim of DP Mesa above Los Alamos Canyon (LANL 1991, 007529, p. 15-34).
- Early 1960s—Building 21-001 was removed (McGehee and Garcia 1999, 087442, p. 76).
- 1995—The septic tank was filled with pea gravel and left in place. The inlet and outlet pipelines were grouted with concrete and left in place (LANL 1996, 053789, p. 2).

### H-2.13 SWMU 21-024(e), Septic System

SWMU 21-024(e) is an inactive septic system that routed sewage from the former TA-21 laundry (building 21-020) and a former diesel power plant and shop (building 21-014) through a septic tank (structure 21-123) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The septic tank and outfall area were located east of MDA V.

**Operational History**

- 1945—Building 21-020 was constructed as a laundry facility. The sanitary sewer system routed sewage via 6-in. VCP drainlines (LASL 1946, 071281) or via 4-in. cast-iron pipe for the first 5 ft from building 21-020 and then via 4-in. VCP (Francis 1995, 087271) through a 1000-gal. steel septic tank (structure 21-123, 11.33 ft × 6.33 ft × 8 ft deep), and to the outfall (LASL 1946, 071281). The outfall was located approximately 20 ft from the southern edge of DP Mesa above Los Alamos Canyon (LASL 1946, 024460).
- 1946–1947—Building 21-014 was constructed as a diesel power plant and shop (McGehee and Garcia 1999, 087442, p. 156). A 4-in. tile pipe exited the southeast corner of the building and connected to a septic tank (structure 21-123) as well as connected to the laundry building (building 21-020) (LASL 1946, 087574). There was also an exterior grease trap connected to the pipeline exiting the building.
- 1947–1948—Building 21-046, a diesel power plant and warehouse, was constructed as an addition to the existing power plant (building 21-014) (McGehee and Garcia 1999, 087442, p. 174). No researched engineering drawings depict a pipeline connection from this building to

the septic tank (structure 21-123). However, a geophysical survey conducted in 2004 indicates there may have been a pipeline connection at one time (LANL 2004, 087461).

- 1965—The laundry facility (building 21-020) underwent D&D (LANL 1991, 007529, p. 15-38).
- 1996—The septic tank was emptied and filled with pea gravel, inlet and outlet lines were grouted with concrete, and the surrounding area was restored and reseeded (LANL 1996, 053788).
- 2006—Building 21-046 underwent D&D.

### H-2.14 SWMU 21-024(g), Septic System

SWMU 21-024(g) is an inactive septic system that formerly routed sewage from building 21-031 (cold work shop/electronics) through pipelines and septic tank (structure 21-125) into two drainage ditches (LASL 1947, 087576; LASL 1948, 087577). Engineering drawings from the 1950s (LASL 1953, 024437; LASL 1958, 000406) indicate sewage from building 21-007 (warehouse) being tied into the system. Subsequently, the drainage ditches were no longer used and the septic tank was moved farther north outside of the fenced area to discharge on the surface of the north rim of DP Mesa. Additionally, a cut pipe visibly exits building 21-031, directing flow into the 2-ft × 2-ft × 1-ft concrete storm drain now present in the paved parking area.

#### Operational History

- 1948—Building 21-031 was constructed. The septic system consisted of a concrete 4-ft × 8.25-ft × 7.2-ft-deep septic tank (structure 21-125; septic tank 1). It routed sewage via a 4-in. VCP line and another 2-in. pipeline, which converged from an electronics shop/cold workshop (building 21-031) to a 4-in. VCP line into two drainage ditches, each approximately 90 ft long × 9 ft wide × 5 ft deep (LASL 1947, 087576; LASL 1948, 087577). The bottom 4 ft of the drainage ditches consisted of 2-in. to 8-in. rock with a 4-in. perforated fiber pipe running through the center. Also present at the northeast end of building 21-031 was a 2-in. drainpipe ending with a splash block (LASL 1948, 087577). This was connected to a funnel-type drain in the building for spot welder water.
- 1953—A new septic system, consisting of a 18-ft × 9.5-ft × 5-ft-deep-reinforced concrete septic tank (structure 21-125; septic tank 2) (LANL 1991, 007529, p. 15-18), replaced the former septic system described above. It routed sewage via 4-in. VCP lines from a warehouse (building 21-007) and the electronics shop/cold workshop (building 21-031) to the surface on the north rim of DP Mesa above DP Canyon (LASL 1958, 000406; LANL 1991, 007529, p. 15-18).
- 1966—Septic tank 2 was no longer used and was left in place (LANL 1991, 007529, p. 15-18).

### H-2.15 SWMU 21-024(h), Septic System

SWMU 21-024(h) is a septic tank, pipelines, and associated outfall that originally received sewage from building 21-151, an administrative building and shop. Later, building 21-152, a polonium-processing and high-temperature laboratory, was tied into the septic tank.

#### Operational History

- 1945—Building 21-151 was constructed as a plutonium-processing facility and the sanitary sewer system routed sewage through a 6-in.-diameter VCP (LASL 1946, 071281) and a reinforced

concrete 11.33-ft × 6.33-ft × 8.67-ft-deep septic tank (structure 21-163) to the surface on the north rim of DP Mesa above DP Canyon (LASL 1945, 024459; LANL 1991, 007529, p. 15-94).

- 1945—Building 21-152 was constructed as a laboratory that worked on Project Rover serving as a polonium-processing and a high-temperature laboratory (LASL 1946, 024460).
- Early 1960s—Building 21-151 was removed.
- 1965—Building 21-152 septic system was tied into the existing septic tank (structure 21-163).
- 1966—The septic tank was no longer used and was left in place (LANL 1991, 007529, p. 15-94).

### H-2.16 SWMU 21-024(i), Septic System

SWMU 21-024(i) is a septic tank, pipelines, and associated outfall. The only portion of the septic system remaining at the site is the inlet line from a high-temperature chemistry building (21-209) to the fenceline. Building 21-209 currently overlays part of the pipeline that previously connected to a sump (structure 21-175). The portion of the inlet line from the fence to the septic tank, the septic tank, the outlet line, and the outfall were removed in 2001 as part of an interim action (LANL 2003, 076053).

#### Operational History

- 1945—Building 21-152 was constructed to serve as a polonium-processing and a high-temperature laboratory, and the septic system that served building 21-152 was constructed at the same time. The septic system routed sewage from the laboratory via 6-in.-diameter VCP inlet line to the reinforced concrete 6-ft × 10-ft × 8-ft-deep septic tank (structure 21-181) through a sump (structure 21-175) (LASL 1946, 024460). Blowdown pipelines from the cooling towers (structures 21-166 and 21-167) were also connected to this sump. Effluent was routed via 6-in.-diameter VCP outlet line to the surface in a broad open area with a gentle slope extending approximately 30 ft to the south edge of DP Mesa above Los Alamos Canyon. The sump and portions of the pipe currently lie under building 21-209 (LASL 1946, 071281).
- 1964–1965—Building 21-209 was built to serve as a high-temperature chemistry building and was located on top of the existing inlet lines from building 21-152, structure 21-166, and structure 21-167 (LASL 1946, 071281). New blowdown pipelines from structures 21-166 and 21-167 were connected into the SWMU 21-024(k) septic system.
- 1965—Septic system was no longer used and left in place.

### H-2.17 SWMU 21-024(j), Septic System

SWMU 21-024(j) is an inactive septic tank, pipelines, and associated outfall that received sewage from building 21-155, a warehouse and laboratory.

#### Operational History

- 1949—Building 21-155 (combined with buildings 21-206 and 21-207 from 1963 to 1965 to become building 21-155) was constructed for initiator research and production.
- 1961—A septic system was constructed to route sewage from a warehouse/laboratory (building 21-155) to a reinforced concrete 5-ft × 3-ft × 6-ft-deep septic tank (structure 21-194) and associated 4-in.-diameter VCP lines (LANL 1991, 007529, p. 15-83). The tank is located off the

southwest corner of building 21-155 near the south edge of the perimeter road (LANL 1991, 007529, p. 15-83).

- 1966—The septic tank was no longer used and was left in place (LANL 1991, 007529, p. 15-83).

### H-2.18 Consolidated Unit 21-024(l)-99, Sump and Associated Lines, Outfall, Aboveground Storage Tank and Associated Lines

Consolidated Unit 21-024(l)-99 consists of SWMU 21-022(a), a sump and associated lines; SWMU 21-024(l), an outfall; and AOC 21-004(a), an aboveground storage tank and associated lines.

#### Operational History

SWMU 21-022(a) consists of a 5-ft-diameter brick sump of unknown depth located north of building 21-021 with a 4-in. inlet line from the building, but documentation is not available indicating if an outlet line exists or describing the type of line.

- 1946—Building 21-021 and sump were constructed. Building 21-021 was used as a secure vault to store special fissile material, including uranium and plutonium metal. The inside of the sump contains a metal catch basin approximately 5 ft deep.

SWMU 21-024(l) consists of an outfall that received liquid waste from the floor drain of building 21-021 machine room via a 3-in. cast-iron pipeline (LASL 1960, 001611).

AOC 21-004(a) consists of a 6000-gal. aboveground steel tank (structure 21-335), 8 ft in diameter and 16 ft long, and a 6-in. cast-iron pipeline from building 21-021.

- 1974—The tank was installed to receive effluent from floor drains in building 21-021.

### H-2.19 SWMU 21-024(o), Pipeline and Outfall

SWMU 21-024(o) is thought to have been a 4-in. VCP drainline that served the old diesel plant (building 21-046) and an associated outfall.

#### Operational History

- 1947–1948—Building 21-046, a diesel power plant and warehouse, was constructed as an addition to the existing power plant (building 21-014), and SWMU 21-024(o) was thought to have been a 4-in. VCP line serving it (LANL 1991, 007529, p. 15-56; McGehee and Garcia 1999, 087442, p. 174). The pipe discharged south into Los Alamos Canyon (LASL 1946, 071281).
- 1957—Building 21-046 was converted to a warehouse/maintenance shop (LANL 1991, 007529, p. 15-56).
- 1985—An engineering drawing depicts building 21-046 as a machine shop (LANL 1985, 087578).
- 2006—Building 21-046 was removed and the foundation was left in place.

### H-2.20 Consolidated Unit 21-026(a)-99, Sewage Treatment Plant

Consolidated Unit 21-026(a)-99 is a sewage treatment plant that consists of SWMUs 21-013(a), a surface disposal area; 21-026(a), a sewage treatment plant; and 21-026(b), four sludge drying/sand filter beds; and AOCs 21-026(c), a dosing siphon chamber; and 21-026(d), an outfall that served the TA-21 facilities.

**Operational History**

SWMU 21-026(a) consists of an inactive sewage treatment plant housed in building 21-227. The plant is located at the eastern end of DP Mesa. The treatment plant replaced the original septic tank/filter fields and septic tank/surface discharge systems throughout TA-21. The treatment plant was an extended aeration sanitary waste treatment plant with a grit chamber, comminuter, digester, aeration tank, and clarifier. The plant treated sanitary wastes and cooling water from TA-21 facilities and received water from decontamination activities, janitor's scrub water, and waste from other TA-21 operations. Originally, treated effluent leaving building 21-227 was released at a concrete spill pad located on the southern edge of DP Canyon [AOC 21-026(d)]. Later, effluent was discharged via a dosing siphon chamber to sand filter/sludge drying beds.

- 1966—Sewage treatment plant was built.
- 1992—Traditional treatment operations ended.
- 1992–present—All waste received is stored until pumped out by truck for transport to the TA-46 facility for treatment/disposal.

SWMU 21-026(b) consists of four sludge drying/sand filter beds; each is 14.5-ft by 23-ft with 4-ft deep concrete walls.

- 1966–1990—Sludge drying beds were operational.
- 1990—The tile drainlines were removed and connections were plugged with concrete.
- 1990–~1992—The two westernmost sand filters received effluent from the dosing siphon chamber. Effluent was piped to a gauging station then to the outfall at the edge of mesa.
- 1992—The beds were filled with clean sand when treatment operations ceased.

AOC 21-026(c) consists of a dosing siphon chamber that was a 5-ft wide × 7-ft long × 8-ft-deep concrete tank (structure 21-348). The dosing siphon chamber received effluent until the chamber was full and then was pumped to the two westernmost sand filter beds.

- 1996—A chlorine contact chamber was built with an outfall [AOC 21-026(d)] to the mesa edge.
- 1990—The contact chamber was converted to a dosing siphon chamber; the manhole and outfall lines were plugged with concrete.
- 1990–1992—Effluent from the dosing siphon chamber was pumped to the sand filter beds.
- 1992—The chamber was left in place when treatment operations ceased.

AOC 21-026(d) consists of an outfall. Discharge from the sewage treatment plant flowed through an 8-in.-diameter VCP into a concrete channel on the north edge of DP Mesa and ran down a natural drainage to a tributary of DP Canyon.

- 1966–1992—The outfall received treated liquid wastes from building 21-227.
- March 10, 1998—The outfall (National Pollution Discharge Elimination System [NPDES] Outfall 05S) was deleted from the Laboratory's NPDES permit.

SWMU 21-013(a) consists of a surface disposal area, approximately 45 $ft^2$.

- 1966–1992—Surface disposal area was used for the periodic disposal of the top layers of sand from the filter beds at SWMU 21-026(b).
- 1994—Sand pile was no longer visible.

### H-2.21 SWMU 21-027(a), Drainlines, Surface Drainage, and Outfall

SWMU 21-027(a) consists of drainlines that received effluent from floor drains in building 21-003, a surface-drainage system, and an outfall that discharges to the mesa edge and into Los Alamos Canyon.

#### Operational History

- 1945—Building 21-003 was built as part of original DP West plutonium facilities. A 4-in.-diameter VCP ran beneath a paved area south of the building for approximately 30 ft and emptied into a storm drain. A 12-in.-diameter culvert ran from the storm drain underground for approximately 50 ft and emptied onto the ground at a ponding area on the southwest corner of the footprint of former cooling tower (structure 21-143, designated as AOC C-21-027). From the cooling tower footprint, runoff flowed in an unlined ditch to a 24-in.-diameter CMP culvert that carries runoff beneath the south perimeter road to the mesa edge. The CMP extended approximately 3 ft over the mesa edge (LANL 1991, 007529, p. 15-69).
- 1994—Outfall was permitted as outfall EPA03A031 under NPDES Permit No. NM0028355 (EPA 1994, 065280).
- 1994–1995—Building 21-003, its drains and the pipes beneath, and the cooling tower were removed during D&D activities. The 4-in.-diameter pipe beneath the paved area was left in place, as was the storm drain, which collected runoff from nearby parking lots.
- 1995—Outfall removed from Laboratory's NPDES permit, effective July 11, 1995.

### H-2.22 SWMU 21-027(c), Pipeline and Outfall

SWMU 21-027(c) is a 4-in. VCP line that exited former building 21-006 (a cafeteria and machine shop removed in 1966) and discharged to the south on DP Mesa.

#### Operational History

- 1945—Building 21-006 was constructed as a cafeteria and machine shop (LASL 1945, 024459). A 4-in.-diameter VCP line exited the southeast corner of the building and discharged to the south on DP Mesa (LANL 1991, 007529, p. 15-18).
- 1966—Building 21-006 was removed and the pipe was left in place (LANL 1991, 007529, p. 15-18).

### H-2.23 Investigation Sampling

The final data set used to identify chemicals of potential concern (COPCs) and evaluate potential risks to human health and the environment for the DP Site Aggregate Area consists of all qualified analytical results compiled from the 2006–2009 investigations. Only those data determined to be decision-level following the data-quality assessment (Appendix F) are included in this appendix.

### H-2.24 Determination of Chemicals of Potential Concern

The determination of COPCs is provided in the DP Site Aggregate Area Investigation Report, Revision 1 (LANL 2008, 104989; NMED 2009, 104978). Only COPCs detected above background (inorganic chemicals and radionuclides), had detection limits greater than background values (BVs) (inorganic chemicals), were detected (organic chemicals, inorganic chemicals with no BVs), and radionuclides detected at depths where fallout values do not apply, were retained. The ecological evaluation utilizes data for samples collected from 0–5 ft below ground surface (bgs). The industrial scenario utilizes data for samples collected from 0–1 ft bgs. The construction worker and the residential scenarios utilize data for samples collected from 0–10 ft bgs. However, sampling depths often overlapped because of multiple investigations; therefore, all samples with a starting depth less than the lower bound of the interval for each scenario were included in the risk assessments. Tables H-2.2-1 to H-2.2-60 summarize the COPCs evaluated for risk or dose for each of the sites in the DP Site Aggregate Area. Some of the COPCs may not be evaluated for potential risk or dose under one or more scenarios because they were only reported below the depth interval associated with a given scenario.

## H-3.0 CONCEPTUAL SITE MODEL

The potential contaminant sources, transport mechanisms, and receptors associated with the conceptual site model are described below.

### H-3.1 Potential Contaminant Sources

The sites in the DP Site Aggregate Area consist of two types. The first type is the wastewater treatment plant site, Consolidated Unit 21-026(a)-99. This site encompasses a large area and a broad suite of COPCs from waste streams. Consolidated Unit 21-026(a)-99 has surface and subsurface COPCs associated with old, inactive sludge beds, as well as an outfall.

The second type of sites is subsurface structures (septic tanks, seepage pits, manholes, and their associated piping). Although different COPCs may be found at each site depending on the materials discharged to them, the sites have relatively similar pathways for releases and exposures. The COPCs occur in the subsurface surrounding the structures, particularly at the junctions between tanks and piping or connections in the associated piping structures. Some of the septic tanks had outfall pipes; effluent at these outfalls could contribute to COPCs on the surface and in the subsurface. All of the structures associated with the septic tanks have been excavated and removed.

Releases at the sites addressed may have occurred as a result of potential leaks from septic systems, storage tanks, waste lines and drains; discharges from outfalls, sumps, waste treatment processes; and spills.

### H-3.2 Receptors and Exposure Pathways

The primary exposure media for human receptors are surface soil and subsurface soil/tuff that may be brought to the surface through intrusive activities. Human receptors may be exposed through direct contact with soil or suspended particulates by ingestion, inhalation, dermal contact, and external irradiation pathways. Direct contact exposure pathways from surface contamination to human receptors are complete for the industrial, construction worker, and resident. Direct contact exposure pathways from subsurface contamination to human receptors are complete for the construction worker and resident. Migration of contamination to groundwater through the vadose zone is unlikely given the depth to

groundwater (greater than 1000 ft bgs) at the site. Sources, exposure pathways, and receptors are shown in the conceptual site model (CSM) (Figure H-3.2-1).

The sites of the DP Site Aggregate Area are in an industrial area or on the slopes of canyon walls. The developed sites provide minimal potential habitat for ecological receptors, especially where sites are covered with asphalt. For unpaved sites or areas of sites, exposure pathways are complete to surface soil and tuff for ecological receptors. Exposure is assessed across the site to a depth of 0–5 ft. Weathering of tuff is the only viable natural process that may result in the exposure of receptors to COPCs in tuff. However, because of the slow rate of weathering expected for tuff, exposure to COPCs in tuff is negligible, although it is included in the assessments. Exposure pathways to subsurface contamination below 5 ft are not complete unless contaminated soil or tuff were excavated and brought to the surface. The potential pathways are root uptake by plants, inhalation of dust, dermal contact, incidental ingestion of soil, external irradiation, and food web transport. Pathways from subsurface releases may be complete for plants. Surface water was not evaluated because of the lack of surface water features. Sources, exposure pathways, and receptors are presented in the CSM (Attachment H-2).

### H-3.3 Environmental Fate and Transport

The evaluation of environmental fate addresses the chemical processes affecting the persistence of a chemical in the environment; the evaluation of transport addresses the physical processes affecting mobility of a contaminant along a migration pathway. Migration through soil and tuff depends on properties such as soil pH, rate of precipitation or snowmelt, soil moisture content, soil/tuff hydraulic properties, and properties of the COPCs. Migration into and through tuff also depends on the unsaturated flow properties of the tuff and the presence of joints and fractures.

The most important factor with respect to the potential for COPCs to migrate to groundwater is the presence of saturated conditions. Downward migration in the vadose zone is also limited by a lack of hydrostatic pressure as well as the lack of a source for the continued release of contamination. Without sufficient moisture and a source, little or no potential migration of materials through the vadose zone to groundwater occurs.

Contamination at depth is addressed in the discussion of nature and extent in the main text. Results from the deepest samples collected at most sites showed either no detected concentrations of COPCs or low/trace-level concentrations of only a few inorganic, radionuclide, and/or organic COPCs in tuff. Consolidated Unit 21-006(c)-99 and SWMU 21-024(d) are the exceptions, as deeper sampling to define extent is required at these sites. The limited extent of contamination is related to the absence of the key factors that facilitate migration, as discussed above. Given how long the contamination has been present in the subsurface, physical and chemicals properties of the COPCs, and the lack of saturated conditions, the potential for contaminant migration to groundwater is very low.

The New Mexico Environment Department (NMED) guidance (NMED 2009, 108070) contains screening levels that consider the potential for contaminants in soil to result in groundwater contamination. These screening levels consider equilibrium partitioning of contaminants among solid, aqueous, and vapor phases and account for dilution and attenuation in groundwater through the use of dilution attenuation factors (DAFs). These DAF soil screening levels (SSLs) can be used to identify chemical concentrations in soil that have the potential to contaminate groundwater (EPA 1996, 059902). Screening contaminant concentrations in soil against these DAF SSLs does not, however, provide an indication of the potential for contaminants to migrate to groundwater. The assumptions used in the development of these DAF SSLs include an assumption of uniform contaminant concentrations from the contaminant source to the water table (i.e., it is assumed that migration to groundwater has already occurred). Furthermore, this

assumption is inappropriate for cases such as the DP Site Aggregate Area where sampling has shown that contamination is vertically bounded near the surface and the distance from the surface to the water table is large. For these reasons, screening of contaminant concentrations in soil against the DAF SSLs was not performed.

The relevant release and transport processes of the COPCs are a function of chemical-specific properties that include the relationship between the physical form of the constituents and the nature of the constituent transport processes in the environment. Specific properties include the degree of saturation, the potential for ion exchange or sorption, and the potential for natural bioremediation. The transport of volatile organic compounds (VOCs) occurs primarily in the vapor phase by diffusion or advection in subsurface air. The chemical and physical properties of the DP Site Aggregate Area COPCs are presented in Tables H-3.3-1, H-3.3-2, and H-3.3-3.

The primary release and transport mechanisms that may lead to the potential exposure of receptors in the DP Site Aggregate Area include

- dissolution and/or particulate transport of surface contaminants during precipitation and runoff events;
- vaporization and gaseous diffusion and advection of VOCs and tritium in air;
- water line breaks resulting in sheet flow;
- preferential flow paths along buried utility lines;
- airborne transport of contaminated surface soil;
- continued dissolution and advective/dispersive transport of contaminants contained in subsurface soil and tuff;
- infiltration of water through the vadose zone;
- disturbance of contaminants in shallow soil and subsurface tuff by construction, D&D, or Laboratory operations;
- biotic perturbation and/or translocation of contaminants in subsurface contaminated media; and
- uptake of contaminants from soil and water by biota.

Contaminant distributions at the sites indicate that after the initial deposition of contaminants from operational activities and historical remediation efforts, elevated levels of COPCs tend to remain concentrated in the vicinity of the original release points.

### H-3.3.1 Inorganic Chemicals

In general, and particularly in a semiarid climate such as that found at the sites within the DP Site Aggregate Area, inorganic chemicals are not highly soluble or mobile in the environment. The primary physical and chemical factors that determine and describe the distribution of inorganic COPCs within the soil and tuff are the water solubility of the inorganic chemical and the soil-water partition coefficient ($K_d$). Other factors besides the $K_d$ values, such as speciation in soil and oxidation/reduction potential (Eh) potential and pH, also play a role in the likelihood that inorganic chemicals will migrate. The $K_d$ values provide a general assessment of the potential for migration through the subsurface; chemicals with higher $K_d$ values are less likely to be mobile than those with lower $K_d$ values. Inorganic chemicals with $K_d$ values greater than 40 are very unlikely to migrate through soil towards the water table (Kincaid et al. 1998, 093270). Table H-3.3-1 presents the $K_d$ values for the inorganic COPCs identified at the DP Site

Aggregate Area sites. Based on this criterion, aluminum, antimony, barium, beryllium, cadmium, calcium, chromium, cobalt, lead, lithium, manganese, mercury, nickel, thallium, uranium, vanadium, and zinc have a low potential to mobilize and migrate through soil and the vadose zone. The $K_d$ values for arsenic, copper, cyanide, iron, molybdenum, nitrate, perchlorate, selenium, silver, and strontium are less than 40 and may indicate that these inorganic chemicals have a greater potential to mobilize and migrate through soil and the vadose zone.

The COPCs with $K_d$ values less than 40 are discussed further in the following section. Information about the fate and transport properties of inorganic chemicals was obtained from individual chemical profiles published by the Agency for Toxic Substances and Disease Registry (ATSDR) (ATSDR 1997, 056531). Information for these inorganic chemicals is also available from the ATSDR website at http://www.atsdr.cdc.gov/toxpro2.html, with the exception of molybdenum, for which there is no profile.

- Arsenic may undergo a variety of reactions, including oxidation-reduction reactions, ligand exchange, precipitation, and biotransformation. Arsenic forms insoluble complexes with iron, aluminum, and magnesium oxides commonly found in soil, and in this form, arsenic is relatively immobile. However, under low pH and reducing conditions, arsenic can become soluble and may potentially leach into groundwater or result in runoff of arsenic into surface waters. Arsenic is expected to have low mobility under the environmental conditions (average soil pH is 7.9) present in the DP Site Aggregate Area.
- Copper movement in soil is determined by physical and chemical interactions with the soil components. Most copper deposited in soil is strongly adsorbed and remains in the upper few centimeters. Copper will adsorb to organic matter, carbonate minerals, clay minerals, hydrous iron, and manganese oxides. In most temperate soil, pH, organic matter, and ionic strength of the soil solutions are the key factors affecting adsorption. Copper binds to soil much more strongly than other divalent cations, and the distribution of copper in the soil solution is less affected by pH than other metals. Copper is expected to be bound to the soil and move in the system by way of transport of soil particles by water as opposed to movement as dissolved species. The average soil pH is 7.9 for the DP Site Aggregate Area determined from investigation sampling results, so leaching of copper is unlikely.
- Cyanide tends to adsorb onto various natural media, including clay and sediment; however, sorption is insignificant relative to the potential for cyanide to volatilize and/or biodegrade. At soil surfaces, volatilization of hydrogen cyanide is a significant mechanism for cyanide loss. Cyanide occurring at low concentrations in subsurface soil is likely to biodegrade under both aerobic and anaerobic conditions.
- Iron is naturally occurring in soil and tuff and may be relatively mobile under reducing conditions. Iron is sensitive to soil pH conditions and occurs in two oxidation states: iron(III), the insoluble oxidized form, and iron(II), the reduced soluble form. Most iron in well drained neutral to alkaline soil is present as precipitates of iron(III) hydroxides and oxides. With time, these precipitates are mineralized and form various iron-bearing minerals, such as lepidcrocite, hematite, and goethite. The average soil pH is 7.9 for the DP Site Aggregate Area, so iron is not expected to be mobile.
- Molybdenum is naturally occurring in soil and tuff. It is considered an essential trace element, necessary for human health (http://rais.ornl.gov/tox/profiles/molybdenum_c_V1.html)
- Nitrate and to a lesser degree perchlorate, are highly soluble in water and may migrate with water molecules in saturated soil. As noted above, the subsurface material beneath the DP Site Aggregate Area sites has low moisture content, which would inhibit the mobility of nitrate and perchlorate as well as most other inorganic chemicals.

- Selenium is not often found in the environment in its elemental form but is usually combined with sulfide minerals or with silver, copper, lead, and nickel minerals. In soil, pH and Eh are determining factors in the transport and partitioning of selenium. In soil with a pH greater than 7.5, selenates, which have high solubility and a low tendency to adsorb onto soil particles, are the major selenium species and are very mobile. The average soil pH is 7.9 in the DP Site Aggregate Area so selenium is not particularly mobile.
- Silver sorbs onto soil and sediment and tends to form complexes with inorganic chemicals and humic substances in soil. Organic matter complexes with silver and reduces its mobility. Silver compounds tend to leach from well-drained soil so that it may potentially migrate into the subsurface.
- Strontium has moderate mobility in soil and sediment, and sorbs moderately to metal oxides and clays. Strontium can be easily absorbed into plants from soil via the roots to satisfy the plant's metabolic requirements for calcium because of strontium's similarity to calcium. Once absorbed in the plant, strontium translocates to other parts of the plant such as the leaves. The plant releases strontium to the soil surface through leaf fall.

### H-3.3.2 Organic Chemicals

Table H-3.2-2 presents the physical and chemical properties (organic carbon-water partition coefficient [$K_{oc}$], logarithm to the base 10 octanol/water partition coefficient [log $K_{ow}$], and solubility) of the organic COPCs identified for the DP Site Aggregate Area. Physical and chemical properties of organic chemicals are important when evaluating their fate and transport. The following physiochemical property information illustrates some aspects of the fate and transport tendencies of the DP Site Aggregate Area COPCs. The information is summarized from Ney (1995, 058210).

Water solubility may be the most important chemical characteristic used to assess mobility of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, or persist in the environment. A highly soluble chemical (water solubility greater than 1000 mg/L) is prone to biodegradation and metabolism that may detoxify the parent chemical. Acetone, benzoic acid, bromomethane, butanone[2-], carbon disulfide, chloroaniline[4-], chloroform, dichloroethene[1,1-], dimethyl phthalate, methyl-2-pentanone[4-], methylene chloride, TCDD[2,3,7,8-] (2,3,7,8-tetrachlorodibenzo-p-dioxin), and trichlorofluoromethane have water solubilities greater than 1000 mg/L.

The lower the water solubility of a chemical, especially below 10 mg/L, the more likely it will be immobilized by adsorption. Chemicals with lower water solubilities are more likely to accumulate or bioaccumulate and persist in the environment, to be slightly prone to biodegradation, and to be metabolized in plants and animals. The COPCs identified as having water solubilities less than 10 mg/L are acenaphthene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, butylbenzylphthalate, carbazole, chrysene, DDT[4,4-] (dichlorodiphenyldichloroethane), dibenz[a,h]anthracene, dibenzofuran, fluoranthene, fluorene, hexachlorobenzene, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.

Vapor pressure is a chemical characteristic used to evaluate the tendency of organic chemicals to volatize. Chemicals with vapor pressure greater than 0.01 millimeters of mercury (mm Hg) are likely to volatilize, and therefore, concentrations at the site are reduced over time; vapors of these chemicals are more likely to travel toward the atmosphere and not migrate toward groundwater. Acetone, bromomethane, butanone[2-], carbon disulfide, chloroaniline[4-], chloroform, dichlorobenzene[1,2-],

dichlorobenzene[1,3-], dichlorobenzene[1,4-], dichloroethene[1,1-], dimethylphenol[2,4-], ethylbenzene, isopropyltoluene[4-], methyl-2-pentanone[4-], methylene chloride, methylnaphthalene[2-], naphthalene, styrene, tetrachloroethene, toluene, trichloroethene, trichlorofluoromethane, trichloro-1,2,2-trifluoroethane[1,1,2-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have vapor pressures greater than 0.01 mm Hg.

Chemicals with vapor pressures less than 0.000001 mm Hg are less likely to volatilize and, therefore, tend to remain immobile. Anthracene, Aroclor-1254, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, carbazole, chrysene, DDT[4,4-], dibenz[a,h]anthracene, fluoranthene, indeno[1,2,3-cd]pyrene, pyrene, and TCDD[2,3,7,8-] have vapor pressures less than 0.000001 mm Hg.

The $K_{ow}$ is an indicator of a chemical's potential to bioaccumulate or bioconcentrate in the fatty tissues of living organisms. The unitless $K_{ow}$ value is an indicator of water solubility, mobility, sorption, and bioaccumulation. The higher the $K_{ow}$ is above 1000, the greater the affinity the chemical has for bioaccumulation in the food chain, the greater its potential for sorption in the soil, and the lower its mobility (Ney 1995, 058210). The COPCs with a $K_{ow}$ greater than 1000 include acenaphthene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2 ethylhexyl]phthalate, carbazole chrysene, dibenz[a,h]anthracene, dibenzofuran, dichlorobenzene[1,4-], di-n-butylphthalate, ethylbenzene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], methylnaphthalene[2-], naphthalene, phenanthrene, pyrene, tetrachloroethene, trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. A $K_{ow}$ of less than 500 indicates high water solubility, high mobility, little to no affinity for bioaccumulation, and degradability by microbes, plants, and animals. Acetone, benzoic acid, bromomethane, butanone[2-], chloroform, DDT[4,4-], dimethylphenol[2,4-], methyl-2-pentanone[4-], methylene chloride, TCDD[2,3,7,8-], toluene, and trichlorofluoromethane have a $K_{ow}$ less than 500.

The $K_{oc}$ measures the tendency of a chemical to adsorb to organic carbon in soil. $K_{oc}$ values above 500 L/kg indicate a strong tendency to adsorb to soil, leading to low mobility (NMED 2009, 108070). COPCs with $K_{oc}$ values above 500 L/kg include acenaphthene, acenaphthylene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, butlybenzylphthalate, carbazole, chrysene, DDT[4,4-], dibenz[a,h]anthracene, dibenzofuran, di-n-butylphthalate, fluoranthene, fluorene, hexachlorobenzene, indeno[1,2,3-cd]pyrene, methylnaphthalene[2-], naphthalene, phenanthrene, pyrene, styrene, TCDD[2,3,7,8-], trimethylbenzene[1,2,4-], and trimethylbenzene[1,3,5-] have $K_{oc}$ values above 500 L/kg, indicating a very low potential to migrate toward groundwater. The COPCs with $K_{oc}$ values less than 500 L/kg are acetone, benzoic acid, bromomethane, butanone[2-], chloroform, dichlorobenzene[1,4-], dimethylphenol[2,4-], methyl-2-pentanone[4-], methylene chloride, tetrachloroethene, toluene, trichlorofluoromethane, and xylene[1,2-], and xylene[1,3-]+xylene[1,4-].

Acenaphthene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, carbazole, chrysene, dibenz[a,h]anthrachene, dibenzofuran, di-n-butylphthalate, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, methylnaphthalene[2-], naphthalene, phenanthrene, pyrene, and trimethylbenzene[1,2,4-] are the least mobile and the most likely to bioaccumulate. The more soluble and volatile COPCs acetone, benzoic acid, butanone[2-], chloroform, dichlorobenzene[1,4-], methyl-2-pentanone[4-], methylene chloride, tetrachloroethene, toluene, trichlorofluoromethane, and xylenes are more mobile but are also more likely to travel toward the atmosphere and not migrate toward groundwater. Because the organic COPCs were detected at low concentrations and the extent is defined, they are not likely to migrate to groundwater.

### H-3.3.3 Radionuclides

Radionuclides are generally not highly soluble or mobile in the environment, particularly in the semiarid climate of the Laboratory. The physical and chemical factors that determine the distribution of radionuclides within soil and tuff are the $K_d$, the pH of the soil and other soil characteristics (e.g., sand or clay content), and the Eh. The interaction of these factors is complex, but $K_d$ values provide a general assessment of the potential for migration through the subsurface: chemicals with higher $K_d$ values are less likely to be mobile than those with lower values. Radionuclides with $K_d$ values greater than 40 are very unlikely to migrate through soil towards the water table (Kincaid et al. 1998, 093270).

Table H-3.3-3 gives physical and chemical properties of the radionuclide COPCs identified at the DP Site Aggregate Area sites. Based on $K_d$ values, americium-241, cesium-137, plutonium-238, and plutonium-239 have a very low potential to migrate towards groundwater at the sites within the DP Site Aggregate Area. The $K_d$ values for strontium-90, uranium-234, uranium-235/236, uranium-238, and tritium are less than 40 and indicate a potential to migrate towards groundwater.

- A major portion of stable and radioactive strontium in soil dissolves in water, so it might move deeper into the subsurface. However, the $K_d$ value of 35 indicates that strontium-90 is relatively immobile in the subsurface.

- Uranium is a natural and commonly occurring radioactive element present in nearly all rock and soil. The mobility of uranium in soil and its vertical transport to groundwater depend on properties of the soil such as pH, Eh, concentration of complexing anions, porosity of the soil, soil-particle size, and sorption properties as well as the amount of water available. In general, the actinide nuclides form comparatively insoluble compounds in the environment and are therefore not considered biologically mobile. The actinides are transported in ecosystems mainly by physical and sometimes chemical processes. They tend to attach, sometimes strongly, to surfaces; and tend to accumulate in soil and sediment, which ultimately serve as strong reservoirs. Subsequent movement is largely associated with geological processes such as erosion and sometimes leaching.

- Thorium is a naturally occurring, radioactive metal. Small amounts of thorium are present in all rock, soil, surface water, groundwater, plants, and animals. More than 99% of natural thorium exists in the form thorium-232. Thorium is strongly sorbed to soil and its mobility is very low.

- Tritium's initial behavior in the environment is determined by the source. If it is released as a gas or vapor to the atmosphere, substantial dispersion can be expected, and the rapidity of deposition is dependent on climatic factors. If tritium is released in liquid form, it is diluted in surface water and is subject to physical dispersion, percolation, and evaporation (Whicker and Schultz 1982, 058209, p. 147). Tritium concentrations in the subsurface at the area of elevated radioactivity are low (<1 pCi/g), indicating that the area of elevated radioactivity is not a significant source of tritium, although this radionuclide is relatively mobile. Because tritium migrates in association with moisture, the low moisture content of the subsurface limits the potential for tritium to migrate to groundwater.

## H-3.4 Exposure Point Concentration Calculations

The exposure point concentrations (EPCs) represent upper bound concentrations of COPCs. For comparison to risk-screening levels, the upper confidence limit (UCL) of the arithmetic mean was calculated when possible and used as the EPC. If an appropriate UCL of the mean could not be calculated or if the UCL exceeded the maximum concentration, the maximum detected concentration of

the COPC was used as the EPC. The EPCs for dioxin and furan congeners are the sum of the detected congeners weighted by the World Health Organization 2005 toxic equivalent factors (TEFs) (http://www.who.int/ipcs/assessment/tef_update/en/index.html); the sum is expressed as the TCDD[2,3,7,8-] equivalent concentration. The summary statistics, including the EPC for each COPC for the human health and the ecological risk-screening assessments and the distribution used for the calculation, are presented in Tables H-2.2-1 to H-2.2-60. After initial sampling for dioxins and furans, NMED did not require additional sampling for these chemicals; therefore, dioxins and furans were not retained as COPCs. However, they have been included in the site risk assessments.

Calculation of UCLs of the mean concentrations was done using the U.S. Environmental Protection Agency (EPA) ProUCL 4.00.04 software (EPA 2007, 096530), which is based on EPA guidance (EPA 2002, 085640). The ProUCL program calculates 95%, 97.5%, and 99% UCLs and recommends a distribution and UCL. The UCL for the recommended calculation method was used as the EPC. The ProUCL software performs distributional tests on the data set for each COPC and calculates the most appropriate UCL based on the distribution of the data set. Environmental data may have a normal, lognormal, or gamma distribution but are often nonparametric (no definable shape to the distribution). Key aspects of the new version of ProUCL are that it tests data against an expanded range of distribution types, contains a larger suite of statistical tests, and can perform analyses on datasets with nondetected values nondetected values. The ProUCL documentation strongly recommends against using the maximum detected concentration for the EPC. However, it also cautions against using statistical values calculated on less than four to six detected results in a large data set. Therefore, the maximum detected concentration was used to represent the EPC for COPCs with less than five detected values, because the resulting statistical estimate may not be reliable. In these cases, if the observations are highly skewed and result in significant risk because the maximum detected concentration is used, the COPC is further assessed in the uncertainty section. Input and output data files for ProUCL calculations are provided on CD as Attachment H-1.

## H-4.0 HUMAN HEALTH RISK-SCREENING ASSESSMENTS

The human health risk-screening assessments were conducted for each site where extent is defined within the DP Site Aggregate Area. All sites were screened for the construction worker and residential scenarios using data from 0-10 ft bgs. Sites were also screened for the industrial scenario using data from 0–1 ft bgs, where available. The human health risk-screening assessments compare either the UCL of the mean concentration or the maximum detected concentration of each COPC with SSLs for chemicals and screening action levels (SALs) for radionuclides.

### H-4.1 Soil Screening Levels

Human health risk-screening assessments for chemicals were conducted using SSLs for the industrial, construction worker, and residential scenarios obtained from NMED guidance (NMED 2009, 108070). The NMED SSLs are based on a target noncarcinogenic hazard quotient (HQ) of 1.0 and a target cancer risk of $1 \times 10^{-5}$ (NMED 2009, 108070). If SSLs were not available from NMED guidance, values from the EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) were used. The EPA SSLs for carcinogens were multiplied by 10 to adjust from a $10^{-6}$ cancer risk level to the NMED target cancer risk level of $10^{-5}$. EPA regional screening levels are not available for construction workers, therefore, when regional screening levels were used for a COPC, the construction worker SSLs were calculated using toxicity values from EPA regional screening tables (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) and exposure parameters from NMED (2009, 108070). A surrogate SSL is used for some COPCs based on structural similarity or breakdown products.

Exposure parameters used to calculate the industrial, construction worker, and residential SSLs are presented in Table H-4.1-1.

Radionuclide SALs are used for comparison with radionuclide concentrations and were derived using the residual radioactive (RESRAD) model, Version 6.5 (LANL 2005, 088493). The SALs are based on a 15-mrem/yr dose per U.S. Department of Energy (DOE) guidance (DOE 2000, 067489). Exposure parameters used to calculate the residential SALs, and the industrial and construction worker SALs are presented in Tables H-4.1-2 and H-4.1-3.

### H-4.2 Results of the Human Health Risk Screening Evaluations

The EPC of each COPC was compared with the SSLs/SALs for the appropriate scenario(s). For carcinogenic chemicals, the EPCs were divided by the NMED or adjusted EPA SSL and then multiplied by $1 \times 10^{-5}$. The sum of the cancer risks was compared with the NMED target cancer risk level of $1 \times 10^{-5}$. For noncarcinogenic chemicals, a HQ was generated for each COPC by dividing the EPC by the NMED or EPA SSL. The HQs were summed to generate a hazard index (HI). The HI was compared with the NMED target HI of 1.0. The dose is determined by dividing the EPC by the SAL, multiplying the ratio by 15 mrem/yr, and summing the individual doses to obtain the total dose for the site. The sum of the doses was compared with the DOE target dose level of 15 mrem/yr (DOE 2000, 067489). The results of the human health risk-screening evaluations for the DP Site Aggregate Area are presented in Tables H-4.2-1 through H-4.2-204.

#### H-4.2.1 AOC 21-002(b)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-1 through H-4.2-3. The COPCs not detected in the 0–1-ft depth interval (acetone, dioxin/furans, methyl-2-pentanone[4-], methylene chloride, and xylene[1,3]+xylene[1,4]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-4. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-5 through H-4.2-7. The total excess cancer risk is approximately $6 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-4. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-8 through H-4.2-10. The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.7, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

#### H-4.2.2 Consolidated Unit 21-006(c)-99

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-11. The results of the risk/dose screening assessments for the industrial scenario are

presented in Tables H-4.2-12 through H-4.2-14. The COPCs not detected in the 0–1-ft depth interval (antimony, anthracene, cyanide, methylene chloride, strontium-90, tetrachloroethene, toluene, tritium, xylene[1,2-], and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.04, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-11. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-15 through H-4.2-17. The total excess cancer risk is approximately $7 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.08, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-11. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-18 through H-4.2-20. The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene contributes $1.5 \times 10^{-5}$ to the total risk. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 11 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.3 SWMU 21-009

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2.-21 through H-4.2 -23. The COPCs not detected in the 0–1-ft depth interval (anthracene, chloroform, dichloroethene[1,1-], dioxin/furans, and tetrachloroethene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $4 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.04 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-24. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-25 through H-4.2-27. The total excess cancer risk is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-24. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-28 through H-4.2-30. The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.4 SWMU 21-012(b)

Methylnaphthalene[2-] was detected only below 10 ft (15–16 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, methylnaphthalene[2-] was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared with the recommended daily allowance (RDA) for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-012(b) (39,300 mg/kg) at the EPA default adult soil ingestion rate of 100 mg/d of soil, an adult would ingest approximately 3.93 mg calcium per day. At the intake level of 3.93 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-012(b) at the EPA default child soil ingestion rate of 200 mg/d of soil, a child would ingest approximately 7.86 mg/d. At the intake level of 7.86 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 39,300 mg/kg, and calcium is eliminated as a COPC.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-31 through H-4.2-33. The COPCs not detected in the 0–1-ft depth interval (acetone, benzoic acid, chloroform, dichlorobenzene[1,4-], isopropyltoluene[4-], 2-methylnaphthalene, methylene chloride, toluene, trichloroethene, trimethylbenzene[1,2,4-], and xylene[1,3]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-34 through H-4.2-36. The total excess cancer risk is approximately $2 \times 10^{-9}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-37 through H-4.2-39. The total excess cancer risk is approximately $7 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.5 SWMU 21-013(c)

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-40. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-41 through H-4.2-43. The total excess cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately

0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-44. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-45 through H-4.2-47. The total excess cancer risk is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-44. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-48 through H-4.2-50. The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.6 SWMU 21-022(f)

Risk/dose screening assessments for the industrial scenario were not conducted for SWMU 21-022(f) because samples were not collected in the 0–1-ft depth interval. Plutonium-239/240 was detected only below 10 ft (23.5–24.5 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, plutonium-239/240 was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-51. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-52 through H-4.2-54. The total excess cancer risk is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 3, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Manganese contributes an HQ of 2.4 to the HI. The total dose is approximately 0.1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-51. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-55 through H-4.2-57. The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.7 SWMU 21-022(h)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-58 through H-4.2-60. The COPCs not detected in the 0–1-ft depth interval (isopropyltoluene[4-], dioxin/furans, and methylene chloride) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene contributes $2.5 \times 10^{-5}$ to the total risk. The HI is approximately 5, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed a HQ of 4.5 to the HI; the HI without lead is less than 1.0. The lead EPC (3602 mg/kg) exceeds the industrial SSL (800 mg/kg) and indicates the blood lead level for a worker may be exceeded.

The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-61. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-62 through H-4.2-64. The total excess cancer risk is approximately $8 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 2, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed approximately 2 to the total HI; the HI without lead is less than 1.0. The lead EPC (1556 mg/kg) exceeds the construction worker SSL (800 mg/kg) and indicates that the blood lead level for a worker may be exceeded. The total dose is approximately 23 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 14 mrem/yr to the total dose.

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-61. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-65 through H-4.2-67. The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene contributed $1.4 \times 10^{-5}$ to the risk. The HI is approximately 4, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed approximately 4 to the HI; the HI without lead is less than 1.0. The lead EPC (1556 mg/kg) exceeds the residential SSL (400 mg/kg) and indicates that the blood lead level for a resident (child) may be exceeded. The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 16 mrem/yr to the total dose.

### H-4.2.8 Consolidated Unit 21-023(a)-99

Styrene was detected only below 10 ft (16–17 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, styrene was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared to the RDA for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-023(a)-99 (42,700 mg/kg) at the EPA default adult soil ingestion rate of 100 mg of soil per day, an adult would ingest approximately 4.27 mg calcium per day. At the intake level of 4.27 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-023(a)-99 at the EPA default child soil ingestion rate of 200 mg of soil per day, a child would ingest approximately 8.54 mg/d. At the intake level of 8.54 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 42,700 mg/kg, and calcium is eliminated as a COPC.

Risk-screening assessments for the industrial scenario were not conducted for Consolidated Unit 21-023(a)-99 because samples were not collected in the 0–1-ft depth interval (subsurface septic systems).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-68. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-69 through H-4.2-71. The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-68. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-72 through H-4.2-74. The total excess cancer risk is approximately $5 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene contributed $4 \times 10^{-5}$ to the risk. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.9 SWMU 21-024(a)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-75 through H-4.2-77. The COPCs not detected in the 0–1-ft depth interval (acetone, chloroform, dichlorobenzene[1,4-], dioxin/furans, isopropyltoluene[4-], methylene chloride, selenium, toluene, trichlorothene, and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-78. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-79 through H-4.2-81. The total excess cancer risk is approximately $6 \times 10^{-9}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-78. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-82 through H-4.2-84. The total excess cancer risk is approximately $3 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.10 SWMU 21-024(b)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-85 through H-4.2-87. The COPCs not detected in the 0–1-ft depth interval (acenaphthene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[g,h,i]perylene, benzo(k)fluoranthene, bis[2-ethylhexyl]phthalate, dichlorobenzene[1,4-], di-n-butylphthalate, dioxin/furans, indeno[1,2,3-cd]pyrene, selenium, strontium, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the

NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-88. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-89 through H-4.2-91. The total excess cancer risk is approximately $8 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 89 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The primary contributors to the dose are plutonium-239, with a dose of 75 mrem/yr, and to a lesser extent, americium-241, with a dose of 13 mrem/yr.

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-88. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-92 through H-4.2-94. The total excess cancer risk is approximately $2 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic with a risk of $1.2 \times 10^{-5}$ is the primary contributor to the risk. The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 98 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 81 mrem/yr, and to a lesser extent, americium-241, with a dose of 15 mrem/yr.

### H-4.2.11 SWMU 21-024(d)

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-95. The COPCs not detected in the 0–1-ft depth interval (anthracene, benzo(a)pyrene, benzo[g,h,i]perylene, benzo[k]fluoranthene,butylbenzylphthalate, carbazole, dibenz[a,h]anthracene, dichlorobenzene[1,4-], europium-152, fluorene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], methylene chloride, phenanthrene, toluene, and trichlorethene) were excluded from the industrial risk-screening evaluations. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-96 through H-4.2-98. The total excess cancer risk is approximately $5 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.07, which is below, the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-99. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-100 through H-4.2-102. The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-99. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-103 through H-4.2-105. The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic contributes $9.1 \times 10^{-6}$ to the carcinogenic risk. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.12 SWMU 21-024(e)

Butanone[2-] was detected only below 10 ft (20–21 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, 2-butanone was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-106 through H-4.2-108. The COPCs not detected in the 0–1-ft depth interval (acenaphthene, benzo[g,h,i]perylene, bis[2-ethylhexyl]phthalate, butanone[2-], chloroaniline[4-], dichlorobenzene[1,4-], dioxin/furans, ethylbenzene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], methylene chloride, trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-109. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-110 through H-4.2-112. The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-109. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-113 through H-4.2-115. The total excess cancer risk is approximately $7 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 10 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.13 SWMU 21-024(g)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-116 through H-4.2-118. The COPCs not detected in the 0–1-ft depth interval (acenaphthylene, benzoic acid, chloroform, dioxin/furans, ethylbenzene, and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-119. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-120 through H-4.2-122. The total excess cancer risk is approximately $1 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-119. The results of the risk/dose screening assessments for the residential scenario are

presented in Tables H-4.2-123 through H-4.2-125. The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.14 SWMU 21-024(h)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-126 through H-4.2-128. The COPCs not detected in the 0–1-ft depth interval (acenaphthene, acenaphthylene, acetone, benzo[a]anthracene, benzo[a]pyrene, benzo[g,h,i]perylene, benzoic acid, chloroform, dichlorobenzene[1,4-], di-n-butylphthalate, dioxin/furans, fluorene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], naphthalene, tetrachloroethene, toluene, trimethylbenzene [1,2,4-], trimethylbenzene [1,3,5-], xylene [1,2-], and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-129. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-130 through H-4.2-132. The total excess cancer risk is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-129. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-133 through H-4.2-135 The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.15 SWMU 21-024(i)

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared to the RDA for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-024(i) (74,400 mg/kg) at the EPA default adult soil ingestion rate of 100 mg/d of soil, an adult would ingest approximately 7.44 mg calcium per day. At the intake level of 7.44 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-024(i) at the EPA default child soil ingestion rate of 200 mg/d of soil, a child would ingest approximately 14.88 mg/d. At the intake level of 14.88 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 39,300 mg/kg, and calcium is eliminated as a COPC.

Benzo(g,h,i)perylene, fluorene, indeno(1,2,3-cd)pyrene, methylnaphthalene(2-), and naphthalene were detected only below 10 ft (12–13 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, benzo(g,h,i)perylene, fluorene, methylnaphthalene[2-], and naphthalene were not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-136 through H-4.2-138. Bromomethane, DDT[4,4-], nitrate, and trichlorofluoromethane were not detected in the 0–1-ft depth interval and were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.1, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-139 through H-4.2-141. The total excess cancer risk is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-142 through H-4.2-144. The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose is in part from isotopic thorium, which is naturally occurring.

### H-4.2.16 SWMU 21-024(j)

Carbon disulfide was detected only below 10 ft (17–18 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, carbon disulfide was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-145 through H-4.2-147. The COPCs not detected in the 0–1-ft depth interval (acetone, bis[2-ethylhexyl]phthalate, carbon disulfide, chloroform, dioxin/furans, isopropyltoluene[4-], methylene chloride, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-148. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-149 through H-4.2-151. The total excess cancer risk is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-148. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-152 through H-4.2-154. The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.17 Consolidated Unit 21-024(l)-99

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-155 through H-4.2-157. The COPCs not detected in the 0–1-ft depth interval (acenaphthylene, acetone, carbazole, chloroform, dibenzofuran, dichlorobenzene[1,4], isopropyltoluene[4-], methylnaphthalene[2-], naphthalene, toluene, and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-158 through H-4.2-160. The total excess cancer risk is approximately $4 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-161 through H-4.2-163. The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene contributes $1.08 \times 10^{-5}$ to the total risk. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.18 SWMU 21-024(o)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-164 through H-4.2-166. The COPCs not detected in the 0–1-ft depth interval (acetone, dioxin/furans, selenium, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-167. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-168 through H-4.2-170. The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-167. The results of the risk/dose screening assessments for the residential scenario are

presented in Tables H-4.2-171 through H-4.2-173. The total excess cancer risk is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.19 Consolidated Unit 21-026(a)-99

Toluene was detected only below 10 ft (10–11 ft), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, toluene was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared to the RDA for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-026(a)-99 (42,800 mg/kg) at the EPA default adult soil ingestion rate of 100 mg/d of soil, an adult would ingest approximately 4.28 mg calcium per day. At the intake level of 4.28 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-026(a)-99 at the EPA default child soil ingestion rate of 200 mg/d of soil, a child would ingest approximately 8.56 mg/d. At the intake level of 8.56 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 42,800 mg/kg, and calcium is eliminated as a COPC.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-174 through H-4.2-176. The COPCs not detected in the 0–1-ft depth interval (anthracene, chloroform, dioxin/furans, ethylbenzene, trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The elevated cancer risk is primarily from polycyclic aromatic hydrocarbons (PAHs) and arsenic. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-177. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-178 through H-4.2-180. The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The elevated cancer risk is primarily from PAHs. The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 13 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-177. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-181 through H-4.2-183. The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The elevated cancer risk is primarily from PAHs and arsenic. The HI is approximately 0.6, which is below the NMED target HI of 1.0

(NMED 2009, 108070). The total dose is approximately 15 mrem/yr, which is equivalent to the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.2.20 SWMU 21-027(a)

Carbon disulfide was detected only below 10 ft (16–17 ft), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, carbon disulfide was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-184. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-185 through H-4.2-187. The COPCs not detected in the 0–1-ft depth interval (acetone, benzo[k]fluoranthene, butanone[2-], di-n-butylphthalate, naphthalene, tetrachloroethene, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $1 \times 10^{-4}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor with a risk of $1 \times 10^{-4}$. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 12 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-188. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-189 through H-4.2-191. The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 6, which is above the NMED target HI of 1.0 (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor with an HQ of 5. The total dose is approximately 46 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 26 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 13 mrem/yr.

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-188. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-192 through H-4.2-194. The total excess cancer risk is approximately $4 \times 10^{-4}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The greatest contributor to the total risk was TCDD[2,3,7,8-] equivalent concentration with a risk of $3.4 \times 10^{-4}$. The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 51 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 28 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 14 mrem/yr.

### H-4.2.21 SWMU 21-027(c)

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-195. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-196 through H-4.2-198. The COPCs not detected in the 0–1-ft depth interval (acenaphthylene, acetone, dichlorobenzene [1,4-], isopropyltoluene[4-], methylene chloride, naphthalene, toluene, and trichloroethene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.07, which is below the NMED target HI of 1.0 (NMED 2009,

108070). The total dose is 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-195. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-199 through H-4.2-201. The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 5 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-195. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-202 through H-4.2-204. The total excess cancer risk is approximately $8 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 14 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

### H-4.3 Evaluation of Vapor Intrusion

The vapor intrusion indoor air pathway was not evaluated because all buildings within the DP Site Aggregate Area are abandoned and are scheduled for D&D. There are no receptors in the reasonably foreseeable future; therefore, the pathway is incomplete.

### H-4.4 Uncertainty Analysis

The analyses presented in human health risk-screening assessments are subject to varying degrees and types of uncertainty. Aspects of data evaluation and COPC identification, exposure assessment, toxicity assessment, and the additive approach all contribute to uncertainties in the risk assessment process and may affect the results.

#### H-4.4.1 Data Evaluation and COPC Identification Process

A primary uncertainty associated with the COPC identification process is the possibility that a chemical may be inappropriately identified as a COPC when it is actually not a COPC or that a chemical may not be identified as a COPC when it actually should be identified as a COPC. Inorganic chemicals are appropriately identified as COPCs because only those inorganic chemicals detected or that have detection limits above background are retained for further analysis. However, established BVs may not accurately represent certain subunits of the Bandelier Tuff (e.g., fractured, clay-rich material) encountered during sampling because such data are not included in the background data set. There are no established BVs for organic chemicals, and all detected organic chemicals are identified as COPCs and are retained for further analysis. Radionuclides are also identified as COPCs based on background comparisons or detected status.

Other uncertainties may include errors in sampling, laboratory analysis, and data analysis. However, because concentrations used in the risk-screening evaluations include those detected less than estimated quantitation limits and nondetects above BVs, data evaluation uncertainties are expected to have little effect on the risk-screening results.

### H-4.4.2 Exposure Assessment

An individual may be subject to exposures in a different manner than the exposure assumptions used to derive the industrial and construction worker SSLs. For the sites evaluated, individuals might not be on-site now or in the future for that frequency and duration. This is particularly true of the canyon edge/wall areas where elevated concentrations of some COPCs remain (e.g., an outfall). The industrial assumptions for the SSLs are that the potentially exposed individual is outside on-site for 8 h/d, 225 d/yr, and 25 yr (NMED 2009, 108070), while the construction worker SSLs are based on exposure of 8 h/d, 250 d/yr, and 1 yr (NMED 2009, 108070). The residential SSLs are based on exposure of 24 h/d, 350 d/yr, and 30 yr (NMED 2009, 108070). As a result, the industrial, construction worker, and residential scenarios evaluated at these sites likely overestimate the exposure and risk/dose.

A number of assumptions are made relative to exposure pathways, including input parameters, whether or not a given pathway is complete, the contaminated media to which an individual may be exposed, and intake rates for different routes of exposure. In the absence of site-specific data, the exposure assumptions used were consistent with default values (EPA 2007, 099314; NMED 2009, 108070). When several upper-bound values (as are found in NMED 2009, 108070) are combined to estimate exposure for any one pathway, the resulting risk can exceed the 99$^{th}$ percentile and, therefore, can exceed the range of risk that may be reasonably expected. Also, the assumption that residual concentrations of chemicals in the tuff are available and result in exposure in the same manner as if they were in soil overestimates the potential exposure and risk to receptors.

Uncertainty is introduced in the concentration aggregation of data for estimating the EPCs at a site. The use of a UCL is intended to provide a protective, upper-bound estimate of the COPC concentration and is assumed to be representative of the average exposure to a COPC across the entire site. Potential risk and exposure from a single location or area with relatively high COPC concentrations may be overestimated if a representative, sitewide value is used. The use of the maximum detected concentration for the EPC overestimates the exposure to contamination because receptors are not consistently exposed to the maximum detected concentration across the site.

#### Lead

Lead was a COPC for all sites within the DP Site Aggregate Area with ratios less than 1 for all but one site. SWMU 21-022(h) has lead EPCs that exceed the SSLs for each scenario. The HIs without lead are less than 1, indicating that lead is the only COPC posing a potential risk to receptors. At Consolidated Unit 21-023(a)-99, lead is also the major contributor with ratios of 0.3 and 0.6 for the construction worker and resident, respectively. However, the HIs are less than 1 with and without lead included, indicating that there are no potential risks to receptors from lead or other noncarcinogenic COPCs at this consolidated unit.

Several sites within the DP Site Aggregate Area have potential risks that exceed NMED target levels. The potential risks may be overestimated because of uncertainties associated with the EPCs and/or the COPCs at these sites.

#### Consolidated Unit 21-006(c)-99

The potential cancer risk (approximately $2 \times 10^{-5}$) for the residential scenario is slightly above the NMED target risk level primarily from benzo(a)pyrene. Consolidated Unit 21-006(c)-99 consists of inactive underground seepage pits associated with buildings 21-002 and 21-003 and also includes a drainline and outfall from a seepage pit. The operations associated with these buildings would not have resulted in the

release of PAHs, such as benzo(a)pyrene, which comprise the majority of the carcinogenic COPCs. In addition, the maximum detected concentration of benzo(a)pyrene is the EPC and is the only concentration above the SSL, with the sample located on the side of the canyon wall next to or near DP Road. PAHs are found in asphalt and are a product of incomplete combustion from the tailpipes of motor vehicles. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt road upslope from the outfall. Therefore, the slightly elevated cancer risk for the residential scenario at this consolidated unit is overestimated and not related to COPCs released from the site. Without benzo(a)pyrene, the potential cancer risk for the residential scenario is approximately $9 \times 10^{-6}$, which is below the NMED target risk level. Therefore, the consolidated unit does not require further investigation or remediation, and there is no potential unacceptable risk for the residential scenario from site operations.

**SWMU 21-022(f)**

The construction worker HI of approximately 3 (HI of 2.5) is primarily from manganese, which has an HQ of 2.4. Manganese was detected above background at one location with an EPC (1121 mg/kg), which is similar to the maximum soil background concentration (1100 mg/kg). In addition, the construction worker SSL (463 mg/kg) is similar to background concentrations for Qbt 2, 3, 4 and soil. If manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. Therefore, this SWMU does not require further investigation or remediation and there is no potential unacceptable risk for the construction worker scenario from site operations.

**Consolidated Unit 21-023(a)-99**

The potential cancer risk (approximately $5 \times 10^{-5}$) for the residential scenario is above the NMED target risk level primarily from benzo(a)pyrene. Consolidated Unit 21-023(a)-99 consists of septic tanks and drainlines that reportedly serviced a janitor's mop sink in building 21-003; received wastewater from the shower room in building 21-003; and received industrial waste and sewage from building 21-003. The operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene. Benzo(a)pyrene was detected above the residential SSL at two locations approximately 20 ft downslope from DP Road, a source of asphalt, and would result in detections of PAHs, including benzo(a)pyrene. In addition, the arsenic EPC (3.2 mg/kg) is similar to soil and tuff background concentrations (LANL 1998, 059730). Therefore, exposure across the site is similar to background for a resident. Without benzo(a)pyrene and arsenic, the residential cancer risk is approximately $5 \times 10^{-6}$, which is below the NMED target risk level. Therefore, the consolidated unit does not require further investigation or remediation, and there is no potential unacceptable risk for the residential scenario from site operations.

**SWMU 21-024(b)**

The potential cancer risk (approximately $2 \times 10^{-5}$) for the residential scenario is slightly above the NMED target risk level primarily from arsenic. The arsenic EPC (4.7 mg/kg) is similar to soil and tuff background concentrations (LANL 1998, 059730). Therefore, exposure across the site is similar to background for a resident. Without arsenic the total excess cancer risk for the residential scenario is approximately $3 \times 10^{-6}$, which is below the NMED target risk level.

**SWMU 21-024(d)**

The potential cancer risk (approximately $2 \times 10^{-5}$) for the residential scenario is slightly above the NMED target risk level primarily from arsenic. The arsenic EPC (3.6 mg/kg) is similar to soil and tuff background concentrations (LANL 1998, 059730). Therefore, exposure across the site is similar to background for a resident. Without arsenic the total excess cancer risk for the residential scenario is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level.

**SWMU 21-024(i)**

The potential dose (approximately 26 mrem/yr) for the residential scenario is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The BVs for thorium-228 are 2.28 pCi/g in soil and 2.52 pCi/g in Qbt 3, and the BVs for thorium-230 are 2.29 pCi/g for soil and and 1.98 pCi/g for Qbt 3. The dose contributed by background concentrations of isotopic thorium is approximately 14 mrem/yr. In addition, the EPCs for thorium-228 and thorium-230 are less than BVs (1.559 pCi/g and 1.168 pCi/g, respectively), the dose is comparable to background dose. The dose from the remaining COPCs is approximately 12 mrem/yr, which is less than the target limit of 15 mrem/yr (DOE 2000, 067489). Therefore, the SWMU does not require further investigation or remediation, and there is no unacceptable dose for the residential scenario from site operations.

**Consolidated Unit 21-024(l)-99**

The potential cancer risk (approximately $2 \times 10^{-5}$) for the residential scenario is slightly above the NMED target risk level primarily from benzo(a)pyrene. Consolidated Unit 21-024(l)-99 consists of an inactive sump, drainline, outfall, and aboveground storage tank associated with building 21-021. Building 21-021 was used as a secure vault to store special fissile material, including uranium and plutonium metal, and the structures were designed to receive liquid waste and effluent from the floor drain(s). The operations associated with this building would not have resulted in the release of PAHs, such as benzo(a)pyrene, which comprise the majority of the carcinogenic COPCs. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt north, east, and west of former building 21-021. Therefore, the slightly elevated cancer risk for the residential scenario at this consolidated unit is overestimated and not related to COPCs released from the site. Without benzo(a)pyrene the potential cancer risk for the residential scenario is approximately $6 \times 10^{-6}$, which is below the NMED target risk level. Therefore, the consolidated unit does not require further investigation or remediation, and there is no potential unacceptable risk for the residential scenario from site operations.

**Consolidated Unit 21-026(a)-99**

The potential cancer risks (approximately $3 \times 10^{-5}$) for the industrial and residential scenarios are above the NMED target risk level in part from arsenic. The arsenic EPCs (4.4 mg/kg and 2.7 mg/kg, respectively) are similar to soil and tuff background concentrations (LANL 1998, 059730). Therefore, exposure across the site is similar to background for a worker and resident. Without arsenic the total excess cancer risks are reduced but still slightly above the NMED target risk level.

### H-4.4.3 Toxicity Assessment

The primary uncertainty associated with the screening values is related to the derivation of toxicity values used in their calculation. Toxicity values (slope factors [SFs] and reference doses [RfDs]) were used to derive the risk-based screening values used in the screening evaluation (NMED 2009, 108070). Uncertainties were identified in six areas with respect to the toxicity values: (1) extrapolation from other

animals to humans, (2) extrapolation from one route of exposure to another route of exposure, (3) interindividual variability in the human population, (4) the derivation of RfDs and SFs, (5) the chemical form of the COPC, and (6) the use of surrogate chemicals.

**Extrapolation from Animals to Humans:** The SFs and RfDs are often determined by extrapolation from animal data to humans, which may result in uncertainties in toxicity values because differences exist between animals and humans in chemical absorption, metabolism, excretion, and toxic responses. Differences in body weight, surface area, and pharmacokinetic relationships between animals and humans are taken into account to address these uncertainties in the dose-response relationship. However, conservatism is usually incorporated in each of these steps, resulting in the overestimation of potential risk.

**Extrapolation from One Route of Exposure to Another Route of Exposure:** The SFs and RfDs often contain extrapolations from one exposure route to another that result in additional conservatism in the risk calculations. The extrapolation from the oral route to the inhalation and/or the dermal route is used in the derivation of some screening values (NMED 2009, 108070). Differences between the two exposure pathways contribute to the uncertainty in the estimation of potential risk.

**Individual Variability in the Human Population:** For noncarcinogenic effects, the degree of variability in human physical characteristics is important both in determining the risks that can be expected at low exposures and in defining the no-observed-adverse-effect level (NOAEL). The NOAEL uncertainty factor approach incorporates a 10-fold factor to reflect individual variability within the human population that can contribute to uncertainty in the risk assessment. This factor of 10 is generally considered to result in a conservative estimate of risk to noncarcinogenic COPCs.

**Derivation of RfDs and SFs:** The SFs and RfDs are often determined by extrapolation from animal data to humans, which may result in uncertainties in toxicity values because differences exist between other animals and humans in chemical absorption, metabolism, excretion, and toxic response. Differences in body weight, surface area, and pharmacokinetic relationships between animals and humans are taken into account to address these uncertainties in the dose-response relationship. However, conservatism is usually incorporated into each of these steps, resulting in the overestimation of potential risk.

**Chemical Form of the COPC:** COPCs may be bound to the environmental matrix and not available for absorption into the human body. However, the exposure scenarios default to the assumption that the COPCs are bioavailable. This assumption can lead to an overestimation of the total risk.

**Use of Surrogate Chemicals:** The use of surrogates for chemicals that do not have EPA-approved or provisional toxicity values also contributes to uncertainty in risk assessment. Surrogates were used to provide SSLs for acenaphthylene, benzo[g,h,i]perylene, and isopropyltoluene[4-], based on structural similarity. The overall impact of surrogates on the risk assessment is minimal because these COPCs were detected at low concentrations and the HQs were below 0.1.

### H-4.4.4 Additive Approach

For noncarcinogens, the effects of exposure to multiple chemicals are generally unknown and possible interactions could be synergistic or antagonistic, resulting in either an overestimation or underestimation of the potential risk. Additionally, RfDs used in the risk calculations typically are not based on the same endpoints with respect to severity, effects, or target organs. Therefore, the potential for noncarcinogenic effects may be overestimated for individual COPCs that act by different mechanisms and on different target organs but are addressed additively.

## H-4.5 Interpretation of Human Health Risk Screening Results

### H-4.5.1 AOC 21-002(b)

#### Industrial Scenario

The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $2 \times 10^{-7}$, based on a comparison with EPA's industrial preliminary remediation goals (PRGs) for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $6 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $9 \times 10^{-8}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Residential Scenario

The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.7, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $4 \times 10^{-7}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.2 Consolidated Unit 21-006(c)-99

#### Industrial Scenario

The total excess cancer risk is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.04, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $7 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.08, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $9 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), benzo(a)pyrene is not related to releases from site operations and is likely from runoff from the road upslope from the outfall. Therefore, the total excess cancer risk is overestimated and if PAHs, in particular benzo(a)pyrene, are not included is approximately $9 \times 10^{-6}$, which is less than the NMED target risk level. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 11 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $3 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.3 SWMU 21-009

**Industrial Scenario**

The total excess cancer risk is approximately $4 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.04 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $9 \times 10^{-8}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Construction Worker Scenario**

The total excess cancer risk is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $9 \times 10^{-8}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $2 \times 10^{-7}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.4 SWMU 21-012(b)

**Industrial Scenario**

The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total

risk of $9 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Construction Worker Scenario**

The total excess cancer risk is approximately $2 \times 10^{-9}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $5 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $7 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.5 SWMU 21-013(c)

**Industrial Scenario**

The total excess cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $4 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Construction Worker Scenario**

The total excess cancer risk is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $3 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $5 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.6 SWMU 21-022(f)

#### Industrial Scenario

Risk/dose screening assessments for the industrial scenario were not conducted for SWMU 21-022(f) because samples were not collected from the 0-1 ft depth interval.

#### Construction Worker Scenario

The total excess cancer risk is approximately $4 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 3, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Manganese is the primary contributor to the HI at this site. As discussed in the uncertainty analysis (section H-4.4.2), the manganese EPC and the construction worker SSL are similar to background concentrations and result in an overestimation of the risk. Therefore, if manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. The total dose is approximately 0.1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $2 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Residential Scenario

The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $2 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.7 SWMU 21-022(h)

#### Industrial Scenario

The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk. The HI is approximately 5, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed over 90% to the HI and exceeds the SSL; the HI without lead is approximately 0.1. The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $8 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 2, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed over 90% to the HI and exceeds the SSL; the HI without lead is approximately 0.1. The total dose is approximately 23 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 14.4 mrem/yr to the total dose. The total dose for the construction worker scenario is equivalent to a total risk of $8 \times 10^{-6}$, based on a comparison

with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk. The HI is approximately 4, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed over 90% to the HI and exceeds the SSL; the HI without lead is approximately 0.1. The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 16 mrem/yr to the total dose. The total dose for the residential scenario is equivalent to a total risk of $3 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.8 Consolidated Unit 21-023(a)-99

**Industrial Scenario**

Risk/dose screening assessments for the industrial scenario were not conducted for Consolidated Unit 21-023(a)-99 because samples were not collected from the 0–1-ft depth interval.

**Construction Worker Scenario**

The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $3 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $5 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene and arsenic are the primary contributors to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), benzo(a)pyrene is not related to releases from site operations and is likely from runoff from the road, which is upslope of the site. The arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, the total excess cancer risk is overestimated and if PAHs, in particular benzo(a)pyrene, and arsenic are not included the cancer risk is approximately $5 \times 10^{-6}$, which is less than the NMED target risk level The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.9 SWMU 21-024(a)

#### Industrial Scenario

The total excess cancer risk is approximately $2 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $7 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $6 \times 10^{-9}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $4 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Residential Scenario

The total excess cancer risk is approximately $3 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $8 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.10 SWMU 21-024(b)

#### Industrial Scenario

The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $8 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 89 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 75 mrem/yr, and to a lesser extent, americium-241, with a dose of 13 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Residential Scenario

The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic is the main contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, if arsenic is not included, the cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 98 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 81 mrem/yr, and to a lesser extent, americium-241, with a dose of 15 mrem/yr. The total dose for the residential scenario is equivalent to a total risk of $1 \times 10^{-4}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

## H-4.5.11 SWMU 21-024(d)

### Industrial Scenario

The total excess cancer risk is approximately $5 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.07, which is below, the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Construction Worker Scenario

The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Residential Scenario

The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic is the main contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, if arsenic is not included, the cancer risk approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.12 SWMU 21-024(e)

#### Industrial Scenario

The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $7 \times 10^{-6}$, based on a comparison with EPA's PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Residential Scenario

The total excess cancer risk is approximately $7 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 10 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.13 SWMU 21-024(g)

#### Industrial Scenario

The total excess cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $9 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $1 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $4 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $9 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.14 SWMU 21-024(h)

**Industrial Scenario**

The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $6 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Construction Worker Scenario**

The total excess cancer risk is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $5 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $1 \times 10^{-5}$ which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $7 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.15 SWMU 21-024(i)

**Industrial Scenario**

The total excess cancer risk is approximately $3 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.1, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $3 \times 10^{-4}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Construction Worker Scenario

The total excess cancer risk is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $4 \times 10^{-4}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Residential Scenario

The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). As discussed in the uncertainty analysis (section H-4.4.2), the dose contributed by background concentrations of isotopic thorium is approximately 14 mrem/yr. Because the EPCs of thorium-228 and thorium-230 are less than background, the dose is comparable to background dose. The dose from the remaining COPCs is approximately 12 mrem/yr, which is less than the target limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario including background thorium is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

## H-4.5.16 SWMU 21-024(j)

### Industrial Scenario

The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $7 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Construction Worker Scenario

The total excess cancer risk is approximately $7 \times 10^{-8}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $3 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### Residential Scenario

The total excess cancer risk is approximately $1 \times 10^{-5}$, which is equivalent to the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $7 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.17 Consolidated Unit 21-024(l)-99

#### Industrial Scenario

The total excess cancer risk is approximately $1 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $4 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $4 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $3 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Residential Scenario

The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), benzo(a)pyrene is not related to releases from site operations and is likely from runoff from the asphalt north, east, and west of former building 21-021. Therefore, the total excess cancer risk is overestimated, and if PAHs, in particular benzo(a)pyrene, are not included the cancer risk is approximately $6 \times 10^{-6}$, which is less than the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $1 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.18 SWMU 21-024(o)

#### Industrial Scenario

The total excess cancer risk is approximately $2 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $6 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose

limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $4 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $8 \times 10^{-6}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.19 Consolidated Unit 21-026(a)-99

**Industrial Scenario**

The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic is a contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Without arsenic the total excess cancer risk is reduced but still slightly above the NMED target risk level. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Construction Worker Scenario**

The total excess cancer risk is approximately $2 \times 10^{-5}$, which is slightly above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 13 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $7 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $3 \times 10^{-5}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). Arsenic is a contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Without arsenic the total excess cancer risk is reduced but still slightly above the NMED target risk level. The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 15 mrem/yr, which is equivalent to the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.20 SWMU 21-027(a)

#### Industrial Scenario

The total excess cancer risk is approximately $1 \times 10^{-4}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor to the risk. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 12 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $3 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 6, which is above the NMED target HI of 1.0 (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor to the HI. The total dose is approximately 46 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 26 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 13 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Residential Scenario

The total excess cancer risk is approximately $4 \times 10^{-4}$, which is above the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration is the greatest contributor to the total risk. The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 51 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 28 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 14 mrem/yr. The total dose for the residential scenario is equivalent to a total risk of $6 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

### H-4.5.21 SWMU 21-027(c)

#### Industrial Scenario

The total excess cancer risk is approximately $6 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.07, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of $5 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

#### Construction Worker Scenario

The total excess cancer risk is approximately $2 \times 10^{-7}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0

(NMED 2009, 108070). The total dose is approximately 5 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of $4 \times 10^{-6}$, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

**Residential Scenario**

The total excess cancer risk is approximately $8 \times 10^{-6}$, which is below the NMED target risk level of $1 \times 10^{-5}$ (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 14 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of $2 \times 10^{-5}$, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

## H-5.0 ECOLOGICAL RISK SCREENING ASSESSMENTS

The approach used to evaluate ecological risk is described in "Screening Level Ecological Risk Assessment Methods, Revision 2" (LANL 2004, 087630). The assessment consists of four parts: a scoping evaluation, a screening evaluation, an uncertainty analysis, and an interpretation of the results.

### H-5.1 Scoping Evaluation

The scoping evaluation establishes the breadth and focus of the screening evaluation. The ecological scoping checklist (Attachment H-2) is a useful tool for organizing existing ecological information. The information in the scoping checklists was used to determine whether ecological receptors might be affected, to identify the types of receptors that might be present, and to develop the ecological conceptual site model for each site (Attachment H-2). Most of the area on the mesa top is developed and typically provides minimal potential habitat for ecological receptors, with the exception of SWMU 21-013(c) and Consolidated Unit 21-026(a)-99. The quality of the habitat at SWMU 21-013(c) and Consolidated Unit 21-026(a)-99 varies and, in some cases, includes native grasses, forbes, and trees that are suitable habitat for ecological receptors. Numerous sites that originate on the mesa top include outfalls that discharge into DP or Los Alamos Canyons. In most cases, the outfalls into DP and Los Alamos Canyons represent undisturbed and native habitat for ecological receptors.

The scoping evaluation indicated that terrestrial receptors were appropriate for evaluating the concentrations of COPCs in soil and tuff. Aquatic receptors were not evaluated because no aquatic communities and no aquatic habitat or perennial source of water exist at any of the sites within the aggregate area or in DP or Los Alamos Canyons below the sites. The depth of the regional aquifer (greater than 1000 ft bgs) and the semiarid climate limits transport to groundwater. The potential exposure pathways for terrestrial receptors in soil and tuff are root uptake, inhalation, soil ingestion, dermal contact, external irradiation, and food web transport (Attachment H-2). The weathering of tuff is the only viable natural process that may result in the exposure of receptors to contaminants in tuff. Because of the slow rate of weathering expected for tuff, exposure in tuff is negligible, although it is included in the assessment. Plant exposure in tuff is largely limited to fractures near the surface, which does not produce sufficient biomass to support an herbivore population. Consequently, the contaminants in tuff are unavailable to receptors.

The potential risk was evaluated in the risk-screening assessments for the following ecological receptors representing several trophic levels:

- a plant,
- soil-dwelling invertebrates (represented by the earthworm),
- the deer mouse (mammalian omnivore),
- the montane shrew (mammalian insectivore),
- the desert cottontail (mammalian herbivore),
- the red fox (mammalian carnivore),
- the American robin (avian insectivore, avian omnivore, and avian herbivore), and
- the American kestrel (avian intermediate carnivore and avian carnivore [surrogate for threatened and endangered (T&E) species (primarily the Mexican spotted owl)]).

The rationale for these receptors is presented in "Screening Level Ecological Risk Assessment Methods, Revision 2" (LANL 2004, 087630). The Mexican spotted owl is the only T&E species known to frequent the Laboratory area. The owl's primary habitat is densely forested canyons, and it has not been observed roosting in DP Canyon and Los Alamos Canyon or on DP Mesa. However, the owl may use the canyons and surrounding areas to forage.

### H-5.2 Assessment Endpoints

An assessment endpoint is an explicit expression of the environmental value to be protected. The endpoints are ecologically relevant and help sustain the natural structure, function, and biodiversity of an ecosystem or its components (EPA 1998, 062809). In a screening-level ecological evaluation, receptors represent the populations and/or communities and assessment endpoints are any adverse effects on the chosen ecological receptors. The purpose of the ecological evaluation is to protect populations and communities of biota rather than individual organisms, except for listed or candidate T&E species and treaty-protected species, when individuals must be protected (EPA 1999, 070086) because populations of protected species tend to be small and the loss of an individual adversely affects the species as a whole (EPA 1997, 059370).

In accordance with this guidance, the Laboratory has developed generic assessment endpoints (LANL 1999, 064137) to ensure that values at all levels of ecological organization are considered in the ecological screening process. These general assessment endpoints can be measured using impacts on reproduction, growth, and survival to represent categories of effects that may adversely impact populations. In addition, specific receptor species were chosen to represent each functional group. The receptor species were chosen because of their presence at the site, their sensitivity to the COPCs, and their potential for exposure to those COPCs. These categories of effects and the chosen receptor species were used to select the types of effects seen in toxicity studies considered in the development of the toxicity reference values (TRVs). Toxicity studies used in the development of TRVs included only studies in which the adverse effect evaluated affected reproduction, survival, and/or growth.

The selection of receptors and assessment endpoints is designed to be protective of both the representative species used as screening receptors and the other species within their feeding guilds and the overall food web for the terrestrial and aquatic ecosystems. Focusing the assessment endpoints on the general characteristics of species that affect populations (rather than the biochemical and behavioral changes that may affect only the studied species) also ensures the applicability to the ecosystem of

concern. It is assumed, for the purposes of ecological screening that nonradionuclides have common toxicological effects and that HQs may be added.

### H-5.3 Screening Evaluation

The ecological risk-screening assessments identify chemicals of potential ecological concern (COPECs) and are based on the comparison of EPCs (UCLs or maximum detected concentrations) (LANL 2004, 087630) to ecological screening levels (ESLs) in accordance with Laboratory guidance (LANL 2004, 087630).

Ecological risk-screening assessments were not conducted for SWMUs 21-022(f) and 21-022(j) because samples were collected below 5 ft bgs and, therefore, there are no complete pathways for exposure to ecological receptors.

The ESLs were obtained from the ECORISK Database, Version 2.4 (LANL 2009, 107524) and are presented in Table H-5.3-1. The ESLs are based on similar species and are derived from experimentally determined NOAELs, lowest observed-adverse-effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and TRVs, is presented in the ECORISK Database, Version 2.4 (LANL 2009, 107524). The HQ calculated for each COPEC and screening receptor is the ratio of the EPC to the ESLs for each ecological receptor. The higher the contaminant levels relative to the ESLs, the higher the potential risk to receptors; conversely, the higher the ESLs relative to the contaminant levels, the lower the potential risk to receptors. The analysis begins with a comparison of the minimum ESL for each COPC with the EPC. HQs greater than 0.3 are used to identify COPECs (LANL 2004, 087630). Individual HQs for a receptor are summed to derive an HI; an HI greater than 1.0 is an indication that further assessment may be needed to be sure that exposure to multiple COPECs at a site will not lead to potential adverse impacts to a given receptor population. COPCs without ESLs are retained as COPECs and evaluated further in the uncertainty section. The HQ and HI analysis is a conservative indication of potential adverse effects and is designed to minimize the potential of overlooking possible COPECs at the site.

#### H-5.3.1 AOC 21-002(b)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-2. The results of the minimum ESL comparisons are presented in Table H-5.3-3. Arsenic, barium, cadmium, chromium, cyanide (total), lead, selenium, zinc, Aroclor-1254, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-4. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.2 Consolidated Unit 21-006(c)-99

The dioxin and furan congener TEF calculations are presented in Table H-5.3-5. The results of the minimum ESL comparisons are presented in Table H-5.3-6. Antimony, barium, chromium, copper, cyanide, lead, mercury, nickel, selenium, zinc, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, TCDD[2,3,7,8-] equivalent, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-7. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.3 SWMU 21-009

The dioxin and furan congener TEF calculations are presented in Table H-5.3-8. The results of the minimum ESL comparisons are presented in Table H-5.3-9. Barium, chromium, cyanide (total), lead, selenium, zinc, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-10. The HI analysis indicates that all of the receptors, except the American kestrel (top carnivore) and the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.4 SWMU 21-012(b)

The results of the minimum ESL comparisons are presented in Table H-5.3-11. Antimony, arsenic, barium, cadmium, chromium, copper, cyanide, lead, lithium, mercury, molybdenum, nickel, selenium, vanadium, zinc, and benzoic acid are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Calcium, iron, nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-12. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.5 SWMU 21-013(c)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-13. The results of the minimum ESL comparisons are presented in Table H-5.3-14. Arsenic, barium, cadmium, chromium, lead, mercury, nickel, selenium, thallium, vanadium, benzoic acid, bis(2-ethylhexyl)phthalate, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-15. The HI analysis indicates that all of the receptors have HIs greater than 1, except for the red fox and cottontail. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.6 SWMU 21-022(h)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-16. The results of the minimum ESL comparisons are presented in Table H-5.3-17. Antimony, barium, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, zinc, acenaphthene, Aroclor-1254, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, di-n-butylphthalate, fluoranthene, naphthalene, phenanthrene, pyrene, TCDD[2,3,7,8-] equivalent, plutonium-238, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, isopropyltoluene[4-] and carbazole do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-18. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.7 Consolidated Unit 21-023(a)-99

The dioxin and furan congener TEF calculations are presented in Table H-5.3-19. The results of the minimum ESL comparisons are presented in Table H-5.3-20. Antimony, arsenic, barium, chromium, copper, lead, manganese, mercury, selenium, vanadium, acenaphthene, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, di-n-butylphthalate, fluoranthene, naphthalene, pyrene, and

TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Calcium, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-21. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.8 SWMU 21-024(a)

The results of the minimum ESL comparisons are presented in Table H-5.3-22. Barium, chromium, copper, lead, mercury, nickel, selenium, vanadium, zinc, benzoic acid, bis(2-ethylhexyl)phthalate, and chloroaniline[4-] are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-23. The HI analysis indicates that all of the receptors, except the red fox and cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.9 SWMU 21-024(b)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-24. The results of the minimum ESL comparisons are presented in Table H-5.3-25. Arsenic, barium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, zinc, Aroclor-1254, Aroclor-1260, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, TCDD[2,3,7,8-] equivalent, americium-241 and plutonium-239 are retained as COPECs because the HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-26. The HI analysis indicates that all of the receptors, except the cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.10 SWMU 21-024(d)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-27. The results of the minimum ESL comparisons are presented in Table H-5.3-28. Arsenic, barium, chromium, copper, cyanide, lead, manganese, mercury, nickel, selenium, silver, zinc, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzoic acid, bis(2-ethylhexyl)phthalate, dichlorobenzene[1,4-], di-n-butylphthalate, and

TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-29. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.11 SWMU 21-024(e)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-30. The results of the minimum ESL comparisons are presented in Table H-5.3-31. Antimony, barium, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, selenium, uranium, zinc, bis(2-ethylhexyl)phthalate, chloroaniline[4-], di-n-butylphthalate, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-32. The HI analysis indicates that all of the receptors, except the red fox and cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.12 SWMU 21-024(g)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-33. The results of the minimum ESL comparisons are presented in Table H-5.3-34. Arsenic, barium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, zinc, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Iron, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-35. The HI analysis indicates that all of the receptors, except the cottontail and red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.13 SWMU 21-024(h)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-36. The results of the minimum ESL comparisons are presented in Table H-5.3-37. Antimony, arsenic, barium, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, vanadium, zinc, benzoic

acid, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-38. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.14 SWMU 21-024(i)

The results of the minimum ESL comparisons are presented in Table H-5.3-39. Antimony, arsenic, barium, chromium, copper, lead, lithium, mercury, selenium, strontium, zinc, Aroclor-1254, Aroclor-1260, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Calcium, perchlorate, isopropylbenzene, trimethylbenzene[1,2,4-], bromomethane, and trichlorofluoromethane do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-40. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.15 SWMU 21-024(j)

The results of the minimum ESL comparisons are presented in Table H-5.3-41. Arsenic, barium, chromium, copper, lead, manganese, nickel, selenium, zinc, Aroclor-1254, Aroclor-1260, and bis(2-ethylhexyl)phthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-42. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.16 Consolidated Unit 21-024(l)-99

The results of the minimum ESL comparisons are presented in Table H-5.3-43. Barium, cadmium, chromium, cobalt, copper, lead, lithium, mercury, selenium, zinc, acenaphthene, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, phenanthrene, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, xylene[1,3-]+[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-44. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.17 SWMU 21-024(o)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-45. The results of the minimum ESL comparisons are presented in Table H-5.3-46. Chromium, cyanide, lead, selenium, zinc, benzoic acid, bis(2-ethylhexyl)phthalate, hexachlorobenzene, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-47. The HI analysis indicates that all of the receptors, except the cottontail and red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.18 Consolidated Unit 21-026(a)-99

The dioxin and furan congener TEF calculations are presented in Table H-5.3-48. The results of the minimum ESL comparisons are presented in Table H-5.3-49. Antimony, arsenic, barium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, zinc, acenaphthene, benzoic acid, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, phenanthrene, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Calcium, nitrate, perchlorate, dimethylphenol[2,4-], ethylbenzene, and trimethylbenzene[1,2,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-50. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.19 SWMU 21-027(a)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-51. The results of the minimum ESL comparisons are presented in Table H-5.3-52. Antimony, arsenic, barium, cadmium, chromium, copper, lead, lithium, mercury, nickel, selenium, vanadium, zinc, Aroclor-1254, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, TCDD[2,3,7,8-] equivalent, americium-241, plutonium-238, plutonium-239/240, and uranium-234 are retained as COPECs because the HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-53. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### H-5.3.20 SWMU 21-027(c)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-54. The results of the minimum ESL comparisons are presented in Table H-5.3-55. Barium, chromium, copper, lead, mercury, selenium, zinc, acenaphthene, benzoic acid, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-56. The HI analysis indicates that all of the receptors, except the cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

## H-5.4 Uncertainty Analysis

The uncertainty analysis describes the key sources of uncertainty related to the screening evaluations. This analysis can result in either adding or removing chemicals from the list of COPECs. This section contains a qualitative uncertainty analysis of the issues relevant to evaluating the potential ecological risk at each site.

### H-5.4.1 Chemical Form

The assumptions used in the ESL derivations are conservative and not necessarily representative of actual conditions. These assumptions include maximum chemical bioavailability, maximum receptor ingestion rates, minimum bodyweight, and additive effects of multiple COPECs. These factors tend to result in conservative ESL estimates, which may lead to an overestimation of the potential risk. The assumption of additive effects for multiple COPECs may result in an over- or underestimation of the potential risk to receptors.

The chemical form of the individual COPCs was not determined as part of the investigation. Toxicological data are typically based on the most toxic and bioavailable chemical species, which are not typically found in the environment. Inorganic, radionuclide, and organic COPECs are generally not 100% bioavailable to receptors in the natural environment from interference from other natural processes, such as the adsorption of chemical constituents to matrix surfaces (e.g., soil) or rapid oxidation or reduction

changes that render harmful chemical forms unavailable to biotic processes. The ESLs were calculated to ensure a conservative indication of potential risk (LANL 2004, 087630) and the values are biased toward overestimating the potential risk to receptors.

### H-5.4.2 Exposure Assumptions

The EPCs used in the calculations of HQs are the UCLs or the maximum detected concentration in the soil/fill/tuff to a depth of 5 ft bgs and are conservative estimates of exposure to each COPEC. At SWMUs 21-022(f) and 21-022(j), samples were collected only at depths below 5 ft bgs, and therefore, there are no complete exposure pathways to ecological receptors. The sampling efforts focused on areas of suspected contamination, and receptors were assumed to ingest 100% of their food and spend 100% of their time at the site. These assumptions regarding the exposure for terrestrial receptors in the DP Site Aggregate Area are likely to result in an overestimation of potential ecological exposure and risk.

### H-5.4.3 Toxicity Values

The HQs were calculated using ESLs, which are based on NOAELs as threshold effect levels; actual risk for a given COPEC/receptor combination occurs at a higher level, somewhere between the NOAEL-based threshold and the threshold based on the LOAEL. The use of NOAELs leads to an overestimation of potential risk to ecological receptors. ESLs are based on laboratory studies requiring extrapolation to wildlife receptors. Laboratory studies are typically based on “artificial” and maintained populations with genetically similar individuals and are limited to single chemical exposures in isolated and controlled conditions using a single exposure pathway. Wild species are concomitantly exposed to a variety of chemical and environmental stressors, potentially rendering them more susceptible to chemical stress. On the other hand, wild populations are probably more genetically diverse than laboratory populations, making wild populations, as a whole, less sensitive to chemical exposure than laboratory populations. The uncertainties associated with the ESLs tend to lead to an overestimation of potential risk.

### H-5.4.4 Comparison with Background Concentrations

#### H-5.4.4.1 AOC 21-002(b)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, cadmium, chromium, cyanide (Table H-5.4-1). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead, selenium, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.2 Consolidated Unit 21-006(c)-99

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, barium, chromium, copper, cyanide, lead, mercury, nickel, and selenium (Table H-5.4-2). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Zinc is retained as a COPEC for further evaluation.

#### H-5.4.4.3 SWMU 21-009

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: barium, chromium, cyanide, lead, and zinc (Table H-5.4-3). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Selenium is retained as a COPEC for further evaluation.

#### H-5.4.4.4 SWMU 21-012(b)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, arsenic, barium, cadmium, chromium, cyanide, lead, nickel, and selenium, (Table H-5.4-4). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, mercury, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.5 SWMU 21-013(c)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, cadmium, chromium, lead, nickel, and vanadium (Table H-5.4-5). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Mercury and selenium are retained as COPECs for further evaluation.

#### H-5.4.4.6 SWMU 21-022(h)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, barium, cadmium, calcium, cyanide, iron, nickel, and selenium (Table H-5.4-6). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Chromium, copper, lead, mercury, silver, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.7 Consolidated Unit 21-023(a)-99

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, arsenic, barium, calcium, chromium, copper, manganese, and vanadium (Table H-5.4-7). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead, mercury, and selenium are retained as COPECs for further evaluation.

#### H-5.4.4.8 SWMU 21-024(a)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: barium, chromium, lead, nickel, selenium, and vanadium (Table H-5.4-8). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations and therefore exposure of the receptors to these inorganic chemicals is similar to background. Copper and mercury are retained as COPECs for further evaluation.

#### H-5.4.4.9 SWMU 21-024(b)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, chromium, cyanide, lead, nickel, selenium, and zinc (Table H-5.4-9). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations and therefore exposure of the receptors to these inorganic chemicals is similar to background. Copper, mercury, and silver are retained as COPECs for further evaluation.

#### H-5.4.4.10 SWMU 21-024(d)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, chromium, cyanide, manganese, nickel, and zinc (Table H-5.4-10). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, lead, mercury, selenium, silver, and uranium are retained as COPECs for further evaluation.

#### H-5.4.4.11 SWMU 21-024(e)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, barium, cadmium, chromium, selenium, and zinc (Table H-5.4-11). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, cyanide, lead, mercury, and uranium are retained as COPECs for further evaluation.

#### H-5.4.4.12 SWMU 21-024(g)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, nickel, selenium, and zinc (Table H-5.4-12). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Mercury is retained as a COPEC for further evaluation.

#### H-5.4.4.13 SWMU 21-024(h)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, arsenic, barium, cadmium, chromium, cyanide, nickel, selenium, and vanadium (Table H-5.4-13). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, lead, mercury, silver, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.14 SWMU 21-024(i)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, calcium, chromium, copper, and selenium (Table H-5.4-14). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Antimony, lead, mercury, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.15 SWMU 21-024(j)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: arsenic, barium, chromium, copper, lead, manganese, and nickel (Table H-5.4-15). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Selenium and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.16 Consolidated Unit 21-024(l)-99

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: barium, cadmium, chromium, cobalt, copper, mercury, and selenium (Table H-5.4-16). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.17 SWMU 21-024(o)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: chromium, lead, and selenium (Table H-5.4-17). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Cyanide and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.18 Consolidated Unit 21-026(a)-99

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, arsenic, barium, cadmium, calcium, nickel, selenium, and vanadium (Table H-5.4-18). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations and therefore exposure of the receptors to these inorganic chemicals is similar to background. Chromium, copper, cyanide, lead, mercury, silver, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.19 SWMU 21-027(a)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: antimony, arsenic, barium, cadmium, lead, nickel, selenium, and vanadium (Table H-5.4-19). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Chromium, copper, mercury, and zinc are retained as COPECs for further evaluation.

#### H-5.4.4.20 SWMU 21-027(c)

The EPCs of the following inorganic chemicals are similar to background soil or tuff concentrations: barium, chromium, copper, mercury, selenium, and zinc (Table H-5.4-20). These inorganic chemicals are not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead is retained as a COPEC for further evaluation.

### H-5.4.5 Area Use Factors

Area use factors (AUFs) are used to account for the amount of time that a receptor is likely to spend within the contaminated areas based on the size of the receptor's home range (HR). The AUF for an individual organism was developed by dividing the size of the site by the receptor's HR. Because T&E species must be assessed on an individual basis (EPA 1999, 070086), the AUF is used for the Mexican spotted owl. The kestrel (top carnivore) is used as the surrogate receptor for the Mexican spotted owl. The unadjusted HI for the kestrel (top carnivore) is above 1.0 for all but SWMU 21-009. The HR for the Mexican spotted owl is 366 ha and the site areas are presented in Tables H-5.4-21 to H-5.4-40. Application of the Mexican spotted owl AUFs to the HQs for the kestrel (top carnivore) results in adjusted HIs ranging from 0.0000001 to 0.007. Therefore, there are no potential adverse impacts to the Mexican spotted owl at the DP Site Aggregate Area sites because the adjusted HIs are less than 1.0.

### H-5.4.6 Population Area Use Factors

EPA guidance is to manage the ecological risk to populations rather than to individuals, with the exception of T&E species (EPA 1999, 070086). One approach to address the potential effects on populations is to estimate the spatial extent of the area inhabited by the local population that overlaps with the contaminated area. The population area for a receptor is based on the individual receptor HR and its dispersal distance (Bowman et al. 2002, 073475). Bowman et al. estimates that the median dispersal distance for mammals is 7 times the linear dimension of the HR, which is equivalent to the square root of the HR area. If only the dispersal distances for the mammals with HRs within the range of the screening receptors are used (Bowman et al. 2002, 073475), the median dispersal distance becomes 3.6 times the square root of the HR ($R^2 = 0.91$). If it is assumed that the receptors can disperse the same distance in any direction, the population area is circular and the dispersal distance is the radius of the circle. Therefore, the population area can be derived by $\pi(3.6\sqrt{HR})^2$ or approximately 40 HR.

Population area use factors (PAUFs) are estimated by dividing the site area by the estimated population area of each receptor population (Tables H-5.4-21 to 1-5.4-40). The HQs are recalculated minus the COPECs eliminated based on similarity to background (section H-5.5.4) and adjusted by multiplying by the PAUFs. If the PAUF is greater than 1, the HQ is not adjusted. The HQs for the plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs. The adjusted HQs are summed for each receptor to calculate the adjusted HIs (Tables H-5.4-41 to H-5.4-60).

#### H-5.4.6.1 AOC 21-002(b)

The adjusted HQs and HIs for AOC 21-002(b) are presented in Table H-5.4-41. The adjusted HIs are below 1, except for the earthworm and plant.

The elevated HIs for the earthworm and plant are primarily from selenium. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. Therefore, no COPECs are retained at this site.

#### H-5.4.6.2 Consolidated Unit 21-006(c)-99

The adjusted HQs and HIs for Consolidated Unit 21-006(c)-99 are presented in Table H-5.4-42. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore and omnivore), earthworm, and plant.

The adjusted HIs for the American robin are primarily from bis(2-ethylhexyl)phthalate, which was detected in 2 of 21 samples. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, bis(2-ethylhexyl)phthalate is not retained as a COPEC for the American robin, and the adjusted HIs do not indicate potential risks.

The elevated HI for the earthworm is primarily from zinc. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI for the earthworm does not indicate a potential risk.

The elevated HI for plant is primarily from zinc. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI for plant does not indicate potential risk.

#### H-5.4.6.3 SWMU 21-009

The adjusted HQs and HIs for SWMU 21-009 are presented in Table H-5.4-43. The adjusted HIs are below 1, except for the earthworm and plant.

The elevated HIs for the earthworm and plant are primarily from selenium. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found minimal vegetation at the site as a result of physical disturbances of the area (Attachment H-2). Therefore, the HIs for the earthworm and plant do not indicate potential risks.

#### H-5.4.6.4 SWMU 21-012(b)

The adjusted HQs and HIs for SWMU 21-012(b) are presented in Table H-5.4-44. The adjusted HIs are below or equivalent to 1, except for the earthworm and plant.

The elevated HI for the earthworm is primarily from mercury. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. The HQ for copper is approximately 2. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL

adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by the COPECs (see below), the earthworm population is also likely not affected. Therefore, the HI does not indicate a potential risk to the earthworm.

The elevated HI for plants is primarily from copper and lithium. Lithium was detected in all 53 samples with concentrations ranging from 2.5 mg/kg to 27.5 mg/kg; and the EPC is 12 mg/kg. Although there is no background data for lithium, it is naturally occurring and the EPC, if not the detected concentrations, reflects natural concentrations. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate a potential risk to the plant.

#### H-5.4.6.5 SWMU 21-013(c)

The adjusted HQs and HIs for SWMU 21-013(c) are presented in Table H-5.4-45. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore and omnivore), deer mouse, earthworm, and plant.

The adjusted HIs for the American robin (insectivore and omnivore) are primarily from bis(2-ethylhexyl)phthalate and mercury. The mercury ESLs (0.013 mg/kg and 0.022 mg/kg) are less than the BV (0.1 mg/kg) and overestimate potential risk; the HQs are less than 1 using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, bis(2-ethylhexyl)phthalate and mercury are not retained as COPECs for the American robin and the adjusted HIs do not indicate potential risk.

The adjusted HI for the deer mouse is primarily from selenium. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, the adjusted HI does not indicate a potential risk to the deer mouse.

The elevated HI for the earthworm is primarily from mercury and selenium. Mercury was detected in 45 of 46 samples, with only 3 detections above the ESL. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI does not indicate a potential risk to the earthworm.

The elevated HI for plant is from selenium. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In

addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate a potential risk to the plant.

#### H-5.4.6.6 SWMU 21-022(h)

The adjusted HQs and HIs for SWMU 21-022(h) are presented in Table H-5.4-46. The adjusted HIs are below or equivalent to 1.0, except for the earthworm and plant.

The elevated HI for the earthworm is primarily from chromium, copper, mercury, and zinc. The chromium and mercury ESLs are less than the BVs and overestimate potential risk to the earthworm. The ratio of soil BVs to the EPCs for these COPECs results in values of approximately 5 and 8, respectively (the ratio to the maximum chromium soil background concentration is approximately 3). Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, there is no potential risk to the earthworm.

The elevated HI for the plant is from chromium and, to a lesser degree, copper, lead, molybdenum, zinc, acenaphthene, and naphthalene. The chromium ESL is less than the BV and overestimates potential risk to the plant. The ratio of soil BV to the EPC results in a value of approximately 5 (the ratio to the maximum soil background concentration is approximately 3). Molybdenum was detected in all 28 samples and is naturally occurring but has no established background concentration. The EPC (9.8 mg/kg) and the range of concentrations detected (0.15 mg/kg to 21.3 mg/kg) are probably naturally occurring. Acenaphthene had only two concentrations detected above the ESL, while naphthalene had only one concentration above the ESL. The maximum detected concentration of naphthalene was the EPC. The results overestimate the potential risk to the plant. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, there is no potential risk to the plant.

#### H-5.4.6.7 Consolidated Unit 21-023(a)-99

The adjusted HQs and HIs for Consolidated Unit 21-023(a)-99 are presented in Table H-5.4-47. The adjusted HIs are below or equivalent to 1, except for the earthworm and plant.

The elevated HI for the earthworm is primarily from selenium and mercury. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for plant is primarily from lead, selenium, acenaphthene, and naphthalene. Acenaphthene was detected in 3 of 36 samples with 2 detected concentrations exceeding the ESL, while

naphthalene was detected in 2 of 36 samples with 1 detected concentration exceeding the ESL; the EPCs for both COPECs are the maximum detected concentrations. The results overestimate the potential risk to the plant. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.8 SWMU 21-024(a)

The adjusted HQs and HIs for SWMU 21-024(a) are presented in Table H-5.4-48. The adjusted HIs are below 1, except for the earthworm.

The elevated HI for the earthworm is from mercury. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. Therefore, the HI does not indicate potential risk to the earthworm.

#### H-5.4.6.9 SWMU 21-024(b)

The adjusted HQs and HIs for SWMU 21-024(b) are presented in Table H-5.4-49. The adjusted HIs are below or equivalent to 1, except for the earthworm.

The elevated HI for the earthworm is primarily from mercury, plutonium-239, and americium-241. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

#### H-5.4.6.10 SWMU 21-024(d)

The adjusted HQs and HIs for SWMU 21-024(d) are presented in Table H-5.4-50. The adjusted HIs are below or equivalent to 1, except for the deer mouse, earthworm, and plant.

The adjusted HI for the deer mouse is from the TCDD[2,3,7,8-] equivalent concentration. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, the adjusted HI does not indicate potential risk to the deer mouse.

The elevated HI for the earthworm is primarily from mercury, selenium, and copper. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for plant is primarily from selenium and copper. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community and minimal vegetation in the disturbed areas (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.11 SWMU 21-024(e)

The adjusted HQs and HIs for SWMU 21-024(e) are presented in Table H-5.4-51. The adjusted HIs are below or equivalent to 1, except for the earthworm and plant.

The elevated HI for the earthworm is primarily from copper, mercury, and plutonium-239. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for the plant is primarily from several metals and chloroaniline[4-], all with HQs less than 1. Molybdenum was detected in 32 of 34 samples with concentrations ranging from 0.25 mg/kg to 2.2 mg/kg; the EPC is 0.87 mg/kg. Although there is no background data for molybdenum, it is naturally occurring and the EPC and the detected concentrations reflect natural concentrations. Chloroaniline[4-] was detected in two samples, with the maximum detected concentration being the EPC, which overestimates potential risk. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community and minimal vegetation in the disturbed areas (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.12 SWMU 21-024(g)

The adjusted HQs and HIs for SWMU 21-024(g) are presented in Table H-5.4-52. The adjusted HIs are below or equivalent to 1, except for the earthworm.

The elevated HI for the earthworm is from mercury. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Because the plant community does not appear to be affected by COPECs (see below), the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

#### H-5.4.6.13 SWMU 21-024(h)

The adjusted HQs and HIs for SWMU 21-024(h) are presented in Table H-5.4-53. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore), earthworm, and plant.

The adjusted HI for the American robin (insectivore) is primarily from mercury. The mercury ESL (0.013 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the ratio is approximately 0.2 using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, the adjusted HI does not indicate potential risk to the American robin (insectivore and omnivore).

The elevated HI for the earthworm is from copper, mercury, and zinc. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for plant is primarily from copper and, to a lesser degree, lead, molybdenum, and zinc. Molybdenum was detected in two of two samples with concentrations ranging from 0.49 mg/kg to 0.72 mg/kg; the EPC is 0.72 mg/kg. Although there is no background data for molybdenum, it is naturally occurring and the EPC and the detected concentrations reflect natural concentrations. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.14 SWMU 21-024(i)

The adjusted HQs and HIs for SWMU 21-024(i) are presented in Table H-5.4-54. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore), earthworm, and plant.

The adjusted HI for the American robin (insectivore) is primarily from mercury. The mercury ESL (0.013 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the ratio is approximately 0.2 using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain

conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, the adjusted HI does not indicate potential risk to the American robin (insectivore).

The elevated HI for the earthworm is primarily from mercury. The mercury ESL (0.05 mg/kg) is less than the BV (0.1 mg/kg) and overestimates potential risk; the HQ is reduced by 50% using the BV. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for the plant is primarily from antimony and lithium. The antimony ESL (0.05 mg/kg) is less than the BV (0.83 mg/kg) and overestimates potential risk; the ratio is approximately 2 using the BV. Lithium was detected in the one sample at 15 mg/kg. Although there is no background data for lithium, it is naturally occurring and the detected concentration reflects natural levels. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.15 SWMU 21-024(j)

The adjusted HQs and HIs for SWMU 21-024(j) are presented in Table H-5.4-55. The adjusted HIs are below 1, except for the earthworm and plant.

The elevated HI for the earthworm is from selenium and zinc. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also probably not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for the plant is primarily from selenium. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.16 Consolidated Unit 21-024(l)-99

The adjusted HQs and HIs for Consolidated Unit 21-024(l)-99 are presented in Table H-5.4-56. The adjusted HIs are below 1, except for the earthworm and plant.

The elevated HI for the earthworm is primarily from zinc. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the

COPECs, the earthworm population is also likely not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for plant is primarily from lithium and lead. Lithium was detected in 50 of 50 samples with concentrations ranging from 2.3 mg/kg to 17.8 mg/kg; the EPC is 12.7 mg/kg mg/kg. Although there is no background data for lithium, it is naturally occurring and the EPC and detected concentrations reflect natural levels. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.17 SWMU 21-024(o)

The adjusted HQs and HIs for SWMU 21-024(o) are presented in Table H-5.4-57. All of the adjusted HIs are below 1. Therefore, there are no potential risks to the receptors.

#### H-5.4.6.18 Consolidated Unit 21-026(a)-99

The adjusted HQs and HIs for Consolidated Unit 21-026(a)-99 are presented in Table H-5.4-58. The adjusted HIs are below or equivalent to 1, except for the American robin (omnivore and insectivore), earthworm, and plant.

The adjusted HIs for the American robin (insectivore and ominivore) are primarily from mercury. The mercury ESLs (0.013 mg/kg and 0.022 mg/kg) are less than the BV (0.1 mg/kg) and overestimate potential risk; the ratios are approximately 0.5 using the BV. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, the adjusted HIs do not indicate potential risks to the American robin (insectivore and omnivore).

The elevated HI for the earthworm is primarily from mercury and, to a lesser degree, chromium. The chromium and mercury ESLs (0.34 mg/kg and 0.05 mg/kg, respectively) are less than the BVs (19.3 mg/kg and 0.1 mg/kg) and overestimate potential risk. The ratios of soil BVs to the EPCs for these COPECs are approximately 2 (the ratio to the maximum chromium soil background concentration is approximately 1) and 30, respectively. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Field observations made during the site visit found distressed vegetation from the outfall discharge but no contaminant effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for the plant is primarily from chromium and, to a lesser degree, copper, zinc, and acenaphthene. The chromium ESL (0.35 mg/kg) is less than the BV (19.3 mg/kg) and overestimates potential risk. The ratio of soil BV to the EPC is approximately 2 (the ratio to the maximum soil background concentration is approximately 1). Acenaphthene was detected in only one sample above the ESL and overestimates the potential risk. Dourson and Stara (1983, 073474) conducted a study of

uncertainty factors incorporated in calculating ESLs for ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Although evidence of distressed vegetation was found at the site during the site visit (Attachment H-2), it is probably from the discharge of water from the outfall rather than from COPECs. Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.19 SWMU 21-027(a)

The adjusted HQs and HIs for SWMU 21-027(a) are presented in Table H-5.4-59. The adjusted HIs are below 1, except for the deer mouse, earthworm, plant, and montane shrew.

The adjusted HIs for the deer mouse and montane shrew are from the TCDD[2,3,7,8-] equivalent concentration. TCDD[2,3,7,8-] equivalent is retained as a COPEC, and the adjusted HIs indicate a potential risk to receptors exists at this site.

The elevated HI for the earthworm is primarily from chromium and, to a lesser degree, mercury, zinc, and plutonium-239. The chromium and mercury ESLs (0.34 mg/kg and 0.05 mg/kg, respectively) are less than the BVs (19.3 mg/kg and 0.1 mg/kg) and overestimate potential risk. The ratios of soil BVs to the EPCs for these COPECs are approximately 19 (the ratio to the maximum chromium soil background concentration is approximately 10) and 3, respectively. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. Therefore, the HI does not indicate potential risk to the earthworm.

The elevated HI for the plant is primarily from chromium and, to a lesser degree, lithium and zinc. The chromium ESL (0.35 mg/kg) is less than the BV (19.3 mg/kg) and overestimates potential risk. The ratio of soil BV to the EPC is approximately 19 (the ratio to the maximum soil background concentration is approximately 10). Lithium was detected in all 29 samples with concentrations ranging from1.9 mg/kg to 18.1 mg/kg; the EPC is 9.7 mg/kg mg/kg. Although there is no background data for lithium, it is naturally occurring and the EPC and detected concentrations reflect natural levels. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Therefore, the HI does not indicate potential risk to the plant.

#### H-5.4.6.20 SWMU 21-027(c)

The adjusted HQs and HIs for SWMU 21-027(c) are presented in Table H-5.4-60. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore and omnivore).

The adjusted HIs for the American robin (insectivore and omnivore) are primarily from bis(2-ethylhexyl)phthalate, which was detected in 7 of 32 samples. Dourson and Stara (1983, 073474) conducted a study of uncertainty factors incorporated in calculating ESLs for ecological receptors. Based on their study, the LOAEL to NOAEL adjustment indicates that HIs up to 10 may not adversely affect

ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore the adjusted HIs do not indicate potential risks to the American robin.

### H-5.4.7 COPECs without ESLs

Several COPECs do not have ESLs for any receptor in version 2.4 of the ECORISK Database (LANL 2009, 107524) because literature searches for relevant toxicity data for these chemicals have not been completed. In an effort to address this uncertainty and provide a quantitative assessment of potential ecological risk, several online toxicity databases have been searched in order to determine if any relevant toxicity information are available. The online databases searched were EPA Ecotox Database, EPA Office of Pesticide Programs Aquatic Life Benchmarks, U.S. Army Corps of Engineers/EPA Environmental Residue-Effects, California Cal/Ecotox Database, Pesticide Action Network Pesticide Database, U.S. Army Wildlife Toxicity Assessment Program, USDA Integrated Pesticide Management Database, American Bird Conservancy Pesticide Toxicity Database, and Oak Ridge National Laboratory Risk Assessment Information System. Toxicity data was obtained for several COPECs and receptors as a result of this online database search and interim ESLs were calculated. The ESLs are termed interim because the information and calculations are still undergoing review, and documentation required for the ECORISK Database has not yet been completed. As a result, the ESLs are not yet in the ECORISK Database. Once the development process is completed the interim ESLs will be finalized and included in the appropriate revision to the ECORISK Database. Although the majority of the COPECs listed did not have any relevant toxicity data in the online databases listed above, a search of the literature continues in an effort to determine if any relevant toxicity information exists.

In the absence of a chemical-specific ESL, COPEC concentrations can be compared to ESLs for a surrogate chemical. Comparison to surrogate ESLs provides an estimate of potential effects of a chemically related compound and a line of evidence to indicate the likelihood that ecological receptors are potentially impacted.

Some COPECs without ESLs do not have chemical-specific toxicity data or surrogate chemicals to be used in the screening assessments and cannot be assessed quantitatively for potential ecological risk. These COPECs are often infrequently detected across the site. In these cases, comparisons to residential human health SSLs are presented as part of a qualitative assessment. The comparison of COPEC concentrations to residential human health SSLs is a viable alternative for several reasons. Animal studies are used to infer effects on humans and is the basic premise of modern toxicology (EPA 1989, 008021). In addition, toxicity values derived for the calculation of human health SSLs are often based on potential effects that are more sensitive than the ones used to derive ESLs (e.g., cellular effects for humans versus survival or reproductive effects for terrestrial animals). The EPA also applies uncertainty factors or modifying factors to ensure that the toxicity values are protective (i.e., they are adjusted by uncertainty factors to values much lower than the study results). COPEC concentrations compared with these values are an order of magnitude or more below the SSLs, which corresponds to uncertainty factors of 10 or more. Therefore, it is assumed that the differences in toxicity would not be more than an order of magnitude for any given chemical. The relative difference between values provides a weight of evidence that the potential toxicity of the COPC is likely to be low or very low to the receptor(s). The COPECs without ESLs were common to many of the sites and are discussed below for each site.

#### H-5.4.7.1 AOC 21-002(b)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs

and are assessed qualitatively. Xylene[1,3-]+xylene[1,4-] has surrogate ESLs for a structurally related compound (xylenes) in the current version of the ECORISK Database.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 18 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.0004. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Nitrate was detected in all 36 samples and had a maximum detected concentration of 13.8 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 36 samples and had a maximum detected concentration of 0.00127 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.2 Consolidated Unit 21-006(c)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Xylene[1,2-] and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for a structurally related compound (xylenes) in the current version of the ECORISK Database.

Xylene[1,2-] was detected in 1 of 15 samples with a maximum detected concentration of 0.0006 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.0004. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 15 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.0006 mg/kg) and results in a maximum HQ of 0.0004. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Nitrate was detected in 13 of 23 samples and had a maximum detected concentration of 66.1 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 2 of 21 samples and had a maximum detected concentration of 0.0345 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.3 SWMU 21-009

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 16 of 18 samples and had a maximum detected concentration of 19.3 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 2 of 16 samples and had a maximum detected concentration of 0.000659 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.4 SWMU 21-012(b)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, iron, nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-]. Calcium, iron, nitrate, and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene[4-], trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Isopropyltoluene[4-] was detected in 3 of 53 samples with a maximum detected concentration of 0.00153 mg/kg. The minimum ESL for toluene (23 mg/kg for the montane shrew) was used to screen the isopropyltoluene[4-] EPC (0.0015 mg/kg) and resulted in a maximum HQ of 0.000067. Because this HQ is less than 0.3, isopropyltoluene[4-] is not retained as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 2 of 53 samples with a maximum concentration of 0.000281 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.00028 mg/kg) and results in a maximum HQ of 0.000012. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 3 of 48 samples with a maximum detected concentration of 0.000553 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.00055 mg/kg) and results in a maximum HQ of 0.00040. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Calcium and iron were not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure to these inorganic chemicals is similar to background (section H-5.4.4.4 and Table H-5.4-4).

Nitrate was detected in 57 of 75 samples and had a maximum detected concentration of 19.5 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 31 of 75 samples and had a maximum detected concentration of 0.00397 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.5 SWMU 21-013(c)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 28 of 46 samples and had a maximum detected concentration of 5.7 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 17 of 46 samples and had a maximum detected concentration of 0.00726 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.6 SWMU 21-022(h)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, isopropyltoluene[4-], and carbazole. Nitrate, perchlorate, and carbazole do not have interim or surrogate ESLs and are assessed qualitatively. However, isopropyltoluene[4-] has surrogate ESLs for a structurally related compounds (toluene) in the current version of the ECORISK Database.

Isopropyltoluene[4-] was detected in 1 of 14 samples with an a maximum detected concentration of 0.0019 mg/kg. The minimum ESL for toluene (23 mg/kg for the montane shrew) was used to screen the isopropyltoluene[4-] EPC (0.0019 mg/kg) and resulted in a maximum HQ of 0.00008. Because this HQ is less than 0.3, isopropyltoluene[4-] is not retained as a COPEC.

Carbazole was detected in 3 of 22 samples with a maximum detected concentration of 1.5 mg/kg. The EPA Region 6 residential SSL for carbazole is 240 mg/kg, indicating that potential toxicity is low. Because of the infrequent detection and the potentially low toxicity, carbazole is eliminated as a COPEC.

Nitrate was detected in 21 of 28 samples and had a maximum detected concentration of 72 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 3 of 27 samples and had a maximum detected concentration of 0.015 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.7 Consolidated Unit 21-023(a)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Calcium, nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Ethylbenzene, isopropyltoluene[4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (benzene, toluene, total xylenes, respectively) in the current version of the ECORISK Database.

Ethylbenzene was detected in 1 of 36 samples with a maximum detected concentration of 0.0006 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.0006 mg/kg) and results in a maximum HQ of 0.00003. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Isopropyltoluene [4-] was detected in 2 of 36 samples with a maximum detected concentration of 0.0004 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Xylene[1,2-] was detected in 1 of 36 samples and with a maximum detected concentration of 0.001 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.001 mg/kg) and results in a maximum HQ of 0.0007. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 36 samples with a maximum detected concentration of 0.002 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.001. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Calcium was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.7 and Table H-5.4-7).

Nitrate was detected in 22 of 36 samples and had a maximum detected concentration of 11.6 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 7 of 36 samples and had a maximum detected concentration of 0.00649 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.8 SWMU 21-024(a)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene[4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene [4-] has surrogate ESLs for a structurally related compound (toluene), in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 1 of 17 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.000002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 26 of 34 samples and had a maximum detected concentration of 6.31 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 34 samples and had a maximum detected concentration of 0.00177 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.9 SWMU 21-024(b)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 18 of 22 samples and had a maximum detected concentration of 67.2 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 11 of 21 samples and had a maximum detected concentration of 0.018 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.10 SWMU 21-024(d)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene [4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. However, isopropyltoluene [4-] has surrogate ESLs for a structurally related compound (toluene) in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 1 of 40 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.000002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 30 of 50 samples and had a maximum detected concentration of 121 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 49 samples and had a maximum detected concentration of 0.00591 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.11 SWMU 21-024(e)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Ethylbenzene, isopropyltoluene[4-], trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (benzene, toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Ethylbenzene was detected in 1 of 33 samples with a maximum detected concentration of 0.0007 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.0007 mg/kg) and results in a maximum HQ of 0.00003. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Isopropyltoluene [4-] was detected in 5 of 33 samples with a maximum detected concentration of 0.05 mg/kg The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.05 mg/kg) and results in a maximum HQ of 0.002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 1 of 33 samples with a maximum concentration of 0.0003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.0003 mg/kg) and results in a maximum HQ of 0.00001. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Xylene[1,2-] was detected in 1 of 33 samples with a maximum concentration of 0.002 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.001. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 33 samples with a maximum detected concentration of 0.004 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.004 mg/kg) and results in a maximum HQ of 0.003. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Nitrate was detected in 26 of 40 samples and had a maximum detected concentration of 23.8 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 40 samples and had a maximum detected concentration of 0.00284 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.12 SWMU 21-024(g)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for iron, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-],and xylene [1,3-]+xylene[1,4-]. Iron, nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Ethylbenzene, isopropyltoluene[4-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (benzene, toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Ethylbenzene was detected in 2 of 40 samples with a maximum detected concentration of 0.001 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.001 mg/kg) and results in a maximum HQ of 0.00004. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Isopropyltoluene[4-] was detected in 3 of 40 samples with a maximum detected concentration of 0.002 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the

isopropyltoluene[4-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.00009. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 2 of 40 samples with a maximum detected concentration of 0.003 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.003 mg/kg) and results in a maximum HQ of 0.0002. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Iron was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.12 and Table H-5.4-12).

Nitrate was detected in 27 of 65 samples and had a maximum detected concentration of 4.6 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 4 of 65 samples and had a maximum observed concentration of 0.0029 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.13 SWMU 21-024(h)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene[4-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 2 of 24 samples with a maximum concentration of 0.0006 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0006 mg/kg) and results in a maximum HQ of 0.00003. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 1 of 24 samples with a maximum concentration of 0.0004 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, trimethylbenzene[1,2,4-] is eliminated as a COPEC.

Trimethylbenzene [1,3,5-] was detected in 1 of 24 samples with a maximum concentration of 0.0003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,3,5-] EPC (0.0003 mg/kg) and results in a maximum HQ of 0.00001. Because this HQ is less than 0.3, trimethylbenzene[1,3,5-] is eliminated as a COPEC.

Xylene[1,2-] was detected in 1 of 24 samples with a maximum concentration of 0.0002 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.0002 mg/kg) and results in a maximum HQ of 0.0001. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 2 of 24 samples with a maximum concentration of 0.0004 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.0003. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Nitrate was detected in 14 of 35 samples and had a maximum detected concentration of 1.84 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 12 of 35 samples and had a maximum detected concentration of 0.00434 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.14 SWMU 21-024(i)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, perchlorate, isopropylbenzene, trimethylbenzene[1,2,4-], bromomethane, and trichlorofluoromethane. Calcium, perchlorate, bromomethane, and trichlorofluoromethane do not have interim or surrogate ESLs and are assessed qualitatively. However, isopropylbenzene and trimethylbenzene[1,2,4-] have surrogate ESLs for structurally related compounds (benzene) in the current version of the ECORISK Database.

Isopropylbenzene was detected in 1 of 15 samples with a maximum detected concentration of 0.003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) was used to screen the isopropylbenzene EPC (0.003 mg/kg) and resulted in a maximum HQ of 0.0001. Because this HQ is less than 0.3, isopropylbenzene is not retained as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 2 of 15 samples with a maximum detected concentration of 0.003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) was used to screen the trimethylbenzene[1,2,4-] EPC (0.003 mg/kg) and resulted in a maximum HQ of 0.0001. Because this HQ is less than 0.3, trimethylbenzene[1,2,4-] is not retained as a COPEC.

Bromomethane was detected in 1 of 15 samples with a maximum detected concentration of 0.003 mg/kg. The NMED residential SSL for bromomethane is 22.3 mg/kg, indicating that potential toxicity is low. Because of the infrequent detection and the potentially low toxicity, bromomethane is not retained as a COPEC.

Trichlorofluoromethane was detected in 2 of 15 samples with a maximum detected concentration of 0.002 mg/kg. The NMED residential SSL for trichlorofluoromethane is 2,010 mg/kg, indicating that potential toxicity is low. Because of the infrequent detection and the potentially low toxicity, trichlorofluoromethane is not retained as a COPEC.

Calcium was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.14 and Table H-5.4-14).

Perchlorate was detected in one of seven samples with a maximum detected concentration of 0.0532 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

### H-5.4.7.15 SWMU 21-024(j)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene[4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene[4-] has a surrogate ESL for a structurally related compound (toluene), in the current version of the ECORISK Database.

Isopropyltoluene[4-] was detected in 1 of 22 samples with a maximum concentration of 0.0004 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00001. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 11 of 29 samples and had a maximum detected concentration of 5.43 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 29 samples and had a maximum detected concentration of 0.0161 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

### H-5.4.7.16 Consolidated Unit 21-024(l)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Xylene[1,3-]+xylene[1,4-] has a surrogate ESL for a structurally related compound (xylene) in the current version of the ECORISK database.

Nitrate was detected in 30 of 48 samples and had a maximum detected concentration of 6.1 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 15 of 50 samples and had a maximum detected concentration of 0.00632 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 37 samples with a maximum concentration of 0.000381 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.00038 mg/kg) and results in a maximum HQ of 0.00027. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

### H-5.4.7.17 SWMU 21-024(o)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 17 of 22 samples and had a maximum detected concentration of 38 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 10 of 22 samples and had a maximum observed concentration of 0.00141 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.18 Consolidated Unit 21-026(a)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, nitrate, perchlorate, dimethylphenol[2,4-], ethylbenzene, and trimethylbenzene[1,2,4-]. Calcium, nitrate, and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Dimethylphenol[2,4-], ethylbenzene, and trimethylbenzene[1,2,4-] have surrogate ESLs for structurally related compounds (phenol and benzene, respectively) in the current version of the ECORISK Database.

Dimethylphenol[2,4-] was detected in 1 of 51 samples with a maximum detected concentration of 0.06 mg/kg. The minimum ESL for phenol (0.79 mg/kg for the plant) is used to screen the dimethylphenol[2,4-] EPC (0.06 mg/kg) and results in a maximum HQ of 0.08. Because this HQ is less than 0.3, dimethylphenol[2,4-] is not retained as a COPEC.

Ethylbenzene was detected in 1 of 26 samples with a maximum detected concentration of 0.0004 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, ethylbenzene is not retained as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 2 of 26 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, trimethylbenzene[1,2,4-] is not retained as a COPEC.

Calcium was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.18 and Table H-5.4-18).

Nitrate was detected in 23 of 50 samples with a maximum detected concentration of 9.8 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 5 of 50 samples with a maximum detected concentration of 0.00154 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.19 SWMU 21-027(a)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 21 of 29 samples and had a maximum detected concentration of 13.9 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 29 samples and had a maximum detected concentration of 0.00364 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

#### H-5.4.7.20 SWMU 21-027(c)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene [4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene [4-] has surrogate ESLs for a structurally related compound (toluene) in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 2 of 17 samples with a maximum detected concentration of 0.002 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.00009. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 10 of 31 samples and had a maximum detected concentration of 2.75 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 3 of 31 samples and had a maximum detected concentration of 0.00155 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

### H-5.4.8 DOE Tier I Bioconcentration Guide

The DOE Tier I Biota Concentration Guide (BCG) is a lower value for cesium-137 (21.6 pCi/g) and stronitium-90 (21.6 pCi/g) than the ECORISK Database final ESLs (680 pCi/g and 560 pCi/g, respectively). Cesium-137 was a COPC at 20 sites. Strontium-90 was a COPC at 15 sites. Using the EPCs for cesium-137 and strontium-90 for each of these sites and the DOE Tier I BCG, the HQs for these radionuclides are all less than 1.0. These HQs are too small to impact the HIs for these sites. In addition, the DOE BCG incorporates bioaccumulation factors that are orders of magnitude higher than those in the ECORISK Database. Environmental surveillance and monitoring at the Laboratory indicate that bioaccumulation factors are not as high as those used by DOE (Bennett et al. 1996, 056035). Therefore, the ESL comparison is more representative than the BCG comparison.

### H-5.4.9 Comparison with Results of Previous Field and Laboratory Studies

Biota investigations have been conducted in canyon reaches in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453). Field and laboratory studies included collection and analysis of soil, sediment, and water samples; cavity-nesting bird monitoring and

analysis of eggs; small mammal trapping and analysis of whole organisms; earthworm bioaccumulation tests (measures of growth and survival, and analysis of whole organisms); laboratory testing of sensitive organisms; and seedling germination tests.

The field and laboratory results included reaches with similar COPEC concentrations as detected at sites within the DP Site Aggregate Area. The studies found no effects from exposure to COPECs in any of the canyon reaches further supporting the conclusion that there is no potential ecological risk at these sites. Specifically, earthworm and plant toxicity tests in Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar or higher concentrations for the COPECs contributing to the elevated earthworm and plant HIs and found no effects from exposure.

## H-5.5 Interpretation of Ecological Risk Screening Results

### H-5.5.1 Receptor Lines of Evidence

Based on the ecological risk-screening assessments, several COPECs (including COPECs without an ESL) were identified within the DP Site Aggregate Area (Table H-5.3-0). Receptors were evaluated using several lines of evidence: minimum ESL comparisons, HI analyses, comparison to background concentrations, potential effects to populations (individuals for T&E species), the relative toxicity of related compounds, and comparisons to previous field and laboratory canyon investigations.

**Plant**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the plant, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the plant at all sites. HIs were evaluated as to the component HQs, and many were found to be overestimates of the potential risk. The overestmation was primarily from ESLs below BVs, which resulted in elevated HQs and HIs.
- Based on Dourson and Stara (1983, 073474), HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. The HIs for the plant are less than or equivalent to 10 at all sites, except at Consolidated Units 21-023(a)-99 and 21-026(a)-99, and SWMUs 21-002(b), 21-009, 21-022(h), 21-024(i), 21-024(j), and 21-027(a).
- The plant communities were evaluated at all sites during site visits. No evidence of adverse impacts of contamination to the plant community based on field observations was found during site visits (Attachment H-2); the plant community is typical of the surrounding area and appears healthy. No marked differences in vegetation were observed between the sites with elevated plant HIs and the sites with similar topography that did not have elevated HIs. However, there were a few sites where the area was physically disturbed by site operations and distressed vegetation was noted from the water discharged from outfalls.
- Field and laboratory studies on plants in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar COPEC concentrations and found no effects from exposure.

These lines of evidence support the conclusion no potential ecological risk to the plants exists at the DP Site Aggregate Area.

**Earthworm (Invertebrate)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the earthworm, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the earthworm at all sites. HIs were evaluated as to the component HQs and many were found to be overestimates of the potential risk. The overestmation was primarily from ESLs below BVs, which resulted in elevated HQs and HIs.
- Based on Dourson and Stara (1983, 073474), HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. The HIs for the earthworm are less than or equivalent to 10 at all sites, except at Consolidated Units 21-026(a)-99 and 21-023(a)-99, and SWMUs 21-012(b), 21-022(h), 21-024(b), 21-024(e), 21-024(h), 21-024(i), and 21-027(a).
- Laboratory studies on earthworms in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar COPEC concentrations and found no effects from exposure.

These lines of evidence support the conclusion no potential ecological risk to the earthworm exists at the DP Site Aggregate Area.

**Montane Shrew (Insectivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the shrew, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the shrew at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the shrew's population area. The adjusted HIs were less than 1.0 for all sites, except at SWMU 21-027(a).
- Based on Dourson and Stara (1983, 073474), HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. The adjusted HI for the shrew is greater than 10 at SWMU 21-027(a). Therefore, it is unlikely that the HIs indicate potential risks to the shrew, except at SWMU 21-027(a)
- Field studies and laboratory analyses on small mammals in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Cañon de Valle (LANL 2003, 077965), and Sandia Canyon (LANL 2009, 107453) included reaches with similar concentrations of COPECs and found no effects from exposure.

These lines of evidence support the conclusion that no potential ecological risk to the montane shrew exists at the DP Site Aggregate Area, except at SWMU 21-027(a).

**Deer Mouse (Omnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the deer mouse, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the deer mouse at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the deer mouse's population area. The adjusted HIs were less than or equivalent to 1.0 at all sites, except at SWMU 21-013(c), 21-024(d), and 21-027(a).
- Based on Dourson and Stara (1983, 073474), HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. The adjusted HIs for the deer mouse are less than 10 at all sites, except at SWMU 21-027(a). Therefore, it is unlikely that the HIs indicate potential risks to the deer mouse, except at SWMU 21-027(a).
- Field studies and laboratory analyses on small mammals in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Cañon de Valle (LANL 2003, 077965), and Sandia Canyon (LANL 2009, 107453) included reaches with similar concentrations of COPECs and found no effects from exposure except for SWMU 21-027(a).
- These lines of evidence support the conclusion that no potential ecological risk to the deer mouse exists at the DP Site Aggregate Area, except at SWMU 21-027(a).

**Desert Cottontail (Herbivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the cottontail, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the cottontail at all sites, except SWMUs 21-013(c), 21-024(a), 21-024(b), 21-024(e), 21-024(g), 21-024(o), and 21-027(c). HIs were adjusted by the PAUF, which is the ratio of the site area to the cottontail's population area. The adjusted HIs were less than 1.0 for the cottontail at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the cottontail exists at the DP Site Aggregate Area.

**Red Fox (Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the fox, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the fox at all sites, except Consolidated Unit 21-026(a)-99 and 21-024(l)-99 and SWMUs 21-009, 21-012(b), 21-013(c), 21-024(a), 21-024(e), 21-024(g), 21-024(h), 21-024(j), and 21-024(o). HIs were adjusted by the PAUF, which is the ratio of the site area to the fox's population area. The adjusted HIs were less than 1.0 at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the fox exists at the DP Site Aggregate Area.

**Robin (All Feeding Guilds)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the robin, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the robin (all feeding guilds) at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the robin's population area. The adjusted HIs were less than or equivalent to 1.0 at all sites, except at Consolidated Units 21-006(c)-99 and 21-026(a)-99 and SWMUs 21-013(c), 21-024(h), 21-024(i), and 21-027(c).
- Based on Dourson and Stara (1983, 073474), HIs up to 10 may not adversely affect ecological receptors. To maintain conservatism, they state that HIs less than 3 do not adversely affect ecological receptors. Therefore, because the adjusted HIs for the robin (insectivore and omnivore) are approximately 10 or less (frequently less than 3), the HIs likely do not indicate potential risks.
- Field studies and laboratory analyses on birds in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar COPEC concentrations and found no effects from exposure.

These lines of evidence support the conclusion that no potential ecological risk to the robin (all feeding guilds) exists at the DP Site Aggregate Area.

**Kestrel (Intermediate Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (intermediate carnivore), were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the kestrel (intermediate carnivore) at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HIs were less than 1.0 for all sites.

These lines of evidence support the conclusion that no potential ecological risk to the kestrel (intermediate carnivore) exists at the DP Site Aggregate Area.

**Kestrel (Top Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (top carnivore), were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.

- HIs were greater than 1.0 for the kestrel (top carnivore) at all sites, except SWMU 21-009. HIs were adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HIs were less than 1.0 for all sites.
- The kestrel (top carnivore) is a surrogate for the Mexican spotted owl. The HIs were adjusted for the owl's AUF. The adjusted HIs were less than 1.0 for all sites.

These lines of evidence support the conclusion that no potential ecological risks to the kestrel (top carnivore) and the Mexican spotted owl exist at the DP Site Aggregate Area.

### H-5.5.2 COPECs with No ESLs

COPECs with no ESLs were not evaluated for each receptor. If a surrogate chemical could be identified or an interim ESL(s) was available, the minimum ESL was used to screen the COPEC. If an interim or surrogate ESL was not available and a residential SSL was available, the residential SSL was used to estimate potential toxicity. In addition, the frequency of detection and the concentrations detected were also evaluated. All COPECs without ESLs were eliminated based on these comparisons.

The analysis of COPECs with no ESLs supports the conclusion that there is no potential ecological risk to receptors at the DP Site Aggregate Area other than to the deer mouse and shrew at SWMU 21-027(a).

### H-5.5.3 Summary

Based on evaluations of the minimum ESL, HI analysis, comparisons to background, potential effects to populations (individuals for T&E species), the relative toxicity of related compounds, and previous canyon studies, there is no potential ecological risk to the earthworm, plant, American robin, American kestrel, desert cottontail, red fox, and Mexican spotted owl at any site within the DP Site Aggregate Area. The risk-screening assessments indicate potential ecological risks to deer mouse and shrew at SWMU 21-027(a) from the TCDD[2,3,7,8-] equivalent concentration.

## H-6.0 CONCLUSIONS

### H-6.1 Human Health Risk

The human health risk-screening assessments found no unacceptable risks or doses under the industrial, construction worker, and residential scenarios for the following sites:

- AOC 21-002(b)
- Consolidated Unit 21-006(c)-99
- SWMU 21-009
- SWMU 21-012(b)
- SWMU 21-013(c)
- SWMU 21-022(f)
- Consolidated Unit 21-023(a)-99
- SWMU 21-024(a)
- SWMU 21-024(d)

- SWMU 21-024(e)
- SWMU 21-024(g)
- SWMU 21-024(h)
- SWMU 21-024(i)
- SWMU 21-024(j)
- Consolidated Unit 21-024(l)-99
- SWMU 21-024(o)
- SWMU 21-027(c)

For Consolidated Units 21-006(c)-99, 21-023(a)-99, and 21-024(l)-99 and SWMUs 21-022(f) and 21-024(d), the total excess cancer risks or HIs were slightly or more above the NMED target levels. However, further evaluation of the EPCs and/or COPCs contributing to the risks indicated that either the COPCs were not site related or the EPCs were similar to background concentrations. This evaluation resulted in concluding that no potential unacceptable risks exist at these sites for all scenarios.

The human health risk-screening assessments at the remaining sites concluded the following.

- SWMU 21-022(h) has HIs above NMED target level for all scenarios; total excess cancer risks above NMED target level for the industrial and residential scenarios; and total doses above the DOE target level for the construction worker and residential scenarios;
- SWMU 21-024(b) has total doses above the DOE target level for the construction worker and residential scenarios;
- Consolidated Unit 21-026(a)-99 has total excess cancer risks above NMED target level for all scenarios;
- SWMU 21-027(a) has HI above NMED target level for the construction worker scenario; total excess cancer risks above NMED target level for the industrial and residential scenarios; and total doses above the DOE target level for the construction worker and residential scenarios.

Sites at TA-21 are not accessible by the public and are not planned for release by DOE in the foreseeable future. Therefore, an as low as reasonably achievable (ALARA) evaluation for radiological exposure to the public is not currently required. Should DOE's plans for releasing these areas change, an ALARA evaluation will be conducted at that time. It should be noted that the Laboratory addresses considerations for radiation exposures to workers under the Laboratory's occupational radiological protection program in compliance with 10 Code of Federal Regulations 835. The Laboratory's radiation protection program implements ALARA and consists of the following elements: management commitment, training, design review, radiological work review, performance assessments, and documentation.

### H-6.2 Ecological Risk

Based on evaluations of the minimum ESL, HI analysis, comparisons to background, potential effects to populations (individuals for T&E species), the relative toxicity of related compounds, and previous canyon studies, there is no potential ecological risk to the earthworm, plant, American robin, American kestrel, desert cottontail, red fox, and Mexican spotted owl at all sites and to the deer mouse and montane shrew at all but one site. Field and laboratory studies conducted and reported as part of the ecological investigations in Los Alamos and Pueblo Canyons (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Cañon de Valle (LANL 1993, 077965) , Pajarito Canyon (LANL

2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) found similar concentrations of COPCs have not adversely impacted small mammal, bird, earthworm, and plant populations, and individual Mexican spotted owls. However, the risk-screening evaluations indicated that there is a potential ecological risk to the montane shrew and the deer mouse at SWMU 21-027(a) from dioxin/furans. Previous field and laboratory studies conducted in the canyons have not encountered the TCDD[2,3,7,8-] equivalent concentration calculated and screened for SWMU 21-027(a). The screening assessment resulted in elevated HIs for the deer mouse and shrew indicating potential risk to these receptors. As a result, additional investigations or corrective actions may be warranted at this site.

## H-7.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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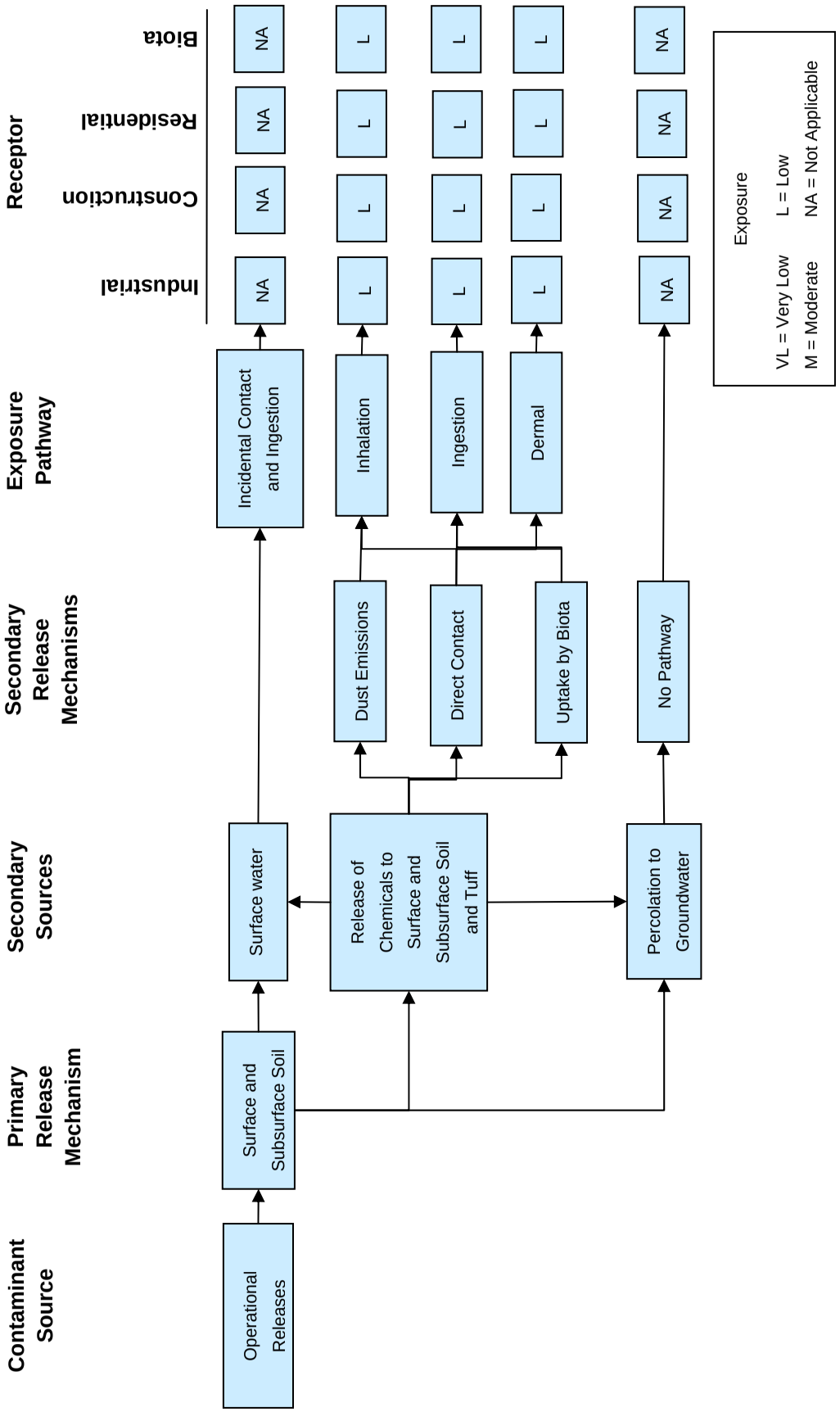



**Figure H-3.2-1 Conceptual site model for DP Site Aggregate Area**

**Table H-2.2-1**
**Exposure Point Concentrations for AOC 21-002(b) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 18 | 18 | 2330 | 11000 | Normal | 9137 | 95% Student's-t |
| Arsenic | 18 | 17 | 1.24 (J) | 3.57 | Nonparametric | 2.742 | 95% KM (t) |
| Barium | 18 | 18 | 47.1 | 188 | Normal | 121.9 | 95% Student's-t |
| Cadmium | 18 | 10 | 0.198 (J) | 0.984 | Nonparametric | 0.575 | 95% KM (t) |
| Chromium | 18 | 18 | 4.9 | 28.6 | Gamma | 13.99 | 95% Approximate Gamma |
| Cyanide (Total) | 18 | 11 | 0.088 (J) | 1.49 | Nonparametric | 0.574 | 95% KM (t) |
| Lead | 20 | 20 | 3.88 | 451 | Lognormal | 171.4 | 95% Chebyshev (MVUE) |
| Nitrate | 18 | 16 | 0.726 (J) | 13.8 | Nonparametric | 5.742 | 95% KM (BCA) |
| Perchlorate | 18 | 3 | 0.000785 (J) | 0.00246 (U) | n/a* | 0.00127 | Maximum detected concentration |
| Selenium | 20 | 8 | 0.054 (U) | 8.27 | Nonparametric | 6.915 | 95% KM (Percentile Bootstrap) |
| Silver | 18 | 18 | 0.048 (J) | 2.15 | Gamma | 0.569 | 95% Approximate Gamma |
| Zinc | 20 | 20 | 22 | 262 | Gamma | 121.4 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Anthracene | 19 | 4 | 0.0075 (J) | 0.34 (U) | n/a | 0.0149 | Maximum detected concentration |
| Benzo(a)anthracene | 19 | 1 | 0.0248 (U) | 0.34 (U) | n/a | 0.0654 | Maximum detected concentration |
| Benzo(a)pyrene | 19 | 2 | 0.0357 (U) | 0.34 (U) | n/a | 0.076 | Maximum detected concentration |
| Benzo(b)fluoranthene | 19 | 6 | 0.0362 (U) | 0.358 | Nonparametric | 0.167 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 19 | 1 | 0.0357 (U) | 0.34 (U) | n/a | 0.139 | Maximum detected concentration |
| Benzo(k)fluoranthene | 19 | 3 | 0.0357 (U) | 0.41 | n/a | 0.41 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 19 | 2 | 0.178 (U) | 1.99 | n/a | 1.99 | Maximum detected concentration |

**Table H-2.2-1 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| Chrysene | 19 | 5 | 0.0352 (J) | 0.34 (U) | Nonparametric | 0.0656 | 95% KM (Percentile Bootstrap) |
| Di-n-butylphthalate | 19 | 2 | 0.0433 (J) | 1.53 (U) | n/a | 0.47 | Maximum detected concentration |
| Dimethylphthalate | 19 | 1 | 0.12 (J) | 1.59 (U) | n/a | 0.12 | Maximum detected concentration |
| Fluoranthene | 19 | 15 | 0.0164 (J) | 0.34 (U) | Nonparametric | 0.0733 | 95% KM (t) |
| Indeno(1,2,3-cd)pyrene | 19 | 2 | 0.0357 (U) | 0.34 (U) | n/a | 0.144 | Maximum detected concentration |
| Phenanthrene | 19 | 3 | 0.0124 (J) | 0.34 (U) | n/a | 0.0368 | Maximum detected concentration |
| Pyrene | 19 | 13 | 0.0168 (J) | 0.34 (U) | Nonparametric | 0.0708 | 95% KM (t) |
| Radionuclides (pCi/g) | | | | | | | |
| Americium-241 | 19 | 11 | 0.0069 (U) | 0.133 | Nonparametric | 0.0673 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 21 | 9 | 0.00412 (U) | 0.14 | Nonparametric | 0.0406 | 95% KM (t) |
| Plutonium-239/240 | 21 | 20 | 0.00154 (U) | 5.2 (J-) | Nonparametric | 2.112 | 95% KM (Chebyshev) |
| Tritium | 18 | 2 | -0.0108561 (U) | 0.042295 | n/a | 0.0423 | Maximum detected concentration |

*n/a = Not applicable.

**Table H-2.2-2**
**Exposure Point Concentrations for AOC 21-002(b) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 36 | 36 | 765 | 13600 | Normal | 8486 | 95% Student's-t |
| Arsenic | 35 | 36 | 1.24 (J) | 9.49 | Nonparametric | 3.805 | 95% KM (Chebyshev) |
| Barium | 36 | 36 | 9.13 | 188 | Normal | 92.5 | 95% Student's-t |
| Cadmium | 19 | 36 | 0.131 (J) | 2.69 (U) | Nonparametric | 0.403 | 95% KM (t) |
| Chromium | 36 | 36 | 4.9 | 28.6 | Gamma | 14.85 | 95% Approximate Gamma |
| Cyanide (total) | 14 | 36 | 0.088 (J) | 1.49 | Nonparametric | 0.4 | 95% KM (t) |
| Lead | 38 | 38 | 3.76 (J-) | 451 | Nonparametric | 132.3 | 97.5% KM (Chebyshev) |
| Nitrate | 25 | 36 | 0.726 (J) | 13.8 | Nonparametric | 3.316 | 95% KM (BCA) |
| Perchlorate | 6 | 36 | 0.000696 (J) | 0.00246 (U) | Nonparametric | 0.00117 | 95% KM (t) |
| Selenium | 16 | 38 | 0.054 (U) | 8.27 | Nonparametric | 4.694 | 95% KM (Percentile Bootstrap) |
| Silver | 27 | 36 | 0.048 (J) | 2.15 | Nonparametric | 0.346 | 95% KM (BCA) |
| Zinc | 38 | 38 | 7.8 | 262 | Nonparametric | 102.4 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 2 | 18 | 0.00331 (U) | 0.0279 (U) | n/a* | 0.0123 | Maximum detected concentration |
| Anthracene | 4 | 37 | 0.0075 (J) | 0.34 (U) | n/a | 0.0149 | Maximum detected concentration |
| Aroclor-1254 | 2 | 2 | 0.0394 | 0.0418 | n/a | 0.0418 | Maximum detected concentration |
| Aroclor-1260 | 2 | 2 | 0.0148 | 0.017 | n/a | 0.017 | Maximum detected concentration |
| Benzo(a)anthracene | 1 | 37 | 0.0248 (U) | 0.34 (U) | n/a | 0.0654 | Maximum detected concentration |
| Benzo(a)pyrene | 3 | 37 | 0.0348 (U) | 0.34 (U) | n/a | 0.0807 | Maximum detected concentration |
| Benzo(b)fluoranthene | 7 | 37 | 0.0348 (U) | 0.358 | Nonparametric | 0.166 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 2 | 37 | 0.0348 (U) | 0.34 (U) | n/a | 0.172 | Maximum detected concentration |
| Benzo(a)anthracene | 1 | 37 | 0.0248 (U) | 0.34 (U) | n/a | 0.0654 | Maximum detected concentration |
| Benzo(a)pyrene | 3 | 37 | 0.0348 (U) | 0.34 (U) | n/a | 0.0807 | Maximum detected concentration |

**Table H-2.2-2 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 7 | 37 | 0.0348 (U) | 0.358 | Nonparametric | 0.166 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 2 | 37 | 0.0348 (U) | 0.34 (U) | n/a | 0.172 | Maximum detected concentration |
| Benzo(k)fluoranthene | 3 | 37 | 0.0348 (U) | 0.41 | n/a | 0.41 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 37 | 0.174 (U) | 1.99 | n/a | 1.99 | Maximum detected concentration |
| Chrysene | 6 | 37 | 0.0348 (U) | 0.34 (U) | Nonparametric | 0.0601 | 95% KM (Percentile Bootstrap) |
| Dimethyl phthalate | 1 | 37 | 0.12 (J) | 1.59 (U) | n/a | 0.12 | Maximum detected concentration |
| Di-n-butylphthalate | 2 | 37 | 0.0433 (J) | 1.53 (U) | n/a | 0.47 | Maximum detected concentration |
| Fluoranthene | 16 | 37 | 0.0164 (J) | 0.34 (U) | Nonparametric | 0.0509 | 95% KM (Percentile Bootstrap) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000263 | 0.00000263 | n/a | 0.00000263 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000107 (J) | 0.00000107 (J) | n/a | 0.00000107 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 0.000000196 | 0.000000196 | n/a | 0.000000196 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 0.000000124 (J) | 0.000000124 (J) | n/a | 0.000000124 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 9.43E-08 (J) | 9.43E-08 (J) | n/a | 9.43E-08 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 3 | 37 | 0.0348 (U) | 0.34 (U) | n/a | 0.166 | Maximum detected concentration |
| Methyl-2-pentanone[4-] | 1 | 18 | 0.00171 (J) | 0.00853 (U) | n/a | 0.00171 | Maximum detected concentration |
| Methylene chloride | 2 | 18 | 0.00266 (U) | 0.00755 (U) | n/a | 0.00547 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000025 | 0.000025 | n/a | 0.000025 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000278 (J) | 0.00000278 (J) | n/a | 0.00000278 | Maximum detected concentration |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 1 | 1 | 8.52E-08 (J) | 8.52E-08 (J) | n/a | 8.52E-08 | Maximum detected concentration |

**Table H-2.2-2 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 0.000000204 (J) | 0.000000204 (J) | n/a | 0.000000204 | Maximum detected concentration |
| Phenanthrene | 3 | 37 | 0.0124 (J) | 0.34 (U) | n/a | 0.0368 | Maximum detected concentration |
| Pyrene | 14 | 37 | 0.0168 (J) | 0.34 (U) | Nonparametric | 0.0485 | 95% KM (t) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 1 | 0.000000466 (J) | 0.000000466 (J) | n/a | 0.000000466 | Maximum detected concentration |
| Xylene[1,3-]+Xylene[1,4-] | 1 | 18 | 0.000369 (U) | 0.00341 (U) | n/a | 0.000502 | Maximum detected concentration |
| **RadionucIdies (pCi/g)** | | | | | | | |
| Americium-241 | 11 | 37 | -0.0113 (U) | 0.133 | Nonparametric | 0.0549 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 11 | 39 | -0.0015 (U) | 0.14 | Nonparametric | 0.0376 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 26 | 39 | -0.0285 (UJ) | 5.2 (J-) | Nonparametric | 0.848 | 95% KM (Percentile Bootstrap) |
| Tritium | 12 | 36 | -0.0109 (U) | 0.0423 | Nonparametric | 0.02 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-3**
**Exposure Point Concentrations for AOC 21-002(b) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 36 | 36 | 765 | 13600 | Normal | 8486 | 95% Student's-t |
| Arsenic | 36 | 35 | 1.24 (J) | 9.49 | Nonparametric | 3.805 | 95% KM (Chebyshev) |
| Barium | 38 | 38 | 9.13 | 188 | Gamma | 92.65 | 95% Approximate Gamma |
| Cadmium | 36 | 19 | 0.131 (J) | 2.69 (U) | Nonparametric | 0.403 | 95% KM (t) |
| Chromium | 36 | 36 | 4.9 | 28.6 | Gamma | 14.85 | 95% Approximate Gamma |
| Cyanide (total) | 36 | 14 | 0.088 (J) | 1.49 | Nonparametric | 0.4 | 95% KM (t) |
| Lead | 38 | 38 | 3.76 (J-) | 451 | Nonparametric | 183.5 | 99% Chebyshev (Mean, Sd) |
| Nitrate | 36 | 25 | 0.726 (J) | 13.8 | Nonparametric | 3.481 | 95% KM (BCA) |
| Perchlorate | 36 | 6 | 0.000696 (J) | 0.00246 (U) | Nonparametric | 0.00117 | 95% KM (t) |
| Selenium | 40 | 16 | 0.029 (U) | 8.27 | Nonparametric | 4.648 | 95% KM (Percentile Bootstrap) |
| Silver | 36 | 27 | 0.048 (J) | 2.15 | Nonparametric | 0.334 | 95% KM (BCA) |
| Zinc | 38 | 38 | 7.8 | 262 | Lognormal | 78.6 | 95% H |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 18 | 2 | 0.00331 (U) | 0.0279 (U) | n/a* | 0.0123 | Maximum detected concentration |
| Anthracene | 38 | 4 | 0.0075 (J) | 0.35 (U) | n/a | 0.0149 | Maximum detected concentration |
| Aroclor-1254 | 2 | 2 | 0.0394 | 0.0418 | n/a | 0.0418 | Maximum detected concentration |
| Aroclor-1260 | 2 | 2 | 0.0148 | 0.017 | n/a | 0.017 | Maximum detected concentration |
| Benzo(a)anthracene | 38 | 1 | 0.0248 (U) | 0.35 (U) | n/a | 0.0654 | Maximum detected concentration |
| Benzo(a)pyrene | 38 | 3 | 0.0348 (U) | 0.35 (U) | n/a | 0.0807 | Maximum detected concentration |
| Benzo(b)fluoranthene | 38 | 7 | 0.0348 (U) | 0.358 | Nonparametric | 0.168 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 38 | 2 | 0.0348 (U) | 0.35 (U) | n/a | 0.172 | Maximum detected concentration |
| Benzo(k)fluoranthene | 38 | 3 | 0.0348 (U) | 0.41 | n/a | 0.41 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 38 | 3 | 0.085 (J) | 1.99 | n/a | 1.99 | Maximum detected concentration |

**Table H-2.2-3 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| Chrysene | 38 | 6 | 0.0348 (U) | 0.35 (U) | Nonparametric | 0.0594 | 95% KM (Percentile Bootstrap) |
| Di-n-butylphthalate | 38 | 3 | 0.0433 (J) | 1.53 (U) | n/a | 0.47 | Maximum detected concentration |
| Dimethylphthalate | 38 | 1 | 0.12 (J) | 1.59 (U) | n/a | 0.12 | Maximum detected concentration |
| Fluoranthene | 38 | 16 | 0.0164 (J) | 0.35 (U) | Nonparametric | 0.0517 | 95% KM (Percentile Bootstrap) |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 2.63E-06 | 2.63E-06 | n/a | 2.63E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 1.07E-06 (J) | 1.07E-06 (J) | n/a | 1.07E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1 | 1 | 1.96E-07 | 1.96E-07 | n/a | 1.96E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 1.24E-07 (J) | 1.24E-07 (J) | n/a | 1.24E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 9.43E-08 (J) | 9.43E-08 (J) | n/a | 9.43E-08 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 38 | 3 | 0.0348 (U) | 0.35 (U) | n/a | 0.166 | Maximum detected concentration |
| Methyl-2-pentanone[4-] | 18 | 1 | 0.00171 (J) | 0.00853 (U) | n/a | 0.00171 | Maximum detected concentration |
| Methylene chloride | 18 | 2 | 0.00266 (U) | 0.00755 (U) | n/a | 0.00547 | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000025 | 0.000025 | n/a | 2.5E-05 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 2.78E-06 (J) | 2.78E-06 (J) | n/a | 2.78E-06 | Maximum detected concentration |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1 | 1 | 8.52E-08 | 8.52E-08 | n/a | 8.52E-08 | Maximum detected concentration |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1 | 1 | 2.04E-07 (J) | 2.04E-07 (J) | n/a | 2.04E-07 | Maximum detected concentration |
| Phenanthrene | 38 | 3 | 0.0124 (J) | 0.35 (U) | n/a | 0.0368 | Maximum detected concentration |
| Pyrene | 38 | 14 | 0.0168 (J) | 0.35 (U) | Nonparametric | 0.0485 | 95% KM (t) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 4.66E-07 (J) | 4.66E-07 (J) | n/a | 4.66E-07 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 18 | 1 | 0.000369 (U) | 0.00341 (U) | n/a | 0.000502 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 37 | 11 | -0.0113 (U) | 0.133 | Nonparametric | 0.0546 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 40 | 11 | -0.0015 (U) | 0.14 | Nonparametric | 0.0373 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 40 | 27 | -0.0285 (UJ) | 5.2 (J-) | Nonparametric | 0.844 | 95% KM (Percentile Bootstrap) |
| Tritium | 36 | 12 | -0.0108561 (U) | 0.042295 | Nonparametric | 0.0199 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-4**
**Exposure Point Concentrations for Consolidated Unit 21-006(c)-99 for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Barium | 6 | 6 | 21.5 | 66.5 | Normal | 59.84 | 95% Student's-t |
| Chromium | 6 | 6 | 2.08 | 7.72 | Normal | 6.719 | 95% Student's-t |
| Copper | 6 | 6 | 2.51 | 6.71 | Normal | 5.627 | 95% Student's-t |
| Lead | 6 | 6 | 10.9 | 34.4 | Gamma | 32.77 | 95% Approximate Gamma |
| Mercury | 6 | 6 | 0.009 (J) | 0.0209 | Normal | 0.0182 | 95% Student's-t |
| Nickel | 6 | 6 | 1.67 | 4.4 | Normal | 3.55 | 95% Student's-t |
| Nitrate | 8 | 7 | 1.2 (U) | 66.1 | Nonparametric | 45.91 | 95% KM (t) |
| Perchlorate | 6 | 1 | 0.00204 (U) | 0.068 (U) | n/a* | 0.0345 | Maximum detected concentration |
| Selenium | 6 | 2 | 0.721 (J) | 1.54 (U) | n/a | 1.3 | Maximum detected concentration |
| Zinc | 6 | 6 | 24.2 | 53.1 | Normal | 42.94 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzo(a)anthracene | 6 | 1 | 0.0341 (U) | 1.13 (U) | n/a | 0.98 | Maximum detected concentration |
| Benzo(a)pyrene | 6 | 1 | 0.0341 (U) | 1.13 (U) | n/a | 0.948 | Maximum detected concentration |
| Benzo(b)fluoranthene | 6 | 3 | 0.0249 (J) | 1.81 | n/a | 1.81 | Maximum detected concentration |
| Benzo(g,h,i)perylene | 6 | 1 | 0.0341 (UJ) | 2.81 (J) | n/a | 2.81 | Maximum detected concentration |
| Benzo(k)fluoranthene | 6 | 1 | 0.0341 (U) | 1.13 (U) | n/a | 0.635 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 6 | 2 | 0.079 (J) | 8.73 | n/a | 8.73 | Maximum detected concentration |
| Chrysene | 6 | 1 | 0.0341 (U) | 1.5 | n/a | 1.5 | Maximum detected concentration |
| Fluoranthene | 6 | 4 | 0.0364 | 2.92 | n/a | 2.92 | Maximum detected concentration |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 2.19E-05 | 2.19E-05 | n/a | 2.19E-05 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 5.17E-06 | 5.17E-06 | n/a | 5.17E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 1 | 1 | 2.89E-07 (J) | 2.89E-07 (J) | n/a | 2.89E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 1 | 1 | 3E-07 (J) | 3E-07 (J) | n/a | 3E-07 | Maximum detected concentration |

**Table H-2.2-4 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 1 | 1 | 8.57E-07 (J) | 8.57E-07 (J) | n/a | 8.57E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1 | 1 | 8.93E-07 (J) | 8.93E-07 (J) | n/a | 8.93E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1 | 1 | 2.51E-07 (J) | 2.51E-07 (J) | n/a | 2.51E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 2.46E-07 (J) | 2.46E-07 (J) | n/a | 2.46E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 2.68E-07 (J) | 2.68E-07 (J) | n/a | 2.68E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 6 | 1 | 0.0341 (UJ) | 2.25 (J) | n/a | 2.25 | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000241 | 0.000241 | n/a | 0.000241 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 1.59E-05 | 1.59E-05 | n/a | 1.59E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 1 | 1 | 9.64E-08 (J) | 9.64E-08 (J) | n/a | 9.64E-08 | Maximum detected concentration |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1 | 1 | 1.9E-07 (J) | 1.9E-07 (J) | n/a | 1.9E-07 | Maximum detected concentration |
| Phenanthrene | 6 | 3 | 0.0146 (J) | 1.38 | n/a | 1.38 | Maximum detected concentration |
| Pyrene | 6 | 4 | 0.0292 (J) | 2.26 | n/a | 2.26 | Maximum detected concentration |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 2.12E-07 (J) | 2.12E-07 (J) | n/a | 2.12E-07 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 6 | 5 | 0.0261 (U) | 0.483 | Nonparametric | 0.308 | 95% KM (t) |
| Cesium-137 | 7 | 7 | 0.382 | 1.69 | Gamma | 1.144 | 95% Approximate Gamma |
| Plutonium-238 | 7 | 5 | 0.00797 (U) | 0.162 (J) | Nonparametric | 0.096 | 95% KM (t) |
| Plutonium-239/240 | 7 | 7 | 0.219 | 15.8 (J) | n/a | 15.8 | Maximum detected concentration |
| Uranium-234 | 7 | 7 | 0.785 | 3.39 | Normal | 2.249 | 95% Student's-t |
| Uranium-235/236 | 7 | 6 | 0.048 (U) | 0.23 | Nonparametric | 0.154 | 95% KM (BCA) |
| Uranium-238 | 7 | 7 | 0.656 | 2.33 | Normal | 1.742 | 95% Student's-t |

* n/a = Not applicable.

## Table H-2.2-5
## Exposure Point Concentrations for Consolidated Unit 21-006(c)-99 for Ecological Risk

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 1 | 19 | 0.331 (J) | 1.33 | n/a* | 1.33 | Maximum detected concentration |
| Barium | 21 | 21 | 3.27 | 133 | Nonparametric | 70.96 | 95% KM (Chebyshev) |
| Chromium | 21 | 21 | 1.06 | 9.67 | Nonparametric | 6.163 | 95% KM (t) |
| Copper | 22 | 22 | 0.605 (J) | 19.2 (J) | Nonparametric | 8.834 | 95% KM (Chebyshev) |
| Cyanide (total) | 1 | 21 | 0.106 (J) | 8.42 (U) | n/a | 0.106 | Maximum detected concentration |
| Lead | 21 | 21 | 4.48 | 34.4 | Nonparametric | 15.83 | 95% KM (BCA) |
| Mercury | 17 | 21 | 0.0023 (J) | 0.2 | Nonparametric | 0.0623 | 95% KM (Chebyshev) |
| Nickel | 21 | 21 | 0.47 | 10.8 | Nonparametric | 5.629 | 95% KM (Chebyshev) |
| Nitrate | 13 | 23 | 0.679 (J-) | 66.1 | Nonparametric | 52.74 | 99% KM (Chebyshev) |
| Perchlorate | 2 | 21 | 0.00131 (J) | 0.068 (U) | n/a | 0.0345 | Maximum detected concentration |
| Selenium | 11 | 21 | 0.67 (J) | 3.55 | Nonparametric | 1.744 | 95% KM (t) |
| Zinc | 21 | 21 | 13.8 | 1390 | Nonparametric | 379.8 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzo(a)anthracene | 1 | 21 | 0.0338 (U) | 1.13 (U) | n/a | 0.98 | Maximum detected concentration |
| Benzo(a)pyrene | 2 | 21 | 0.0116 (J) | 1.13 (U) | n/a | 0.948 | Maximum detected concentration |
| Benzo(b)fluoranthene | 4 | 21 | 0.0156 (J) | 1.81 | n/a | 1.81 | Maximum detected concentration |
| Benzo(g,h,i)perylene | 1 | 21 | 0.0338 (UJ) | 2.81 (J) | n/a | 2.81 | Maximum detected concentration |
| Benzo(k)fluoranthene | 2 | 21 | 0.0114 (J) | 1.13 (U) | n/a | 0.635 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 21 | 0.079 (J) | 8.73 | n/a | 8.73 | Maximum detected concentration |
| Chrysene | 2 | 21 | 0.0184 (J) | 1.5 | n/a | 1.5 | Maximum detected concentration |
| Fluoranthene | 6 | 21 | 0.0192 (J) | 2.92 | Nonparametric | 0.481 | 95% KM (t) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000219 | 0.0000219 | n/a | 0.0000219 | Maximum detected concentration |

**Table H-2.2-5 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000517 | 0.00000517 | n/a | 0.00000517 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 1 | 1 | 0.000000289 (J) | 0.000000289 (J) | n/a | 0.000000289 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 1 | 1 | 0.0000003 (J) | 0.0000003 (J) | n/a | 0.0000003 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 1 | 0.000000857 (J) | 0.000000857 (J) | n/a | 0.000000857 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 0.000000893 (J) | 0.000000893 (J) | n/a | 0.000000893 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 0.000000251 (J) | 0.000000251 (J) | n/a | 0.000000251 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 0.000000246 (J) | 0.000000246 (J) | n/a | 0.000000246 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 0.000000268 (J) | 0.000000268 (J) | n/a | 0.000000268 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 1 | 21 | 0.0338 (UJ) | 2.25 (J) | n/a | 2.25 | Maximum detected concentration |
| Methylene Chloride | 1 | 15 | 0.00223 (J) | 0.106 (UJ) | n/a | 0.00223 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000241 | 0.000241 | n/a | 0.000241 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000159 | 0.0000159 | n/a | 0.0000159 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 1 | 1 | 9.64E-08 (J) | 9.64E-08 (J) | n/a | 0.0000000964 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 0.00000019 (J) | 0.00000019 (J) | n/a | 0.00000019 | Maximum detected concentration |
| Phenanthrene | 3 | 21 | 0.0146 (J) | 1.38 | n/a | 1.38 | Maximum detected concentration |
| Pyrene | 6 | 21 | 0.0171 (J) | 2.26 | Nonparametric | 0.381 | 95% KM (t) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 1 | 0.000000212 (J) | 0.000000212 (J) | n/a | 0.000000212 | Maximum detected concentration |

**Table H-2.2-5 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 1 | 15 | 0.00101 (U) | 0.0212 (UJ) | n/a | 0.00626 | Maximum detected concentration |
| Toluene | 1 | 15 | 0.000533 (J) | 0.0212 (U) | n/a | 0.000533 | Maximum detected concentration |
| Xylene[1,2-] | 1 | 15 | 0.000481 (J) | 0.0212 (U) | n/a | 0.000481 | Maximum detected concentration |
| Xylene[1,3-]+Xylene[1,4-] | 1 | 15 | 0.000566 (J) | 0.0424 (U) | n/a | 0.000566 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 10 | 22 | -0.0156 (U) | 5.17 | Nonparametric | 0.837 | 95% KM (t) |
| Cesium-137 | 9 | 23 | -0.044 (U) | 1.99 | Nonparametric | 0.827 | 95% KM (t) |
| Plutonium-238 | 10 | 27 | -0.00832 (U) | 0.586 | Nonparametric | 0.123 | 95% KM (t) |
| Plutonium-239/240 | 23 | 27 | 0.00282 (U) | 69.3 | Nonparametric | 18.82 | 95% KM (Chebyshev) |
| Strontium-90 | 2 | 22 | -0.121 (U) | 0.49 | n/a | 0.49 | Maximum detected concentration |
| Tritium | 7 | 23 | -0.0162 (U) | 1.492 (J) | Nonparametric | 0.254 | 95% KM (t) |
| Uranium-234 | 25 | 25 | 0.785 | 18.8 | Nonparametric | 5.56 | 95% KM (Chebyshev) |
| Uranium-235/236 | 15 | 25 | 0.0241 (U) | 0.793 | Nonparametric | 0.179 | 95% KM (% Bootstrap) |
| Uranium-238 | 25 | 25 | 0.656 | 2.33 | Nonparametric | 1.182 | 95% KM (BCA) |

* n/a = Not applicable.

**Table H-2.2-6**
**Exposure Point Concentrations for Consolidated Unit 21-006(c)-99 for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 23 | 2 | 0.331 (U) | 1.7 | n/a* | 1.7 | Maximum detected concentration |
| Barium | 29 | 29 | 3.27 | 133 | Gamma | 46.08 | 95% Approximate Gamma |
| Chromium | 29 | 29 | 0.766 | 17 | Gamma | 8.151 | 95% Approximate Gamma |
| Copper | 31 | 31 | 0.605 (J) | 163 (J) | Nonparametric | 60.65 | 99% Chebyshev (Mean, Sd) |
| Cyanide (total) | 29 | 2 | 0.106 (J) | 8.42 (U) | n/a | 0.205 | Maximum detected concentration |
| Lead | 29 | 29 | 4.15 | 34.4 | Gamma | 13.54 | 95% Approximate Gamma |
| Mercury | 29 | 24 | 0.0016 (J) | 0.2 | Nonparametric | 0.0527 | 95% KM (Chebyshev) |
| Nickel | 29 | 29 | 0.47 | 10.8 | Gamma | 4.186 | 95% Approximate Gamma |
| Nitrate | 31 | 16 | 0.679 (J-) | 66.1 | Nonparametric | 40.28 | 99% KM (Chebyshev) |
| Perchlorate | 29 | 3 | 0.00131 (J) | 0.068 (U) | n/a | 0.0345 | Maximum detected concentration |
| Selenium | 29 | 16 | 0.67 (J) | 3.55 | Nonparametric | 1.658 | 95% KM (t) |
| Zinc | 29 | 29 | 13.8 | 1390 | Nonparametric | 283 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Anthracene | 29 | 1 | 0.00966 (J) | 1.13 (U) | n/a | 0.00966 | Maximum detected concentration |
| Benzo(a)anthracene | 29 | 1 | 0.0337 (U) | 1.13 (U) | n/a | 0.98 | Maximum detected concentration |
| Benzo(a)pyrene | 29 | 2 | 0.0116 (J) | 1.13 (U) | n/a | 0.948 | Maximum detected concentration |
| Benzo(b)fluoranthene | 29 | 4 | 0.0156 (J) | 1.81 | n/a | 1.81 | Maximum detected concentration |
| Benzo(g,h,i)perylene | 29 | 1 | 0.0337 (UJ) | 2.81 (J) | n/a | 2.81 | Maximum detected concentration |
| Benzo(k)fluoranthene | 29 | 2 | 0.0114 (J) | 1.13 (U) | n/a | 0.635 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 29 | 2 | 0.079 (J) | 8.73 | n/a | 8.73 | Maximum detected concentration |
| Chrysene | 29 | 3 | 0.0184 (J) | 1.5 | n/a | 1.5 | Maximum detected concentration |
| Fluoranthene | 29 | 8 | 0.0176 (J) | 2.92 | Nonparametric | 0.347 | 95% KM (t) |

**Table H-2.2-6 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000219 | 0.0000219 | n/a | 2.19E-05 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000517 | 0.00000517 | n/a | 5.17E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 1 | 1 | 0.000000289 (J) | 0.000000289 (J) | n/a | 2.89E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 1 | 1 | 0.0000003 (J) | 0.0000003 (J) | n/a | 3E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 1 | 0.000000857 (J) | 0.000000857 (J) | n/a | 8.57E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 0.000000893 (J) | 0.000000893 (J) | n/a | 8.93E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 0.000000251 (J) | 0.000000251 (J) | n/a | 2.51E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 0.000000246 (J) | 0.000000246 (J) | n/a | 2.46E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 0.000000268 (J) | 0.000000268 (J) | n/a | 2.68E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 29 | 1 | 0.0337 (UJ) | 2.25 (J) | n/a | 2.25 | Maximum detected concentration |
| Methylene chloride | 23 | 1 | 0.00223 (J) | 0.106 (UJ) | n/a | 0.00223 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000241 | 0.000241 | n/a | 2.41E-04 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000159 | 0.0000159 | n/a | 1.59E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 1 | 1 | 0.0000000964 (J) | 0.0000000964 (J) | n/a | 9.64E-08 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 0.00000019 (J) | 0.00000019 (J) | n/a | 1.9E-07 | Maximum detected concentration |
| Phenanthrene | 29 | 4 | 0.0146 (J) | 1.38 | n/a | 1.38 | Maximum detected concentration |

**Table H-2.2-6 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Pyrene | 29 | 8 | 0.0154 (J) | 2.26 | Nonparametric | 0.276 | 95% KM (t) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 1 | 0.000000212 (J) | 0.000000212 (J) | n/a | 2.12E-07 | Maximum detected concentration |
| Tetrachloroethene | 23 | 1 | 0.00101 (U) | 0.0212 (UJ) | n/a | 0.00626 | Maximum detected concentration |
| Toluene | 23 | 1 | 0.000533 (J) | 0.0212 (U) | n/a | 0.00053 | Maximum detected concentration |
| Xylene[1,2-] | 23 | 1 | 0.000481 (J) | 0.0212 (U) | n/a | 0.00048 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 23 | 1 | 0.000566 (J) | 0.0424 (U) | n/a | 0.00057 | Maximum detected concentration |
| **Radionuclides (pci/g)** | | | | | | | |
| Americium-241 | 32 | 15 | -0.0156 (U) | 5.17 | Nonparametric | 0.724 | 95% KM (t) |
| Cesium-137 | 32 | 11 | -0.044 (U) | 1.99 | Nonparametric | 0.74 | 95% KM (t) |
| Plutonium-238 | 38 | 16 | -0.00832 (U) | 0.586 | Nonparametric | 0.107 | 95% KM (t) |
| Plutonium-239/240 | 38 | 33 | 0.00282 (U) | 69.3 | Nonparametric | 15.5 | 95% KM (Chebyshev) |
| Strontium-90 | 31 | 3 | -0.121 (U) | 0.49 | n/a | 0.49 | Maximum detected concentration |
| Tritium | 33 | 14 | -0.0162273 (U) | 1.49154 (J) | Nonparametric | 0.279 | 95% KM (t) |
| Uranium-234 | 36 | 36 | 0.785 | 18.8 | Nonparametric | 4.576 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 36 | 22 | 0.0241 (U) | 0.793 | Nonparametric | 0.167 | 95% KM (BCA) |
| Uranium-238 | 36 | 36 | 0.648 | 2.33 | Normal | 1.106 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-7**
**Exposure Point Concentrations for SWMU 21-009 for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum | Maximum | Distribution Type | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 8 | 8 | 12100 | 20700 | Normal | 17393 | 95% Student's-t |
| Barium | 8 | 8 | 60.5 (J+) | 196 (J+) | Normal | 162 | 95% Student's-t |
| Chromium | 8 | 8 | 8.75 | 16.7 | Normal | 13.68 | 95% Student's-t |
| Cyanide (total) | 8 | 4 | 0.133 (J-) | 0.709 (J-) | n/a* | 0.709 | Maximum detected concentration |
| Lead | 8 | 8 | 9.78 | 38.7 | Normal | 22.92 | 95% Modified-t |
| Nitrate | 10 | 8 | 0.66 (U) | 8.44 | Nonparametric | 6.455 | 95% KM [t] |
| Perchlorate | 8 | 1 | 0.000659 (J) | 0.00224 (U) | n/a | 0.000659 | Maximum detected concentration |
| Selenium | 8 | 8 | 7.96 | 12.2 | Normal | 11.44 | 95% Student's-t |
| Zinc | 8 | 8 | 30.6 | 113 | Normal | 67.2 | 95% Modified-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzo(a)pyrene | 8 | 1 | 0.036 (U) | 0.372 (UJ) | n/a | 0.0686 | Maximum detected concentration |
| Benzo(b)fluoranthene | 8 | 1 | 0.036 (U) | 0.372 (UJ) | n/a | 0.16 | Maximum detected concentration |
| Benzo(k)fluoranthene | 8 | 1 | 0.036 (U) | 0.372 (UJ) | n/a | 0.0573 | Maximum detected concentration |
| Fluoranthene | 8 | 3 | 0.0312 (J) | 0.372 (U) | n/a | 0.103 | Maximum detected concentration |
| Pyrene | 8 | 4 | 0.0149 (J) | 0.372 (U) | n/a | 0.162 | Maximum detected concentration |
| **Radionuclides (pci/g)** | | | | | | | |
| Americium-241 | 9 | 4 | -0.0152 (U) | 0.108 | n/a | 0.108 | Maximum detected concentration |
| Tritium | 8 | 8 | 0.024135 | 0.056946 | Normal | 0.0445 | 95% Student's-t |
| Plutonium-239/240 | 10 | 8 | 0.0133 (U) | 1.15 | Nonparametric | 0.479 | 95% KM [BCA] |

* n/a = Not applicable.

**Table H-2.2-8**
**Exposure Point Concentrations for SWMU 21-009 for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic chemicals (mg/kg)** | | | | | | | |
| Aluminum | 16 | 16 | 4640 | 20700 | Normal | 17222 | 95% Student's-t |
| Barium | 16 | 16 | 49.3 (J+) | 250 (J+) | Normal | 153 | 95% Student's-t |
| Chromium | 16 | 16 | 8.75 | 24.7 | Gamma | 14.37 | 95% Approximate Gamma |
| Cyanide (total) | 6 | 16 | 0.105 (J-) | 0.709 (J-) | Nonparametric | 0.315 | 95% KM (t) |
| Lead | 16 | 16 | 4.92 | 38.7 | Normal | 16.74 | 95% Modified-t |
| Nitrate | 16 | 18 | 0.66 (U) | 19.3 (J-) | Nonparametric | 6.789 | 95% KM (BCA) |
| Perchlorate | 2 | 16 | 0.000579 (J) | 0.00229 (U) | n/a* | 0.000659 | Maximum detected concentration |
| Selenium | 16 | 16 | 2.11 | 12.2 | Normal | 10.63 | 95% Student's-t |
| Zinc | 16 | 16 | 14.3 | 113 | Gamma | 49.36 | 95% Approximate Gamma |
| **Organic chemicals (mg/kg)** | | | | | | | |
| Anthracene | 1 | 16 | 0.0149 (J) | 0.372 (U) | n/a | 0.0149 | Maximum detected concentration |
| Benzo(a)pyrene | 1 | 16 | 0.0352 (U) | 0.372 (UJ) | n/a | 0.0686 | Maximum detected concentration |
| Benzo(b)fluoranthene | 1 | 16 | 0.0352 (U) | 0.372 (UJ) | n/a | 0.16 | Maximum detected concentration |
| Benzo(k)fluoranthene | 1 | 16 | 0.0352 (U) | 0.372 (UJ) | n/a | 0.0573 | Maximum detected concentration |
| Chloroform | 1 | 8 | 0.00102 (U) | 0.00175 (U) | n/a | 0.00119 | Maximum detected concentration |
| Dichloroethene[1,1-] | 2 | 8 | 0.000614 (J) | 0.00175 (U) | n/a | 0.000891 | Maximum detected concentration |

**Table H-2.2-8 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Fluoranthene | 3 | 16 | 0.0312 (J) | 0.372 (U) | n/a | 0.103 | Maximum detected concentration |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 0.000011 | 0.000011 | n/a | 0.000011 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 1.55E-06 (J) | 1.55E-06 (J) | n/a | 0.00000155 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 1 | 1 | 3.47E-07 (J) | 3.47E-07 (J) | n/a | 0.000000347 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 1 | 1 | 6.74E-07 (J) | 6.74E-07 (J) | n/a | 0.000000674 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1 | 1 | 5.52E-07 (J) | 5.52E-07 (J) | n/a | 0.000000552 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 1.07E-07 (J) | 1.07E-07 (J) | n/a | 0.000000107 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 1.45E-07 (J) | 1.45E-07 (J) | n/a | 0.000000145 | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000087 | 0.000087 | n/a | 0.000087 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 3.66E-06 (J) | 3.66E-06 (J) | n/a | 0.00000366 | Maximum detected concentration |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1 | 1 | 1.77E-07 (J) | 1.77E-07 (J) | n/a | 0.000000177 | Maximum detected concentration |
| Pyrene | 5 | 16 | 0.0145 (J) | 0.372 (U) | Nonparametric | 0.051 | 95% KM (t) UCL |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 1.47E-07 (J) | 1.47E-07 (J) | n/a | 0.000000147 | Maximum detected concentration |
| Tetrachloroethene | 1 | 8 | 0.000683 (J) | 0.00175 (U) | n/a | 0.000683 | Maximum detected concentration |

**Table H-2.2-8 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 6 | 17 | -0.0152 (U) | 0.31 | Nonparametric | 0.231 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 14 | 18 | -0.00142 (U) | 1.15 | Nonparametric | 0.305 | 95% KM (Percentile Bootstrap) |
| Tritium | 15 | 16 | -0.00412 (U) | 0.0607 | Nonparametric | 0.0435 | 95% KM (t) |

* n/a = Not applicable.

**Table H-2.2-9**
**Exposure Point Concentrations for SWMU 21-009 for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 16 | 16 | 4640 | 20700 | Normal | 17222 | 95% Student's-t |
| Barium | 16 | 16 | 49.3 (J+) | 250 (J+) | Normal | 153 | 95% Student's-t |
| Chromium | 16 | 16 | 8.75 | 24.7 | Gamma | 14.37 | 95% Approximate Gamma |
| Cyanide (total) | 16 | 6 | 0.105 (J-) | 0.709 (J-) | Nonparametric | 0.315 | 95% KM [t] |
| Lead | 16 | 16 | 4.92 | 38.7 | Normal | 16.74 | 95% Modified-t |
| Nitrate | 21 | 16 | 0.66 (U) | 19.3 (J-) | Nonparametric | 6.179 | 95% KM [BCA] |
| Perchlorate | 16 | 2 | 0.000579 (J) | 0.00229 (U) | n/a* | 0.000659 | Maximum detected concentration |
| Selenium | 16 | 16 | 2.11 | 12.2 | Normal | 10.63 | 95% Student's-t |
| Zinc | 16 | 16 | 14.3 | 113 | Gamma | 49.36 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Anthracene | 16 | 1 | 0.0149 (J) | 0.372 (U) | n/a | 0.0149 | Maximum detected concentration |
| Benzo(a)pyrene | 16 | 1 | 0.0352 (U) | 0.372 (UJ) | n/a | 0.0686 | Maximum detected concentration |
| Benzo(b)fluoranthene | 16 | 1 | 0.0352 (U) | 0.372 (UJ) | n/a | 0.16 | Maximum detected concentration |
| Benzo(k)fluoranthene | 16 | 1 | 0.0352 (U) | 0.372 (UJ) | n/a | 0.0573 | Maximum detected concentration |
| Chloroform | 8 | 1 | 0.00102 (U) | 0.00175 (U) | n/a | 0.00119 | Maximum detected concentration |
| Dichloroethene[1,1-] | 8 | 2 | 0.000614 (J) | 0.00175 (U) | n/a | 0.000891 | Maximum detected concentration |
| Fluoranthene | 16 | 3 | 0.0312 (J) | 0.372 (U) | n/a | 0.103 | Maximum detected concentration |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 0.000011 | 0.000011 | n/a | 1.1E-05 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 1.55E-06 (J) | 1.55E-06 (J) | n/a | 1.55E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 1 | 1 | 3.47E-07 (J) | 3.47E-07 (J) | n/a | 3.47E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 1 | 1 | 6.74E-07 (J) | 6.74E-07 (J) | n/a | 6.74E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1 | 1 | 5.52E-07 (J) | 5.52E-07 (J) | n/a | 5.52E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 1.07E-07 (J) | 1.07E-07 (J) | n/a | 1.07E-07 | Maximum detected concentration |

**Table H-2.2-9 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 1.45E-07 (J) | 1.45E-07 (J) | n/a | 1.45E-07 (J) | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000087 | 0.000087 | n/a | 0.000087 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 3.66E-06 (J) | 3.66E-06 (J) | n/a | 3.66E-06 (J) | Maximum detected concentration |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1 | 1 | 1.77E-07 (J) | 1.77E-07 (J) | n/a | 1.77E-07 (J) | Maximum detected concentration |
| Pyrene | 16 | 5 | 0.0145 | 0.0145 (J) | Nonparametric | 0.0145 | 95% KM [t] |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 1.47E-07 (J) | 1.47E-07 (J) | n/a | 1.47E-07 (J) | Maximum detected concentration |
| Tetrachloroethene | 8 | 1 | 0.000683 | 0.000683 (J) | n/a | 0.000683 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 19 | 6 | 0.0381 | -0.0152 (U) | Nonparametric | 0.0381 | 99% KM [Chebyshev] |
| Plutonium-239/240 | 19 | 14 | 0.0216 | -0.00142 (U) | Nonparametric | 0.0216 | 95% KM [Percentile Bootstrap] |
| Tritium | 16 | 15 | 0.0152 | -0.00411764 (U) | Nonparametric | 0.0152 | 95% KM [t] |

* n/a = Not applicable.

**Table H-2.2-10**
**Exposure Point Concentrations for SWMU 21-012(b) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 22 | 22 | 6410 | 30800 (J+) | Normal | 12258 | 95% Modified-t |
| Antimony | 9 | 5 | 0.128 (J-) | 0.47 (UJ) | Nonparametric | 0.239 | 95% KM (t) |
| Arsenic | 22 | 22 | 1.62 (J) | 4.46 | Gamma | 2.696 | 95% Approximate Gamma |
| Barium | 22 | 22 | 47.4 | 135 (J+) | Normal | 88.79 | 95% Student's-t |
| Beryllium | 22 | 22 | 0.309 | 1.74 | Normal | 0.719 | 95% Modified-t |
| Cadmium | 22 | 16 | 0.112 (J) | 0.712 | Nonparametric | 0.302 | 95% KM (Percentile Bootstrap) |
| Calcium | 22 | 22 | 923 | 10800 (J) | Gamma | 4391 | 95% Approximate Gamma |
| Chromium | 22 | 22 | 5.01 | 17.8 | Gamma | 9.324 | 95% Approximate Gamma |
| Cobalt | 22 | 22 | 0.846 | 4.02 | Normal | 2.334 | 95% Student’s-t |
| Copper | 23 | 23 | 8.77 | 218 | Lognormal | 115.6 | 95% H |
| Cyanide (total) | 22 | 11 | 0.0855 (J) | 1.56 | Nonparametric | 0.344 | 95% KM (Percentile Bootstrap) |
| Iron | 22 | 22 | 5270 (J-) | 22500 | Gamma | 10861 | 95% Approximate Gamma |
| Lead | 23 | 23 | 8.35 | 69.5 | Gamma | 25.59 | 95% Approximate Gamma |
| Lithium | 11 | 11 | 5.9 | 27 | Gamma | 14.85 | 95% Approximate Gamma |
| Mercury | 22 | 22 | 0.0224 | 4.03 | Nonparametric | 2.453 | 99% Chebyshev (Mean, Sd) |
| Molybdenum | 11 | 11 | 0.587 | 2.15 | Gamma | 1.299 | 95% Approximate Gamma |
| Nickel | 12 | 12 | 3.16 (J-) | 12 (J-) | Gamma | 6.224 | 95% Approximate Gamma |
| Nitrate | 22 | 18 | 0.803 (J) | 12.9 | Nonparametric | 5.005 | 95% KM (Chebyshev) |
| Perchlorate | 22 | 16 | 0.000669 (J) | 0.00397 (J-) | Nonparametric | 0.00183 | 95% KM (BCA) |
| Selenium | 22 | 9 | 0.661 (U) | 1.71 (U) | Nonparametric | 0.956 | 95% KM (t) |
| Strontium | 23 | 23 | 9.55 | 101 | Gamma | 34.68 | 95% Approximate Gamma |
| Uranium | 22 | 22 | 0.596 | 8.01 | Gamma | 2.29 | 95% Approximate Gamma |
| Vanadium | 22 | 22 | 6.49 | 30 | Normal | 14.21 | 95% Modified-t |

**Table H-2.2-10 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Zinc | 24 | 24 | 31.7 | 314 | Gamma | 135.3 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzo(a)anthracene | 22 | 1 | 0.024 (J) | 0.0409 (U) | n/a* | 0.024 | Maximum detected concentration |
| Benzo(b)fluoranthene | 22 | 1 | 0.0161 (J) | 0.0409 (U) | n/a | 0.0161 | Maximum detected concentration |
| Chrysene | 22 | 1 | 0.0306 (J) | 0.0409 (U) | n/a | 0.0306 | Maximum detected concentration |
| Fluoranthene | 22 | 6 | 0.0137 (J) | 0.0522 | Nonparametric | 0.0209 | 95% KM (Percentile Bootstrap) |
| Phenanthrene | 22 | 2 | 0.016 (J) | 0.0409 (U) | n/a | 0.0264 | Maximum detected concentration |
| Pyrene | 22 | 8 | 0.0134 (J) | 0.0596 | Nonparametric | 0.022 | 95% KM (t) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 22 | 18 | 0.0191 (U) | 0.521 | Nonparametric | 0.175 | 95% KM (BCA) |
| Cesium-134 | 9 | 1 | 0.0411 (U) | 0.128 | n/a | 0.128 | Maximum detected concentration |
| Cesium-137 | 22 | 22 | 0.0992 | 2.2 | Nonparametric | 0.758 | 95% Chebyshev (Mean, Sd) |
| Plutonium-238 | 22 | 3 | 0 (U) | 0.0971 | n/a | 0.0971 | Maximum detected concentration |
| Plutonium-239/240 | 22 | 22 | 0.163 (J) | 2 | Gamma | 0.945 | 95% Approximate Gamma |
| Tritium | 22 | 21 | 0.026112 | 0.07181 | Nonparametric | 0.0534 | 95% KM (t) |
| Uranium-234 | 22 | 22 | 0.883 | 3.39 | Normal | 1.677 | 95% Modified-t |
| Uranium-235/236 | 22 | 21 | 0.0573 (U) | 0.137 | Nonparametric | 0.096 | 95% KM (BCA) |
| Uranium-238 | 22 | 22 | 0.961 | 2.68 | Normal | 1.541 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-11**
**Exposure Point Concentrations for SWMU 21-012(b) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 75 | 75 | 695 (J-) | 30800 (J+) | Gamma | 10263 | 95% Approximate Gamma |
| Antimony | 12 | 49 | 0.121 (J-) | 0.507 (U) | Nonparametric | 0.193 | 95% KM (t) |
| Arsenic | 75 | 75 | 1.24 (J) | 6.56 | Normal | 2.823 | 95% Student's-t |
| Barium | 75 | 75 | 9.4 | 222 | Normal | 77.73 | 95% Student's-t |
| Beryllium | 75 | 75 | 0.179 | 2.01 | Gamma | 0.654 | 95% Approximate Gamma |
| Cadmium | 30 | 75 | 0.112 (J) | 1.4 (J) | Nonparametric | 0.296 | 95% KM (t) |
| Calcium | 73 | 73 | 214 | 14700 (J) | Nonparametric | 3571 | 95% KM (BCA) |
| Chromium | 76 | 76 | 1.04 | 90 | Nonparametric | 13.29 | 95% KM (BCA) |
| Cobalt | 74 | 75 | 0.236 (J) | 5.06 | Nonparametric | 1.954 | 95% KM (Percentile Bootstrap) |
| Copper | 77 | 77 | 1.22 | 1320 | Nonparametric | 135.7 | 95% KM (Chebyshev) |
| Cyanide (total) | 13 | 74 | 0.0855 (J) | 1.56 | Nonparametric | 0.199 | 95% KM (% Bootstrap) |
| Iron | 75 | 75 | 3580 (J) | 36700 (J-) | Normal | 10365 | 95% Modified-t |
| Lead | 76 | 76 | 1.54 | 108 | Nonparametric | 17.8 | 95% KM (BCA) |
| Lithium | 53 | 53 | 2.5 (J+) | 27.6 (J+) | Nonparametric | 11.62 | 95% KM (BCA) |
| Mercury | 74 | 75 | 0.0041 (J) | 9.68 | Nonparametric | 1.377 | 97.5% KM (Chebyshev) |
| Molybdenum | 52 | 53 | 0.288 (U) | 3.81 | Nonparametric | 1.159 | 95% KM (BCA) |
| Nickel | 55 | 55 | 1.3 (J+) | 12 (J-) | Nonparametric | 5.397 | 95% KM (BCA) |
| Nitrate | 57 | 75 | 0.509 (J) | 19.5 (J-) | Nonparametric | 2.771 | 95% KM (BCA) |
| Perchlorate | 31 | 75 | 0.000537 (J-) | 0.00397 (J-) | Nonparametric | 0.00126 | 95% KM (t) |
| Selenium | 24 | 75 | 0.651 (J) | 7.49 (U) | Nonparametric | 0.974 | 95% KM (t) |
| Strontium | 76 | 76 | 1.24 | 101 | Nonparametric | 26.77 | 95% KM (BCA) |
| Uranium | 75 | 75 | 0.39 | 8.01 | Nonparametric | 2.153 | 95% Chebyshev (Mean, Sd) |
| Vanadium | 75 | 75 | 1.84 | 30 | Nonparametric | 14.93 | 95% Chebyshev (Mean, Sd) |

**Table H-2.2-11 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Zinc | 78 | 78 | 13.1 | 615 | Nonparametric | 96.56 | 95% KM (BCA) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 7 | 53 | 0.0036 (J) | 0.0639 | Nonparametric | 0.00813 | 95% KM (t) |
| Aroclor-1260 | 1 | 14 | 0.0015 (J) | 0.0417 (U) | n/a* | 0.0015 | Maximum detected concentration |
| Benzo(a)anthracene | 1 | 75 | 0.024 (J) | 0.0425 (U) | n/a | 0.024 | Maximum detected concentration |
| Benzo(b)fluoranthene | 1 | 75 | 0.0161 (J) | 0.0425 (U) | n/a | 0.0161 | Maximum detected concentration |
| Benzoic Acid | 1 | 68 | 0.629 (J) | 0.85 (U) | n/a | 0.629 | Maximum detected concentration |
| Chloroform | 3 | 53 | 0.000219 (J) | 0.0075 (U) | n/a | 0.000365 | Maximum detected concentration |
| Chrysene | 1 | 75 | 0.0306 (J) | 0.0425 (U) | n/a | 0.0306 | Maximum detected concentration |
| Fluoranthene | 9 | 75 | 0.0129 (J) | 0.0522 | Nonparametric | 0.0169 | 95% KM (t) |
| Isopropyltoluene[4-] | 3 | 53 | 0.000503 (J) | 0.0075 (U) | n/a | 0.00153 | Maximum detected concentration |
| Methylene chloride | 2 | 53 | 0.00315 (J) | 0.0075 (U) | n/a | 0.00476 | Maximum detected concentration |
| Phenanthrene | 2 | 75 | 0.016 (J) | 0.0425 (U) | n/a | 0.0264 | Maximum detected concentration |
| Pyrene | 12 | 75 | 0.0134 (J) | 0.0596 | Nonparametric | 0.0201 | 95% KM (% Bootstrap) |
| Toluene | 30 | 55 | 0.00021 (U) | 0.0325 | Nonparametric | 0.00484 | 95% KM (BCA) |
| Trichloroethene | 1 | 53 | 0.000322 (J) | 0.0075 (U) | n/a | 0.000322 | Maximum detected concentration |
| Trimethylbenzene[1,2,4-] | 2 | 53 | 0.000262 (J) | 0.0075 (U) | n/a | 0.000281 | Maximum detected concentration |
| Xylene[1,3-]+Xylene[1,4-] | 3 | 48 | 0.000374 (J) | 0.00255 (U) | n/a | 0.000553 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 30 | 75 | -0.016 (U) | 6.41 | Nonparametric | 0.689 | 97.5% KM (Chebyshev) |
| Cesium-134 | 1 | 31 | -0.00623 (U) | 0.141 (U) | n/a | 0.128 | Maximum detected concentration |
| Cesium-137 | 33 | 75 | -0.0977 (U) | 2.2 | Nonparametric | 0.39 | 97.5% KM (Chebyshev) |
| Plutonium-238 | 6 | 75 | -0.00887 (U) | 0.301 | Nonparametric | 0.107 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 52 | 75 | -0.00178 (U) | 2 | Nonparametric | 0.439 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-11 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Tritium | 71 | 75 | 0.0162 (U) | 0.198 | Nonparametric | 0.0751 | 95% KM (BCA) |
| Uranium-234 | 75 | 75 | 0.703 | 3.39 | Normal | 1.401 | 95% Modified-t |
| Uranium-235/236 | 62 | 75 | -0.0266 (U) | 0.182 | Nonparametric | 0.0831 | 95% KM (BCA) |
| Uranium-238 | 75 | 75 | 0.789 | 3.08 | Normal | 1.344 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-12**
**Exposure Point Concentrations for SWMU 21-012(b) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 84 | 84 | 399 (J+) | 30800 (J+) | Nonparametric | 11338 | 95% Chebyshev (Mean, Sd) |
| Antimony | 58 | 12 | 0.121 (J-) | 0.507 (U) | Nonparametric | 0.193 | 95% KM (t) |
| Arsenic | 84 | 84 | 1.24 (J) | 6.58 | Gamma | 2.866 | 95% Approximate Gamma |
| Barium | 84 | 84 | 7.83 | 222 | Normal | 76.41 | 95% Student's-t |
| Beryllium | 84 | 84 | 0.179 | 2.01 | Gamma | 0.638 | 95% Approximate Gamma |
| Cadmium | 84 | 30 | 0.112 (J) | 1.4 (J) | Nonparametric | 0.293 | 95% KM (Percentile Bootstrap) |
| Calcium | 82 | 82 | 214 | 39300 (J) | Nonparametric | 6813 | 95% Chebyshev (Mean, Sd) |
| Chromium | 85 | 85 | 0.518 (J) | 90 | Nonparametric | 16.95 | 95% Chebyshev (Mean, Sd) |
| Cobalt | 84 | 82 | 0.236 (J) | 5.06 | Nonparametric | 1.857 | 95% KM (t) |
| Copper | 87 | 87 | 0.887 (J) | 1320 | Lognormal | 75.17 | 95% H |
| Cyanide (total) | 83 | 14 | 0.0855 (J) | 1.56 | Nonparametric | 0.194 | 95% KM (Percentile Bootstrap) |
| Iron | 84 | 84 | 3580 (J) | 36700 (J-) | Normal | 10016 | 95% Modified-t |
| Lead | 86 | 86 | 1.54 | 108 | Lognormal | 15.96 | 95% H |
| Lithium | 61 | 61 | 2.5 (J+) | 27.6 (J+) | Gamma | 11.32 | 95% Approximate Gamma |
| Mercury | 84 | 81 | 0.0028 (U) | 9.68 | Nonparametric | 1.239 | 97.5% KM (Chebyshev) |
| Molybdenum | 61 | 60 | 0.288 (U) | 3.81 | Nonparametric | 1.219 | 95% KM (BCA) |
| Nickel | 64 | 64 | 1.3 (J+) | 12 (J-) | Gamma | 5.418 | 95% Approximate Gamma |
| Nitrate | 85 | 66 | 0.509 (J) | 34.2 (J-) | Nonparametric | 3.503 | 95% KM (BCA) |
| Perchlorate | 84 | 34 | 0.000537 (J-) | 0.00397 (J-) | Nonparametric | 0.00125 | 95% KM (t) |
| Selenium | 84 | 26 | 0.645 (J) | 7.49 (U) | Nonparametric | 0.954 | 95% KM (t) |
| Strontium | 85 | 85 | 1.24 | 101 | Gamma | 27.77 | 95% Approximate Gamma |
| Uranium | 84 | 84 | 0.39 | 8.01 | Nonparametric | 2.042 | 95% Chebyshev (Mean, Sd) |

**Table H-2.2-12 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Vanadium | 84 | 84 | 1.84 | 30 | Nonparametric | 14.54 | 95% Chebyshev (Mean, Sd) |
| Zinc | 87 | 87 | 12.4 | 615 | Nonparametric | 112.1 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 62 | 10 | 0.00319 (J) | 0.0639 | Nonparametric | 0.00729 | 95% KM (t) |
| Aroclor-1260 | 19 | 1 | 0.0015(J) | 0.0015(J) | n/a* | 0.0015 | Maximum detected concentration |
| Benzo(a)anthracene | 84 | 1 | 0.024 (J) | 0.0425 (U) | n/a | 0.024 | Maximum detected concentration |
| Benzo(b)fluoranthene | 84 | 1 | 0.0161 (J) | 0.0425 (U) | n/a | 0.0161 | Maximum detected concentration |
| Benzoic acid | 76 | 1 | 0.629 (J) | 0.85 (U) | n/a | 0.629 | Maximum detected concentration |
| Chloroform | 62 | 4 | 0.000219 (J) | 0.0075 (U) | n/a | 0.00037 | Maximum detected concentration |
| Chrysene | 84 | 1 | 0.0306 (J) | 0.0425 (U) | n/a | 0.0306 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 146 | 1 | 0.00042 (J) | 0.425 (U) | n/a | 0.00042 | Maximum detected concentration |
| Fluoranthene | 84 | 9 | 0.0129 (J) | 0.0522 | Nonparametric | 0.0168 | 95% KM (Percentile Bootstrap) |
| Isopropyltoluene[4-] | 62 | 3 | 0.000503 (J) | 0.0075 (U) | n/a | 0.00153 | Maximum detected concentration |
| Methylene chloride | 62 | 2 | 0.00315 (J) | 0.0075 (U) | n/a | 0.00476 | Maximum detected concentration |
| Phenanthrene | 84 | 2 | 0.016 (J) | 0.0425 (U) | n/a | 0.0264 | Maximum detected concentration |
| Pyrene | 84 | 12 | 0.0134 (J) | 0.0596 | Nonparametric | 0.02 | 95% KM (Percentile Bootstrap) |
| Toluene | 64 | 34 | 0.00021 (U) | 0.0325 | Nonparametric | 0.0043 | 95% KM (BCA) |
| Trichloroethene | 62 | 1 | 0.000322 (J) | 0.0075 (U) | n/a | 0.00032 | Maximum detected concentration |
| Trimethylbenzene[1,2,4-] | 62 | 2 | 0.000262 (J) | 0.0075 (U) | n/a | 0.00028 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 57 | 3 | 0.000374 (J) | 0.00255 (U) | n/a | 0.00055 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 84 | 31 | -0.016 (U) | 6.41 | Nonparametric | 0.675 | 97.5% KM (Chebyshev) |
| Cesium-134 | 34 | 1 | -0.00623 (U) | 0.141 (U) | n/a | 0.128 | Maximum detected concentration |
| Cesium-137 | 84 | 34 | -0.0977 (U) | 2.2 | Nonparametric | 0.36 | 97.5% KM (Chebyshev) |
| Plutonium-238 | 86 | 8 | -0.00887 (U) | 0.301 | Nonparametric | 0.0373 | 95% KM (t) |
| Plutonium-239/240 | 86 | 56 | -0.00913 (UJ) | 2 | Nonparametric | 0.388 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-12 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Tritium | 84 | 80 | 0.0162222 (U) | 0.223902 | Nonparametric | 0.0802 | 95% KM (BCA) |
| Uranium-234 | 84 | 84 | 0.703 | 3.39 | Normal | 1.364 | 95% Modified-t |
| Uranium-235/236 | 84 | 68 | -0.0266 (U) | 0.182 | Nonparametric | 0.0945 | 97.5% KM (Chebyshev) |
| Uranium-238 | 84 | 84 | 0.789 | 3.08 | Normal | 1.312 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-13**
**Exposure Point Concentrations for SWMU 21-013(c) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 25 | 25 | 488(J+) | 29300 | Normal | 15903 | 95% Student's-t |
| Arsenic | 25 | 25 | 1.59 | 7.36 | Normal | 3.881 | 95% Student's-t |
| Barium | 25 | 25 | 5.95 | 211 | Normal | 119.6 | 95% Student's-t |
| Cadmium | 25 | 14 | 0.112(J) | 2.59(U) | Nonparametric | 0.223 | 95% KM (t) |
| Chromium | 25 | 25 | 3.37 | 14.1 | Normal | 10.43 | 95% Student's-t |
| Lead | 25 | 24 | 1(U) | 26.2 | Nonparametric | 16.81 | 95% KM (Chebyshev) |
| Mercury | 25 | 24 | 0.0069(J) | 2.49 | Nonparametric | 0.741 | 97.5% KM (Chebyshev) |
| Nickel | 25 | 25 | 1.03 | 10.7 | Nonparametric | 8.511 | 95% Chebyshev (Mean, Sd) |
| Nitrate | 25 | 19 | 0.781(J-) | 5.7 | Nonparametric | 2.493 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 25 | 7 | 0.00053(U) | 0.00227(U) | Nonparametric | 0.00114 | 95% KM (Percentile Bootstrap) |
| Selenium | 27 | 12 | 0.028(U) | 6.14 | Nonparametric | 2.611 | 95% KM (t) |
| Thallium | 25 | 21 | 0.0851(J) | 0.253 | Nonparametric | 0.193 | 95% KM (t) |
| Uranium | 25 | 25 | 0.572 | 5.56(J+) | Normal | 1.553 | 95% Modified-t |
| Vanadium | 25 | 25 | 1.15 | 35.1 | Normal | 22.4 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 27 | 4 | 0.0145(J) | 0.38(U) | Nonparametric | 0.0194 | 95% KM (t) |
| Anthracene | 27 | 7 | 0.0105(J) | 0.38(U) | Nonparametric | 0.026 | 95% KM (t) |
| Aroclor-1254 | 25 | 5 | 0.0016(J) | 0.0695(U) | Nonparametric | 0.00444 | 95% KM (Percentile Bootstrap) |
| Aroclor-1260 | 25 | 11 | 0.00132(J) | 0.0695(U) | Nonparametric | 0.00236 | 95% KM (t) |
| Benzo(a)anthracene | 27 | 1 | 0.034(U) | 0.38(U) | n/a* | 0.08 | Maximum detected concentration |
| Benzo(a)pyrene | 27 | 11 | 0.0172(J) | 0.38(U) | Nonparametric | 0.0446 | 95% KM (t) |
| Benzo(b)fluoranthene | 27 | 15 | 0.0125(J) | 0.236(J) | Nonparametric | 0.0828 | 95% KM (t) |
| Benzo(k)fluoranthene | 27 | 3 | 0.034(U) | 0.18(J) | n/a | 0.18 | Maximum detected concentration |
| Benzo(g,h,i)perylene | 27 | 8 | 0.0114 (J) | 0.38(UJ) | Nonparametric | 0.0464 | 95% KM (Percentile Bootstrap) |
| Benzoic acid | 25 | 6 | 0.432 (J) | 0.758(U) | Nonparametric | 0.464 | 95% KM (t) |

**Table H-2.2-13 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 27 | 2 | 0.12 (J) | 0.38(U) | n/a | 0.355 | Maximum detected concentration |
| Chloroform | 2 | 1 | 0.000287 (J) | 0.00105(U) | n/a | 0.000287 | Maximum detected concentration |
| Chrysene | 27 | 11 | 0.0172 (J) | 0.38(U) | Nonparametric | 0.059 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 27 | 18 | 0.0149 (J) | 0.38(U) | Nonparametric | 0.0995 | 95% KM (Percentile Bootstrap) |
| Fluorene | 27 | 3 | 0.0105 (J) | 0.38(U) | n/a | 0.0214 | Maximum detected concentration |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 1.32E-05 | 1.32E-05 | n/a | 0.0000132 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 0.0000024 (J) | 0.0000024 (J) | n/a | 0.0000024 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 1 | 1 | 0.000000537 (J) | 0.000000537 (J) | n/a | 0.000000537 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1 | 1 | 0.000000487 (J) | 0.000000487 (J) | n/a | 0.000000487 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1 | 1 | 0.000000393 (J) | 0.000000393 (J) | n/a | 0.000000393 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 0.000000214 (J) | 0.000000214 (J) | n/a | 0.000000214 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 0.000000225 (J) | 0.000000225 (J) | n/a | 0.000000225 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 27 | 7 | 0.017 (J) | 0.38(UJ) | Nonparametric | 0.0436 | 95% KM (Percentile Bootstrap) |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000112 | 0.000112 | n/a | 0.000112 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000521 (J) | 0.00000521 (J) | n/a | 0.00000521 | Maximum detected concentration |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1 | 1 | 0.000000269 (J) | 0.000000269 (J) | n/a | 0.000000269 | Maximum detected concentration |
| Phenanthrene | 27 | 16 | 0.0117 (J) | 0.38(U) | Nonparametric | 0.0637 | 95% KM (% Bootstrap) |
| Pyrene | 27 | 19 | 0.011 (J) | 0.384 | Nonparametric | 0.102 | 95% KM (Percentile Bootstrap) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 0.000000256 (J) | 0.000000256 (J) | n/a | 0.000000256 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 30 | 10 | -0.0208(U) | 0.0857 | Nonparametric | 0.0437 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 24 | 19 | 0.00518(U) | 1.2 | Nonparametric | 0.386 | 95% KM (BCA) |
| Plutonium-239/240 | 26 | 22 | -0.0184(U) | 0.728 | Nonparametric | 0.191 | 95% KM (BCA) |
| Strontium-90 | 25 | 1 | -0.0636(U) | 0.157(U) | n/a | 0.108 | Maximum detected concentration |
| Tritium | 25 | 25 | 0.016144 | 0.401572 | Gamma | 0.151 | 95% Approximate Gamma |
| Uranium-235/236 | 25 | 19 | 0.0063(U) | 0.113 | Nonparametric | 0.0668 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-14**
**Exposure Point Concentrations for SWMU 21-013(c) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 46 | 46 | 485 (J+) | 34800 (J+) | Normal | 14425 | 95% Student's-t |
| Arsenic | 46 | 46 | 1.1 (J) | 7.36 | Gamma | 3.802 | 95% Approximate Gamma |
| Barium | 46 | 46 | 5.95 | 214 | Normal | 108.7 | 95% Student's-t |
| Cadmium | 19 | 46 | 0.112 (J) | 2.73 (U) | Nonparametric | 0.214 | 95% KM (t) |
| Chromium | 46 | 46 | 2.39 | 23.8 | Gamma | 10.42 | 95% Approximate Gamma |
| Lead | 44 | 46 | 1 (U) | 26.5 | Nonparametric | 14.13 | 95% KM (Chebyshev) |
| Mercury | 45 | 46 | 0.006 (J) | 2.49 | Nonparametric | 0.319 | 95% KM (Chebyshev) |
| Nickel | 46 | 46 | 1.03 | 12.4 | Normal | 6.66 | 95% Student's-t |
| Nitrate | 28 | 46 | 0.776 (J) | 5.7 | Nonparametric | 1.889 | 95% KM (BCA) |
| Perchlorate | 17 | 46 | 0.00053 (U) | 0.00726 | Nonparametric | 0.00171 | 95% KM (t) |
| Selenium | 20 | 48 | 0.028 (U) | 6.14 | Nonparametric | 2.089 | 95% KM (t) |
| Thallium | 35 | 46 | 0.0851 (J) | 0.319 | Nonparametric | 0.19 | 95% KM (t) |
| Uranium | 46 | 46 | 0.572 | 5.56 (J+) | Normal | 1.275 | 95% Modified-t |
| Vanadium | 46 | 46 | 1.15 | 35.1 | Nonparametric | 23.07 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 4 | 48 | 0.0145 (J) | 0.38 (U) | n/a* | 0.0366 | Maximum detected concentration |
| Anthracene | 8 | 48 | 0.00703 (J) | 0.38 (U) | Nonparametric | 0.024 | 95% KM (t) |
| Aroclor-1254 | 5 | 46 | 0.0016 (J) | 0.0695 (U) | Nonparametric | 0.00416 | 95% KM (Percentile Bootstrap) UCL |
| Aroclor-1260 | 11 | 46 | 0.00132 (J) | 0.0695 (U) | Nonparametric | 0.00227 | 95% KM (t) |
| Benzo(a)anthracene | 1 | 48 | 0.034 (U) | 0.38 (U) | n/a | 0.08 | Maximum detected concentration |
| Benzo(a)pyrene | 12 | 48 | 0.0172 (J) | 0.38 (U) | Nonparametric | 0.0346 | 95% KM (t) |
| Benzo(b)fluoranthene | 17 | 48 | 0.0111 (J) | 0.236 (J) | Nonparametric | 0.0564 | 95% KM (t) |
| Benzo(g,h,i)perylene | 8 | 48 | 0.0114 (J) | 0.38 (UJ) | Nonparametric | 0.0414 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-14 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | 3 | 48 | 0.034 (U) | 0.18 (J) | n/a | 0.18 | Maximum detected concentration |
| Benzoic Acid | 8 | 46 | 0.432 (J) | 0.79 (U) | Nonparametric | 0.458 | 95% KM (t) |
| Bis(2-ethylhexyl)phthalate | 2 | 48 | 0.12 (J) | 0.38 (U) | n/a | 0.355 | Maximum detected concentration |
| Chloroform | 1 | 23 | 0.000287 (J) | 0.00119 (U) | n/a | 0.000287 | Maximum detected concentration |
| Chrysene | 12 | 48 | 0.0172 (J) | 0.38 (U) | Nonparametric | 0.0462 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 21 | 48 | 0.0117 (J) | 0.38 (U) | Nonparametric | 0.0651 | 95% KM (t) |
| Fluorene | 3 | 48 | 0.0105 (J) | 0.38 (U) | n/a | 0.0214 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 2 | 2 | 0.0000012 (J) | 0.0000132 | n/a | 0.0000132 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 2 | 2 | 2.55E-07 (J) | 0.0000024 (J) | n/a | 0.0000024 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 2 | 0.00000015 (U) | 5.37E-07 (J) | n/a | 5.37E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 2 | 0.000000146 (U) | 4.87E-07 (J) | n/a | 4.87E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 2 | 2 | 7.54E-08 (J) | 3.93E-07 (J) | n/a | 3.93E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 2 | 0.0000000713 (U) | 2.14E-07 (J) | n/a | 2.14E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 2 | 0.000000077 (U) | 2.25E-07 (J) | n/a | 2.25E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 7 | 48 | 0.017 (J) | 0.38 (UJ) | Nonparametric | 0.0382 | 95% KM (Percentile Bootstrap) |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 2 | 2 | 0.0000108 | 0.000112 | n/a | 0.000112 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 2 | 0.000000899 (U) | 5.21E-06 (J) | n/a | 5.21E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 2 | 0.0000000803 (U) | 2.69E-07 (J) | n/a | 2.69E-07 | Maximum detected concentration |
| Phenanthrene | 17 | 48 | 0.0117 (J) | 0.38 (U) | Nonparametric | 0.0453 | 95% KM (% Bootstrap) |

**Table H-2.2-14 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Pyrene | 22 | 48 | 0.011 (J) | 0.384 | Nonparametric | 0.0679 | 95% KM (t) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 2 | 0.000000107 (U) | 2.56E-07 (J) | n/a | 2.56E-07 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 11 | 51 | -0.0208 (U) | 0.0857 | Nonparametric | 0.0418 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 20 | 44 | -0.0433 (U) | 1.2 | Nonparametric | 0.254 | 95% KM (t) |
| Plutonium-239/240 | 24 | 47 | -0.0193 (U) | 0.728 | Nonparametric | 0.128 | 95% KM (t) |
| Strontium-90 | 1 | 46 | -0.0636 (U) | 0.157 (U) | n/a | 0.108 | Maximum detected concentration |
| Tritium | 46 | 46 | 0.0161 | 0.402 | Gamma | 0.116 | 95% Approximate Gamma |
| Uranium-235/236 | 37 | 46 | 0.0063 (U) | 0.113 | Nonparametric | 0.0651 | 95% KM (BCA) |

* n/a = Not applicable.

**Table H-2.2-15**
**Exposure Point Concentrations for SWMU 21-013(c) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 46 | 46 | 485 (J+) | 34800 (J+) | Normal | 14425 | 95% Student's-t |
| Arsenic | 46 | 46 | 1.1 (J) | 7.36 | Gamma | 3.802 | 95% Approximate Gamma |
| Barium | 47 | 47 | 5.95 | 214 | Normal | 107.3 | 95% Student's-t |
| Cadmium | 46 | 19 | 0.112 (J) | 2.73 (U) | Nonparametric | 0.215 | 95% KM (Percentile Bootstrap) |
| Chromium | 46 | 46 | 2.39 | 23.8 | Gamma | 10.42 | 95% Approximate Gamma |
| Lead | 46 | 44 | 1 (U) | 26.5 | Nonparametric | 14.13 | 95% KM (Chebyshev) |
| Mercury | 46 | 45 | 0.006 (J) | 2.49 | Nonparametric | 0.319 | 95% KM (Chebyshev) |
| Nickel | 46 | 46 | 1.03 | 12.4 | Normal | 6.66 | 95% Student's-t |
| Nitrate | 46 | 28 | 0.776 (J) | 5.7 | Nonparametric | 1.904 | 95% KM (BCA) |
| Perchlorate | 48 | 18 | 0.00053 (U) | 0.00726 | Nonparametric | 0.00171 | 95% KM (t) |
| Selenium | 49 | 20 | 0.028 (U) | 6.14 | Nonparametric | 2.054 | 95% KM (t) |
| Thallium | 46 | 35 | 0.0851 (J) | 0.319 | Nonparametric | 0.19 | 95% KM (t) |
| Uranium | 46 | 46 | 0.572 | 5.56 (J+) | Normal | 1.275 | 95% Modified-t |
| Vanadium | 46 | 46 | 1.15 | 35.1 | Nonparametric | 23.07 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 48 | 4 | 0.0145 (J) | 0.38 (U) | n/a* | 0.0366 | Maximum detected concentration. |
| Anthracene | 48 | 8 | 0.00703 (J) | 0.38 (U) | Nonparametric | 0.024 | 95% KM (t) |
| Aroclor-1254 | 46 | 5 | 0.0016 (J) | 0.0695 (U) | Nonparametric | 0.00412 | 95% KM (Percentile Bootstrap) |
| Aroclor-1260 | 46 | 11 | 0.00132 (J) | 0.0695 (U) | Nonparametric | 0.00227 | 95% KM (t) |
| Benzo(a)anthracene | 48 | 1 | 0.034 (U) | 0.38 (U) | n/a | 0.08 | Maximum detected concentration. |
| Benzo(a)pyrene | 48 | 12 | 0.0172 (J) | 0.38 (U) | Nonparametric | 0.0346 | 95% KM (t) |
| Benzo(b)fluoranthene | 48 | 17 | 0.0111 (J) | 0.236 (J) | Nonparametric | 0.0564 | 95% KM (t) |
| Benzo(g,h,i)perylene | 48 | 8 | 0.0114 (J) | 0.38 (UJ) | Nonparametric | 0.0419 | 95% KM (Percentile Bootstrap) |
| Benzo(k)fluoranthene | 48 | 3 | 0.034 (U) | 0.18 (J) | n/a | 0.18 | Maximum detected concentration. |
| Benzoic acid | 46 | 8 | 0.432 (J) | 0.79 (U) | Nonparametric | 0.458 | 95% KM (t) |

**Table H-2.2-15 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 48 | 2 | 0.12 (J) | 0.38 (U) | n/a | 0.355 | Maximum detected concentration. |
| Chloroform | 23 | 1 | 0.000287 (J) | 0.00119 (U) | n/a | 0.000287 | Maximum detected concentration. |
| Chrysene | 48 | 12 | 0.0172 (J) | 0.38 (U) | Nonparametric | 0.0464 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 48 | 21 | 0.0117 (J) | 0.38 (U) | Nonparametric | 0.0651 | 95% KM (t) |
| Fluorene | 48 | 3 | 0.0105 (J) | 0.38 (U) | n/a | 0.0214 | Maximum detected concentration. |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 2 | 2 | 0.0000012 (J) | 0.0000132 | n/a | 1.32E-05 | Maximum detected concentration. |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 2 | 2 | 0.000000255 (J) | 0.0000024 (J) | n/a | 2.40E-06 | Maximum detected concentration. |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 2 | 1 | 0.00000015 (U) | 0.000000537 (J) | n/a | 5.37E-07 | Maximum detected concentration. |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 2 | 1 | 0.000000146 (U) | 0.000000487 (J) | n/a | 4.87E-07 | Maximum detected concentration. |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 2 | 2 | 0.0000000754 (J) | 0.000000393 (J) | n/a | 3.93E-07 | Maximum detected concentration. |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2 | 1 | 0.0000000713 (U) | 0.000000214 (J) | n/a | 2.14E-07 | Maximum detected concentration. |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2 | 1 | 0.000000077 (U) | 0.000000225 (J) | n/a | 2.25E-07 | Maximum detected concentration. |
| Indeno(1,2,3-cd)pyrene | 48 | 7 | 0.017 (J) | 0.38 (UJ) | Nonparametric | 0.0382 | 95% KM (Percentile Bootstrap) |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 2 | 2 | 0.0000108 | 0.000112 | n/a | 0.000112 | Maximum detected concentration. |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 2 | 1 | 0.000000899 (U) | 0.00000521 (J) | n/a | 5.21E-06 | Maximum detected concentration. |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 2 | 1 | 0.0000000803 (U) | 0.000000269 (J) | n/a | 2.69E-07 | Maximum detected concentration. |
| Phenanthrene | 48 | 17 | 0.0117 (J) | 0.38 (U) | Nonparametric | 0.0448 | 95% KM (Percentile Bootstrap) |
| Pyrene | 48 | 22 | 0.011 (J) | 0.384 | Nonparametric | 0.0679 | 95% KM (t) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 2 | 1 | 0.000000107 (U) | 0.000000256 (J) | n/a | 2.56E-07 | Maximum detected concentration. |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 52 | 11 | -0.0208 (U) | 0.0857 | Nonparametric | 0.042 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 44 | 20 | -0.0433 (U) | 1.2 | Nonparametric | 0.254 | 95% KM (t) |
| Plutonium-239/240 | 48 | 24 | -0.0193 (U) | 0.728 | Nonparametric | 0.126 | 95% KM (t) |
| Strontium-90 | 46 | 1 | -0.0636 (U) | 0.157 (U) | n/a | 0.108 | Maximum detected concentration. |
| Tritium | 46 | 46 | 0.0161439 | 0.401572 | Gamma | 0.116 | 95% Approximate Gamma |
| Uranium-235/236 | 46 | 37 | 0.0063 (U) | 0.113 | Nonparametric | 0.0646 | 95% KM (BCA) |

* n/a = Not applicable.

**Table H-2.2-16**
**Exposure Point Concentrations for SWMU 21-022(f) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Barium | 10 | 10 | 10.4 | 63.1 | Normal | 42.46 | 95% Student's-t |
| Cobalt | 10 | 10 | 0.383 (J) | 5.69 | Lognormal | 3.911 | 95% H-UCL |
| Copper | 10 | 10 | 1.18 | 10.6 | Gamma | 6.369 | 95% Approximate Gamma |
| Lead | 10 | 10 | 4.43 (J) | 34.4 | Nonparametric | 28.47 | 95% Chebyshev (Mean, Sd) |
| Manganese | 10 | 10 | 226 (J+) | 1580 | Nonparametric | 1121 | 95% Chebyshev (Mean, Sd) |
| Nitrate | 10 | 3 | 1.05 (J-) | 1.17 (UJ) | n/a* | 1.95 | Maximum detected concentration |
| Selenium | 10 | 7 | 0.815 (J) | 1.73 (U) | Nonparametric | 1.221 | 95% KM (t) |
| Silver | 10 | 8 | 0.0926 (J) | 2.71 | Nonparametric | 1.564 | 95% KM (Chebyshev) |
| Zinc | 10 | 10 | 54.5 (J-) | 3840 | n/a | 3840 | Maximum detected concentration |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 10 | 1 | 0.00333 (U) | 0.202 (J) | n/a | 0.202 | Maximum detected concentration |
| Benzo(a)anthracene | 10 | 2 | 0.0381 (U) | 0.0738 | n/a | 0.0738 | Maximum detected concentration |
| Benzo(a)pyrene | 10 | 2 | 0.0381 (U) | 0.0634 | n/a | 0.0634 | Maximum detected concentration |
| Benzo(b)fluoranthene | 10 | 2 | 0.0381 (U) | 0.122 | n/a | 0.122 | Maximum detected concentration |
| Benzo(g,h,i)perylene | 10 | 1 | 0.0264 (J) | 0.0393 (U) | n/a | 0.0264 | Maximum detected concentration |
| Benzo(k)fluoranthene | 10 | 1 | 0.012 (J) | 0.0393 (U) | n/a | 0.012 | Maximum detected concentration |
| Chrysene | 10 | 2 | 0.0381 (U) | 0.0741 | n/a | 0.0741 | Maximum detected concentration |
| Fluoranthene | 10 | 2 | 0.0381 (U) | 0.0807 | n/a | 0.0807 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 10 | 1 | 0.0275 (J) | 0.0393 (U) | n/a | 0.0275 | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000187 | 0.00000187 | n/a | 1.87E-06 | Maximum detected concentration |
| Phenanthrene | 10 | 2 | 0.0121 (J) | 0.0393 (U) | n/a | 0.0174 | Maximum detected concentration |
| Pyrene | 10 | 2 | 0.0381 (U) | 0.0735 | n/a | 0.0735 | Maximum detected concentration |

**Table H-2.2-16 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Tritium | 10 | 10 | 0.0894277 | 4.15195 | Gamma | 2.099 | 95% Approximate Gamma |
| Uranium-234 | 10 | 10 | 0.856 | 1.51 | Normal | 1.234 | 95% Student's-t |
| Uranium-235/236 | 10 | 9 | 0.0527 (U) | 0.0983 | Nonparametric | 0.0776 | 95% KM (t) |

* n/a = Not applicable.

**Table H-2.2-17**
**Exposure Point Concentrations for SWMU 21-022(h) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 12 | 12 | 851 | 15500 | Gamma | 6899 | 95% Approximate Gamma |
| Antimony | 12 | 10 | 0.056 (J-) | 0.52 (UJ) | Nonparametric | 0.218 | 95% KM (BCA) |
| Barium | 12 | 12 | 7.4 | 127 | Normal | 67.76 | 95% Student's-t |
| Cadmium | 12 | 12 | 0.048 (J) | 6 | Gamma | 2.371 | 95% Approximate Gamma |
| Chromium | 12 | 12 | 0.49 (J) | 356 | Nonparametric | 326.5 | 99% Chebyshev (Mean, Sd) |
| Copper | 7 | 7 | 1.1 (J-) | 249 | n/a* | 249 | Maximum detected concentration |
| Cyanide (total) | 12 | 6 | 0.12 (J-) | 0.54 (U) | Nonparametric | 0.277 | 95% KM (t) |
| Lead | 12 | 12 | 6.5 | 3940 | Nonparametric | 3602 | 99% Chebyshev (Mean, Sd) |
| Mercury | 12 | 10 | 0.0278 (J) | 1.92 (J) | n/a | 1.92 | Maximum detected concentration |
| Molybdenum | 14 | 14 | 0.18 (J) | 21.3 | Gamma | 14.19 | 95% Approximate Gamma |
| Nickel | 12 | 12 | 0.5 (J) | 14.9 (J-) | Gamma | 8.17 | 95% Approximate Gamma |
| Nitrate | 14 | 14 | 0.88 (J) | 72 | Nonparametric | 33.04 | 95% Chebyshev (MVUE) |
| Perchlorate | 13 | 2 | 0.00221 (U) | 0.015 | n/a | 0.015 | Maximum detected concentration |
| Selenium | 12 | 6 | 0.17 (J) | 8.11 (U) | Nonparametric | 0.483 | 95% KM (t) |
| Silver | 12 | 12 | 0.032 (J) | 47.3 | Nonparametric | 43.24 | 99% Chebyshev (Mean, Sd) |
| Zinc | 7 | 7 | 15 (J-) | 1200 | n/a | 1200 | Maximum detected concentration |
| Organic Chemicals (mg/kg) | | | | | | | |
| Acenaphthene | 12 | 4 | 0.14 (J) | 2 | n/a | 2 | Maximum detected concentration |
| Anthracene | 12 | 4 | 0.21 (J) | 2.3 | n/a | 2.3 | Maximum detected concentration |
| Benzo(a)anthracene | 12 | 4 | 0.34 (U) | 5.5 (J) | n/a | 5.5 | Maximum detected concentration |
| Benzo(a)pyrene | 12 | 4 | 0.21 (J) | 5.9 (J) | n/a | 5.9 | Maximum detected concentration |
| Benzo(b)fluoranthene | 12 | 7 | 0.074 (J) | 7.3 (J) | Nonparametric | 2.636 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 12 | 4 | 0.34 (U) | 6.4 (J) | n/a | 6.4 | Maximum detected concentration |

**Table H-2.2-17 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | 12 | 4 | 0.34 (U) | 2.7 (J) | n/a | 2.7 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 12 | 5 | 0.14 (J) | 7.9 (J) | Nonparametric | 3.109 | 95% KM (Percentile Bootstrap) |
| Butylbenzylphthalate | 12 | 2 | 0.15 (J) | 3.67 (U) | n/a | 0.51 | Maximum detected concentration |
| Carbazole | 11 | 3 | 0.18 (J) | 1.5 | n/a | 1.5 | Maximum detected concentration |
| Chrysene | 12 | 6 | 0.081 (J) | 6.1 (J) | Nonparametric | 2.376 | 95% KM (Percentile Bootstrap) |
| Di-n-butylphthalate | 12 | 2 | 0.26 (J) | 3.67 (U) | n/a | 0.35 | Maximum detected concentration |
| Dibenz(a,h)anthracene | 12 | 2 | 0.12 (J) | 1.2 (U) | n/a | 0.43 | Maximum detected concentration |
| Dibenzofuran | 12 | 2 | 0.34 (U) | 3.67 (U) | n/a | 1.1 | Maximum detected concentration |
| Fluoranthene | 12 | 8 | 0.11 (J) | 8.4 | Nonparametric | 3.576 | 95% KM (BCA) |
| Fluorene | 12 | 4 | 0.11 (J) | 1.6 | n/a | 1.6 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 12 | 3 | 0.34 (U) | 5 (J) | n/a | 5 | Maximum detected concentration |
| Methylnaphthalene[2-] | 12 | 3 | 0.107 (J) | 0.74 (U) | n/a | 0.51 | Maximum detected concentration |
| Naphthalene | 12 | 3 | 0.275 (J) | 1.7 | n/a | 1.7 | Maximum detected concentration |
| Phenanthrene | 12 | 5 | 0.25 (J) | 9.8 | Nonparametric | 5.767 | 95% KM (Percentile Bootstrap) |
| Pyrene | 12 | 8 | 0.1 (J) | 19 | Nonparametric | 6.178 | 95% KM (BCA) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 12 | 8 | 0.0033 (U) | 4.64 | Nonparametric | 2.15 | 95% KM (BCA) |
| Cesium-137 | 12 | 12 | 0.149 | 1.16 | Gamma | 0.658 | 95% Approximate Gamma |
| Plutonium-238 | 12 | 8 | -0.0009 (U) | 42.2 | Nonparametric | 12.9 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 12 | 12 | 0.068 (J) | 78.1 (J) | Gamma | 41.81 | 95% Adjusted Gamma |
| Strontium-90 | 12 | 2 | -0.0622 (U) | 0.377 | n/a | 0.377 | Maximum detected concentration |
| Tritium | 12 | 1 | -0.008 (U) | 0.117465 (U) | n/a | 0.0344 | Maximum detected concentration |
| Uranium-235/236 | 12 | 8 | 0.031 (U) | 0.114 | Nonparametric | 0.0928 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-18**
**Exposure Point Concentrations for SWMU 21-022(h) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 26 | 26 | 400 | 15500 | Nonparametric | 6868 | 95% KM (Chebyshev) |
| Antimony | 14 | 26 | 0.056 (J-) | 0.62 (UJ) | Nonparametric | 0.184 | 95% KM (t) |
| Barium | 29 | 29 | 2.1 | 136 | Nonparametric | 78.15 | 95% KM (Chebyshev) |
| Cadmium | 24 | 26 | 0.0061 (J) | 6 | Nonparametric | 2.951 | 99% KM (Chebyshev) |
| Calcium | 26 | 26 | 593 | 36600 (J-) | Nonparametric | 14228 | 97.5% KM (Chebyshev) |
| Chromium | 26 | 26 | 0.49 (J) | 356 | Nonparametric | 104.6 | 97.5% KM (Chebyshev) |
| Copper | 16 | 16 | 0.41 (J-) | 249 | Nonparametric | 181.1 | 99% KM (Chebyshev) |
| Cyanide (Total) | 8 | 26 | 0.11 (J-) | 0.6 (UJ) | Nonparametric | 0.231 | 95% KM (t) |
| Lead | 26 | 26 | 2.3 | 3940 | Nonparametric | 1675 | 99% KM (Chebyshev) |
| Mercury | 20 | 26 | 0.0121 (J) | 1.92 (J) | Nonparametric | 0.775 | 97.5% KM (Chebyshev) |
| Molybdenum | 28 | 28 | 0.15 (J) | 21.3 | Nonparametric | 9.791 | 95% KM (Chebyshev) |
| Nickel | 26 | 26 | 0.5 (J) | 14.9 (J-) | Nonparametric | 7.178 | 95% KM (Chebyshev) |
| Nitrate | 21 | 28 | 0.21 (J) | 72 | Nonparametric | 30.69 | 97.5% KM (Chebyshev) |
| Perchlorate | 3 | 27 | 0.00208 | 0.015 | n/a* | 0.015 | Maximum detected concentration |
| Selenium | 13 | 26 | 0.14 (J) | 8.11 (U) | Nonparametric | 0.407 | 95% KM (t) |
| Silver | 24 | 26 | 0.022 (J) | 47.3 | Nonparametric | 20.11 | 99% KM (Chebyshev) |
| Zinc | 16 | 16 | 6.7 (J-) | 1200 | Nonparametric | 561 | 97.5% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 6 | 26 | 0.0202 (J) | 2 | Nonparametric | 0.434 | 95% KM (Percentile Bootstrap) |
| Anthracene | 6 | 26 | 0.0287 (J) | 2.3 | Nonparametric | 0.621 | 95% KM (Percentile Bootstrap) |
| Aroclor-1254 | 1 | 1 | 0.0478 | 0.0478 | n/a | 0.0478 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0211 (J) | 0.0211 (J) | n/a | 0.0211 | Maximum detected concentration |
| Benzo(a)anthracene | 8 | 26 | 0.0152 (J) | 5.5 (J) | Nonparametric | 0.955 | 95% KM (t) |
| Benzo(a)pyrene | 6 | 26 | 0.0137 (U) | 5.9 (J) | Nonparametric | 0.929 | 95% KM (t) |
| Benzo(b)fluoranthene | 11 | 26 | 0.0161 (J) | 7.3 (J) | Nonparametric | 1.262 | 95% KM (t) |

**Table H-2.2-18 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 6 | 26 | 0.0349 (UJ) | 6.4 (J) | Nonparametric | 2 | 95% KM (Percentile Bootstrap) |
| Benzo(k)fluoranthene | 5 | 26 | 0.0349 (U) | 2.7 (J) | Nonparametric | 1.498 | 95% KM (Percentile Bootstrap) |
| Bis(2-ethylhexyl)phthalate | 11 | 26 | 0.0963 (J) | 7.9 (J) | Nonparametric | 1.248 | 95% KM (t) |
| Butylbenzylphthalate | 2 | 26 | 0.15 (J) | 3.67 (U) | n/a | 0.51 | Maximum detected concentration |
| Carbazole | 3 | 22 | 0.18 (J) | 1.5 | n/a | 1.5 | Maximum detected concentration |
| Chrysene | 10 | 26 | 0.0124 (J) | 6.1 (J) | Nonparametric | 1.058 | 95% KM (t) |
| Dibenzo(a,h)anthracene | 2 | 26 | 0.0349 (U) | 1.2 (U) | n/a | 0.43 | Maximum detected concentration |
| Dibenzofuran | 2 | 26 | 0.34 (U) | 3.67 (U) | n/a | 1.1 | Maximum detected concentration |
| Di-n-butylphthalate | 2 | 26 | 0.26 (J) | 3.67 (U) | n/a | 0.35 | Maximum detected concentration |
| Fluoranthene | 14 | 26 | 0.0253 (J) | 8.4 | Nonparametric | 5.552 | 99% KM (Chebyshev) |
| Fluorene | 6 | 26 | 0.0161 (J) | 1.6 | Nonparametric | 0.365 | 95% KM (Percentile Bootstrap) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000181 | 0.0000181 | n/a | 0.0000181 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000285 | 0.00000285 | n/a | 0.00000285 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 1 | 1 | 0.000000246 (J) | 0.000000246 (J) | n/a | 0.000000246 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 1 | 1 | 0.000000214 (J) | 0.000000214 (J) | n/a | 0.000000214 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 1 | 0.000000922 (J) | 0.000000922 (J) | n/a | 0.000000922 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 0.000000488 (J) | 0.000000488 (J) | n/a | 0.000000488 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 0.00000041 (J) | 0.00000041 (J) | n/a | 0.00000041 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 0.000000252 (J) | 0.000000252 (J) | n/a | 0.000000252 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 1 | 1 | 0.000000105 (J) | 0.000000105 (J) | n/a | 0.000000105 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 0.000000265 (J) | 0.000000265 (J) | n/a | 0.000000265 | Maximum detected concentration |

**Table H-2.2-18 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-cd)pyrene | 4 | 26 | 0.0349 (UJ) | 5 (J) | n/a | 5 | Maximum detected concentration |
| Isopropyltoluene[4-] | 1 | 14 | 0.00105 (U) | 0.0061 (U) | n/a | 0.0019 | Maximum detected concentration |
| Methylene Chloride | 1 | 14 | 0.0033 (J) | 0.0061 (U) | n/a | 0.0033 | Maximum detected concentration |
| Methylnaphthalene[2-] | 3 | 26 | 0.0349 (U) | 0.81 (U) | n/a | 0.51 | Maximum detected concentration |
| Naphthalene | 4 | 26 | 0.0168 (J) | 1.7 | n/a | 1.7 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000132 | 0.000132 | n/a | 0.000132 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000663 | 0.00000663 | n/a | 0.00000663 | Maximum detected concentration |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 1 | 1 | 0.000000136 (J) | 0.000000136 (J) | n/a | 0.000000136 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 1 | 1 | 0.000000108 (J) | 0.000000108 (J) | n/a | 0.000000108 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 0.000000335 (J) | 0.000000335 (J) | n/a | 0.000000335 | Maximum detected concentration |
| Phenanthrene | 9 | 26 | 0.0185 (J) | 9.8 | Nonparametric | 1.78 | 95% KM (t) |
| Pyrene | 12 | 26 | 0.0284 (J) | 19 | Nonparametric | 9.943 | 99% KM (Chebyshev) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 1 | 0.000000353 (J) | 0.000000353 (J) | n/a | 0.000000353 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 14 | 26 | 0.0032 (U) | 4.64 | Nonparametric | 1.092 | 95% KM (BCA) |
| Cesium-137 | 13 | 26 | -0.07 (U) | 1.16 | Nonparametric | 0.393 | 95% KM (t) |
| Plutonium-238 | 16 | 26 | -0.0038 (U) | 42.2 | Nonparametric | 20.9 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 22 | 26 | 0.0011 (U) | 78.1 (J) | Nonparametric | 19.71 | 95% KM (Chebyshev) |
| Strontium-90 | 3 | 26 | -0.0808 (U) | 0.377 | n/a | 0.377 | Maximum detected concentration |
| Tritium | 1 | 26 | -0.018 (U) | 0.117 (U) | n/a | 0.0344 | Maximum detected concentration |
| Uranium-235/236 | 13 | 26 | 0.01 (U) | 0.128 | Nonparametric | 0.0806 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-19**
**Exposure Point Concentrations for SWMU 21-022(h) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 28 | 28 | 400 | 15500 | Nonparametric | 1.024 | 95% KM (BCA) |
| Antimony | 28 | 14 | 0.056 (J-) | 0.62 (UJ) | Nonparametric | 0.179 | 95% KM (t) |
| Barium | 32 | 32 | 2.1 | 136 | Gamma | 64.11 | 95% Approximate Gamma |
| Cadmium | 28 | 24 | 0.0061 (J) | 6 | Nonparametric | 2.76 | 99% KM (Chebyshev) |
| Chromium | 28 | 28 | 0.49 (J) | 356 | Lognormal | 28.18 | 95% H |
| Copper | 18 | 18 | 0.41 (J-) | 249 | Nonparametric | 162.2 | 99% Chebyshev (Mean, Sd) |
| Cyanide (total) | 28 | 8 | 0.11 (J-) | 0.6 (UJ) | Nonparametric | 0.227 | 95% KM (t) |
| Lead | 28 | 28 | 2.3 | 3940 | Nonparametric | 1556 | 99% Chebyshev (Mean, Sd) |
| Mercury | 28 | 22 | 0.0121 (J) | 1.92 (J) | Nonparametric | 0.726 | 97.5% KM (Chebyshev) |
| Molybdenum | 30 | 30 | 0.15 (J) | 21.3 | Nonparametric | 9.257 | 95% Chebyshev (Mean, Sd) |
| Nickel | 28 | 28 | 0.5 (J) | 14.9 (J-) | Gamma | 5.513 | 95% Approximate Gamma |
| Nitrate | 30 | 23 | 0.21 (U) | 72 | Nonparametric | 28.81 | 97.5% KM (Chebyshev) |
| Perchlorate | 29 | 3 | 0.00208 (U) | 0.015 | n/a* | 0.015 | Maximum detected concentration |
| Selenium | 28 | 14 | 0.14 (J) | 8.11 (U) | Nonparametric | 0.45 | 95% KM (t) |
| Silver | 28 | 26 | 0.022 (J) | 47.3 | Nonparametric | 18.99 | 99% KM (Chebyshev) |
| Zinc | 18 | 18 | 6.7 (J-) | 1200 | Nonparametric | 745.9 | 99% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 28 | 7 | 0.0202 (J) | 2 | Nonparametric | 0.322 | 95% KM (t) |
| Anthracene | 28 | 7 | 0.0287 (J) | 2.3 | Nonparametric | 0.444 | 95% KM (Percentile Bootstrap) |
| Aroclor-1254 | 1 | 1 | 0.0478 | 0.0478 | n/a | 0.0478 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0211 (J) | 0.0211 (J) | n/a | 0.0211 | Maximum detected concentration |
| Benzo(a)anthracene | 28 | 10 | 0.0152 (J) | 5.5 (J) | Nonparametric | 0.905 | 95% KM (t) |
| Benzo(a)pyrene | 28 | 6 | 0.0137 (U) | 5.9 (J) | Nonparametric | 0.864 | 95% KM (t) |

**Table H-2.2-19 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 28 | 13 | 0.0161 (J) | 7.3 (J) | Nonparametric | 1.176 | 95% KM (t) |
| Benzo(g,h,i)perylene | 28 | 7 | 0.0349 (UJ) | 6.4 (J) | Nonparametric | 0.954 | 95% KM (t) |
| Benzo(k)fluoranthene | 28 | 6 | 0.0349 (U) | 2.7 (J) | Nonparametric | 0.774 | 95% KM (Percentile Bootstrap) |
| Bis(2-ethylhexyl)phthalate | 28 | 12 | 0.0963 (J) | 7.9 (J) | Nonparametric | 1.176 | 95% KM (t) |
| Butylbenzylphthalate | 28 | 2 | 0.15 (J) | 3.67 (U) | n/a | 0.51 | Maximum detected concentration |
| Carbazole | 22 | 3 | 0.18 (J) | 1.5 | n/a | 1.5 | Maximum detected concentration |
| Chrysene | 28 | 12 | 0.0124 (J) | 6.1 (J) | Nonparametric | 0.999 | 95% KM (t) |
| Di-n-butylphthalate | 28 | 2 | 0.26 (J) | 3.67 (U) | n/a | 0.35 | Maximum detected concentration |
| Dibenz(a,h)anthracene | 28 | 2 | 0.0349 (U) | 1.2 (U) | n/a | 0.43 | Maximum detected concentration |
| Dibenzofuran | 28 | 2 | 0.34 (U) | 3.67 (U) | n/a | 1.1 | Maximum detected concentration |
| Fluoranthene | 28 | 16 | 0.0253 (J) | 8.4 | Nonparametric | 5.183 | 99% KM (Chebyshev) |
| Fluorene | 28 | 7 | 0.0161 (J) | 1.6 | Nonparametric | 0.266 | 95% KM (t) |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 0.0000181 | 0.0000181 | n/a | 1.81E-05 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 0.00000285 | 0.00000285 | n/a | 2.85E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 1 | 1 | 0.000000246 (J) | 0.000000246 (J) | n/a | 2.46E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 1 | 1 | 0.000000214 (J) | 0.000000214 (J) | n/a | 2.14E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 1 | 1 | 0.000000922 (J) | 0.000000922 (J) | n/a | 9.22E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1 | 1 | 0.000000488 (J) | 0.000000488 (J) | n/a | 4.88E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1 | 1 | 0.00000041 (J) | 0.00000041 (J) | n/a | 4.10E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 0.000000252 (J) | 0.000000252 (J) | n/a | 2.52E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 1 | 1 | 0.000000105 (J) | 0.000000105 (J) | n/a | 1.05E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 0.000000265 (J) | 0.000000265 (J) | n/a | 2.65E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 28 | 5 | 0.0349 (UJ) | 5 (J) | Nonparametric | 2.086 | 95% KM (Percentile Bootstrap) |
| Isopropyltoluene[4-] | 16 | 1 | 0.00105 (U) | 0.0061 (U) | n/a | 0.0019 | Maximum detected concentration |
| Methylene chloride | 16 | 2 | 0.00263 (J) | 0.0061 (U) | n/a | 0.0033 | Maximum detected concentration |
| Methylnaphthalene[2-] | 28 | 4 | 0.0296 (J) | 0.81 (U) | n/a | 0.51 | Maximum detected concentration |

**Table H-2.2-19 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Naphthalene | 39 | 5 | 0.0051 (U) | 1.7 | Nonparametric | 0.394 | 95% KM (Percentile Bootstrap) |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000132 | 0.000132 | n/a | 1.32E-04 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000663 | 0.00000663 | n/a | 6.63E-06 | Maximum detected concentration |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1 | 1 | 0.000000136 (J) | 0.000000136 (J) | n/a | 1.36E-07 | Maximum detected concentration |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 1 | 1 | 0.000000108 (J) | 0.000000108 (J) | n/a | 1.08E-07 | Maximum detected concentration |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1 | 1 | 0.000000335 (J) | 0.000000335 (J) | n/a | 3.35E-07 | Maximum detected concentration |
| Phenanthrene | 28 | 11 | 0.0185 (J) | 9.8 | Nonparametric | 1.662 | 95% KM (t) |
| Pyrene | 28 | 14 | 0.0284 (J) | 19 | Nonparametric | 2.823 | 95% KM (t) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 0.000000353 (J) | 0.000000353 (J) | n/a | 3.53E-07 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 28 | 15 | 0.0032 (U) | 4.64 | Nonparametric | 1.024 | 95% KM (BCA) |
| Cesium-137 | 28 | 13 | -0.07 (U) | 1.16 | Nonparametric | 0.376 | 95% KM (t) |
| Plutonium-238 | 28 | 17 | -0.0038 (U) | 42.2 | Nonparametric | 19.48 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 28 | 24 | 0.0011 (U) | 78.1 (J) | Nonparametric | 34.63 | 99% KM (Chebyshev) |
| Strontium-90 | 28 | 3 | -0.0808 (U) | 0.377 | n/a | 0.377 | Maximum detected concentration |
| Tritium | 28 | 2 | -0.018 (U) | 0.117465 (U) | n/a | 0.0545 | Maximum detected concentration |
| Uranium-235/236 | 28 | 15 | 0.01 (U) | 0.128 | Nonparametric | 0.0799 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-20**
**Exposure Point Concentrations for Consolidated Unit 21-023(a)-99 for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 6 | 20 | 0.128 (J-) | 0.948 (J-) | Nonparametric | 0.311 | 95% KM (t) |
| Arsenic | 35 | 36 | 0.654 (J) | 7.78 | Nonparametric | 3.65 | 95% KM (BCA) |
| Barium | 36 | 36 | 5.12 (J) | 334 | Gamma | 89.95 | 95% Approximate Gamma |
| Calcium | 36 | 36 | 182 | 42700 (J+) | Lognormal | 9480 | 95% H- |
| Chromium | 36 | 36 | 1.63 | 48.8 | Nonparametric | 11.54 | 95% Chebyshev (Mean, Sd) |
| Cobalt | 36 | 36 | 0.218 (J) | 6.56 | Gamma | 2.274 | 95% Approximate Gamma |
| Copper | 36 | 36 | 0.811 (J) | 19 | Gamma | 5.204 | 95% Approximate Gamma |
| Lead | 36 | 36 | 3.33 | 1270 | Nonparametric | 394.8 | 99% Chebyshev (Mean, Sd) |
| Manganese | 36 | 36 | 73.1 | 714 | Normal | 238.6 | 95% Modified-t |
| Mercury | 34 | 36 | 0.0025 (J) | 2.16 | Nonparametric | 0.491 | 97.5% KM (Chebyshev) |
| Nitrate | 22 | 36 | 1.05 (U) | 11.6 (J-) | Nonparametric | 2.691 | 95% KM (BCA) |
| Perchlorate | 7 | 36 | 0.000639 (J) | 0.00649 | Nonparametric | 0.0017 | 95% KM (t) |
| Selenium | 28 | 36 | 0.582 (J) | 22.5 | Nonparametric | 5.802 | 95% KM (BCA) |
| Vanadium | 36 | 36 | 0.977 | 28.3 | Gamma | 11.39 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 3 | 36 | 0.0171 (J) | 1.38 | n/a* | 1.38b | Maximum detected concentration |
| Acetone | 1 | 36 | 0.00333 (U) | 0.0114 (J) | n/a | 0.0114 | Maximum detected concentration |
| Anthracene | 7 | 36 | 0.00952 (J) | 2.36 | Nonparametric | 0.777 | 99% KM (Chebyshev) |
| Aroclor-1254 | 1 | 1 | 0.0069 (J) | 0.0069 (J) | n/a | 0.0069 | Maximum detected concentration |
| Benzo(a)anthracene | 4 | 36 | 0.0347 | 15.4 | n/a | 15.4 | Maximum detected concentration |
| Benzo(a)pyrene | 9 | 36 | 0.0124 (J) | 12.2 | Nonparametric | 3.943 | 99% KM (Chebyshev) |
| Benzo(b)fluoranthene | 12 | 36 | 0.0141 (J) | 14.5 | Nonparametric | 4.663 | 99% KM (Chebyshev) |

**Table H-2.2-20 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 3 | 36 | 0.0176 (J) | 3.94 | n/a | 3.94 | Maximum detected concentration |
| Benzo(k)fluoranthene | 3 | 36 | 0.0128 (J) | 0.0324 (U) | n/a | 0.0324 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 36 | 0.0942 (J) | 2.12 (J) | n/a | 2.12 | Maximum detected concentration |
| Chrysene | 11 | 36 | 0.0122 (J) | 14.9 | Nonparametric | 4.754 | 99% KM (Chebyshev) |
| Di-n-butylphthalate | 7 | 36 | 0.0395 (J) | 3.46 (U) | Nonparametric | 0.094 | 95% KM (% Bootstrap) |
| Ethylbenzene | 1 | 36 | 0.000565 (J) | 0.00121 (U) | n/a | 0.000565 | Maximum detected concentration |
| Fluoranthene | 13 | 36 | 0.0183 (J) | 20.2 | Nonparametric | 6.386 | 99% KM (Chebyshev) |
| Fluorene | 3 | 36 | 0.0122 (J) | 0.42 | n/a | 0.42 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000096 | 0.0000096 | n/a | 0.0000096 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000555 (J) | 0.0000555 (J) | n/a | 0.0000555 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 1 | 6.05E-07 (J) | 6.05E-07 (J) | n/a | 0.000000605 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 1.93E-07 (J) | 1.93E-07 (J) | n/a | 0.000000193 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 3.13E-07 (J) | 3.13E-07 (J) | n/a | 0.000000313 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 1.92E-07 (J) | 1.92E-07 (J) | n/a | 0.000000192 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 3 | 36 | 0.0189 (J) | 4.06 | n/a | 4.06 | Maximum detected concentration |
| Isopropyltoluene[4-] | 2 | 36 | 0.000297 (J) | 0.00121 (U) | n/a | 0.000399 | Maximum detected concentration |
| Methylnaphthalene[2-] | 2 | 36 | 0.0213 (J) | 0.396 | n/a | 0.396 | Maximum detected concentration |
| Naphthalene | 2 | 36 | 0.0344 (U) | 1.17 | n/a | 1.17 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000969 (J) | 0.0000969 (J) | n/a | 0.0000969 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000018 (J) | 0.000018 (J) | n/a | 0.000018 | Maximum detected concentration |

**Table H-2.2-20 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 1.33E-07 (J) | 1.33E-07 (J) | n/a | 0.000000133 | Maximum detected concentration |
| Phenanthrene | 11 | 36 | 0.011 (U) | 6.49 | Nonparametric | 1.379 | 97.5% KM (Chebyshev) |
| Pyrene | 13 | 36 | 0.0138 (J) | 18.3 | Nonparametric | 5.823 | 99% KM (Chebyshev) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 1 | 9.51E-08 (J) | 9.51E-08 (J) | n/a | 9.51E-08 | Maximum detected concentration |
| Tetrachloroethene | 8 | 36 | 0.000243 (J) | 0.00616 | Nonparametric | 0.00165 | 95% KM (Percentile Bootstrap) |
| Toluene | 2 | 36 | 0.00035 (J) | 0.00121 (U) | n/a | 0.000401 | Maximum detected concentration |
| Xylene[1,2-] | 1 | 36 | 0.00101 (J) | 0.00121 (U) | n/a | 0.00101 | Maximum detected concentration |
| Xylene[1,3-]+Xylene[1,4-] | 1 | 36 | 0.00203 (J) | 0.00243 (U) | n/a | 0.00203 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 14 | 36 | -0.00605 (U) | 1.75 | Nonparametric | 0.6 | 99% KM (Chebyshev) |
| Cesium-137 | 1 | 35 | -0.0534 (U) | 0.133 | n/a | 0.133 | Maximum detected concentration |
| Plutonium-238 | 7 | 36 | -0.00666 (U) | 0.253 | Nonparametric | 0.0718 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 32 | 36 | -0.00111 (U) | 2.88 | Nonparametric | 1.496 | 99% KM (Chebyshev) |
| Strontium-90 | 2 | 36 | -0.147 (U) | 1.95 | n/a | 1.95 | Maximum detected concentration |
| Tritium | 33 | 36 | 0.00882 (U) | 4.624 | Nonparametric | 1.164 | 97.5% KM (Chebyshev) |
| Uranium-234 | 36 | 36 | 0.723 | 7.95 | Normal | 1.647 | 95% Modified-t |
| Uranium-235/236 | 14 | 36 | 0.0168 (U) | 0.457 | Nonparametric | 0.102 | 95% KM (% Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-21**
**Exposure Point Concentrations for Consolidated Unit 21-023(a)-99 for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Num ber of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 37 | 6 | 0.128 (J-) | 0.948 (J-) | Nonparametric | 0.27 | 95% KM (t) |
| Arsenic | 56 | 55 | 0.654 (J) | 7.78 | Nonparametric | 3.21 | 95% KM [BCA] |
| Barium | 56 | 56 | 5.12 (J) | 334 | Lognormal | 71.67 | 95% H |
| Calcium | 56 | 56 | 182 | 42700 (J+) | Lognormal | 6511 | 95% H |
| Chromium | 56 | 56 | 1.63 | 48.8 | Lognormal | 6.073 | 95% H |
| Cobalt | 56 | 53 | 0.218 (J) | 6.56 | Nonparametric | 2.38 | 95% KM (Chebyshev) |
| Copper | 56 | 56 | 0.811 (J) | 19 | Gamma | 4.184 | Approximate Gamma |
| Lead | 56 | 56 | 2.94 | 1270 | Nonparametric | 222.2 | 97.5% Chebyshev (Mean, Sd) |
| Manganese | 56 | 56 | 73.1 | 714 | Gamma | 222.8 | 95% Approximate Gamma |
| Mercury | 56 | 52 | 0.0025 (J) | 2.16 | Nonparametric | 0.255 | 95% KM (Chebyshev) |
| Nitrate | 56 | 25 | 1.03 (U) | 11.6 (J-) | Nonparametric | 2.129 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 56 | 10 | 0.000534 (J) | 0.00649 | Nonparametric | 0.00142 | 95% KM (Percentile Bootstrap) |
| Selenium | 56 | 34 | 0.582 (J) | 22.5 | Nonparametric | 4.261 | 95% KM (Percentile Bootstrap) |
| Vanadium | 56 | 56 | 0.977 | 28.3 | Gamma | 10.45 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 57 | 4 | 0.0171 (J) | 1.38 | n/a* | 1.38 | Maximum detected concentration |
| Acetone | 56 | 1 | 0.00312 (U) | 0.0626 (UJ) | n/a | 0.0114 | Maximum detected concentration |
| Anthracene | 57 | 8 | 0.00952 (J) | 2.36 | Nonparametric | 0.251 | 95% KM (Chebyshev) |
| Benzo(a)anthracene | 57 | 5 | 0.0344 (U) | 15.4 | Nonparametric | 0.844 | 95% KM [t] |
| Benzo(a)pyrene | 57 | 11 | 0.0124 (J) | 12.2 | Nonparametric | 2.492 | 99% KM (Chebyshev) |
| Benzo(b)fluoranthene | 57 | 16 | 0.0141 (J) | 14.5 | Nonparametric | 1.478 | 95% KM (Chebyshev) |
| Benzo(g,h,i)perylene | 57 | 5 | 0.016 (J) | 3.94 | Nonparametric | 0.225 | 95% KM [t] |
| Benzo(k)fluoranthene | 57 | 4 | 0.0128 (J) | 0.39 (UJ) | n/a | 0.0324 | Maximum detected concentration |

**Table H-2.2-21 (continued)**

| COPC | Number of Analyses | Num ber of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 57 | 2 | 0.0942 (J) | 2.12 (J) | n/a | 2.12 | Maximum detected concentration |
| Chrysene | 57 | 14 | 0.0122 (J) | 14.9 | Nonparametric | 3.001 | 99% KM (Chebyshev) |
| Di-n-butylphthalate | 57 | 9 | 0.0395 (J) | 3.46 (U) | Nonparametric | 0.0854 | 95% KM (Percentile Bootstrap) |
| Ethylbenzene | 56 | 1 | 0.000565 (J) | 0.0125 (U) | n/a | 0.000565 | Maximum detected concentration |
| Fluoranthene | 57 | 19 | 0.0141 (J) | 20.2 | Nonparametric | 2.006 | 95% KM (Chebyshev) |
| Fluorene | 57 | 4 | 0.0122 (J) | 0.42 | n/a | 0.42 | Maximum detected concentration |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 0.0000096 | 0.0000096 | n/a | 9.60E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 0.0000555 (J) | 0.0000555 (J) | n/a | 5.55E-05 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 1 | 1 | 0.000000605 (J) | 0.000000605 (J) | n/a | 6.05E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1 | 1 | 0.000000193 (J) | 0.000000193 (J) | n/a | 1.93E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1 | 1 | 0.000000313 | 0.000000313 | n/a | 3.13E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1 | 1 | 0.000000192 (J) | 0.000000192 (J) | n/a | 1.92E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 57 | 5 | 0.0128 (J) | 4.06 | Nonparametric | 0.228 | 95% KM [t] |
| Isopropyltoluene[4-] | 56 | 2 | 0.000297 (J) | 0.0125 (U) | n/a | 0.000399 | Maximum detected concentration |
| Methylnaphthalene[2-] | 57 | 2 | 0.0213 (J) | 0.396 | n/a | 0.396 | Maximum detected concentration |
| Naphthalene | 57 | 2 | 0.0342 (U) | 1.17 | n/a | 1.17 | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000969 (J) | 0.0000969 (J) | n/a | 9.69E-05 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000018 (J) | 0.000018 (J) | n/a | 1.80E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1 | 1 | 0.000000133 (J) | 0.000000133 (J) | n/a | 1.33E-07 | Maximum detected concentration |
| Phenanthrene | 57 | 14 | 0.011 (U) | 6.49 | Nonparametric | 0.659 | 95% KM (Chebyshev) |
| Pyrene | 57 | 18 | 0.0134 (J) | 18.3 | Nonparametric | 1.837 | 95% KM (Chebyshev) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 9.51E-08 (J) | 9.51E-08 (J) | n/a | 9.51E-08 | Maximum detected concentration |
| Tetrachloroethene | 56 | 9 | 0.000243 (J) | 0.0125 (U) | Nonparametric | 0.00138 | 95% KM (Percentile Bootstrap) |
| Toluene | 56 | 2 | 0.00035 (J) | 0.0125 (U) | n/a | 0.000401 | Maximum detected concentration |
| Xylene[1,2-] | 56 | 1 | 0.00101 (J) | 0.0125 (U) | n/a | 0.00101 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 56 | 1 | 0.00203 (J) | 0.025 (U) | n/a | 0.00203 | Maximum detected concentration |

**Table H-2.2-21 (continued)**

| COPC | Number of Analyses | Num ber of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 56 | 18 | -0.00605 (U) | 2.3 | Nonparametric | 0.635 | 99% KM (Chebyshev) |
| Cesium-137 | 55 | 1 | -0.0682 (U) | 0.133 | n/a | 0.133 | Maximum detected concentration |
| Plutonium-238 | 58 | 10 | -0.00666 (U) | 0.289 | Nonparametric | 0.0544 | 95% KM [t] |
| Plutonium-239/240 | 58 | 51 | -0.00111 (U) | 3.77 | Nonparametric | 1.393 | 99% KM (Chebyshev) |
| Strontium-90 | 56 | 2 | -0.147 (U) | 1.95 | n/a | 1.95 | Maximum detected concentration |
| Tritium | 56 | 47 | -0.00317497 (U) | 4.62353 | Nonparametric | 1.099 | 99% KM (Chebyshev) |
| Uranium-234 | 56 | 56 | 0.601 | 7.95 | Normal | 1.468 | 95% Modified-t |
| Uranium-235/236 | 56 | 26 | 0.0092 (U) | 0.457 | Nonparametric | 0.0936 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

## Table H-2.2-22
## Exposure Point Concentrations for SWMU 21-024(a) for Industrial Scenario

| COPC | Number of Analyses | Number Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 14 | 14 | 786 (J+) | 22400 | Normal | 10206 | 95% Student's-t |
| Barium | 14 | 14 | 4.72 | 141 | Normal | 87.31 | 95% Student's-t |
| Chromium | 14 | 14 | 0.601 | 14.4 | Normal | 7.753 | 95% Student's-t |
| Cobalt | 14 | 12 | 0.425 (J) | 5.23 | Nonparametric | 2.681 | 95% KM (t) |
| Copper | 14 | 14 | 0.739 (J) | 93.9 | Gamma | 49.42 | 95% Approximate Gamma |
| Lead | 14 | 14 | 2.68 | 40.3 | Normal | 21.93 | 95% Student's-t |
| Mercury | 14 | 14 | 0.0044 (J) | 0.47 | Gamma | 0.225 | 95% Approximate Gamma |
| Nickel | 14 | 14 | 0.52 | 9.73 | Normal | 4.78 | 95% Student's-t |
| Nitrate | 14 | 12 | 0.699 (J) | 6.31 | Nonparametric | 2.331 | 95% KM (BCA) |
| Perchlorate | 14 | 3 | 0.000616 (J-) | 0.0031 (UJ) | n/a* | 0.000959 | Maximum detected concentration |
| Uranium | 14 | 14 | 0.775 | 4.05 | Gamma | 2.093 | 95% Approximate Gamma |
| Vanadium | 14 | 14 | 1.29 | 26.3 | Normal | 13.8 | 95% Student's-t |
| Zinc | 14 | 14 | 7.73 | 96.2 | Normal | 54.52 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Anthracene | 14 | 2 | 0.00721 (J) | 0.0394 (U) | n/a | 0.00916 | Maximum detected concentration |
| Benzo(a)anthracene | 14 | 1 | 0.0146 (J) | 0.0394 (U) | n/a | 0.0146 | Maximum detected concentration |
| Benzo(b)fluoranthene | 14 | 2 | 0.0159 (J) | 0.0394 (U) | n/a | 0.0164 | Maximum detected concentration |
| Benzoic acid | 14 | 2 | 0.567 (J) | 0.788 (U) | n/a | 0.621 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 14 | 1 | 0.116 (J) | 0.197 (U) | n/a | 0.116 | Maximum detected concentration |
| Chloroaniline[4-] | 14 | 1 | 0.0804 (J) | 0.394 (U) | n/a | 0.0804 | Maximum detected concentration |
| Chrysene | 14 | 1 | 0.0148 (J) | 0.0394 (U) | n/a | 0.0148 | Maximum detected concentration |
| Fluoranthene | 14 | 6 | 0.0121 (J) | 0.0394 (U) | Nonparametric | 0.0222 | 95% KM (t) |
| Phenanthrene | 14 | 1 | 0.0115 (J) | 0.0394 (U) | n/a | 0.0115 | Maximum detected concentration |
| Pyrene | 14 | 6 | 0.0131 (J) | 0.0489 | Nonparametric | 0.024 | 95% KM (t) |

**Table H-2.2-22 (continued)**

| COPC | Number of Analyses | Number Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 14 | 5 | -0.00342 (U) | 0.173 | Nonparametric | 0.106 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 13 | 11 | 0.0443 (U) | 1.46 | Nonparametric | 0.608 | 95% KM (BCA) |
| Plutonium-238 | 14 | 1 | -0.00158 (U) | 0.0268 | n/a | 0.0268 | Maximum detected concentration |
| Plutonium-239/240 | 14 | 13 | 0.0169 (U) | 2.32 | Nonparametric | 1.38 | 95% KM (Chebyshev) |
| Strontium-90 | 14 | 5 | -0.029 (U) | 0.348 | Nonparametric | 0.18 | 95% KM (Percentile Bootstrap) |
| Tritium | 14 | 11 | 0.00640336 (U) | 0.0784458 (J-) | Nonparametric | 0.033 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 14 | 14 | 0.892 | 2.61 | Normal | 1.572 | 95% Modified-t |
| Uranium-235/236 | 14 | 13 | 0.0293 (U) | 0.0914 | Nonparametric | 0.0701 | 95% KM (t) |
| Uranium-238 | 14 | 14 | 0.814 | 2.31 | Gamma | 1.457 | 95% Approximate Gamma |

* n/a = Not applicable.

**Table H-2.2-23**
**Exposure Point Concentrations for SWMU 21-024(a) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 35 | 35 | 360 | 24000 | Gamma | 8543 | 95% Approximate Gamma |
| Barium | 35 | 35 | 3.51 | 166 | Gamma | 71.23 | 95% Approximate Gamma |
| Chromium | 36 | 36 | 0.601 | 32.4 | Gamma | 9.542 | 95% Approximate Gamma |
| Cobalt | 29 | 34 | 0.425 (J) | 5.23 | Nonparametric | 2.11 | 95% KM (BCA) |
| Copper | 35 | 35 | 0.48 (J) | 93.9 | Nonparametric | 32.22 | 95% KM (Chebyshev) |
| Lead | 34 | 34 | 1.25 | 43.5 (J-) | Gamma | 18.52 | 95% Approximate Gamma |
| Mercury | 33 | 34 | 0.0025 (J) | 0.798 | Nonparametric | 0.26 | 95% KM (Chebyshev) |
| Nickel | 34 | 34 | 0.335 (J) | 10.5 | Gamma | 4.246 | 95% Approximate Gamma |
| Nitrate | 26 | 34 | 0.511 (J) | 6.31 | Nonparametric | 1.506 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 6 | 34 | 0.000616 (J-) | 0.0031 (UJ) | Nonparametric | 0.00123 | 95% KM (t) |
| Selenium | 6 | 34 | 0.699 (J) | 2.23 (U) | Nonparametric | 1.164 | 95% KM (Percentile Bootstrap) |
| Uranium | 34 | 34 | 0.582 | 4.05 | Normal | 1.447 | 95% Modified-t |
| Vanadium | 34 | 34 | 1.29 | 26.3 | Normal | 11.44 | 95% Student's-t |
| Zinc | 34 | 34 | 6.6 | 123 | Gamma | 48.96 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 1 | 17 | 0.00505 (U) | 0.26 | n/a* | 0.26 | Maximum detected concentration |
| Anthracene | 2 | 34 | 0.00721 (J) | 0.0397 (U) | n/a | 0.00916 | Maximum detected concentration |
| Benzo(a)anthracene | 1 | 34 | 0.0146 (J) | 0.0397 (U) | n/a | 0.0146 | Maximum detected concentration |
| Benzo(b)fluoranthene | 2 | 34 | 0.0159 (J) | 0.0397 (U) | n/a | 0.0164 | Maximum detected concentration |
| Benzoic Acid | 2 | 34 | 0.567 (J) | 0.793 (U) | n/a | 0.621 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 1 | 34 | 0.116 (J) | 0.198 (U) | n/a | 0.116 | Maximum detected concentration |
| Chloroaniline[4-] | 2 | 34 | 0.0804 (J) | 0.462 | n/a | 0.462 | Maximum detected concentration |
| Chloroform | 1 | 17 | 0.000204 (U) | 0.00112 (U) | n/a | 0.000248 | Maximum detected concentration |

**Table H-2.2-23 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Chrysene | 1 | 34 | 0.0148 (J) | 0.0397 (U) | n/a | 0.0148 | Maximum detected concentration |
| Fluoranthene | 7 | 34 | 0.0121 (J) | 0.0397 (U) | Nonparametric | 0.0213 | 95% KM (Percentile Bootstrap) |
| Isopropyltoluene[4-] | 1 | 17 | 0.000488 (J) | 0.00119 (U) | n/a | 0.000488 | Maximum detected concentration |
| Methylene Chloride | 1 | 17 | 0.00505 (U) | 0.00562 (U) | n/a | 0.0055 | Maximum detected concentration |
| Phenanthrene | 1 | 34 | 0.0115 (J) | 0.0397 (U) | n/a | 0.0115 | Maximum detected concentration |
| Pyrene | 7 | 34 | 0.0131 (J) | 0.0489 | Nonparametric | 0.0207 | 95% KM (% Bootstrap) |
| Toluene | 14 | 18 | 0.000452 (J) | 0.00712 | Nonparametric | 0.00255 | 95% KM (BCA) |
| Trichloroethene | 3 | 18 | 0.000315 (U) | 0.005 (U) | n/a | 0.00286 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 5 | 34 | -0.0105 (U) | 0.173 | Nonparametric | 0.0999 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 16 | 34 | -0.0456 (U) | 1.46 | Nonparametric | 0.292 | 95% KM (t) |
| Plutonium-238 | 1 | 35 | -0.00995 (U) | 0.0268 | n/a | 0.0268 | Maximum detected concentration |
| Plutonium-239/240 | 28 | 35 | 0.00513 (U) | 2.32 | Nonparametric | 0.772 | 95% KM (Chebyshev) |
| Strontium-90 | 5 | 34 | -0.029 (U) | 0.348 | Nonparametric | 0.164 | 95% KM (Percentile Bootstrap) |
| Tritium | 28 | 34 | 0.00014777 (U) | 0.0969 | Nonparametric | 0.0349 | 95% KM (BCA) |
| Uranium-234 | 34 | 34 | 0.755 | 2.61 | Normal | 1.278 | 95% Modified-t |
| Uranium-235/236 | 32 | 34 | 0.0293 (U) | 0.0974 | Nonparametric | 0.0671 | 95% KM (t) |
| Uranium-238 | 34 | 34 | 0.773 | 2.31 | Gamma | 1.218 | 95% Approximate Gamma |

* n/a = Not applicable.

## Table H-2.2-24
## Exposure Point Concentrations for SWMU 21-024(a) for Construction Worker and Residential Scenarios

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 41 | 41 | 360 | 24000 | Gamma | 7768 | 95% Approximate Gamma |
| Barium | 41 | 41 | 3.51 | 166 | Gamma | 65.02 | 95% Approximate Gamma |
| Chromium | 42 | 42 | 0.601 | 32.4 | Gamma | 9.6 | 95% Approximate Gamma |
| Cobalt | 40 | 35 | 0.347 | 5.23 | Nonparametric | 2.015 | 95% KM (BCA) |
| Copper | 41 | 41 | 0.48 (J) | 93.9 | Lognormal | 24.81 | 95% H |
| Lead | 40 | 40 | 1.25 | 43.5 (J-) | Gamma | 16.8 | 95% Approximate Gamma |
| Mercury | 40 | 38 | 0.0025 (J) | 0.95 | Nonparametric | 0.283 | 95% KM (Chebyshev) |
| Nickel | 40 | 40 | 0.335 (J) | 10.5 | Gamma | 4.164 | 95% Approximate Gamma |
| Nitrate | 40 | 30 | 0.492 (J) | 6.67 | Nonparametric | 1.899 | 95% KM (BCA) |
| Perchlorate | 40 | 7 | 0.000616 (J-) | 0.0031 (UJ) | Nonparametric | 0.00118 | 95% KM (t) |
| Selenium | 40 | 6 | 0.642 (U) | 16 (U) | Nonparametric | 1.155 | 95% KM (Percentile Bootstrap) |
| Uranium | 40 | 40 | 0.582 | 13.3 | Nonparametric | 2.914 | 95% Chebyshev (Mean, Sd) |
| Vanadium | 40 | 40 | 1.29 | 26.3 | Gamma | 11.78 | 95% Approximate Gamma |
| Zinc | 40 | 40 | 6.6 | 123 | Gamma | 46.14 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acetone | 23 | 2 | 0.00505 (U) | 0.26 | n/a* | 0.26 | Maximum detected concentration |
| Anthracene | 40 | 2 | 0.00721 (J) | 0.0413 (U) | n/a | 0.00916 | Maximum detected concentration |
| Benzo(a)anthracene | 40 | 1 | 0.0146 (J) | 0.0413 (U) | n/a | 0.0146 | Maximum detected concentration |
| Benzo(b)fluoranthene | 40 | 2 | 0.0159 (J) | 0.0413 (U) | n/a | 0.0164 | Maximum detected concentration |
| Benzoic acid | 40 | 2 | 0.567 (J) | 0.827 (UJ) | n/a | 0.621 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 40 | 1 | 0.116 (J) | 0.207 (U) | n/a | 0.116 | Maximum detected concentration |
| Chloroaniline[4-] | 40 | 2 | 0.0804 (J) | 0.462 | n/a | 0.462 | Maximum detected concentration |
| Chloroform | 23 | 3 | 0.000204 (U) | 0.00122 (U) | n/a | 0.00025 | Maximum detected concentration |
| Chrysene | 40 | 1 | 0.0148 (J) | 0.0413 (U) | n/a | 0.0148 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 63 | 1 | 0.000442 (J) | 0.413 (U) | n/a | 0.00044 | Maximum detected concentration |

**Table H-2.2-24 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Fluoranthene | 40 | 7 | 0.0121 (J) | 0.0413 (U) | Nonparametric | 0.0213 | 95% KM (Percentile Bootstrap) |
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1 | 1 | 0.00000147 (J) | 0.00000147 (J) | n/a | 1.47E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1 | 1 | 0.000000514 (J) | 0.000000514 (J) | n/a | 5.14E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1 | 1 | 5.17E-08 (J) | 5.17E-08 (J) | n/a | 5.17E-08 | Maximum detected concentration |
| Isopropyltoluene[4-] | 23 | 1 | 0.000488 (J) | 0.00124 (U) | n/a | 0.00049 | Maximum detected concentration |
| Methylene chloride | 23 | 1 | 0.00505 (U) | 0.0062 (U) | n/a | 0.0055 | Maximum detected concentration |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000013 (J) | 0.000013 (J) | n/a | 1.3E-05 | Maximum detected concentration |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000111 (J) | 0.00000111 (J) | n/a | 1.11E-06 | Maximum detected concentration |
| Phenanthrene | 40 | 1 | 0.0115 (J) | 0.0413 (U) | n/a | 0.0115 | Maximum detected concentration |
| Pyrene | 40 | 7 | 0.0131 (J) | 0.0489 | Nonparametric | 0.0203 | 95% KM (t) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 7.73E-08 (J) | 7.73E-08 (J) | n/a | 7.73E-08 | Maximum detected concentration |
| Toluene | 24 | 18 | 0.000362 (J) | 0.00712 | Nonparametric | 0.00214 | 95% KM (BCA) |
| Trichloroethene | 24 | 3 | 0.000315 (U) | 0.005 (U) | n/a | 0.00286 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 23 | 1 | 0.000333 (J) | 0.00243 (U) | n/a | 0.00033 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 40 | 6 | -0.0188 (U) | 0.173 | Nonparametric | 0.104 | 99% KM (Chebyshev) |
| Cesium-137 | 40 | 17 | -0.0456 (U) | 1.46 | Nonparametric | 0.263 | 95% KM (t) |
| Plutonium-238 | 42 | 1 | -0.00995 (U) | 0.0268 | n/a | 0.0268 | Maximum detected concentration |
| Plutonium-239/240 | 42 | 32 | 0.00134 (U) | 2.32 | Nonparametric | 0.66 | 95% KM (Chebyshev) |
| Strontium-90 | 40 | 5 | -0.112 (U) | 0.348 | Nonparametric | 0.166 | 95% KM (Percentile Bootstrap) |
| Tritium | 40 | 31 | 0.000147769 (U) | 0.0968795 | Nonparametric | 0.0333 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 40 | 40 | 0.702 | 4.11 | Normal | 1.374 | 95% Modified-t |
| Uranium-235/236 | 40 | 38 | 0.0293 (U) | 0.246 | Nonparametric | 0.0893 | 95% KM (Chebyshev) |
| Uranium-238 | 40 | 40 | 0.72 | 4.26 | Normal | 1.35 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-25**
**Exposure Point Concentrations for SWMU 21-024(b) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 9 | 9 | 1.11 (J) | 3.41 | Normal | 2.402 | 95% Student's-t |
| Barium | 9 | 9 | 16.9 | 90.7 (J+) | Normal | 65.07 | 95% Student's-t |
| Chromium | 9 | 9 | 1.6 | 9.37 | Normal | 6.268 | 95% Student's-t |
| Cobalt | 9 | 9 | 0.689 | 2.94 | Normal | 2.258 | 95% Student's-t |
| Copper | 9 | 9 | 1.95 | 11 | Normal | 6.769 | 95% Student's-t |
| Cyanide (total) | 9 | 3 | 0.0958 (U) | 0.945 | n/a* | 0.945 | Maximum detected concentration |
| Lead | 9 | 9 | 4.62 | 16.6 | Normal | 14.53 | 95% Student's-t |
| Mercury | 9 | 9 | 0.0052 (J) | 0.138 (J+) | Gamma | 0.0722 | 95% Approximate Gamma |
| Nickel | 9 | 9 | 1.3 | 5.96 (J+) | Normal | 4.245 | 95% Student's-t |
| Nitrate | 10 | 9 | 1.39 | 43.5 | Nonparametric | 34.48 | 97.5% KM (Chebyshev) |
| Perchlorate | 9 | 3 | 0.000807 (J-) | 0.00631 | n/a | 0.00631 | Maximum detected concentration |
| Selenium | 9 | 5 | 0.671 (J) | 1.51 (U) | Nonparametric | 1.195 | 95% KM (t) |
| Silver | 9 | 8 | 0.0488 (J) | 0.198 (U) | Nonparametric | 0.0868 | 95% KM (t) |
| Zinc | 9 | 9 | 25.8 | 96.7 | Normal | 60.99 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzo(b)fluoranthene | 9 | 2 | 0.0129 (J) | 0.0358 (UJ) | n/a | 0.0203 | Maximum detected concentration |
| Chrysene | 9 | 2 | 0.0117 (J) | 0.0358 (UJ) | n/a | 0.0146 | Maximum detected concentration |
| Fluoranthene | 9 | 5 | 0.0145 (J) | 0.0358 (U) | Nonparametric | 0.0268 | 95% KM (t) |
| Phenanthrene | 9 | 2 | 0.0126 (J) | 0.0358 (U) | n/a | 0.016 | Maximum detected concentration |
| Pyrene | 9 | 5 | 0.016 (J) | 0.0358 (UJ) | Nonparametric | 0.0234 | 95% KM (t) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 9 | 7 | 0.00816 (U) | 3.4 | Nonparametric | 1.896 | 95% KM (t) |

**Table H-2.2-25 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Cesium-137 | 8 | 8 | 0.136 | 1.13 | Normal | 0.772 | 95% Student's-t |
| Plutonium-238 | 9 | 4 | 0.00302 (U) | 0.642 | n/a | 0.642 | Maximum detected concentration |
| Plutonium-239/240 | 9 | 9 | 0.231 | 76.3 (J) | n/a | 76.3 | Maximum detected concentration |
| Tritium | 9 | 3 | 0.000376387 (U) | 0.0183676 (U) | n/a | 0.0129 | Maximum detected concentration |
| Uranium-234 | 9 | 9 | 1.01 | 2.8 | Normal | 2.055 | 95% Student’s-t |
| Uranium-235/236 | 9 | 9 | 0.0656 | 0.199 | Normal | 0.146 | 95% Student’s-t |
| Uranium-238 | 9 | 9 | 0.985 | 2.87 | Gamma | 1.919 | 95% Approximate Gamma |

* n/a = Not applicable.

**Table H-2.2-26**
**Exposure Point Concentrations for SWMU 21-024(b) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 19 | 21 | 0.952 (J) | 5.01 | Nonparametric | 2.713 | 95% KM (BCA) |
| Barium | 21 | 21 | 2.11 | 179 (J+) | Nonparametric | 93.42 | 95% KM (Chebyshev) |
| Chromium | 21 | 21 | 1.41 | 52.4 | Nonparametric | 18.14 | 95% KM (Chebyshev) |
| Cobalt | 20 | 21 | 0.271 (J) | 4.5 | Nonparametric | 2.097 | 95% KM (t) |
| Copper | 21 | 21 | 0.806 (J) | 70.3 (J) | Nonparametric | 21.71 | 95% KM (Chebyshev) |
| Cyanide (Total) | 7 | 21 | 0.0958 (U) | 0.949 | Nonparametric | 0.373 | 95% KM (t) |
| Lead | 21 | 21 | 2.11 | 40.8 | Nonparametric | 19.16 | 95% KM (Chebyshev) |
| Mercury | 15 | 21 | 0.0052 (J) | 4.42 | Nonparametric | 2.345 | 99% KM (Chebyshev) |
| Nickel | 21 | 21 | 0.352 (J) | 16.3 (J+) | Nonparametric | 7.331 | 95% KM (Chebyshev) |
| Nitrate | 18 | 22 | 1.01 (U) | 67.2 | Nonparametric | 33.32 | 97.5% KM (Chebyshev) |
| Perchlorate | 11 | 21 | 0.000746 (J) | 0.018 (J+) | Nonparametric | 0.00601 | 95% KM (t) |
| Selenium | 10 | 21 | 0.671 (J) | 1.55 (U) | Nonparametric | 1.039 | 95% KM (t) |
| Silver | 16 | 21 | 0.0428 (J) | 22.8 | Nonparametric | 7.978 | 97.5% KM (Chebyshev) |
| Strontium | 3 | 3 | 15.7 | 24.1 | n/a* | 24.1 | Maximum detected concentration |
| Zinc | 21 | 21 | 18.9 | 126 | Nonparametric | 59.02 | 95% KM (BCA) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Anthracene | 2 | 21 | 0.0218 (J) | 0.0576 (J) | n/a | 0.0576 | Maximum detected concentration |
| Aroclor-1254 | 1 | 1 | 0.0909 | 0.0909 | n/a | 0.0909 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0519 | 0.0519 | n/a | 0.0519 | Maximum detected concentration |
| Benzo(a)anthracene | 1 | 21 | 0.0335 (U) | 0.138 (U) | n/a | 0.114 | Maximum detected concentration |
| Benzo(a)pyrene | 3 | 21 | 0.0109 (U) | 0.153 | n/a | 0.153 | Maximum detected concentration |
| Benzo(b)fluoranthene | 5 | 21 | 0.0129 (J) | 0.18 | Nonparametric | 0.0536 | 95% KM (t) |

**Table H-2.2-26 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 3 | 21 | 0.0125 (J) | 0.102 (J) | n/a | 0.102 | Maximum detected concentration |
| Benzo(k)fluoranthene | 1 | 21 | 0.0335 (U) | 0.138 (U) | n/a | 0.0739 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 21 | 0.0764 (J) | 0.69 (UJ) | n/a | 0.456 | Maximum detected concentration |
| Chrysene | 5 | 21 | 0.0117 (J) | 0.139 | Nonparametric | 0.0442 | 95% KM (t) |
| Di-n-butylphthalate | 1 | 21 | 0.335 (U) | 0.497 (J) | n/a | 0.497 | Maximum detected concentration |
| Fluoranthene | 8 | 21 | 0.0145 (J) | 0.296 | Nonparametric | 0.0876 | 95% KM (BCA) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 8.21E-06 | 8.21E-06 | n/a | 8.21E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 2.07E-06 (J) | 2.07E-06 (J) | n/a | 2.07E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 1 | 5.92E-07 (J) | 5.92E-07 (J) | n/a | 5.92E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 6E-07 (J) | 6E-07 (J) | n/a | 6E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 3.24E-07 (J) | 3.24E-07 (J) | n/a | 3.24E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 2.29E-07 (J) | 2.29E-07 (J) | n/a | 2.29E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 2 | 21 | 0.0271 (J) | 0.0484 (J) | n/a | 0.0484 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 7.48E-05 | 7.48E-05 | n/a | 7.48E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 3.49E-06 (J) | 3.49E-06 (J) | n/a | 3.49E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 3.8E-07 (J) | 3.8E-07 (J) | n/a | 3.8E-07 | Maximum detected concentration |
| Phenanthrene | 4 | 21 | 0.0126 (J) | 0.249 | n/a | 0.249 | Maximum detected concentration |
| Pyrene | 8 | 21 | 0.016 (J) | 0.315 | Nonparametric | 0.0745 | 95% KM (BCA) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 1 | 1 | 5.22E-07 (J) | 5.22E-07 (J) | n/a | 5.22E-07 | Maximum detected concentration |

**Table H-2.2-26 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Toluene | 4 | 12 | 0.00079 (J) | 0.00135 | n/a | 0.00135 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 13 | 21 | -0.00573 (U) | 73 | Nonparametric | 39.13 | 99% KM (Chebyshev) |
| Cesium-137 | 8 | 18 | -0.0764 (U) | 1.13 | Nonparametric | 0.448 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 9 | 21 | -0.00591 (U) | 2 | Nonparametric | 0.426 | 95% KM (t) |
| Plutonium-239/240 | 19 | 21 | 0.00709 (U) | 131 (J) | Nonparametric | 60.28 | 95% KM (Chebyshev) |
| Tritium | 10 | 21 | 0.00037639 (U) | 0.0797 | Nonparametric | 0.0208 | 95% KM (t) |
| Uranium-234 | 21 | 21 | 0.855 | 2.8 | Nonparametric | 1.686 | 95% KM (BCA) |
| Uranium-235/236 | 19 | 21 | 0.0149 (U) | 0.199 | Nonparametric | 0.114 | 95% KM (t) |
| Uranium-238 | 21 | 21 | 0.784 | 2.87 | Nonparametric | 1.744 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-27**
**Exposure Point Concentrations for SWMU 21-024(b) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 32 | 30 | 0.684 (J) | 14.5 | Nonparametric | 4.702 | 99% KM (Chebyshev) |
| Barium | 32 | 32 | 2.11 | 216 | Gamma | 84.44 | 95% Approximate Gamma |
| Chromium | 32 | 32 | 1.41 | 52.4 | Gamma | 13.31 | 95% Approximate Gamma |
| Cobalt | 32 | 31 | 0.271 (J) | 4.5 | Nonparametric | 2.708 | 95% KM (Chebyshev) |
| Copper | 32 | 32 | 0.806 (J) | 121 | Lognormal | 22.67 | 95% H |
| Cyanide (total) | 32 | 11 | 0.0958 (U) | 0.949 | Nonparametric | 0.316 | 95% KM (t) |
| Lead | 32 | 32 | 2.11 | 120 | Lognormal | 24 | 95% H |
| Mercury | 32 | 25 | 0.0052 (J) | 4.42 | Nonparametric | 2.048 | 99% KM (Chebyshev) |
| Nickel | 32 | 32 | 0.352 (J) | 16.3 (J+) | Gamma | 5.511 | 95% Approximate Gamma |
| Nitrate | 33 | 29 | 1.01 (U) | 67.2 | Nonparametric | 26.33 | 97.5% KM (Chebyshev) |
| Perchlorate | 32 | 16 | 0.000746 (J) | 0.0434 (J+) | Nonparametric | 0.00865 | 95% KM (t) |
| Selenium | 32 | 13 | 0.57 (J) | 1.67 (U) | Nonparametric | 0.998 | 95% KM (Percentile Bootstrap) |
| Silver | 32 | 25 | 0.0428 (J) | 22.8 | Nonparametric | 8.614 | 99% KM (Chebyshev) |
| Strontium | 13 | 13 | 1.05 | 32.2 | Normal | 21.38 | 95% Student's-t |
| Zinc | 32 | 32 | 18.9 | 856 | Nonparametric | 221.5 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthylene | 32 | 1 | 0.0129 (J) | 0.138 (U) | n/a* | 0.0129 | Maximum detected concentration |
| Anthracene | 32 | 4 | 0.013 (J) | 0.0576 (J) | n/a | 0.0576 | Maximum detected concentration |
| Aroclor-1254 | 1 | 1 | 0.0909 | 0.0909 | n/a | 0.0909 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0519 | 0.0519 | n/a | 0.0519 | Maximum detected concentration |
| Benzo(a)anthracene | 32 | 2 | 0.0334 (U) | 0.419 | n/a | 0.419 | Maximum detected concentration |
| Benzo(a)pyrene | 32 | 7 | 0.0109 (U) | 0.508 | Nonparametric | 0.0815 | 95% KM (t) |
| Benzo(b)fluoranthene | 32 | 10 | 0.0118 (J) | 0.828 | Nonparametric | 0.109 | 95% KM (t) |

**Table H-2.2-27 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 32 | 6 | 0.0125 (J) | 0.338 | Nonparametric | 0.0515 | 95% KM (t) |
| Benzo(k)fluoranthene | 32 | 2 | 0.0167 (J) | 0.138 (U) | n/a | 0.0739 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 32 | 5 | 0.0764 (J) | 0.69 (UJ) | Nonparametric | 0.147 | 95% KM (Percentile Bootstrap) |
| Chrysene | 32 | 9 | 0.0117 (J) | 0.495 | Nonparametric | 0.0761 | 95% KM (t) |
| Di-n-butylphthalate | 32 | 4 | 0.0411 (J) | 0.497 (J) | n/a | 0.497 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 32 | 1 | 0.000288 (U) | 1.38 (U) | n/a | 0.237 | Maximum detected concentration |
| Fluoranthene | 32 | 15 | 0.0114 (J) | 0.429 | Nonparametric | 0.0878 | 95% KM (BCA) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000821 | 0.00000821 | n/a | 8.21E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000207 (J) | 0.00000207 (J) | n/a | 2.07E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 1 | 1 | 0.000000592 (J) | 0.000000592 (J) | n/a | 5.92E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 0.0000006 (J) | 0.0000006 (J) | n/a | 6.0E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 0.000000324 (J) | 0.000000324 (J) | n/a | 3.24E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 0.000000229 (J) | 0.000000229 (J) | n/a | 2.29E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 32 | 4 | 0.0271 | 0.276 | n/a | 0.276 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000748 | 0.0000748 | n/a | 7.48E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000349 (J) | 0.00000349 (J) | n/a | 3.49E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1 | 1 | 0.00000038 (J) | 0.00000038 (J) | n/a | 3.80E-07 | Maximum detected concentration |
| Phenanthrene | 32 | 6 | 0.0126 (J) | 0.249 | Nonparametric | 0.04 | 95% KM (t) |
| Pyrene | 32 | 13 | 0.0131 (J) | 0.518 | Nonparametric | 0.0864 | 95% KM (BCA) |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1 | 1 | 0.000000522 (J) | 0.000000522 (J) | n/a | 5.22E-07 | Maximum detected concentration |
| Toluene | 23 | 7 | 0.000304 (J) | 0.00135 | Nonparametric | 0.000845 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-27 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 32 | 22 | -0.0112 (U) | 73 | Nonparametric | 30.43 | 99% KM (Chebyshev) |
| Cesium-137 | 27 | 8 | -0.0764 (U) | 1.13 | Nonparametric | 0.37 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 32 | 15 | -0.00591 (U) | 4.95 | Nonparametric | 0.793 | 95% KM (t) |
| Plutonium-239/240 | 32 | 30 | 0.00709 (U) | 797 (J) | Nonparametric | 178.9 | 95% KM (Chebyshev) |
| Tritium | 32 | 18 | 0.000376387 (U) | 0.915 (U) | Nonparametric | 0.0253 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 32 | 32 | 0.749 | 8.42 | Nonparametric | 3.081 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 32 | 30 | 0.0149 (U) | 0.318 | Nonparametric | 0.162 | 95% KM (Chebyshev) |
| Uranium-238 | 32 | 32 | 0.761 | 3.44 | Normal | 1.517 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-28**
**Exposure Point Concentrations for SWMU 21-024(d) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 9 | 9 | 0.67 (J) | 4.65 | Normal | 3.312 | 95% Student's-t |
| Barium | 9 | 9 | 19.3 | 120 | Gamma | 100.4 | 95% Approximate Gamma |
| Chromium | 10 | 10 | 2.27 | 43.2 | Gamma | 25.61 | 95% Approximate Gamma |
| Cobalt | 9 | 9 | 0.457 (J) | 4.13 | Gamma | 3.136 | 95% Approximate Gamma |
| Copper | 10 | 10 | 1.87 | 161 | Gamma | 97.49 | 95% Approximate Gamma |
| Cyanide (total) | 10 | 7 | 0.153 (J) | 2.28 | Nonparametric | 1.273 | 95% KM (BCA) |
| Lead | 10 | 10 | 8.13 | 75.9 | Gamma | 44.76 | 95% Approximate Gamma |
| Manganese | 9 | 9 | 105 (J+) | 323 | Normal | 239.4 | 95% Student's-t |
| Mercury | 10 | 10 | 0.0103 (J) | 0.826 (J+) | Gamma | 0.511 | 95% Approximate Gamma |
| Nickel | 6 | 6 | 1.25 | 6.43 | Gamma | 4.901 | 95% Approximate Gamma |
| Nitrate | 10 | 9 | 1.2 | 121 | Nonparametric | 74.76 | 95% KM (Chebyshev) |
| Perchlorate | 9 | 3 | 0.0011 (J-) | 0.00591 (J-) | n/a* | 0.00591 | Maximum detected concentration |
| Selenium | 9 | 1 | 0.77 (J) | 1.66 (U) | n/a | 0.77 | Maximum detected concentration |
| Silver | 10 | 10 | 0.0661 (J) | 20.1 | Normal | 9.683 | 95% Student's-t |
| Uranium | 10 | 10 | 0.878 | 14.8 | Gamma | 7.362 | 95% Approximate Gamma |
| Zinc | 10 | 10 | 15.5 | 145 | Gamma | 97.9 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 9 | 1 | 0.0333 (U) | 0.0758 | n/a | 0.0758 | Maximum detected concentration |
| Acenaphthylene | 9 | 1 | 0.0162 (J) | 0.0374 (U) | n/a | 0.0162 | Maximum detected concentration |
| Aroclor-1242 | 3 | 1 | 0.00374 (U) | 0.178 | n/a | 0.178 | Maximum detected concentration |
| Aroclor-1254 | 3 | 3 | 0.0285 | 0.422 | n/a | 0.422 | Maximum detected concentration |
| Aroclor-1260 | 3 | 3 | 0.0117 | 0.186 | n/a | 0.186 | Maximum detected concentration |
| Benzo(a)anthracene | 9 | 1 | 0.0333 (U) | 0.1 (J) | n/a | 0.1 | Maximum detected concentration |

**Table H-2.2-28 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 9 | 1 | 0.0333 (U) | 0.42 (J) | n/a | 0.42 | Maximum detected concentration |
| Benzoic acid | 9 | 1 | 0.445 (J) | 0.773 (UJ) | n/a | 0.445 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 9 | 2 | 0.167 (U) | 0.43 (J) | n/a | 0.43 | Maximum detected concentration |
| Chrysene | 9 | 1 | 0.0333 (U) | 0.198 (J) | n/a | 0.198 | Maximum detected concentration |
| Di-n-butylphthalate | 9 | 2 | 0.184 (J) | 0.395 | n/a | 0.395 | Maximum detected concentration |
| Fluoranthene | 9 | 2 | 0.0103 (J) | 0.0407 | n/a | 0.0407 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 3 | 3 | 3.41E-05 | 0.000677 | n/a | 0.000677 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 3 | 3 | 1.03E-05 | 0.000175 | n/a | 0.000175 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 3 | 3 | 4.37-07 (J) | 0.00000731 | n/a | 7.31E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 3 | 3 | 0.0000013 (J) | 3.33E-05 | n/a | 0.0000333 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 3 | 3 | 0.00000192 (J) | 3.88E-05 | n/a | 0.0000388 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 3 | 3 | 0.00000136 (J) | 3.32E-05 | n/a | 0.0000332 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 3 | 3 | 0.000000547 (J) | 1.14E-05 | n/a | 0.0000114 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 3 | 3 | 0.000000501 (J) | 4.82E-06 | n/a | 4.82E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 3 | 2 | 0.000000224 (U) | 2.67E-06 | n/a | 2.67E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 3 | 3 | 0.000000743 (J) | 6.98E-06 | n/a | 6.98E-06 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 3 | 3 | 0.000221 | 0.00439 | n/a | 0.00439 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 3 | 3 | 1.44E-05 | 0.000414 | n/a | 0.000414 | Maximum detected concentration |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 3 | 3 | 0.00000065 (J) | 1.54E-05 | n/a | 0.0000154 | Maximum detected concentration |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 3 | 3 | 0.000000186 (J) | 2.65E-06 | n/a | 2.65E-06 | Maximum detected concentration |

**Table H-2.2-28 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Pentachlorodibenzofuran[2,3,4,7,8-] | 3 | 3 | 0.000000784 (J) | 6.36E-06 | n/a | 6.36E-06 | Maximum detected concentration |
| Pyrene | 9 | 1 | 0.0333 (UJ) | 0.0756 (J) | n/a | 0.0756 | Maximum detected concentration |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 3 | 2 | 0.0000000952 (U) | 2.23E-06 | n/a | 2.23E-06 | Maximum detected concentration |
| Tetrachlorodibenzofuran[2,3,7,8-] | 3 | 3 | 8.12E-07 | 6.11E-06 | n/a | 6.11E-06 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 10 | 8 | 0.0153 (U) | 2.21 | Nonparametric | 1.65 | 95% KM (Chebyshev) |
| Cesium-137 | 9 | 9 | 0.115 | 0.687 | Normal | 0.485 | 95% Student's-t |
| Plutonium-238 | 10 | 6 | -0.00157 (U) | 0.593 | Nonparametric | 0.223 | 95% KM (t) |
| Plutonium-239/240 | 10 | 10 | 0.196 | 32.7 | Normal | 15.72 | 95% Student's-t |
| Strontium-90 | 9 | 2 | -0.0793 (U) | 0.293 | n/a | 0.293 | Maximum detected concentration |
| Tritium | 10 | 4 | -0.0191867 (U) | 0.138667 | n/a | 0.139 | Maximum detected concentration |
| Uranium-234 | 10 | 10 | 1.01 | 9.03 | Nonparametric | 6.458 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 10 | 9 | 0.0478 | 0.63 | Nonparametric | 0.479 | 95% KM (Chebyshev) |
| Uranium-238 | 10 | 10 | 0.965 | 6.58 | Nonparametric | 4.578 | 95% Chebyshev (Mean, Sd) |

* n/a = Not applicable.

**Table H-2.2-29**
**Exposure Point Concentrations for SWMU 21-024(d) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 48 | 49 | 0.67 (J) | 11.8 | Nonparametric | 3.526 | 95% KM (BCA) |
| Barium | 49 | 49 | 6.59 | 141 | Nonparametric | 77.82 | 95% KM (Chebyshev) |
| Chromium | 49 | 50 | 1.85 (U) | 233 | Nonparametric | 34.22 | 95% KM (Chebyshev) |
| Cobalt | 41 | 49 | 0.35 (J) | 10.1 | Nonparametric | 2.866 | 95% KM (Chebyshev) |
| Copper | 50 | 50 | 0.812 (J) | 575 | Nonparametric | 114 | 97.5% KM (Chebyshev) |
| Cyanide (total) | 24 | 46 | 0.0814 (J) | 2.28 | Nonparametric | 0.456 | 95% KM (% Bootstrap) |
| Lead | 51 | 51 | 3.11 | 102 | Nonparametric | 35.93 | 95% KM (Chebyshev) |
| Manganese | 49 | 49 | 68.7 (J+) | 1360 | Nonparametric | 322.6 | 95% KM (Chebyshev) |
| Mercury | 48 | 50 | 0.0035 (J) | 1.5 | Nonparametric | 0.404 | 97.5% KM (Chebyshev) |
| Nickel | 42 | 42 | 0.982 | 70.4 (J-) | Nonparametric | 13.14 | 95% KM (Chebyshev) |
| Nitrate | 30 | 50 | 0.2 (J) | 121 | Nonparametric | 26.88 | 97.5% KM (Chebyshev) |
| Perchlorate | 6 | 49 | 0.00068 (J) | 0.00591 (J-) | Nonparametric | 0.00237 | 95% KM (Percentile Bootstrap) |
| Selenium | 11 | 49 | 0.2 (J) | 9.7 | Nonparametric | 1.796 | 95% KM (BCA) |
| Silver | 36 | 50 | 0.034 (J) | 20.1 | Nonparametric | 8.982 | 99% KM (Chebyshev) |
| Uranium | 20 | 20 | 0.614 | 14.8 | Nonparametric | 6.537 | 95% KM (Chebyshev) |
| Zinc | 50 | 50 | 9.09 | 258 (J+) | Nonparametric | 80.24 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 2 | 49 | 0.0181 (J-) | 0.39 (U) | n/a* | 0.0758 | Maximum detected concentration |
| Acenaphthylene | 1 | 49 | 0.0162 (J) | 0.39 (U) | n/a | 0.0162 | Maximum detected concentration |
| Anthracene | 3 | 49 | 0.00749 (U) | 0.39 (U) | n/a | 0.166 | Maximum detected concentration |
| Aroclor-1242 | 3 | 7 | 0.0037 | 0.256 | n/a | 0.256 | Maximum detected concentration |

**Table H-2.2-29 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Aroclor-1254 | 6 | 7 | 0.00383 (U) | 0.457 | Nonparametric | 0.332 | 95% KM (t) |
| Aroclor-1260 | 5 | 7 | 0.0024 (J) | 0.188 | Nonparametric | 0.13 | 95% KM (t) |
| Benzo(a)anthracene | 5 | 49 | 0.0333 (U) | 0.456 | Nonparametric | 0.137 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 5 | 49 | 0.014 (U) | 0.486 (J) | Nonparametric | 0.27 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 7 | 49 | 0.0141 (U) | 0.93 (J) | Nonparametric | 0.111 | 95% KM (t) |
| Benzo(g,h,i)perylene | 7 | 49 | 0.0146 (J) | 0.39 (U) | Nonparametric | 0.0387 | 95% KM (t) |
| Benzo(k)fluoranthene | 2 | 49 | 0.0216 (U) | 0.39 (U) | n/a | 0.3 | Maximum detected concentration |
| Benzoic Acid | 2 | 49 | 0.445 (J) | 1.9 (U) | n/a | 0.453 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 7 | 49 | 0.0956 (J) | 0.43 (J) | Nonparametric | 0.197 | 95% KM (Percentile Bootstrap) |
| Butylbenzylphthalate | 3 | 49 | 0.0827 (J) | 0.421 (U) | n/a | 0.248 | Maximum detected concentration |
| Chrysene | 6 | 49 | 0.0189 (U) | 0.63 (J) | Nonparametric | 0.214 | 95% KM (Percentile Bootstrap) |
| Dibenzo(a,h)anthracene | 1 | 49 | 0.0333 (UJ) | 0.39 (U) | n/a | 0.04 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 1 | 49 | 0.097 (J-) | 0.421 (U) | n/a | 0.097 | Maximum detected concentration |
| Di-n-butylphthalate | 9 | 49 | 0.0568 (J) | 0.421 (U) | Nonparametric | 0.213 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 10 | 49 | 0.0103 (J) | 1.17 (J) | Nonparametric | 0.119 | 95% KM (t) |
| Fluorene | 1 | 49 | 0.0151 (U) | 0.39 (U) | n/a | 0.0206 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 6 | 6 | 2.93E-06 | 0.000677 | Nonparametric | 0.000466 | 95% KM (t) |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 6 | 6 | 8.33E-07 (J) | 0.000175 | Nonparametric | 0.000129 | 95% KM (t) |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 4 | 6 | 0.0000000495 (U) | 7.31E-06 | n/a | 7.31E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 5 | 6 | 0.000000134 (U) | 3.33E-05 | Nonparametric | 2.1595E-5 | 95% KM (t) |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 6 | 6 | 1.95E-07 (J) | 3.88E-05 | Nonparametric | 2.58E-05 | 95% KM (t) |

**Table H-2.2-29 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 5 | 6 | 0.000000224 (U) | 3.32E-05 | Nonparametric | 2.2509E-5 | 95% KM (t) |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 4 | 6 | 0.0000000323 (U) | 1.14E-05 | n/a | 1.14E-05 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 4 | 6 | 0.0000000313 (U) | 4.82E-06 | n/a | 4.82E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 3 | 6 | 0.0000000423 (U) | 2.67E-06 | n/a | 2.67E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 4 | 6 | 0.0000000331 (U) | 6.98E-06 | n/a | 6.98E-06 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 7 | 49 | 0.0123 (J) | 0.39 (U) | Nonparametric | 0.042 | 95% KM (Percentile Bootstrap) |
| Isopropyltoluene[4-] | 1 | 40 | 0.000495 (J) | 0.0059 (U) | n/a | 0.000495 | Maximum detected concentration |
| Methylene Chloride | 4 | 40 | 0.00507 (U) | 0.019 | n/a | 0.019 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 6 | 6 | 1.78E-05 | 0.00439 | Nonparametric | 0.00289 | 95% KM (t) |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 5 | 6 | 0.00000133 (U) | 0.000414 | Nonparametric | 2.8757E-4 | 95% KM (t) |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 4 | 6 | 0.0000000771 (U) | 1.54E-05 | n/a | 1.54E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 4 | 6 | 0.0000000519 (U) | 2.65E-06 | n/a | 2.65E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 4 | 6 | 0.0000000506 (U) | 6.36E-06 | n/a | 6.36E-06 | Maximum detected concentration |
| Phenanthrene | 5 | 49 | 0.0222 (U) | 0.86 (J) | Nonparametric | 0.18 | 95% KM (t) |
| Pyrene | 9 | 49 | 0.0128 (U) | 1.3 (J) | Nonparametric | 0.117 | 95% KM (t) |
| Tetrachlorodibenzodioxin [2,3,7,8-] | 3 | 6 | 0.0000000935 (U) | 2.23E-06 | n/a | 2.23E-06 | Maximum detected concentration |
| Tetrachlorodibenzofuran [2,3,7,8-] | 5 | 6 | 0.0000000625 (U) | 6.11E-06 | Nonparametric | 4.8299E-6 | 95% KM (t) |

**Table H-2.2-29 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Toluene | 9 | 42 | 0.0003 (J) | 0.00897 | Nonparametric | 0.00249 | 95% KM (Percentile Bootstrap) |
| Trichloroethene | 7 | 42 | 0.00101 (U) | 0.006 (U) | Nonparametric | 0.00228 | 95% KM (Percentile Bootstrap) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 19 | 50 | -0.0307 (U) | 2.31 (J) | Nonparametric | 0.388 | 95% KM (t) |
| Cesium-137 | 19 | 48 | -0.0771 (U) | 0.687 | Nonparametric | 0.364 | 99% KM (Chebyshev) |
| Europium-152 | 1 | 49 | -0.164 (U) | 0.393 | n/a | 0.393 | Maximum detected concentration |
| Plutonium-238 | 13 | 50 | -0.00857 (U) | 0.593 | Nonparametric | 0.0723 | 95% KM (t) |
| Plutonium-239/240 | 35 | 50 | -5.66E-10 (U) | 33.8 (J) | Nonparametric | 5.852 | 95% KM (Percentile Bootstrap) |
| Strontium-90 | 6 | 50 | -0.128 (U) | 0.854 | Nonparametric | 0.375 | 99% KM (Chebyshev) |
| Tritium | 15 | 50 | -0.034 (U) | 0.18 (U) | Nonparametric | 0.0356 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 50 | 50 | 0.549 | 9.03 | Nonparametric | 2.553 | 95% KM (Chebyshev) |
| Uranium-235/236 | 34 | 50 | 0.02 (U) | 0.63 | Nonparametric | 0.129 | 95% KM (BCA) |
| Uranium-238 | 50 | 50 | 0.465 | 6.58 | Nonparametric | 1.949 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-30**
**Exposure Point Concentrations for SWMU 21-024(d) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 49 | 48 | 0.67 (J) | 11.8 | Nonparametric | 3.556 | 95% KM (BCA) |
| Barium | 49 | 49 | 6.59 | 141 | Gamma | 64.17 | 95% Approximate Gamma |
| Chromium | 50 | 49 | 1.85 (U) | 233 | Nonparametric | 34.22 | 95% KM (Chebyshev) |
| Cobalt | 49 | 41 | 0.35 (J) | 10.1 | Nonparametric | 2.866 | 95% KM (Chebyshev) |
| Copper | 50 | 50 | 0.812 (J) | 575 | Nonparametric | 114 | 97.5% Chebyshev (Mean, Sd) |
| Cyanide (total) | 46 | 24 | 0.0814 (J) | 2.28 | Nonparametric | 0.455 | 95% KM (t) |
| Lead | 52 | 52 | 3.11 | 102 | Nonparametric | 36.34 | 95% Chebyshev (Mean, Sd) |
| Manganese | 49 | 49 | 68.7 (J+) | 1360 | Normal | 252.9 | 95% Modified-t |
| Mercury | 50 | 48 | 0.0035 (J) | 1.5 | Nonparametric | 0.404 | 97.5% KM (Chebyshev) |
| Nickel | 42 | 42 | 0.982 | 70.4 (J-) | Nonparametric | 13.14 | 95% Chebyshev (Mean, Sd) |
| Nitrate | 50 | 30 | 0.2 (J) | 121 | Nonparametric | 26.88 | 97.5% KM (Chebyshev) |
| Perchlorate | 49 | 6 | 0.00068 (J) | 0.00591 (J-) | Nonparametric | 0.0022 | 95% KM (Percentile Bootstrap) |
| Selenium | 49 | 11 | 0.2 (J) | 9.7 | Nonparametric | 1.807 | 95% KM (BCA) |
| Silver | 50 | 36 | 0.034 (J) | 20.1 | Nonparametric | 8.982 | 99% KM (Chebyshev) |
| Uranium | 20 | 20 | 0.614 | 14.8 | Gamma | 4.57 | 95% Approximate Gamma |
| Zinc | 50 | 50 | 9.09 | 258 (J+) | Nonparametric | 80.24 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 50 | 2 | 0.0181 (J-) | 0.39 (U) | n/a* | 0.0758 | Maximum detected concentration |
| Acenaphthylene | 50 | 1 | 0.0162 (J) | 0.39 (U) | n/a | 0.0162 | Maximum detected concentration |
| Anthracene | 50 | 4 | 0.00749 (U) | 0.39 (U) | n/a | 0.166 | Maximum detected concentration |
| Aroclor-1242 | 7 | 3 | 0.0037 | 0.256 | n/a | 0.256 | Maximum detected concentration |
| Aroclor-1254 | 7 | 6 | 0.00383 (U) | 0.457 | Nonparametric | 0.332 | 95% KM (t) |
| Aroclor-1260 | 7 | 5 | 0.0024 (J) | 0.188 | Nonparametric | 0.13 | 95% KM (t) |
| Benzo(a)anthracene | 50 | 6 | 0.0333 (U) | 0.456 | Nonparametric | 0.149 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-30**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene | 50 | 6 | 0.014 (U) | 0.486 (J) | Nonparametric | 0.159 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 50 | 8 | 0.0141 (U) | 0.93 (J) | Nonparametric | 0.176 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 50 | 8 | 0.0146 (J) | 0.39 (U) | Nonparametric | 0.0519 | 95% KM (Percentile Bootstrap) |
| Benzo(k)fluoranthene | 50 | 3 | 0.0216 (U) | 0.39 (U) | n/a | 0.33 | Maximum detected concentration |
| Benzoic acid | 49 | 2 | 0.445 (J) | 1.9 (U) | n/a | 0.453 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 50 | 7 | 0.0956 (J) | 0.43 (J) | Nonparametric | 0.194 | 95% KM (Percentile Bootstrap) |
| Butylbenzylphthalate | 50 | 3 | 0.0827 (J) | 0.421 (U) | n/a | 0.248 | Maximum detected concentration |
| Carbazole | 1 | 1 | 0.1 (J) | 0.1 (J) | n/a | 0.1 | Maximum detected concentration |
| Chrysene | 50 | 7 | 0.0189 (U) | 0.63 (J) | Nonparametric | 0.219 | 95% KM (Percentile Bootstrap) |
| Dibenz(a,h)anthracene | 50 | 2 | 0.0333 (UJ) | 0.39 (U) | n/a | 0.085 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 50 | 1 | 0.000241 (J) | 0.421 (U) | n/a | 0.097 | Maximum detected concentration |
| Di-n-butylphthalate | 50 | 9 | 0.0568 (J) | 0.421 (U) | Nonparametric | 0.214 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 50 | 11 | 0.0103 (J) | 1.17 (J) | Nonparametric | 0.149 | 95% KM (t) |
| Fluorene | 50 | 1 | 0.0151 (U) | 0.39 (U) | n/a | 0.0206 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 6 | 6 | 0.00000293 | 0.000677 | Normal | 0.0004661 | 95% Student's-t |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 6 | 6 | 0.000000833 (J) | 0.000175 | Normal | 0.0001295 | 95% Student's-t |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 6 | 4 | 0.0000000495 (U) | 0.00000731 | n/a | 7.31E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 6 | 5 | 0.000000134 (U) | 0.0000333 | Nonparametric | 2.16E-05 | 95% KM (t) |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 6 | 6 | 0.000000195 (J) | 0.0000388 | Normal | 2.583E-05 | 95% Student's-t |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 6 | 5 | 0.000000224 (U) | 0.0000332 | Nonparametric | 2.251E-05 | 95% KM (t) |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 6 | 4 | 0.0000000323 (U) | 0.0000114 | n/a | 0.0000114 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 6 | 4 | 0.0000000313 (U) | 0.00000482 | n/a | 4.82E-06 | Maximum detected concentration |

**Table H-2.2-30**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 6 | 3 | 0.0000000423 (U) | 0.00000267 | n/a | 2.67E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 6 | 4 | 0.0000000331 (U) | 0.00000698 | n/a | 6.98E-06 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 50 | 8 | 0.0123 (J) | 0.39 (U) | Nonparametric | 0.0484 | 95% KM (Percentile Bootstrap) |
| Isopropyltoluene[4-] | 40 | 1 | 0.000495 (J) | 0.0059 (U) | n/a | 0.000495 | Maximum detected concentration |
| Methylene chloride | 40 | 4 | 0.00507 (U) | 0.019 | n/a | 0.019 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 6 | 6 | 0.0000178 | 0.00439 | Normal | 0.00289 | 95% Student's-t |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 6 | 5 | 0.00000133 (U) | 0.000414 | Nonparametric | 0.0002876 | 95% KM (t) |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 6 | 4 | 0.0000000771 (U) | 0.0000154 | n/a | 0.0000154 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 6 | 4 | 0.0000000519 (U) | 0.00000265 | n/a | 2.65E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 6 | 4 | 0.0000000506 (U) | 0.00000636 | n/a | 6.36E-06 | Maximum detected concentration |
| Phenanthrene | 50 | 6 | 0.0222 (U) | 0.86 (J) | Nonparametric | 0.215 | 95% KM (Percentile Bootstrap) |
| Pyrene | 50 | 10 | 0.0128 (U) | 1.3 (J) | Nonparametric | 0.142 | 95% KM (t) |
| Tetrachlorodibenzodioxin [2,3,7,8-] | 6 | 3 | 0.0000000935 (U) | 0.00000223 | n/a | 2.23E-06 | Maximum detected concentration |
| Tetrachlorodibenzofuran [2,3,7,8-] | 6 | 5 | 0.0000000625 (U) | 0.00000611 | Nonparametric | 4.83E-06 | 95% KM (t) |
| Toluene | 42 | 9 | 0.0003 (J) | 0.00897 | Nonparametric | 0.00243 | 95% KM (Percentile Bootstrap) |
| Trichloroethene | 42 | 7 | 0.00101 (U) | 0.006 (U) | Nonparametric | 0.0023 | 95% KM (Percentile Bootstrap) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 50 | 19 | -0.0307 (U) | 2.31 (J) | Nonparametric | 0.388 | 95% KM (t) |
| Cesium-137 | 48 | 19 | -0.0771 (U) | 0.687 | Nonparametric | 0.364 | 99% KM (Chebyshev) |
| Europium-152 | 49 | 1 | -0.164 (U) | 0.393 | n/a | 0.393 | Maximum detected concentration |
| Plutonium-238 | 51 | 13 | -0.00857 (U) | 0.593 | Nonparametric | 0.0714 | 95% KM (t) |
| Plutonium-239/240 | 51 | 36 | -0.000000000566 (U) | 33.8 (J) | Nonparametric | 5.892 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-30**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Strontium-90 | 50 | 6 | -0.128 (U) | 0.854 | Nonparametric | 0.375 | 99% KM (Chebyshev) |
| Tritium | 50 | 15 | -0.0339874 (U) | 0.18 (U) | Nonparametric | 0.036 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 50 | 50 | 0.549 | 9.03 | Nonparametric | 2.553 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 50 | 34 | 0.02 (U) | 0.63 | Nonparametric | 0.128 | 95% KM (BCA) |
| Uranium-238 | 50 | 50 | 0.465 | 6.58 | Normal | 1.6 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-31**
**Exposure Point Concentrations for SWMU 21-024(e) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 18 | 8 | 0.111 (U) | 3.23 | Nonparametric | 0.674 | 95% KM (BCA) |
| Barium | 18 | 18 | 25.3 | 171 | Normal | 98.64 | 95% Student's-t |
| Cadmium | 18 | 16 | 0.131 (J) | 2.32 | Nonparametric | 0.921 | 95% KM (Chebyshev) |
| Chromium | 18 | 18 | 3.18 | 21.4 | Gamma | 9.287 | 95% Approximate Gamma |
| Copper | 18 | 18 | 2.54 | 26.5 | Gamma | 10.03 | 95% Approximate Gamma |
| Cyanide (total) | 18 | 7 | 0.115 (J) | 0.29 | Nonparametric | 0.218 | 95% KM (Percentile Bootstrap) |
| Lead | 18 | 18 | 8.82 | 72.1 | Nonparametric | 35.07 | 95% Chebyshev (Mean, Sd) |
| Mercury | 18 | 18 | 0.0103 | 0.595 | Nonparametric | 0.207 | 95% Chebyshev (Mean, Sd) |
| Molybdenum | 9 | 8 | 0.462 (U) | 1.23 | Nonparametric | 0.811 | 95% KM (BCA) |
| Nitrate | 18 | 15 | 0.927 (J) | 13.3 | Nonparametric | 6.334 | 95% KM (Chebyshev) |
| Perchlorate | 18 | 7 | 0.000539 (J-) | 0.00284 (J+) | Nonparametric | 0.00124 | 95% KM [t] |
| Selenium | 18 | 2 | 0.843 (J) | 1.75 (U) | n/a* | 1.29 | Maximum detected concentration |
| Silver | 18 | 17 | 0.0468 (J) | 1.1 | Nonparametric | 0.384 | 95% KM (Chebyshev) |
| Uranium | 18 | 18 | 0.885 (J)+ | 22.5 | Nonparametric | 8.677 | 95% Chebyshev (Mean, Sd) |
| Zinc | 18 | 18 | 16.7 | 124 | Gamma | 63.52 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 18 | 2 | 0.0188 (J) | 0.0843 | n/a | 0.0843 | Maximum detected concentration |
| Acetone | 8 | 1 | 0.00437 (J) | 0.00563 (U) | n/a | 0.00437 | Maximum detected concentration |
| Anthracene | 18 | 3 | 0.00711 (J) | 0.158 | n/a | 0.158 | Maximum detected concentration |
| Benzo(a)anthracene | 18 | 3 | 0.0131 (J) | 0.32 | n/a | 0.32 | Maximum detected concentration |
| Benzo(a)pyrene | 18 | 2 | 0.0345 (U) | 0.273 (J) | n/a | 0.273 | Maximum detected concentration |
| Benzo(b)fluoranthene | 18 | 3 | 0.0345 (U) | 0.582 (J) | n/a | 0.582 | Maximum detected concentration |
| Benzo(k)fluoranthene | 18 | 1 | 0.0345 (U) | 0.0786 | n/a | 0.0786 | Maximum detected concentration |

**Table H-2.2-31 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Chrysene | 18 | 4 | 0.0196 (J) | 0.293 | n/a | 0.293 | Maximum detected concentration |
| Di-n-butylphthalate | 18 | 3 | 0.0404 (J) | 0.391 (U) | n/a | 0.0622 | Maximum detected concentration |
| Fluoranthene | 18 | 10 | 0.0122 (J) | 0.634 | Nonparametric | 0.3 | 97.5% KM (Chebyshev) |
| Fluorene | 18 | 2 | 0.0306 (J) | 0.127 | n/a | 0.127 | Maximum detected concentration |
| Methylnaphthalene[2-] | 18 | 2 | 0.0113 (J) | 0.052 | n/a | 0.052 | Maximum detected concentration |
| Naphthalene | 18 | 2 | 0.0209 (J) | 0.104 | n/a | 0.104 | Maximum detected concentration |
| Phenanthrene | 18 | 4 | 0.0114 (J) | 0.682 | n/a | 0.682 | Maximum detected concentration |
| Pyrene | 18 | 10 | 0.0119 (J) | 0.715 | Nonparametric | 0.322 | 97.5% KM (Chebyshev) |
| Toluene | 8 | 8 | 0.00141 | 0.0249 | Gamma | 0.0154 | 95% Approximate Gamma |
| Trichloroethene | 8 | 5 | 0.00062 (J) | 0.0164 | Nonparametric | 0.00748 | 95% KM [t] |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 18 | 11 | -0.0144 (U) | 1.86 | Nonparametric | 1.182 | 99% KM (Chebyshev) |
| Cesium-137 | 15 | 14 | 0.0682 (U) | 1.11 | Nonparametric | 0.63 | 95% KM [t] |
| Plutonium-238 | 18 | 2 | -0.00381 (U) | 0.329 | n/a | 0.329 | Maximum detected concentration |
| Plutonium-239/240 | 18 | 18 | 0.0474 | 56.6 | Nonparametric | 35.34 | 99% Chebyshev (Mean, Sd) |
| Strontium-90 | 18 | 3 | -0.297 (U) | 0.907 | n/a | 0.907 | Maximum detected concentration |
| Tritium | 18 | 6 | -0.00465133 (U) | 0.0365771 | Nonparametric | 0.0199 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 18 | 18 | 0.904 | 12.3 | Nonparametric | 4.777 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 18 | 14 | 0.0368 (U) | 0.589 | Nonparametric | 0.177 | 95% KM (BCA) |
| Uranium-238 | 18 | 18 | 0.923 | 8.96 | Normal | 2.724 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-32**
**Exposure Point Concentrations for SWMU 21-024(e) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 8 | 31 | 0.111 (U) | 3.23 | Nonparametric | 0.501 | 95% KM (BCA) |
| Barium | 40 | 40 | 9.74 | 235 (J+) | Nonparametric | 99.25 | 95% KM (Chebyshev) |
| Cadmium | 21 | 40 | 0.154 (J) | 15 | Nonparametric | 2.746 | 95% KM (Chebyshev) |
| Chromium | 40 | 40 | 1.37 | 21.4 | Nonparametric | 9.02 | 95% KM (BCA) |
| Copper | 40 | 40 | 1.3 | 130 | Nonparametric | 25.01 | 95% KM (Chebyshev) |
| Cyanide (total) | 10 | 40 | 0.112 (J) | 30.3 | Nonparametric | 4.35 | 95% KM (Chebyshev) |
| Lead | 40 | 40 | 1.86 | 161 | Nonparametric | 38.84 | 95% KM (Chebyshev) |
| Mercury | 40 | 40 | 0.008 (J) | 2.95 | Nonparametric | 0.507 | 95% KM (Chebyshev) |
| Molybdenum | 32 | 34 | 0.245 | 2.24 | Nonparametric | 0.871 | 95% KM (BCA) |
| Nitrate | 26 | 40 | 0.9 (UJ) | 23.8 | Nonparametric | 3.708 | 95% KM (BCA) |
| Perchlorate | 6 | 40 | 0.000609 (J) | 0.00284 (J+) | Nonparametric | 0.00126 | 95% KM (t) |
| Selenium | 10 | 40 | 0.685 (J) | 1.75 (U) | Nonparametric | 1.166 | 95% KM (t) |
| Silver | 34 | 40 | 0.0488 (J) | 1.52 | Nonparametric | 0.413 | 95% KM (Chebyshev) |
| Uranium | 40 | 40 | 0.583 | 62 | Nonparametric | 10.98 | 95% KM (Chebyshev) |
| Zinc | 40 | 40 | 15.9 | 124 | Nonparametric | 60.93 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 2 | 40 | 0.0142 (J) | 0.0391 (U) | n/a* | 0.0188 | Maximum detected concentration |
| Acenaphthylene | 1 | 40 | 0.0261 (J) | 0.0391 (U) | n/a | 0.0261 | Maximum detected concentration |
| Acetone | 3 | 33 | 0.00284 (J) | 0.00904 (J) | n/a | 0.00904 | Maximum detected concentration |

**Table H-2.2-32 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Anthracene | 4 | 40 | 0.00711 (J) | 0.0741 | n/a | 0.0741 | Maximum detected concentration |
| Benzo(a)anthracene | 3 | 40 | 0.0131 (J) | 0.242 (J) | n/a | 0.242 | Maximum detected concentration |
| Benzo(a)pyrene | 2 | 40 | 0.0341 (U) | 0.197 (J) | n/a | 0.197 | Maximum detected concentration |
| Benzo(b)fluoranthene | 3 | 40 | 0.0341 (U) | 0.315 (J) | n/a | 0.315 | Maximum detected concentration |
| Benzo(g,h,i)perylene | 3 | 40 | 0.0341 (U) | 0.125 | n/a | 0.125 | Maximum detected concentration |
| Benzo(k)fluoranthene | 1 | 40 | 0.0341 (U) | 0.0786 | n/a | 0.0786 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 3 | 40 | 0.0801 (J) | 0.383 | n/a | 0.383 | Maximum detected concentration |
| Chloroaniline[4-] | 2 | 40 | 0.263 (J) | 0.407 (J) | n/a | 0.407 | Maximum detected concentration |
| Chrysene | 3 | 40 | 0.0196 (J) | 0.239 (J) | n/a | 0.239 | Maximum detected concentration |
| Di-n-butylphthalate | 13 | 40 | 0.0404 (J) | 0.391 (U) | Nonparametric | 0.137 | 95% KM (% Bootstrap) |
| Ethylbenzene | 1 | 33 | 0.000663 (J) | 0.00117 (U) | n/a | 0.000663 | Maximum detected concentration |
| Fluoranthene | 13 | 40 | 0.0122 (J) | 0.512 | Nonparametric | 0.0644 | 95% KM (BCA) |
| Fluorene | 2 | 40 | 0.0192 (J) | 0.0391 (U) | n/a | 0.0306 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 1 | 40 | 0.0341(U) | 0.168 (J) | n/a | 0.168 | Maximum detected concentration |
| Isopropyltoluene[4-] | 5 | 33 | 0.000419 (J) | 0.0508 (J) | Nonparametric | 0.0127 | 97.5% KM (Chebyshev) |
| Methylene Chloride | 1 | 33 | 0.00251 (J+) | 0.00583 (U) | n/a | 0.00251 | Maximum detected concentration |
| Methylnaphthalene[2-] | 1 | 40 | 0.0113 (J) | 0.0391 (U) | n/a | 0.0113 | Maximum detected concentration |
| Naphthalene | 1 | 40 | 0.0209 (J) | 0.0391 (U) | n/a | 0.0209 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 4.78E-06 (J) | 4.78E-06 (J) | n/a | 4.78E-06 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 4.11E-07 (J) | 4.11E-07 (J) | n/a | 4.11E-07 | Maximum detected concentration |
| Phenanthrene | 6 | 40 | 0.0108 (J) | 0.257 | Nonparametric | 0.0438 | 95% KM (BCA) |
| Pyrene | 14 | 40 | 0.0114 (J) | 0.555 (J) | Nonparametric | 0.0665 | 95% KM (BCA) |
| Toluene | 25 | 35 | 0.000426 (J) | 0.0249 | Nonparametric | 0.00788 | 95% KM (Chebyshev) |
| Trichloroethene | 5 | 33 | 0.00062 (J) | 0.0164 | Nonparametric | 0.00515 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-32 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Trimethylbenzene[1,2,4-] | 1 | 33 | 0.000271 (U) | 0.00117 (U) | n/a | 0.00034 | Maximum detected concentration |
| Xylene[1,2-] | 1 | 33 | 0.00102 (U) | 0.00157 | n/a | 0.00157 | Maximum detected concentration |
| Xylene[1,3-]+Xylene[1,4-] | 1 | 33 | 0.00205 (U) | 0.00411 | n/a | 0.00411 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 17 | 40 | -0.0144 (U) | 1.86 | Nonparametric | 0.579 | 99% KM (Chebyshev) |
| Cesium-137 | 17 | 37 | -0.0827 (U) | 1.11 | Nonparametric | 0.639 | 99% KM (Chebyshev) |
| Plutonium-238 | 4 | 40 | -0.0108 (U) | 0.329 | n/a | 0.329 | Maximum detected concentration |
| Plutonium-239/240 | 35 | 40 | -0.00155 (U) | 56.6 | Nonparametric | 16.49 | 99% KM (Chebyshev) |
| Strontium-90 | 3 | 40 | -0.297 (U) | 0.907 | n/a | 0.907 | Maximum detected concentration |
| Tritium | 16 | 40 | -0.00857 (U) | 0.108 | Nonparametric | 0.0199 | 95% KM (t) |
| Uranium-234 | 40 | 40 | 0.695 | 12.3 | Nonparametric | 3.237 | 95% KM (Chebyshev) |
| Uranium-235/236 | 34 | 40 | 0.03 | 0.589 | Nonparametric | 0.17 | 95% KM (Chebyshev) |
| Uranium-238 | 40 | 40 | 0.72 | 8.96 | Nonparametric | 2.597 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-33**
**Exposure Point Concentrations for SWMU 21-024(e) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 43 | 9 | 0.111 (U) | 3.23 | Nonparametric | 0.39 | 95% KM (BCA) |
| Barium | 59 | 59 | 9.74 | 235 (J+) | Gamma | 73.8 | 95% Approximate Gamma |
| Cadmium | 59 | 24 | 0.131 (J) | 15 | Nonparametric | 1.269 | 95% KM (BCA) |
| Chromium | 59 | 59 | 1.37 | 21.4 | Normal | 8.602 | 95% Student's-t |
| Copper | 59 | 59 | 1.3 | 130 | Nonparametric | 18.46 | 95% Chebyshev (Mean, Sd) |
| Cyanide (total) | 59 | 13 | 0.0932 (U) | 30.3 | Nonparametric | 1.709 | 95% KM (BCA) |
| Lead | 59 | 59 | 1.86 | 161 | Lognormal | 22.25 | 95% H |
| Mercury | 59 | 59 | 0.0066 (J) | 2.95 | Nonparametric | 0.453 | 97.5% Chebyshev (Mean, Sd) |
| Molybdenum | 47 | 45 | 0.245 | 2.24 | Nonparametric | 1.101 | 95% KM (Chebyshev) |
| Nitrate | 59 | 42 | 0.9 (UJ) | 23.8 | Nonparametric | 3.426 | 95% KM (BCA) |
| Perchlorate | 59 | 14 | 0.000539 (J-) | 0.00284 (J+) | Nonparametric | 0.00115 | 95% KM (t) |
| Selenium | 59 | 18 | 0.607 J | 1.75 (U) | Nonparametric | 1.066 | 95% KM (t) |
| Silver | 59 | 51 | 0.0452 (J) | 1.52 | Nonparametric | 0.305 | 95% KM (Chebyshev) |
| Uranium | 59 | 59 | 0.583 | 62 | Nonparametric | 7.792 | 95% Chebyshev (Mean, Sd) |
| Zinc | 59 | 59 | 15.9 | 124 | Nonparametric | 55.3 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 59 | 4 | 0.0142 (J) | 0.0843 | n/a* | 0.0843 | Maximum detected concentration |
| Acenaphthylene | 59 | 1 | 0.0261 (J) | 0.0391 (U) | n/a | 0.0261 | Maximum detected concentration |
| Acetone | 49 | 4 | 0.00284 (J) | 0.00904 (J) | n/a | 0.00904 | Maximum detected concentration |
| Anthracene | 59 | 8 | 0.00711 (J) | 0.158 | Nonparametric | 0.0251 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 59 | 7 | 0.0131 (J) | 0.498 | Nonparametric | 0.128 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 59 | 4 | 0.0341 (U) | 0.406 | n/a | 0.406 | Maximum detected concentration |
| Benzo(b)fluoranthene | 59 | 8 | 0.111 (U) | 3.23 | Nonparametric | 0.202 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-33 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 59 | 5 | 0.0291 (J) | 0.184 | Nonparametric | 0.125 | 95% KM (Percentile Bootstrap) |
| Benzo(k)fluoranthene | 59 | 2 | 0.0107 (J) | 0.0786 | n/a | 0.0786 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 59 | 3 | 0.0801 (J) | 0.383 | n/a | 0.383 | Maximum detected concentration |
| Chloroaniline[4-] | 59 | 2 | 0.263 (J) | 0.407 (J) | n/a | 0.407 | Maximum detected concentration |
| Chrysene | 59 | 11 | 0.0186 (J) | 0.48 | Nonparametric | 0.0601 | 95% KM (t) |
| Dichlorobenzene[1,4-] | 108 | 1 | 0.00026 (U) | 0.391 (U) | n/a | 0.000635 | Maximum detected concentration |
| Di-n-butylphthalate | 59 | 13 | 0.0404 (J) | 0.391 (U) | Nonparametric | 0.137 | 95% KM (Percentile Bootstrap) |
| Ethylbenzene | 49 | 1 | 0.000663 (J) | 0.00117 (U) | n/a | 0.000663 | Maximum detected concentration |
| Fluoranthene | 59 | 21 | 0.0122 (J) | 0.781 | Nonparametric | 0.0934 | 95% KM (BCA) |
| Fluorene | 59 | 4 | 0.0192 (J) | 0.127 | n/a | 0.127 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 2 | 1 | 0.00000058 (U) | 0.00000489 | n/a | 4.89E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 2 | 1 | 0.000000205 (U) | 0.00000117(J) | n/a | 1.17E-06 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 2 | 1 | 0.0000000579 (U) | 0.000000196 (J) | n/a | 1.96E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 2 | 1 | 0.0000000715 (U) | 0.000000179 (J) | n/a | 1.79E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 59 | 1 | 0.0341 (U) | 0.168 (J) | n/a | 0.168 | Maximum detected concentration |
| Isopropyltoluene[4-] | 49 | 5 | 0.000419 (J) | 0.0508 (J) | Nonparametric | 0.00667 | 95% KM (Chebyshev) |
| Methylene chloride | 49 | 1 | 0.00251 (J+) | 0.00587 (U) | n/a | 0.00251 | Maximum detected concentration |
| Methylnaphthalene[2-] | 59 | 2 | 0.0113 (J) | 0.052 | n/a | 0.052 | Maximum detected concentration |
| Naphthalene | 59 | 2 | 0.0209 (J) | 0.104 | n/a | 0.104 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 2 | 1 | 0.000004785 (J) | 0.0000431 | n/a | 4.31E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 2 | 1 | 0.000000411 (J) | 0.00000267 (J) | n/a | 2.67E-06 | Maximum detected concentration |

**Table H-2.2-33 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Pentachlorodibenzofuran[2,3,4,7,8-] | 2 | 1 | 0.000000155 (U) | 0.000000333 (J) | n/a | 3.33E-07 | Maximum detected concentration |
| Phenanthrene | 59 | 14 | 0.0108 J | 0.682 | Nonparametric | 0.0637 | 95% KM (BCA) |
| Pyrene | 59 | 22 | 0.0114 (J) | 0.768 | Nonparametric | 0.0997 | 95% KM (BCA) |
| Toluene | 51 | 27 | 0.000426 (J) | 0.0249 | Nonparametric | 0.00402 | 95% KM (BCA) |
| Trichloroethene | 49 | 5 | 0.00062 (J) | 0.0164 | Nonparametric | 0.00486 | 95% KM (Percentile Bootstrap) |
| Trimethylbenzene[1,2,4-] | 49 | 1 | 0.000271 (U) | 0.00117 (U) | n/a | 0.00034 | Maximum detected concentration |
| Xylene[1,2-] | 49 | 1 | 0.00102 (U) | 0.00157 | n/a | 0.00157 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 49 | 1 | 0.00204 (U) | 0.00411 | n/a | 0.00411 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 59 | 20 | -0.0144 (U) | 1.86 | Nonparametric | 0.402 | 99% KM (Chebyshev) |
| Cesium-137 | 56 | 21 | -0.0827 (U) | 1.11 | Nonparametric | 0.525 | 99% KM (Chebyshev) |
| Plutonium-238 | 59 | 4 | -0.0108 (U) | 0.329 | n/a | 0.329 | Maximum detected concentration |
| Plutonium-239/240 | 59 | 50 | -0.0074 (U) | 56.6 | Nonparametric | 11.29 | 99% KM (Chebyshev) |
| Strontium-90 | 59 | 4 | -0.297 (U) | 0.907 | n/a | 0.907 | Maximum detected concentration |
| Tritium | 59 | 20 | -0.00856667 (U) | 0.108333 | Nonparametric | 0.0176 | 95% KM (t) |
| Uranium-234 | 59 | 59 | 0.695 | 12.3 | Nonparametric | 2.56 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 59 | 48 | 0.03 | 0.589 | Nonparametric | 0.137 | 95% (Chebyshev) |
| Uranium-238 | 59 | 59 | 0.645 | 8.96 | Normal | 1.717 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-34**
**Exposure Point Concentrations for SWMU 21-024(g) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 29 | 29 | 1710 (J+) | 21400 (J+) | Gamma | 7764 | 95% Approximate Gamma |
| Arsenic | 29 | 29 | 1.11 (J) | 7.01 | Gamma | 3.377 | 95% Approximate Gamma |
| Barium | 29 | 29 | 11.5 | 139 | Normal | 74.18 | 95% Student's-t |
| Cadmium | 29 | 5 | 0.142 (J) | 1.14 | Nonparametric | 0.333 | 95% KM [Percentile Bootstrap] |
| Chromium | 30 | 30 | 3.71 | 24 | Gamma | 9.608 | 95% Approximate Gamma |
| Cobalt | 29 | 29 | 0.415 (J) | 5.49 | Normal | 2.815 | 95% Student's-t |
| Copper | 29 | 28 | 1.57 | 25.4 | Nonparametric | 8.77 | 95% KM [BCA] |
| Cyanide (total) | 29 | 8 | 0.0754 (J) | 1.25 | Nonparametric | 0.4 | 95% KM [Percentile Bootstrap] |
| Iron | 29 | 29 | 4530 | 14800 | Gamma | 9526 | 95% Approximate Gamma |
| Lead | 29 | 29 | 1.99 | 37.7 | Normal | 20.64 | 95% Student's-t |
| Mercury | 29 | 27 | 0.0071 (J) | 1.14 | Nonparametric | 0.383 | 97.5% KM [Chebyshev] |
| Nickel | 29 | 29 | 1.34 | 7.94 | Normal | 5.439 | 95% Student's-t |
| Nitrate | 29 | 17 | 0.604 (J) | 4.6 | Nonparametric | 1.856 | 95% KM [t] |
| Perchlorate | 29 | 1 | 0.000745 (J-) | 0.00285 (UJ) | n/a* | 7.45E-04 | Maximum detected concentration |
| Selenium | 29 | 10 | 0.697 (J) | 17.1 (U) | Nonparametric | 0.976 | 95% KM [t] |
| Uranium | 29 | 29 | 0.57 | 6.83 | Nonparametric | 3.023 | 95% Chebyshev [mean, SD] |
| Zinc | 29 | 29 | 19.2 | 221 | Lognormal | 65.97 | 95% H |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 31 | 1 | 0.0347 (U) | 0.79 (U) | n/a | 0.0369 | Maximum detected concentration |
| Acetone | 4 | 2 | 0.00392 (J) | 0.0846 | n/a | 0.0846 | Maximum detected concentration |
| Anthracene | 31 | 3 | 0.0116 (J) | 0.79 (U) | n/a | 0.0551 | Maximum detected concentration |
| Benzo(a)anthracene | 31 | 5 | 0.0196 (J) | 0.79 (U) | Nonparametric | 0.069 | 95% KM [Percentile Bootstrap] |
| Benzo(a)pyrene | 31 | 3 | 0.0213 (J) | 0.79 (UJ) | n/a | 0.222 | Maximum detected concentration |
| Benzo(b)fluoranthene | 31 | 8 | 0.0141 (J) | 0.79 (UJ) | Nonparametric | 0.105 | 95% KM [Percentile Bootstrap] |

**Table H-2.2-34 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 31 | 2 | 0.0347 (U) | 0.79 (UJ) | n/a | 0.127 | Maximum detected concentration |
| Benzo(k)fluoranthene | 31 | 3 | 0.0191 (J) | 0.79 (UJ) | n/a | 0.0446 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 31 | 1 | 0.0773 (U) | 0.828 (U) | n/a | 0.11 | Maximum detected concentration |
| Chrysene | 31 | 11 | 0.0203 (J) | 0.79 (U) | Nonparametric | 0.0578 | 95% KM [t] |
| Di-n-butylphthalate | 31 | 1 | 0.327 (J) | 1.66 (U) | n/a | 0.327 | Maximum detected concentration |
| Fluoranthene | 31 | 18 | 0.0115 (J) | 0.79 (U) | Nonparametric | 0.0834 | 95% KM [Percentile Bootstrap] |
| Fluorene | 31 | 1 | 0.0347 (U) | 0.79 (U) | n/a | 0.041 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 31 | 1 | 0.0347 (U) | 0.79 (UJ) | n/a | 0.104 | Maximum detected concentration |
| Isopropyltoluene[4-] | 4 | 1 | 0.00038 (J) | 0.00124 (U) | n/a | 3.80E-04 | Maximum detected concentration |
| Methylnaphthalene[2-] | 31 | 1 | 0.029 (J) | 0.79 (U) | n/a | 0.029 | Maximum detected concentration |
| Naphthalene | 31 | 1 | 0.0347 (UJ) | 0.79 (U) | n/a | 0.0435 | Maximum detected concentration |
| Phenanthrene | 31 | 9 | 0.0117 (J) | 0.79 (U) | Nonparametric | 0.0637 | 95% KM [BCA] |
| Pyrene | 31 | 15 | 0.0117 (U) | 0.79 (U) | Nonparametric | 0.102 | 95% KM [Percentile Bootstrap] |
| Toluene | 4 | 4 | 0.000478 (J) | 0.00101 (J) | n/a | 0.00101 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 31 | 12 | 0.00283 (U) | 0.181 | Nonparametric | 0.0601 | 95% KM [Percentile Bootstrap] |
| Cesium-137 | 27 | 19 | -0.00225 (U) | 1.17 | Nonparametric | 0.848 | 99% KM [Chebyshev] |
| Plutonium-238 | 31 | 5 | -0.00323 (U) | 0.0439 | Nonparametric | 0.0247 | 95% KM [Percentile Bootstrap] |
| Plutonium-239/240 | 31 | 29 | 0.00971 (U) | 3.92 | Nonparametric | 1.814 | 97.5% KM [Chebyshev] |
| Tritium | 29 | 8 | 0.00152953 (U) | 0.19858 | Nonparametric | 0.0412 | 95% KM [t] |
| Uranium-234 | 29 | 29 | 0.734 | 3.71 | Normal | 1.538 | 95% Modified-t |
| Uranium-235/236 | 29 | 24 | 0.0265 (U) | 0.23 | Nonparametric | 0.0939 | 95% KM [BCA] |
| Uranium-238 | 29 | 29 | 0.731 | 3.32 | Normal | 1.497 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-35**
**Exposure Point Concentrations for SWMU 21-024(g) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 64 | 64 | 435 | 21400 (J+) | Nonparametric | 8007 | 95% KM (Chebyshev) |
| Arsenic | 64 | 64 | 0.605 (J) | 7.01 | Nonparametric | 3.14 | 95% KM (BCA) |
| Barium | 64 | 64 | 9.42 | 139 | Nonparametric | 58.32 | 95% KM (t) |
| Cadmium | 7 | 64 | 0.142 (J) | 3.05 (U) | Nonparametric | 0.368 | 95% KM (Percentile Bootstrap) |
| Chromium | 68 | 68 | 1.83 | 37.5 | Nonparametric | 11.56 | 95% KM (Chebyshev) |
| Cobalt | 64 | 64 | 0.316 (J) | 5.49 | Nonparametric | 2.109 | 95% KM (Percentile Bootstrap) |
| Copper | 62 | 64 | 0.501 (J) | 25.4 | Nonparametric | 6.296 | 95% KM (BCA) |
| Cyanide (total) | 16 | 63 | 0.0754 (J) | 1.25 | Nonparametric | 0.247 | 95% KM (t) |
| Iron | 64 | 64 | 952 (J+) | 25800 (J+) | Nonparametric | 9037 | 95% KM (BCA) |
| Lead | 64 | 64 | 1.99 | 109 (J+) | Nonparametric | 24.37 | 95% KM (Chebyshev) |
| Mercury | 62 | 64 | 0.0038 (J) | 1.14 | Nonparametric | 0.18 | 95% KM (Chebyshev) |
| Nickel | 64 | 64 | 1.1 | 11.1 | Nonparametric | 4.968 | 95% KM (Percentile Bootstrap) |
| Nitrate | 26 | 64 | 0.604 (J) | 4.6 | Nonparametric | 1.355 | 95% KM (t) |
| Perchlorate | 3 | 64 | 0.00062 (J-) | 0.00285 (UJ) | n/a* | 0.00138 | Maximum detected concentration |
| Selenium | 15 | 64 | 0.687 (J) | 17.1 (U) | Nonparametric | 0.983 | 95% KM (t) |
| Uranium | 63 | 63 | 0.511 | 16.6 | Nonparametric | 3.052 | 95% KM (Chebyshev) |
| Zinc | 64 | 64 | 6.77 | 221 | Nonparametric | 66.94 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 1 | 66 | 0.0346 (U) | 0.79 (U) | n/a | 0.0369 | Maximum detected concentration |
| Acetone | 4 | 39 | 0.00288 (U) | 0.0846 | n/a | 0.0846 | Maximum detected concentration |
| Anthracene | 4 | 66 | 0.0116 (J) | 0.79 (U) | n/a | 0.105 | Maximum detected concentration |
| Aroclor-1254 | 1 | 1 | 0.0025 (J) | 0.0025 (J) | n/a | 0.0025 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0022 (J) | 0.0022 (J) | n/a | 0.0022 | Maximum detected concentration |

**Table H-2.2-35 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | 6 | 66 | 0.018 (U) | 0.79 (U) | Nonparametric | 0.0623 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 4 | 66 | 0.0213 (J) | 0.79 (UJ) | n/a | 0.359 | Maximum detected concentration |
| Benzo(b)fluoranthene | 12 | 66 | 0.0129 (J) | 0.813 | Nonparametric | 0.0736 | 95% KM (t) |
| Benzo(g,h,i)perylene | 3 | 66 | 0.0346 (U) | 0.79 (UJ) | n/a | 0.22 | Maximum detected concentration |
| Benzo(k)fluoranthene | 4 | 66 | 0.0191 (J) | 0.79 (UJ) | n/a | 0.0446 | Maximum detected concentration |
| Benzoic Acid | 1 | 66 | 0.224 (J) | 3.9 (U) | n/a | 0.224 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 66 | 0.0773 (U) | 0.828 (U) | n/a | 0.11 | Maximum detected concentration |
| Chrysene | 14 | 66 | 0.0132 (J) | 0.79 (U) | Nonparametric | 0.0601 | 95% KM (BCA) |
| Di-n-butylphthalate | 1 | 66 | 0.327 (J) | 1.66 (U) | n/a | 0.3 | Maximum detected concentration |
| Ethylbenzene | 1 | 39 | 0.000265 (J) | 0.00129 (U) | n/a | 0.000265 | Maximum detected concentration |
| Fluoranthene | 27 | 66 | 0.0111 (J) | 1.47 | Nonparametric | 0.0992 | 95% KM (BCA) |
| Fluorene | 1 | 67 | 0.0346 (U) | 0.79 (U) | n/a | 0.041 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 1.3E-06 (J) | 1.3E-06 (J) | n/a | 1.3E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 5.46E-07 (J) | 5.46E-07 (J) | n/a | 5.46E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 2 | 66 | 0.0346 (U) | 0.79 (UJ) | n/a | 0.204 | Maximum detected concentration |
| Isopropyltoluene[4-] | 2 | 39 | 0.00038 (J) | 0.00205 (J) | n/a | 0.00205 | Maximum detected concentration |
| Methylnaphthalene[2-] | 1 | 66 | 0.029 (J) | 0.79 (U) | n/a | 0.029 | Maximum detected concentration |
| Naphthalene | 1 | 66 | 0.0346 (UJ) | 0.79 (U) | n/a | 0.0435 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 8.79E-06 | 8.79E-06 | n/a | 8.79E-06 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 7.14E-07 (J) | 7.14E-07 (J) | n/a | 7.14E-07 | Maximum detected concentration |
| Phenanthrene | 12 | 66 | 0.0117 (J) | 0.79 (U) | Nonparametric | 0.049 | 95% KM (BCA) |
| Pyrene | 23 | 66 | 0.0117 (J) | 0.964 | Nonparametric | 0.0906 | 95% KM (BCA) |
| Toluene | 11 | 39 | 0.000408 (J) | 0.00329 | Nonparametric | 0.00105 | 95% KM (t) |

**Table H-2.2-35 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Xylene[1,3-]+Xylene[1,4-] | 1 | 39 | 0.000319 (J) | 0.00258 (U) | n/a | 0.000319 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 15 | 66 | -0.0143 (U) | 0.181 | Nonparametric | 0.0511 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 26 | 61 | -0.0415 (U) | 1.17 | Nonparametric | 0.38 | 97.5% KM (Chebyshev) |
| Plutonium-238 | 5 | 66 | -0.00647 (U) | 0.0439 | Nonparametric | 0.0327 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 51 | 66 | -0.00954 (U) | 3.92 | Nonparametric | 1.024 | 97.5% KM (Chebyshev) |
| Tritium | 26 | 64 | 0.00153 (U) | 0.199 | Nonparametric | 0.0366 | 95% KM (% Bootstrap) |
| Uranium-234 | 64 | 64 | 0.681 | 4.43 | Nonparametric | 1.665 | 95% KM (Chebyshev) |
| Uranium-235/236 | 47 | 64 | 0.0217 (U) | 0.256 | Nonparametric | 0.0904 | 95% KM (BCA) |
| Uranium-238 | 64 | 64 | 0.731 | 4.31 | Nonparametric | 1.647 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-36**
**Exposure Point Concentrations for SWMU 21-024(g) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 78 | 78 | 435 | 21400 (J+) | Gamma | 5822 | 95% Approximate Gamma |
| Arsenic | 78 | 76 | 0.605 (J) | 10.8 | Nonparametric | 3.106 | 95% KM [BCA] |
| Barium | 78 | 78 | 9.42 | 139 | Gamma | 53.89 | 95% Approximate Gamma |
| Cadmium | 78 | 7 | 0.142 (J) | 3.05 (U) | Nonparametric | 0.364 | 95% KM [Percentile Bootstrap] |
| Chromium | 82 | 82 | 1.83 | 37.5 | Lognormal | 12.46 | 95% H |
| Cobalt | 78 | 78 | 0.255 (J) | 5.49 | Normal | 1.928 | 95% Student's-t |
| Copper | 78 | 76 | 0.501 (J) | 25.4 | Nonparametric | 5.709 | 95% KM [BCA] |
| Cyanide (total) | 78 | 16 | 0.0754 (J) | 1.25 | Nonparametric | 0.225 | 95% KM (t) |
| Iron | 78 | 78 | 952 (J+) | 25800 (J+) | Gamma | 8653 | 95% Approximate Gamma |
| Lead | 79 | 79 | 1.99 | 109 (J+) | Gamma | 17.06 | 95% Approximate Gamma |
| Mercury | 78 | 74 | 0.0038 (J) | 1.14 | Nonparametric | 0.153 | 95% KM [Chebyshev] |
| Nickel | 78 | 78 | 1.1 | 11.1 | Gamma | 4.754 | 95% Approximate Gamma |
| Nitrate | 78 | 33 | 0.604 (J) | 4.6 | Nonparametric | 1.313 | 95% KM [t] |
| Perchlorate | 78 | 4 | 0.00062 (J-) | 0.00285 (UJ) | n/a* | 0.00248 | Maximum detected concentration |
| Selenium | 78 | 16 | 0.658 (J) | 17.1 (U) | Nonparametric | 0.967 | 95% KM [t] |
| Uranium | 76 | 76 | 0.486 | 16.6 | Nonparametric | 2.706 | 95% Chebyshev [Mean, SD] |
| Zinc | 78 | 78 | 6.77 | 221 | Nonparametric | 61.32 | 95% Chebyshev [Mean, SD] |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 81 | 1 | 0.0343 (U) | 0.79 (U) | n/a | 0.0369 | Maximum detected concentration |
| Acenaphthylene | 81 | 1 | 0.0265 (J) | 0.79 (U) | n/a | 0.0265 | Maximum detected concentration |
| Acetone | 53 | 6 | 0.00288 (U) | 0.0846 | Nonparametric | 0.00997 | 95% KM [BCA] |
| Anthracene | 81 | 5 | 0.0116 (J) | 0.79 (U) | Nonparametric | 0.0434 | 95% KM [Percentile Bootstrap] |

**Table H-2.2-36 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Aroclor-1254 | 1 | 1 | 0.0025 | 0.0025 | n/a | 0.0025 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0022 | 0.0022 | n/a | 0.0022 | Maximum detected concentration |
| Benzo(a)anthracene | 81 | 7 | 0.018 (U) | 0.82 | Nonparametric | 0.0915 | 95% KM [Percentile Bootstrap] |
| Benzo(a)pyrene | 81 | 5 | 0.0213 (J) | 2.17 | Nonparametric | 0.105 | 95% KM [t] |
| Benzo(b)fluoranthene | 81 | 13 | 0.0129 (J) | 3.53 (J) | Nonparametric | 0.163 | 95% KM [t] |
| Benzo(g,h,i)perylene | 81 | 4 | 0.0343 (U) | 2.49 | n/a | 2.49 | Maximum detected concentration |
| Benzo(k)fluoranthene | 81 | 4 | 0.0191 (J) | 0.79 (UJ) | n/a | 0.0446 | Maximum detected concentration |
| Benzoic acid | 81 | 1 | 0.224 (J) | 3.9 (U) | n/a | 0.224 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 81 | 5 | 0.0773 (U) | 0.828 (U) | Nonparametric | 0.115 | 95% KM [Percentile Bootstrap] |
| Chloroform | 53 | 1 | 0.000233 (J) | 0.00132 (U) | n/a | 2.33E-04 | Maximum detected concentration |
| Chrysene | 81 | 15 | 0.0132 (J) | 0.79 (U) | Nonparametric | 0.0534 | 95% KM [BCA] |
| Di-n-butylphthalate | 81 | 1 | 0.327 (J) | 1.66 (U) | n/a | 0.327 | Maximum detected concentration |
| Ethylbenzene | 53 | 1 | 0.000265 (J) | 0.00132 (U) | n/a | 2.65E-04 | Maximum detected concentration |
| Fluoranthene | 81 | 29 | 0.0111 (J) | 1.47 | Nonparametric | 0.0891 | 95% KM [BCA] |
| Fluorene | 81 | 1 | 0.0343 (U) | 0.79 (U) | n/a | 0.041 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000013 (J) | 0.0000013 (J) | n/a | 1.3E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.000000546 (J) | 0.000000546 (J) | n/a | 5.46E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 81 | 3 | 0.0343 (U) | 1.7 (J) | n/a | 1.7 | Maximum detected concentration |
| Isopropyltoluene[4-] | 53 | 2 | 0.00038 (J) | 0.00205 (J) | n/a | 0.00205 | Maximum detected concentration |
| Methylnaphthalene[2-] | 81 | 1 | 0.029 (J) | 0.79 (U) | n/a | 0.029 | Maximum detected concentration |
| Naphthalene | 81 | 1 | 0.0343 (U) | 0.79 (U) | n/a | 0.0435 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000879 | 0.00000879 | n/a | 8.79E-06 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000000714 (J) | 0.000000714 (J) | n/a | 7.14E-07 | Maximum detected concentration |

**Table H-2.2-36 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Phenanthrene | 81 | 14 | 0.011 (J) | 0.79 (U) | Nonparametric | 0.0434 | 95% KM [BCA] |
| Pyrene | 81 | 25 | 0.0117 (U) | 0.964 | Nonparametric | 0.0824 | 95% KM [BCA] |
| Toluene | 53 | 12 | 0.000408 (J) | 0.00329 | Nonparametric | 0.0009457 3 | 95% KM [t] |
| Xylene[1,3-]+xylene[1,4-] | 53 | 1 | 0.000319 (J) | 0.00264 (U) | n/a | 3.19E-04 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 80 | 15 | -0.0265 (U) | 0.181 | Nonparametric | 0.0514 | 95% KM [Percentile Bootstrap] |
| Cesium-137 | 75 | 26 | -0.0415 (U) | 1.17 | Nonparametric | 0.327 | 97.5% KM [Chebyshev] |
| Plutonium-238 | 80 | 5 | -0.00895 (U) | 0.0439 | Nonparametric | 0.0241 | 95% KM [Percentile Bootstrap] |
| Plutonium-239/240 | 80 | 56 | -0.0125 (U) | 3.92 | Nonparametric | 0.867 | 97.5% KM (Chebyshev) |
| Tritium | 78 | 31 | 0.00152953 (U) | 0.19858 | Nonparametric | 0.0331 | 95% KM [t] |
| Uranium-234 | 78 | 78 | 0.681 | 4.43 | Normal | 1.345 | 95% Modified-t |
| Uranium-235/236 | 78 | 56 | 0.0216 (U) | 0.256 | Nonparametric | 0.0871 | 95% KM [BCA] |
| Uranium-238 | 78 | 78 | 0.725 | 4.31 | Normal | 1.342 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-37**
**Exposure Point Concentrations for SWMU 21-024(h) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 12 | 2 | 0.145 (J-) | 0.639 (UJ) | n/a | 0.15 | Maximum detected concentration |
| Arsenic | 12 | 12 | 1.52 (J) | 4.54 | Gamma | 2.855 | 95% Approximate Gamma |
| Barium | 12 | 12 | 28.1 | 116 | Normal | 76.5 | 95% Student's-t |
| Cadmium | 12 | 5 | 0.1 | 0.987 | Nonparametric | 0.364 | 95% KM (t) |
| Chromium | 12 | 12 | 2.89 | 15.5 | Gamma | 7.824 | 95% Approximate Gamma |
| Copper | 12 | 12 | 4.29 | 31.5 | Nonparametric | 17.7 | 95% Chebyshev (Mean, Sd) |
| Cyanide (total) | 12 | 5 | 0.12 (J) | 0.815 | Nonparametric | 0.4 | 95% KM (Percentile Bootstrap) |
| Lead | 12 | 12 | 7.72 | 35.7 | Gamma | 18.42 | 95% Approximate Gamma |
| Mercury | 12 | 12 | 0.01 | 0.36 | Gamma | 0.166 | 95% Approximate Gamma |
| Molybdenum | 1 | 1 | 0.72 | 0.72 | n/a* | 0.72 | Maximum detected concentration |
| Nickel | 12 | 12 | 2.04 | 12 | Normal | 5.901 | 95% Modified-t |
| Nitrate | 12 | 8 | 0.32 (U) | 1.84 | Nonparametric | 1.404 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 12 | 2 | 0.000613 (J) | 0.0058 (U) | n/a | 0.00258 | Maximum detected concentration |
| Selenium | 12 | 3 | 0.58 (U) | 2.43 (U) | n/a | 1.64 | Maximum detected concentration |
| Silver | 12 | 12 | 0.0437 (J) | 0.351 | Lognormal | 0.144 | 95% H |
| Vanadium | 12 | 12 | 6.49 | 19.5 | Normal | 15.24 | 95% Student's-t |
| Zinc | 12 | 12 | 24.1 | 321 | Nonparametric | 162.8 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Anthracene | 12 | 1 | 0.0108 (J) | 0.38 (U) | n/a | 0.0108 | Maximum detected concentration |
| Benzo(b)fluoranthene | 12 | 2 | 0.0343 (U) | 0.38 (U) | n/a | 0.157 | Maximum detected concentration |
| Benzo(k)fluoranthene | 12 | 1 | 0.026 (U) | 0.38 (U) | n/a | 0.0458 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 12 | 2 | 0.0885 (J) | 1.4 | n/a | 1.4 | Maximum detected concentration |

**Table H-2.2-37 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Chrysene | 12 | 2 | 0.0164 (J) | 0.38 (U) | n/a | 0.0179 | Maximum detected concentration |
| Fluoranthene | 12 | 7 | 0.0133 (J) | 0.38 (U) | Nonparametric | 0.0308 | 95% KM (t) |
| Phenanthrene | 12 | 4 | 0.0141 (J) | 0.38 (U) | n/a | 0.0332 | Maximum detected concentration |
| Pyrene | 12 | 7 | 0.0164 (J) | 0.38 (U) | Nonparametric | 0.035 | 95% KM (t) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 12 | 9 | 0.01 (U) | 0.253 | Nonparametric | 0.156 | 95% KM (t) |
| Cesium-137 | 12 | 11 | 0.0486 (U) | 0.976 | Nonparametric | 0.487 | 95% KM (t) |
| Plutonium-238 | 15 | 7 | -0.00609 (U) | 0.061 | Nonparametric | 0.0404 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 15 | 15 | 0.133 | 4.09 | Normal | 2.355 | 95% Student's-t |
| Tritium | 12 | 11 | 0.012587 | 0.71399 | Nonparametric | 0.381 | 95% KM (Chebyshev) |
| Uranium-234 | 12 | 12 | 0.522 | 2.56 | Gamma | 1.396 | 95% Approximate Gamma |
| Uranium-235/236 | 12 | 10 | 0.0362 (U) | 0.16 | Nonparametric | 0.0926 | 95% KM (t) |
| Uranium-238 | 12 | 12 | 0.558 | 2.08 | Gamma | 1.229 | 95% Approximate Gamma |

* n/a = Not applicable.

**Table H-2.2-38**
**Exposure Point Concentrations for SWMU 21-024(h) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 8 | 36 | 0.059 (J-) | 11.9 (J-) | Nonparametric | 1.123 | 95% KM (t) |
| Arsenic | 36 | 36 | 0.964 (J) | 11.9 | Nonparametric | 4.119 | 95% KM (Chebyshev) |
| Barium | 31 | 31 | 8.86 | 165 | Nonparametric | 72.72 | 95% KM (Chebyshev) |
| Cadmium | 16 | 36 | 0.042 (J) | 4.99 | Nonparametric | 0.627 | 95% KM (BCA) |
| Chromium | 36 | 36 | 1.6 | 57.5 (J-) | Nonparametric | 15.36 | 95% KM (Chebyshev) |
| Copper | 36 | 36 | 0.895 (J) | 374 | Nonparametric | 82.1 | 97.5% KM (Chebyshev) |
| Cyanide (Total) | 11 | 35 | 0.105 (J) | 2.76 | Nonparametric | 0.427 | 95% KM (t) |
| Lead | 36 | 36 | 3.11 (J) | 317 | Nonparametric | 62.19 | 95% KM (Chebyshev) |
| Mercury | 35 | 35 | 0.0043 (J) | 20 | Nonparametric | 6.502 | 99% KM (Chebyshev) |
| Molybdenum | 2 | 2 | 0.49 (J) | 0.72 | n/a* | 0.72 | Maximum detected concentration |
| Nickel | 36 | 36 | 1.32 | 12 | Nonparametric | 4.574 | 95% KM (BCA) |
| Nitrate | 14 | 35 | 0.11 (U) | 1.84 | Nonparametric | 1.209 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 12 | 35 | 0.000613 (J) | 0.0058 (U) | Nonparametric | 0.00171 | 95% KM (t) |
| Selenium | 12 | 36 | 0.15 (J) | 7.92 (U) | Nonparametric | 0.984 | 95% KM (Percentile Bootstrap) |
| Silver | 33 | 36 | 0.0437 (J) | 16 | Nonparametric | 3.536 | 97.5% KM (Chebyshev) |
| Vanadium | 36 | 36 | 1.46 (J) | 23.9 | Nonparametric | 11.56 | 95% KM (t) |
| Zinc | 36 | 36 | 19.1 (J-) | 407 (J-) | Nonparametric | 113.4 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 2 | 37 | 0.0169 (J) | 0.38 (U) | n/a | 0.0247 | Maximum detected concentration |
| Acenaphthylene | 1 | 37 | 0.0135 (J) | 0.38 (U) | n/a | 0.0135 | Maximum detected concentration |
| Acetone | 1 | 22 | 0.00495 (J) | 0.00643 (UJ) | n/a | 0.00495 | Maximum detected concentration |

**Table H-2.2-38 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Anthracene | 5 | 37 | 0.0108 (J) | 0.38 (U) | Nonparametric | 0.0286 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 5 | 37 | 0.0123 (U) | 0.38 (U) | Nonparametric | 0.0393 | 95% KM (t) |
| Benzo(a)pyrene | 4 | 37 | 0.0342 (U) | 0.38 (U) | n/a | 0.176 | Maximum detected concentration |
| Benzo(b)fluoranthene | 7 | 37 | 0.0342 (U) | 0.38 (U) | Nonparametric | 0.157 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 2 | 37 | 0.0342 (U) | 0.38 (U) | n/a | 0.135 | Maximum detected concentration |
| Benzo(k)fluoranthene | 3 | 37 | 0.0232 (J) | 0.38 (U) | n/a | 0.0458 | Maximum detected concentration |
| Benzoic acid | 1 | 37 | 0.613 (J) | 1.9 (U) | n/a | 0.613 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 5 | 37 | 0.0736 (J) | 1.4 | Nonparametric | 0.202 | 95% KM (t) |
| Chloroform | 2 | 24 | 0.000225 (J) | 0.0057 (U) | n/a | 0.000246 | Maximum detected concentration |
| Chrysene | 8 | 37 | 0.0164 (J) | 0.38 (U) | Nonparametric | 0.0358 | 95% KM (t) |
| Di-n-butylphthalate | 6 | 37 | 0.0392 (J) | 1.32 | Nonparametric | 0.248 | 95% KM (t) |
| Fluoranthene | 15 | 37 | 0.0113 (J) | 0.38 (U) | Nonparametric | 0.0503 | 95% KM (t) |
| Fluorene | 1 | 37 | 0.0152 (J) | 0.38 (U) | n/a | 0.0152 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 1.8E-06 (J) | 1.8E-06 (J) | n/a | 1.8E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 6.54E-07 (J) | 6.54E-07 (J) | n/a | 6.54E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 6.33E-08 (J) | 6.33E-08 (J) | n/a | 6.33E-08 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 8.77E-08 (J) | 8.77E-08 (J) | n/a | 8.77E-08 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 1 | 37 | 0.0149 (U) | 0.38 (U) | n/a | 0.104 | Maximum detected concentration |
| Isopropyltoluene[4-] | 2 | 24 | 0.000446 (J) | 0.0057 (U) | n/a | 0.000586 | Maximum detected concentration |
| Naphthalene | 1 | 37 | 0.015 (J) | 0.38 (U) | n/a | 0.015 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 1.23E-05 | 1.23E-05 | n/a | 1.23E-05 | Maximum detected concentration |

**Table H-2.2-38 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 9.73E-07 (J) | 9.73E-07 (J) | n/a | 9.73E-07 | Maximum detected concentration |
| Phenanthrene | 11 | 37 | 0.011 (J) | 0.38 (U) | Nonparametric | 0.0372 | 95% KM (t) |
| Pyrene | 15 | 37 | 0.0139 (J) | 0.38 (U) | Nonparametric | 0.0533 | 95% KM (t) |
| Tetrachloroethene | 1 | 24 | 0.000249 (J) | 0.0057 (U) | n/a | 0.000249 | Maximum detected concentration |
| Toluene | 7 | 24 | 0.000374 (J) | 0.0057 (U) | Nonparametric | 0.000849 | 95% KM (t) |
| Trimethylbenzene[1,2,4-] | 1 | 24 | 0.00035 (J) | 0.0057 (U) | n/a | 0.00035 | Maximum detected concentration |
| Trimethylbenzene[1,3,5-] | 1 | 24 | 0.000252 (J) | 0.0057 (U) | n/a | 0.000252 | Maximum detected concentration |
| Xylene[1,2-] | 1 | 24 | 0.00024 (J) | 0.0057 (U) | n/a | 0.00024 | Maximum detected concentration |
| Xylene[1,3-]+Xylene[1,4-] | 2 | 24 | 0.000294 (J) | 0.0057 (U) | n/a | 0.000421 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 15 | 38 | -0.00405 (U) | 0.253 | Nonparametric | 0.0861 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 18 | 36 | -0.0533 (U) | 0.976 | Nonparametric | 0.244 | 95% KM (t) |
| Plutonium-238 | 8 | 42 | -0.00609 (U) | 0.061 | Nonparametric | 0.0364 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 37 | 42 | -0.00255 (U) | 7.4 | Nonparametric | 1.636 | 95% KM (BCA) |
| Tritium | 36 | 38 | 0.0126 | 10.4 | Nonparametric | 3.75 | 99% KM (Chebyshev) |
| Uranium-234 | 35 | 35 | 0.522 | 3.08 | Nonparametric | 1.592 | 95% KM (Chebyshev) |
| Uranium-235/236 | 29 | 35 | 0.0362 (U) | 0.179 | Nonparametric | 0.087 | 95% KM (BCA) |
| Uranium-238 | 35 | 35 | 0.558 | 2.91 | Nonparametric | 1.481 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-39**
**Exposure Point Concentrations for SWMU 21-024(h) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 47 | 10 | 0.059 (J-) | 11.9 (J-) | Nonparametric | 0.915 | 95% KM (t) |
| Arsenic | 47 | 47 | 0.964 (J) | 11.9 | Normal | 3.212 | 95% Modified-t |
| Barium | 41 | 41 | 8.86 | 165 | Gamma | 51.79 | 95% Approximate Gamma |
| Cadmium | 47 | 18 | 0.042 (J) | 4.99 | Nonparametric | 0.535 | 95% KM (BCA) |
| Chromium | 47 | 47 | 1.6 | 57.5 (J-) | Nonparametric | 14.71 | 95% Chebyshev (Mean, Sd) |
| Copper | 47 | 47 | 0.895 (J) | 374 | Nonparametric | 94.26 | 99% Chebyshev (Mean, Sd) |
| Cyanide (total) | 46 | 14 | 0.105 (J) | 2.76 | Nonparametric | 0.39 | 95% KM (Percentile Bootstrap) |
| Lead | 47 | 47 | 3.11 (J) | 317 | Nonparametric | 54.53 | 95% Chebyshev (Mean, Sd) |
| Mercury | 46 | 46 | 0.0043 (J) | 20 | Nonparametric | 5.065 | 99% Chebyshev (Mean, Sd) |
| Molybdenum | 2 | 2 | 0.49 (J) | 0.72 | n/a* | 0.72 | Maximum detected concentration |
| Nickel | 47 | 47 | 1.28 | 13 | Gamma | 4.458 | 95% Approximate Gamma |
| Nitrate | 46 | 19 | 0.11 (U) | 6.2 (J-) | Nonparametric | 1.463 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 46 | 13 | 0.000613 (J) | 0.0058 (U) | Nonparametric | 0.00169 | 95% KM (t) |
| Selenium | 47 | 20 | 0.15 (J) | 7.92 (U) | Nonparametric | 1.19 | 95% KM (t) |
| Silver | 47 | 40 | 0.0437 (J) | 16 | Nonparametric | 2.133 | 95% KM (Chebyshev) |
| Vanadium | 47 | 47 | 1.46 (J) | 23.9 | Gamma | 10.7 | 95% Approximate Gamma |
| Zinc | 47 | 47 | 19.1 (J-) | 407 (J-) | Nonparametric | 98.89 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 48 | 2 | 0.0169 (J) | 0.38 (U) | n/a | 0.0247 | Maximum detected concentration |
| Acenaphthylene | 48 | 1 | 0.0135 (J) | 0.38 (U) | n/a | 0.0135 | Maximum detected concentration |
| Acetone | 33 | 2 | 0.00495 (J) | 0.00643 (UJ) | n/a | 0.00497 | Maximum detected concentration |
| Anthracene | 48 | 5 | 0.0108 (J) | 0.38 (U) | Nonparametric | 0.0282 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 48 | 5 | 0.0123 (U) | 0.38 (U) | Nonparametric | 0.0353 | 95% KM (t) |

**Table H-2.2-39 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene | 48 | 5 | 0.0264 (J) | 0.38 (U) | Nonparametric | 0.125 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 48 | 8 | 0.034 (J) | 0.38 (U) | Nonparametric | 0.132 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 48 | 2 | 0.0342 (U) | 0.38 (U) | n/a | 0.135 | Maximum detected concentration |
| Benzo(k)fluoranthene | 48 | 4 | 0.0166 (J) | 0.38 (U) | n/a | 0.0458 | Maximum detected concentration |
| Benzoic acid | 48 | 1 | 0.613 (J) | 1.9 (U) | n/a | 0.613 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 48 | 5 | 0.0736 (J) | 1.4 | Nonparametric | 0.179 | 95% KM (t) |
| Chloroform | 35 | 2 | 0.000225 (J) | 0.0057 (U) | n/a | 0.000246 | Maximum detected concentration |
| Chrysene | 48 | 9 | 0.0164 (J) | 0.38 (U) | Nonparametric | 0.0323 | 95% KM (t) |
| Di-n-butylphthalate | 48 | 7 | 0.0392 (J) | 1.32 | Nonparametric | 0.222 | 95% KM (BCA) |
| Dichlorobenzene[1,4-] | 83 | 1 | 0.000327 (U) | 0.518 (U) | n/a | 0.000396 | Maximum detected concentration |
| Fluoranthene | 48 | 16 | 0.0113 (J) | 0.38 (U) | Nonparametric | 0.0437 | 95% KM (t) |
| Fluorene | 48 | 1 | 0.0152 (J) | 0.38 (U) | n/a | 0.0152 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000018 (J) | 0.0000018 (J) | n/a | 1.8E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.000000654 (J) | 0.000000654 (J) | n/a | 6.54E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 1 | 1 | 6.33E-08 (J) | 6.33E-08 (J) | n/a | 6.33E-08 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 8.77E-08 (J) | 8.77E-08 (J) | n/a | 8.77E-08 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 48 | 1 | 0.0149 (U) | 0.38 (U) | n/a | 0.104 | Maximum detected concentration |
| Isopropyltoluene[4-] | 35 | 2 | 0.000446 (J) | 0.0057 (U) | n/a | 0.000586 | Maximum detected concentration |
| Naphthalene | 50 | 1 | 0.0056 (U) | 0.38 (U) | n/a | 0.015 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000123 | 0.0000123 | n/a | 1.23E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.000000973 (J) | 0.000000973 (J) | n/a | 9.73E-07 | Maximum detected concentration |

**Table H-2.2-39 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Phenanthrene | 48 | 11 | 0.011 (J) | 0.38 (U) | Nonparametric | 0.0336 | 95% KM (t) |
| Pyrene | 48 | 16 | 0.0139 (J) | 0.38 (U) | Nonparametric | 0.0459 | 95% KM (t) |
| Tetrachloroethene | 35 | 1 | 0.000249 (J) | 0.0057 (U) | n/a | 0.000249 | Maximum detected concentration |
| Toluene | 35 | 7 | 0.000374 (J) | 0.0057 (U) | Nonparametric | 0.0007639 | 95% KM (t) |
| Trimethylbenzene[1,2,4-] | 35 | 1 | 0.00035 (J) | 0.0057 (U) | n/a | 0.00035 | Maximum detected concentration |
| Trimethylbenzene[1,3,5-] | 35 | 1 | 0.000252 (J) | 0.0057 (U) | n/a | 0.000252 | Maximum detected concentration |
| Xylene[1,2-] | 35 | 2 | 0.00024 (J) | 0.0057 (U) | n/a | 0.000278 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 35 | 3 | 0.000294 (J) | 0.0057 (U) | n/a | 0.000547 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 49 | 15 | -0.00405 (U) | 0.253 | Nonparametric | 0.0773 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 47 | 18 | -0.067 (U) | 0.976 | Nonparametric | 0.206 | 95% KM (t) |
| Plutonium-238 | 55 | 8 | -0.0159 (U) | 0.061 | Nonparametric | 0.0367 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 55 | 44 | -0.00255 (U) | 7.4 | Nonparametric | 1.353 | 95% KM (BCA) |
| Tritium | 49 | 47 | 0.0125868 | 10.3982 | Nonparametric | 2.299 | 97.5% KM (Chebyshev) |
| Uranium-234 | 46 | 46 | 0.522 | 3.08 | Normal | 1.294 | 95% Modified-t |
| Uranium-235/236 | 47 | 38 | -0.07 (U) | 0.179 | Nonparametric | 0.0838 | 95% KM (BCA) |
| Uranium-238 | 46 | 46 | 0.558 | 2.91 | Normal | 1.219 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-40**
**Exposure Point Concentrations for SWMU 21-024(i) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 44 | 44 | 1300 | 28000 | Gamma | 9581 | 95% Approximate Gamma |
| Antimony | 27 | 6 | 0.0584 (J-) | 7.3 (U) | Nonparametric | 2.04 | 97.5% KM (Chebyshev) |
| Arsenic | 44 | 44 | 0.71 (J) | 8.3 | Gamma | 4.112 | 95% Approximate Gamma |
| Barium | 44 | 44 | 8.7 | 304 | Gamma | 123.7 | 95% Approximate Gamma |
| Calcium | 44 | 44 | 360 | 6700 | Gamma | 2478 | 95% Approximate Gamma |
| Chromium | 44 | 44 | 1 | 44.7 | Gamma | 14.64 | 95% Approximate Gamma |
| Copper | 44 | 42 | 1 | 22.2 | Nonparametric | 8.629 | 95% KM (BCA) UCL |
| Lead | 44 | 44 | 3.6 | 144 | Nonparametric | 50.61 | 95% Chebyshev (Mean, Sd) |
| Mercury | 44 | 33 | 0.0111 | 14.7 | Nonparametric | 5.156 | 97.5% KM (Chebyshev) |
| Perchlorate | 7 | 1 | 0.0532 (J) | 0.308 (U) | n/a* | 0.0532 | Maximum detected concentration |
| Selenium | 44 | 19 | 0.29 (J-) | 1.67 | Nonparametric | 0.493 | 95% KM (% Bootstrap) |
| Zinc | 44 | 44 | 13.1 | 316 | Nonparametric | 123.9 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 24 | 1 | 0.0339 (U) | 0.38 (U) | n/a | 0.044 | Maximum detected concentration |
| Acetone | 1 | 1 | 0.2 (J) | 0.2 (J) | n/a | 0.2 | Maximum detected concentration |
| Anthracene | 24 | 1 | 0.0339 (U) | 0.38 (U) | n/a | 0.045 | Maximum detected concentration |
| Aroclor-1254 | 24 | 8 | 0.0035 (U) | 0.906 | Nonparametric | 0.256 | 95% KM (Percentile Bootstrap) |
| Aroclor-1260 | 24 | 6 | 0.0035 (U) | 0.4 | Nonparametric | 0.221 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 24 | 1 | 0.0339 (UJ) | 0.38 (U) | n/a | 0.082 | Maximum detected concentration |
| Benzo(a)pyrene | 24 | 1 | 0.0339 (UJ) | 0.38 (U) | n/a | 0.074 | Maximum detected concentration |
| Benzo(b)fluoranthene | 24 | 1 | 0.0339 (UJ) | 0.38 (U) | n/a | 0.078 | Maximum detected concentration |
| Benzo(k)fluoranthene | 24 | 1 | 0.0339 (UJ) | 0.38 (U) | n/a | 0.078 | Maximum detected concentration |
| Benzoic acid | 24 | 1 | 0.18 (J) | 3.8 (U) | n/a | 0.18 | Maximum detected concentration |

**Table H-2.2-40 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 24 | 2 | 0.0447 (J) | 0.38 (U) | n/a | 0.055 | Maximum detected concentration |
| Butanone[2-] | 1 | 1 | 0.056 | 0.056 | n/a | 0.056 | Maximum detected concentration |
| Chrysene | 24 | 1 | 0.0339 (UJ) | 0.38 (U) | n/a | 0.089 | Maximum detected concentration |
| Di-n-butylphthalate | 24 | 2 | 0.0408 (J) | 0.38 (U) | n/a | 0.0432 | Maximum detected concentration |
| Fluoranthene | 24 | 4 | 0.0244 (J) | 0.57 | n/a | 0.57 | Maximum detected concentration |
| Phenanthrene | 24 | 3 | 0.0339 (U) | 0.66 | n/a | 0.66 | Maximum detected concentration |
| Pyrene | 24 | 4 | 0.0339 (UJ) | 0.52 | n/a | 0.52 | Maximum detected concentration |
| Toluene | 1 | 1 | 0.0022 (J) | 0.0022 (J) | n/a | 0.0022 | Maximum detected concentration |
| Trimethylbenzene[1,2,4-] | 1 | 1 | 0.0024 (J) | 0.0024 (J) | n/a | 0.0024 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Tritium | 35 | 30 | 0.02 (U) | 2.4 | Nonparametric | 0.742 | 95% KM (Chebyshev) |
| Uranium-235/236 | 19 | 18 | 0.007 (U) | 0.306 | Nonparametric | 0.185 | 95% KM (Chebyshev) |
| Americium-241 | 40 | 3 | -0.29 (U) | 0.4377 (U) | n/a | 0.0616 | Maximum detected concentration |
| Cesium-137 | 35 | 17 | -0.044 (U) | 1.03 | Nonparametric | 0.311 | 95% KM (t) UCL |
| Plutonium-239/240 | 8 | 7 | 0.017 (U) | 2.94 | Nonparametric | 1.791 | 95% KM (t) |
| Thorium-228 | 35 | 35 | 1.11 | 1.83 | Normal | 1.475 | 95% Student's-t |
| Thorium-230 | 35 | 34 | 0.0764 (U) | 1.4 | Nonparametric | 1.069 | 95% KM (BCA) |
| Tritium | 35 | 30 | 0.02 (U) | 2.4 | Nonparametric | 0.742 | 95% KM (Chebyshev) |
| Uranium-234 | 35 | 35 | 0.662 | 7.25 | Nonparametric | 2.995 | 95% Chebyshev (Mean, Sd) |

* n/a = Not applicable.

**Table H-2.2-41**
**Exposure Point Concentrations for SWMU 21-024(i) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 62 | 62 | 390 | 28000 | Gamma | 8501 | 95% Approximate Gamma |
| Antimony | 6 | 36 | 0.0584 (J-) | 7.3 (U) | Nonparametric | 1.553 | 97.5% KM (Chebyshev) |
| Arsenic | 62 | 62 | 0.55 (J-) | 8.3 | Gamma | 3.62 | 95% Approximate Gamma |
| Barium | 62 | 62 | 4.4 | 304 | Gamma | 107 | 95% Approximate Gamma |
| Calcium | 62 | 62 | 360 | 74400 | Nonparametric | 11618 | 95% Chebyshev (Mean, Sd) |
| Chromium | 62 | 62 | 1 | 44.7 | Lognormal | 12.83 | 95% H |
| Copper | 60 | 62 | 1 (U) | 22.2 | Nonparametric | 8.93 | 95% KM (Chebyshev) |
| Lead | 62 | 62 | 3.5 | 144 | Nonparametric | 39.91 | 95% Chebyshev (Mean, Sd) |
| Lithium | 1 | 1 | 14.8 | 14.8 | n/a* | 14.8 | Maximum detected concentration |
| Mercury | 42 | 61 | 0.0111 | 14.7 | Nonparametric | 3.817 | 97.5% KM (Chebyshev) |
| Perchlorate | 1 | 7 | 0.0532 (J) | 0.308 (U) | n/a | 0.0532 | Maximum detected concentration |
| Selenium | 35 | 62 | 0.21 (UJ) | 1.67 | Nonparametric | 0.507 | 95% KM (% Bootstrap) |
| Strontium | 1 | 1 | 223 | 223 | n/a | 223 | Maximum detected concentration |
| Zinc | 62 | 62 | 10.3 | 316 | Nonparametric | 97.1 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 1 | 39 | 0.0339 (U) | 0.66 (U) | n/a | 0.044 | Maximum detected concentration |
| Acetone | 10 | 15 | 0.014 (J) | 0.2 (J) | Nonparametric | 0.0646 | 95% KM (BCA) |
| Anthracene | 1 | 39 | 0.0339 (U) | 0.66 (U) | n/a | 0.045 | Maximum detected concentration |
| Aroclor-1254 | 9 | 38 | 0.0035 (U) | 0.906 | Nonparametric | 0.158 | 95% KM (t) |
| Aroclor-1260 | 6 | 38 | 0.0035 (U) | 0.4 | Nonparametric | 0.204 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 1 | 39 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.082 | Maximum detected concentration |
| Benzo(a)pyrene | 1 | 39 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.074 | Maximum detected concentration |

**Table H-2.2-41 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 1 | 39 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.078 | Maximum detected concentration |
| Benzo(k)fluoranthene | 1 | 39 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.078 | Maximum detected concentration |
| Benzoic acid | 1 | 39 | 0.18 (J) | 3.8 (U) | n/a | 0.18 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 39 | 0.0447 (J) | 0.66 (U) | n/a | 0.055 | Maximum detected concentration |
| Bromomethane | 1 | 15 | 0.0034 (J) | 0.014 (UJ) | n/a | 0.0034 | Maximum detected concentration |
| Butanone[2-] | 8 | 15 | 0.0042 (J) | 0.056 | Nonparametric | 0.0184 | 95% KM (t) |
| Chrysene | 1 | 39 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.089 | Maximum detected concentration |
| DDT[4,4'-] | 1 | 31 | 0.0017 (UJ) | 0.02 (U) | n/a | 0.0028 | Maximum detected concentration |
| Di-n-butylphthalate | 2 | 39 | 0.0408 (J) | 0.66 (U) | n/a | 0.0432 | Maximum detected concentration |
| Fluoranthene | 4 | 39 | 0.0244 (J) | 0.66 (U) | n/a | 0.57 | Maximum detected concentration |
| Isopropylbenzene | 1 | 15 | 0.0025 (J) | 0.0071 (U) | n/a | 0.0025 | Maximum detected concentration |
| Phenanthrene | 3 | 39 | 0.0339 (U) | 0.66 | n/a | 0.66 | Maximum detected concentration |
| Pyrene | 4 | 39 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.52 | Maximum detected concentration |
| Toluene | 3 | 15 | 0.0022 (J) | 0.0071 (U) | n/a | 0.006 | Maximum detected concentration |
| Trichlorofluoromethane | 2 | 15 | 0.0016 (J) | 0.014 (U) | n/a | 0.0018 | Maximum detected concentration |
| Trimethylbenzene[1,2,4-] | 2 | 15 | 0.0024 (J) | 0.0071 (U) | n/a | 0.003 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 3 | 58 | -0.29 (U) | 0.438 (U) | n/a | 0.0616 | Maximum detected concentration |
| Cesium-137 | 17 | 53 | -0.044 (U) | 1.03 | Nonparametric | 0.234 | 95% KM (t) |
| Plutonium-239/240 | 12 | 23 | -0.007 (U) | 2.94 | Nonparametric | 0.694 | 95% KM (t) |
| Tritium | 43 | 53 | -0.21 (U) | 147 | Nonparametric | 47.66 | 99% KM (Chebyshev) |
| Uranium-234 | 53 | 53 | 0.54 | 7.25 | Nonparametric | 2.351 | 95% KM (Chebyshev) |
| Uranium-235/236 | 30 | 37 | 0.007 (U) | 0.306 | Nonparametric | 0.12 | 95% KM (Chebyshev) |
| Uranium-238 | 53 | 53 | 0.608 | 3.45 | Nonparametric | 1.457 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-42**
**Exposure Point Concentrations for SWMU 21-024(i) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 79 | 79 | 256 (J+) | 28000 | Gamma | 7493 | 95% Approximate Gamma |
| Antimony | 43 | 6 | 0.0584 (J-) | 7.3 (U) | Nonparametric | 1 | 95% KM (Chebyshev) |
| Arsenic | 79 | 79 | 0.12 (J) | 8.3 | Gamma | 3.325 | 95% Approximate Gamma |
| Barium | 79 | 79 | 3.4 (J) | 304 | Gamma | 92.59 | 95% Approximate Gamma |
| Calcium | 79 | 79 | 256 (J) | 74400 | Nonparametric | 14702 | 97.5% Chebyshev (Mean, Sd) |
| Chromium | 79 | 79 | 1 | 44.7 | Lognormal | 11.93 | 95% H |
| Copper | 79 | 76 | 0.59 (U) | 22.2 | Nonparametric | 7.711 | 95% KM (Chebyshev) |
| Lead | 79 | 79 | 1.5 | 144 | Nonparametric | 33.45 | 95% Chebyshev (Mean, Sd) |
| Lithium | 2 | 2 | 7.4 (J) | 14.8 | n/a* | 14.8 | Maximum detected concentration |
| Mercury | 77 | 51 | 0.0096 | 14.7 | Nonparametric | 3.068 | 97.5% KM (Chebyshev) |
| Nitrate | 7 | 2 | 0.9 (U) | 2.83 | n/a | 2.83 | Maximum detected concentration |
| Perchlorate | 12 | 1 | 0.00211 (U) | 0.308 (U) | n/a | 0.0532 | Maximum detected concentration |
| Selenium | 79 | 51 | 0.21 (J) | 15.6 | Nonparametric | 1.253 | 95% KM (BCA) |
| Strontium | 2 | 2 | 223 | 262 | n/a | 262 | Maximum detected concentration |
| Zinc | 79 | 79 | 10.3 | 316 | Nonparametric | 82.15 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 56 | 1 | 0.0339 (U) | 0.66 (U) | n/a | 0.044 | Maximum detected concentration |
| Acetone | 31 | 12 | 0.00527 (UJ) | 0.2 (J) | Nonparametric | 0.0405 | 95% KM (% Bootstrap) |
| Anthracene | 56 | 1 | 0.0339 (U) | 0.66 (U) | n/a | 0.045 | Maximum detected concentration |
| Aroclor-1254 | 50 | 9 | 0.0035 (U) | 0.906 | Nonparametric | 0.125 | 95% KM (t) |
| Aroclor-1260 | 50 | 6 | 0.0035 (U) | 0.4 | Nonparametric | 0.201 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 56 | 1 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.082 | Maximum detected concentration |
| Benzo(a)pyrene | 56 | 1 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.074 | Maximum detected concentration |
| Benzo(b)fluoranthene | 56 | 1 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.078 | Maximum detected concentration |
| Benzo(k)fluoranthene | 56 | 1 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.078 | Maximum detected concentration |

**Table H-2.2-42 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzoic acid | 56 | 2 | 0.089 (J) | 3.8 (U) | n/a | 0.18 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 56 | 3 | 0.0447 (J) | 0.66 (U) | n/a | 0.11 | Maximum detected concentration |
| Bromomethane | 32 | 1 | 0.00105 (U) | 0.016 (U) | n/a | 0.0034 | Maximum detected concentration |
| Butanone[2-] | 31 | 9 | 0.0042 (J) | 0.056 | Nonparametric | 0.0119 | 95% KM (t) |
| Chrysene | 56 | 1 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.089 | Maximum detected concentration |
| DDT[4,4'-] | 45 | 2 | 0.0017 (U) | 0.02 (U) | n/a | 0.0028 | Maximum detected concentration |
| Di-n-butylphthalate | 56 | 2 | 0.0408 (J) | 0.66 (U) | n/a | 0.0432 | Maximum detected concentration |
| Fluoranthene | 56 | 4 | 0.0244 (J) | 0.66 (U) | n/a | 0.57 | Maximum detected concentration |
| Isopropylbenzene | 31 | 1 | 0.00105 (U) | 0.0082 (U) | n/a | 0.0025 | Maximum detected concentration |
| Phenanthrene | 56 | 3 | 0.0339 (U) | 0.66 (U) | n/a | 0.66 | Maximum detected concentration |
| Pyrene | 56 | 4 | 0.0339 (UJ) | 0.66 (U) | n/a | 0.52 | Maximum detected concentration |
| Toluene | 31 | 3 | 0.00105 (U) | 0.0082 (U) | n/a | 0.006 | Maximum detected concentration |
| Trichlorofluoromethane | 31 | 3 | 0.00105 (U) | 0.016 (U) | n/a | 0.0018 | Maximum detected concentration |
| Trimethylbenzene[1,2,4-] | 31 | 2 | 0.00105 (U) | 0.0082 (U) | n/a | 0.003 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 75 | 4 | -0.29 (U) | 0.4377 (U) | n/a | 0.0616 | Maximum detected concentration |
| Cesium-137 | 70 | 17 | -0.09 (U) | 1.03 | Nonparametric | 0.197 | 95% KM (t) |
| Plutonium-239/240 | 40 | 14 | -0.007 (U) | 2.94 | Nonparametric | 0.419 | 95% KM (t) |
| Thorium-228 | 65 | 65 | 1.04 | 2.56 | Normal | 1.559 | 95% Modified-t |
| Thorium-230 | 65 | 64 | 0.0764 (U) | 2.27 | Nonparametric | 1.168 | 95% KM (Chebyshev) |
| Tritium | 70 | 60 | -0.21 (U) | 4233.18 | Nonparametric | 572.1 | 97.5% KM (Chebyshev) |
| Uranium-234 | 70 | 70 | 0.54 | 7.25 | Nonparametric | 1.999 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 54 | 38 | 0.007 (U) | 0.306 | Nonparametric | 0.0751 | 95% KM (BCA) |
| Uranium-238 | 70 | 70 | 0.608 | 3.45 | Normal | 1.148 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-43**
**Exposure Point Concentrations for SWMU 21-024(j) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 9 | 9 | 1.35 (J) | 2.92 | Normal | 2.334 | 95% Student's-t |
| Barium | 9 | 9 | 24.4 | 82.8 (J) | Normal | 65.43 | 95% Student's-t |
| Chromium | 9 | 9 | 2.02 | 5.44 | Normal | 4.571 | 95% Student's-t |
| Copper | 9 | 9 | 2.83 | 11.6 | Gamma | 7.436 | 95% Approximate Gamma |
| Lead | 9 | 9 | 7.43 | 36.5 | Gamma | 20.23 | 95% Approximate Gamma |
| Manganese | 9 | 9 | 193 (J+) | 335 (J) | Normal | 292.9 | 95% Student's-t |
| Nickel | 9 | 9 | 1.98 (J+) | 6.17 | Normal | 4.777 | 95% Student's-t |
| Nitrate | 9 | 7 | 1.01 (U) | 2.46 (J+) | Nonparametric | 1.758 | 95% KM (t) |
| Perchlorate | 9 | 1 | 0.000861 (J-) | 0.00206 (UJ) | n/a* | 0.000861 | Maximum Concentration detected |
| Selenium | 9 | 6 | 0.606 (J) | 1.56 (U) | Nonparametric | 0.831 | 95% KM (t) |
| Zinc | 9 | 9 | 25.4 (J+) | 685 (J-) | n/a | 685 | Maximum Concentration detected |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 9 | 1 | 0.0336 (U) | 0.0479 | n/a | 0.0479 | Maximum Concentration detected |
| Anthracene | 9 | 2 | 0.011 (J) | 0.0738 | n/a | 0.0738 | Maximum Concentration detected |
| Aroclor-1254 | 4 | 2 | 0.00342 (U) | 0.0368 | n/a | 0.0368 | Maximum Concentration detected |
| Aroclor-1260 | 4 | 2 | 0.00342 (U) | 0.0238 | n/a | 0.0238 | Maximum Concentration detected |
| Benzo(a)anthracene | 9 | 2 | 0.0216 (J) | 0.15 | n/a | 0.15 | Maximum Concentration detected |
| Benzo(a)pyrene | 9 | 1 | 0.015 (U) | 0.0342 (U) | n/a | 0.0166 | Maximum Concentration detected |
| Benzo(b)fluoranthene | 9 | 4 | 0.0267 (J) | 0.215 | n/a | 0.215 | Maximum Concentration detected |
| Benzo(g,h,i)perylene | 9 | 1 | 0.0336 (U) | 0.109 | n/a | 0.109 | Maximum Concentration detected |
| Chrysene | 9 | 5 | 0.0202 (J) | 0.154 | Nonparametric | 0.0691 | 95% KM (BCA) |
| Fluoranthene | 9 | 7 | 0.0139 (J) | 0.387 | Nonparametric | 0.328 | 97.5% KM (Chebyshev) |
| Fluorene | 9 | 1 | 0.0336 (U) | 0.0363 | n/a | 0.0363 | Maximum Concentration detected |
| Indeno(1,2,3-cd)pyrene | 9 | 1 | 0.0336 (U) | 0.0867 | n/a | 0.0867 | Maximum Concentration detected |

**Table H-2.2-43 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| Naphthalene | 9 | 1 | 0.0102 (J) | 0.0347 (U) | n/a | 0.0102 | Maximum Concentration detected |
| Phenanthrene | 9 | 6 | 0.0164 (J) | 0.291 | Nonparametric | 0.246 | 97.5% KM (Chebyshev) |
| Pyrene | 9 | 6 | 0.0276 (J) | 0.345 | Nonparametric | 0.297 | 97.5% KM (Chebyshev) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 9 | 6 | 0.0186 (U) | 0.145 | Nonparametric | 0.0906 | 95% KM (t) |
| Cesium-137 | 8 | 6 | 0.0415 (U) | 1.48 | Nonparametric | 0.756 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 9 | 9 | 0.0499 | 0.423 | Gamma | 0.222 | 95% Approximate Gamma |
| Tritium | 9 | 4 | -2.19 (U) | 0.273 (U) | n/a | 0.0333 | Maximum Concentration detected |
| Uranium-234 | 9 | 9 | 0.865 | 7.79 | Gamma | 3.86 | 95% Approximate Gamma |
| Uranium-235/236 | 2 | 2 | 0.0759 | 0.0973 | n/a | 0.0973 | Maximum Concentration detected |

* n/a = Not applicable.

**Table H-2.2-44**
**Exposure Point Concentrations for SWMU 21-024(j) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 29 | 29 | 0.708 (J) | 6.33 | Gamma | 3.197 | 95% Approximate Gamma |
| Barium | 29 | 29 | 7.26 (J+) | 166 | Gamma | 73.64 | 95% Approximate Gamma |
| Chromium | 29 | 29 | 1.81 | 19.8 | Gamma | 7.443 | 95% Approximate Gamma |
| Copper | 29 | 29 | 0.728 (J) | 11.6 | Gamma | 5.418 | 95% Approximate Gamma |
| Lead | 29 | 29 | 2.73 | 36.5 | Gamma | 14.04 | 95% Approximate Gamma |
| Manganese | 29 | 29 | 85.5 | 818 (J) | Normal | 333.1 | 95% Modified-t |
| Nickel | 29 | 29 | 0.833 | 9.85 | Normal | 5.167 | 95% Student's-t |
| Nitrate | 11 | 29 | 0.927 | 5.43 | Nonparametric | 1.686 | 95% KM (% Bootstrap) |
| Perchlorate | 6 | 29 | 0.000567 (J) | 0.0161 | Nonparametric | 0.00248 | 95% KM (t) |
| Selenium | 21 | 29 | 0.606 (J) | 11.6 | Nonparametric | 7.061 | 97.5% KM (Chebyshev) |
| Zinc | 23 | 23 | 11.8 | 685 (J-) | Nonparametric | 197.9 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 2 | 29 | 0.0255 (U) | 0.0479 | n/a* | 0.0479 | Maximum detected concentration |
| Anthracene | 4 | 29 | 0.00981 (J) | 0.0738 | n/a | 0.0738 | Maximum detected concentration |
| Aroclor-1254 | 6 | 13 | 0.0016 (J) | 0.326 | Nonparametric | 0.0796 | 95% KM (t) |
| Aroclor-1260 | 5 | 13 | 0.00342 (U) | 0.26 | Nonparametric | 0.0652 | 95% KM (t) |
| Benzo(a)anthracene | 3 | 29 | 0.0216 (J) | 0.15 | n/a | 0.15 | Maximum detected concentration |
| Benzo(a)pyrene | 2 | 29 | 0.0166 (J) | 0.102 | n/a | 0.102 | Maximum detected concentration |
| Benzo(b)fluoranthene | 6 | 29 | 0.0236 (J) | 0.215 | Nonparametric | 0.0632 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 3 | 29 | 0.0131 (J) | 0.109 | n/a | 0.109 | Maximum detected concentration |

**Table H-2.2-44 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 1 | 29 | 0.0878 (J) | 0.203 (U) | n/a | 0.0878 | Maximum detected concentration |
| Chloroform | 1 | 22 | 0.000281 (J) | 0.00123 (U) | n/a | 0.000281 | Maximum detected concentration |
| Chrysene | 5 | 29 | 0.0129 (J) | 0.154 | Nonparametric | 0.0658 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 10 | 29 | 0.0139 (J) | 0.387 | Nonparametric | 0.0772 | 95% KM (BCA) |
| Fluorene | 2 | 29 | 0.0255 (U) | 0.0407 (U) | n/a | 0.0363 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 2 | 29 | 0.0255 (UJ) | 0.0867 | n/a | 0.0867 | Maximum detected concentration |
| Isopropyltoluene[4-] | 1 | 22 | 0.000368 (J) | 0.00123 (U) | n/a | 0.000368 | Maximum detected concentration |
| Methylene chloride | 5 | 22 | 0.00302 (J) | 0.00617 (U) | Nonparametric | 0.00363 | 95% KM (t) |
| Naphthalene | 2 | 29 | 0.0102 (J) | 0.0407 (U) | n/a | 0.0122 | Maximum detected concentration |
| Phenanthrene | 7 | 29 | 0.0164 (J) | 0.291 | Nonparametric | 0.0587 | 95% KM (t) |
| Pyrene | 9 | 29 | 0.0139 (J) | 0.345 | Nonparametric | 0.0735 | 95% KM (BCA) |
| Toluene | 2 | 22 | 0.000673 (J) | 0.00177 | n/a | 0.00177 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 4 | 29 | -0.00585 (U) | 0.145 | n/a | 0.145 | Maximum detected concentration |
| Cesium-137 | 5 | 24 | -0.063 (U) | 1.48 | Nonparametric | 0.331 | 95% KM (t) |
| Plutonium-239/240 | 12 | 29 | -0.00847 (U) | 0.423 | Nonparametric | 0.0962 | 95% KM (t) |
| Tritium | 22 | 29 | 0.00187 (U) | 0.768 | Nonparametric | 0.235 | 95% KM (Chebyshev) |
| Uranium-235/236 | 24 | 29 | 0.0187 (U) | 1.4 | Nonparametric | 0.43 | 95% KM (Chebyshev) |
| Uranium-234 | 29 | 29 | 0.46 | 21.7 | Nonparametric | 7.72 | 95% Chebyshev (Mean, Sd) |

* n/a = Not applicable.

**Table H-2.2-45**
**Exposure Point Concentrations for SWMU 21-024(j) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Arsenic | 39 | 39 | 0.708 (J) | 6.33 | Gamma | 3.262 | 95% Approximate Gamma |
| Barium | 39 | 39 | 7.26 (J+) | 166 | Gamma | 68.04 | 95% Approximate Gamma |
| Chromium | 39 | 39 | 1.81 | 19.8 | Gamma | 6.752 | 95% Approximate Gamma |
| Copper | 39 | 39 | 0.728 (J) | 11.6 | Gamma | 5.321 | 95% Approximate Gamma |
| Lead | 39 | 39 | 2.73 | 76.3 (J) | Lognormal | 16.72 | 95% H |
| Manganese | 39 | 39 | 85.5 | 818 (J) | Lognormal | 328.2 | 95% H |
| Nickel | 39 | 39 | 0.833 | 9.85 | Normal | 5.183 | 95% Student's-t |
| Nitrate | 39 | 15 | 0.927 (U) | 5.43 (J-) | Nonparametric | 1.681 | 95% KM (% Bootstrap) |
| Perchlorate | 39 | 7 | 0.000567 (J) | 0.0161 | Nonparametric | 0.00215 | 95% KM (BCA) |
| Selenium | 39 | 29 | 0.606 (J) | 11.6 | Nonparametric | 6.909 | 97.5% KM (Chebyshev) |
| Zinc | 33 | 33 | 11.8 | 685 (J-) | Nonparametric | 157.7 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 39 | 2 | 0.0255 (U) | 0.0479 | n/a* | 0.0479 | Maximum detected concentration |
| Acetone | 30 | 2 | 0.00357 (U) | 0.0146 | n/a | 0.0146 | Maximum detected concentration |
| Anthracene | 39 | 4 | 0.00981 (J) | 0.0738 | n/a | 0.0738 | Maximum detected concentration |
| Aroclor-1254 | 16 | 9 | 0.0012 (J) | 0.941 | Nonparametric | 0.562 | 99% KM (Chebyshev) |
| Aroclor-1260 | 16 | 8 | 0.0021 (J) | 0.369 (J) | Nonparametric | 0.0755 | 95% KM (t) |
| Benzo(a)anthracene | 39 | 3 | 0.0216 (J) | 0.15 | n/a | 0.15 | Maximum detected concentration |
| Benzo(a)pyrene | 39 | 2 | 0.0166 (J) | 0.102 | n/a | 0.102 | Maximum detected concentration |
| Benzo(b)fluoranthene | 39 | 7 | 0.0236 (J) | 0.215 | Nonparametric | 0.0461 | 95% KM (t) |
| Benzo(g,h,i)perylene | 39 | 3 | 0.0131 (J) | 0.109 | n/a | 0.109 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 39 | 1 | 0.0878 (J) | 0.204 (U) | n/a | 0.0878 | Maximum detected concentration |
| Chloroform | 30 | 2 | 0.000237 (J) | 0.00123 (U) | n/a | 0.000281 | Maximum detected concentration |

**Table H-2.2-45 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| Chrysene | 39 | 8 | 0.0118 (J) | 0.154 | Nonparametric | 0.0329 | 95% KM (t) |
| Fluoranthene | 39 | 13 | 0.0139 (J) | 0.387 | Nonparametric | 0.064 | 95% KM (BCA) |
| Fluorene | 39 | 2 | 0.0255 (U) | 0.0407 (U) | n/a | 0.0363 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 2 | 2 | 0.00000863 | 0.0000108 | n/a | 1.08E-05 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 2 | 2 | 0.00000357 | 0.00000443 | n/a | 4.43E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 2 | 1 | 0.000000413 (U) | 0.0000006 (J) | n/a | 6E-07 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 2 | 2 | 0.000000367 (J) | 0.000000426 (J) | n/a | 4.26E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 2 | 2 | 0.000000301 (J) | 0.000000886 (J) | n/a | 8.86E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 2 | 1 | 0.000000207 (J) | 0.000000407 (U) | n/a | 2.07E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 2 | 1 | 0.000000174 (U) | 0.000000175 (J) | n/a | 1.75E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 2 | 1 | 0.000000229 (J) | 0.000000356 (U) | n/a | 2.29E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 39 | 2 | 0.0255 (UJ) | 0.0867 | n/a | 0.0867 | Maximum detected concentration |
| Isopropyltoluene[4-] | 30 | 2 | 0.000368 (J) | 0.00762 | n/a | 0.00762 | Maximum detected concentration |
| Methylene chloride | 30 | 8 | 0.00299 (J) | 0.00617 (U) | Nonparametric | 0.00352 | 95% KM (t) |
| Naphthalene | 39 | 2 | 0.0102 (J) | 0.0407 (U) | n/a | 0.0122 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 2 | 2 | 0.0000521 | 0.0000851 | n/a | 8.51E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 2 | 2 | 0.0000088 | 0.0000103 | n/a | 1.03E-05 | Maximum detected concentration |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 2 | 1 | 0.000000101 (U) | 0.000000159 (J) | n/a | 1.59E-07 | Maximum detected concentration |

**Table H-2.2-45 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Methodology |
|---|---|---|---|---|---|---|---|
| Pentachlorodibenzofuran [1,2,3,7,8-] | 2 | 1 | 0.000000136 (U) | 0.000000463 (J) | n/a | 4.63E-07 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 2 | 1 | 0.000000128 (U) | 0.00000035 (J) | n/a | 3.5E-07 | Maximum detected concentration |
| Phenanthrene | 39 | 9 | 0.0164 (J) | 0.291 | Nonparametric | 0.0485 | 95% KM (BCA) |
| Pyrene | 39 | 12 | 0.0139 (J) | 0.345 | Nonparametric | 0.0564 | 95% KM (% Bootstrap) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 2 | 2 | 0.000000154 (J) | 0.000000476 (J) | n/a | 4.76E-07 | Maximum detected concentration |
| Toluene | 30 | 3 | 0.000673 (J) | 0.00177 | n/a | 0.00177 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 39 | 6 | -0.00585 (U) | 0.145 | Nonparametric | 0.0637 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 34 | 8 | -0.063 (U) | 1.48 | Nonparametric | 0.288 | 95% KM (t) |
| Plutonium-239/240 | 39 | 15 | -0.00847 (U) | 0.423 | Nonparametric | 0.0845 | 95% KM (t) |
| Tritium | 39 | 28 | -2.19 (U) | 0.768421 | Nonparametric | 0.153 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 39 | 39 | 0.46 | 21.7 | Nonparametric | 6.239 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 4 | 3 | 0.0464 (U) | 0.0973 | n/a | 0.0973 | Maximum detected concentration |

* n/a = Not applicable.

**Table H-2.2-46**
**Exposure Point Concentrations for Consolidated Unit 21-024(l)-99 for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 14 | 14 | 3040 | 16000 (J+) | Normal | 9743 | 95% Student's-t |
| Barium | 14 | 14 | 48.7 | 146 | Normal | 102.6 | 95% Student's-t |
| Cadmium | 3 | 3 | 0.132 (J) | 0.565 (U) | n/a* | 0.449 | Maximum detected concentration |
| Chromium | 14 | 14 | 4.67 | 11.3 | Normal | 9.98 | 95% Student's-t |
| Cobalt | 14 | 14 | 1.57 | 5.03 | Normal | 3.616 | 95% Student's-t |
| Copper | 13 | 13 | 5.99 | 14.2 | Normal | 10.94 | 95% Student's-t |
| Lead | 15 | 15 | 9.6 | 38 | Lognormal | 22.45 | 95% H |
| Lithium | 14 | 14 | 5.1 (J+) | 15.3 (J+) | Normal | 12.27 | 95% Student's-t |
| Mercury | 15 | 15 | 0.013 (J) | 0.0786 | Nonparametric | 0.0487 | 95% Chebyshev (Mean, Sd) |
| Nitrate | 8 | 8 | 0.918 (UJ) | 2.27 | Nonparametric | 1.811 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 4 | 4 | 0.000628 (J-) | 0.00232 (U) | n/a | 0.00154 | Maximum detected concentration |
| Selenium | 13 | 13 | 0.045 (U) | 1.55 (U) | Nonparametric | 1.022 | 95% KM (Percentile Bootstrap) |
| Zinc | 15 | 15 | 25 | 91.5 | Gamma | 60.32 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 7 | 7 | 0.0161 (J) | 0.68 (U) | Nonparametric | 0.0488 | 95% KM (t) |
| Anthracene | 9 | 9 | 0.00773 (J) | 0.68 (U) | Nonparametric | 0.0783 | 95% KM (BCA) |
| Benzo(a)anthracene | 12 | 12 | 0.0242 (J) | 0.584 | Nonparametric | 0.234 | 95% KM (t) |
| Benzo(a)pyrene | 11 | 11 | 0.0107 (U) | 0.558 | Nonparametric | 0.199 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 14 | 14 | 0.0163 (J) | 0.84 | Nonparametric | 0.385 | 95% KM (t) |
| Benzo(g,h,i)perylene | 13 | 13 | 0.018 (J) | 0.257 (J) | Nonparametric | 0.147 | 95% KM (t) |
| Benzo(k)fluoranthene | 7 | 7 | 0.0189 (J) | 0.21 (J) | Nonparametric | 0.12 | 95% KM (Percentile Bootstrap) |
| Bis(2-ethylhexyl)phthalate | 2 | 2 | 0.0876 (J) | 0.25 (J) | n/a | 0.25 | Maximum detected concentration |
| Chrysene | 14 | 14 | 0.0187 (J) | 0.584 | Nonparametric | 0.252 | 95% KM (t) |

**Table H-2.2-46 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Fluoranthene | 14 | 14 | 0.0268 (J) | 1.41 | Nonparametric | 0.833 | 95% KM (Chebyshev) |
| Fluorene | 7 | 7 | 0.0114 (J) | 0.68 (U) | Nonparametric | 0.0419 | 95% KM (t) |
| Indeno(1,2,3-cd)pyrene | 13 | 13 | 0.0188 (J) | 0.24 (J) | Nonparametric | 0.143 | 95% KM (t) |
| Methylene chloride | 1 | 1 | 0.00411 (J) | 0.00411 (J) | n/a | 0.00411 | Maximum detected concentration |
| Phenanthrene | 12 | 12 | 0.0206 (J) | 0.972 | Nonparametric | 0.504 | 95% KM (Chebyshev) |
| Pyrene | 14 | 14 | 0.0246 (J) | 1.21 | Nonparametric | 0.714 | 95% KM (Chebyshev) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 15 | 15 | 0.000443 (U) | 0.375 | Nonparametric | 0.197 | 95% KM (Chebyshev) |
| Cesium-137 | 9 | 9 | 0.0305 (U) | 0.624 | Nonparametric | 0.324 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 10 | 10 | -0.00382 (U) | 4.9 | Nonparametric | 2.913 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 18 | 18 | 0.0138 (U) | 6.23 | Nonparametric | 2.246 | 95% KM (Chebyshev) |
| Tritium | 6 | 6 | 0.00498369 (U) | 0.193801 | Nonparametric | 0.0764 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 14 | 14 | 0.735 | 3.72 | Nonparametric | 2.403 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 14 | 10 | 0.0174 (U) | 0.276 | Nonparametric | 0.122 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-47**
**Exposure Point Concentrations for Consolidated Unit 21-024(l)-99 for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 50 | 50 | 577 | 17200 (J+) | Nonparametric | 9804 | 95% KM (BCA) |
| Barium | 50 | 50 | 14.3 | 236 (J-) | Nonparametric | 115.3 | 95% KM (t) |
| Cadmium | 6 | 50 | 0.112 (J) | 0.991 | Nonparametric | 0.343 | 95% KM (t) |
| Chromium | 50 | 50 | 4.4 | 16.8 | Nonparametric | 10.26 | 95% KM (t) |
| Cobalt | 50 | 50 | 0.387 (J) | 8.46 | Nonparametric | 4.524 | 95% KM (Chebyshev) |
| Copper | 44 | 44 | 2.48 | 36.4 | Nonparametric | 11.24 | 95% KM (BCA) |
| Lead | 51 | 51 | 2.72 | 970 (J) | Nonparametric | 149.1 | 95% KM (Chebyshev) |
| Lithium | 50 | 50 | 2.3 | 17.8 (J+) | Nonparametric | 12.72 | 95% KM (Chebyshev) |
| Mercury | 51 | 51 | 0.004 (J) | 0.628 | Nonparametric | 0.0987 | 95% KM (Chebyshev) |
| Nitrate | 30 | 48 | 0.694 (J-) | 6.1 (J-) | Nonparametric | 1.547 | 95% KM (BCA) |
| Perchlorate | 15 | 50 | 0.000628 (J-) | 0.00632 (J+) | Nonparametric | 0.00169 | 95% KM (t) |
| Selenium | 40 | 52 | 0.045 (U) | 1.79 | Nonparametric | 1.096 | 95% KM (Percentile Bootstrap) |
| Zinc | 51 | 51 | 25 | 552 (J) | Nonparametric | 122.9 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthylene | 1 | 51 | 0.0122 (J) | 0.68 (U) | n/a* | 0.0122 | Maximum detected concentration |
| Acenaphthene | 21 | 51 | 0.0124 (J) | 1.02 | Nonparametric | 0.147 | 95% KM (BCA) |
| Acetone | 4 | 37 | 0.00522 (U) | 0.35 | n/a | 0.35 | Maximum detected concentration |
| Anthracene | 30 | 51 | 0.00773 (J) | 1.49 | Nonparametric | 0.44 | 97.5% KM (Chebyshev) |
| Benzo(a)anthracene | 32 | 51 | 0.0146 (J) | 3.2 | Nonparametric | 1.033 | 97.5% KM (Chebyshev) |
| Benzo(a)pyrene | 31 | 51 | 0.0107 (U) | 3.12 (J) | Nonparametric | 0.657 | 95% KM (Chebyshev) |
| Benzo(b)fluoranthene | 41 | 51 | 0.0135 (J) | 4.8 (J) | Nonparametric | 1.433 | 97.5% KM (Chebyshev) |
| Benzo(g,h,i)perylene | 32 | 51 | 0.0147 (J) | 1.29 (J) | Nonparametric | 0.278 | 95% KM (BCA) |
| Benzo(k)fluoranthene | 24 | 51 | 0.0124 (J) | 1.8 (J) | Nonparametric | 0.236 | 95% KM (t) |

**Table H-2.2-47 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 2 | 51 | 0.0876 (J) | 0.25 (J) | n/a | 0.25 | Maximum detected concentration |
| Chloroform | 1 | 37 | 0.000215 (J) | 0.00125 (U) | n/a | 0.000215 | Maximum detected concentration |
| Chrysene | 40 | 51 | 0.014 (J) | 3.24 | Nonparametric | 1.041 | 97.5% KM (Chebyshev) |
| Dibenzofuran | 8 | 51 | 0.0754 (J) | 0.68 (U) | Nonparametric | 0.221 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 42 | 51 | 0.0118 (J) | 8.61 | Nonparametric | 2.621 | 97.5% KM (Chebyshev) |
| Fluorene | 21 | 51 | 0.0109 (J) | 0.932 | Nonparametric | 0.129 | 95% KM (BCA) |
| Indeno(1,2,3-cd)pyrene | 33 | 51 | 0.0123 (J) | 1.31 | Nonparametric | 0.275 | 95% KM (BCA) |
| Methylene chloride | 1 | 37 | 0.00411 (J) | 0.00625 (U) | n/a | 0.00411 | Maximum detected concentration |
| Methylnaphthalene[2-] | 11 | 51 | 0.00778 (J) | 0.68 (U) | Nonparametric | 0.0429 | 95% KM (Percentile Bootstrap) |
| Naphthalene | 9 | 51 | 0.0112 (U) | 0.739 | Nonparametric | 0.166 | 95% KM (Percentile Bootstrap) |
| Phenanthrene | 36 | 51 | 0.0182 (J) | 7.01 | Nonparametric | 2.016 | 97.5% KM (Chebyshev) |
| Pyrene | 41 | 51 | 0.0162 (J) | 7.37 | Nonparametric | 2.19 | 97.5% KM (Chebyshev) |
| Toluene | 10 | 37 | 0.000411 (J) | 0.0038 | Nonparametric | 0.00139 | 95% KM (Percentile Bootstrap) |
| Xylene[1,3-]+[1,4-] | 1 | 37 | 0.000381(J) | 0.0025 (U) | n/a | 0.000381 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 25 | 54 | -0.00569 (U) | 3.44 | Nonparametric | 0.864 | 99% KM (Chebyshev) |
| Cesium-137 | 12 | 45 | -0.0238 (U) | 0.701 | Nonparametric | 0.191 | 95% KM (t) |
| Plutonium-238 | 15 | 55 | -0.0101 (U) | 4.9 | Nonparametric | 1.045 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 51 | 55 | 0.0138 (U) | 103 | Nonparametric | 17.5 | 97.5% KM (Chebyshev) |
| Tritium | 35 | 50 | 0.00446 (U) | 0.68 | Nonparametric | 0.159 | 95% KM (Chebyshev) |
| Uranium-234 | 50 | 50 | 0.504 | 3.72 | Nonparametric | 1.372 | 95% KM (Chebyshev) |
| Uranium-235/236 | 30 | 50 | 0.0174 (U) | 0.276 | Nonparametric | 0.0774 | 95% KM (% Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-48**
**Exposure Point Concentrations for Consolidated Unit 21-024(l)-99 for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 65 | 65 | 577 | 46800 (J+) | Gamma | 10187 | 95% Approximate Gamma |
| Barium | 65 | 65 | 14.3 | 342 | Normal | 113.5 | 95% Student's-t |
| Cadmium | 9 | 9 | 0.112 (J) | 2.74 (U) | Nonparametric | 0.315 | 95% KM (t) |
| Chromium | 65 | 65 | 1.35 (J) | 24.9 (J) | Normal | 10.36 | 95% Student's-t |
| Cobalt | 65 | 65 | 0.387 (J) | 8.46 | Normal | 3.674 | 95% Student's-t |
| Copper | 54 | 54 | 2.15 | 36.4 | Lognormal | 9.917 | 95% H |
| Lead | 68 | 68 | 2.72 | 970 (J) | Nonparametric | 147.6 | 97.5% Chebyshev (Mean, Sd) |
| Lithium | 65 | 65 | 2.3 | 17.8 (J+) | Normal | 11.2 | 95% Student's-t |
| Mercury | 68 | 68 | 0.004 (J) | 0.628 | Nonparametric | 0.0797 | 95% Chebyshev (Mean, Sd) |
| Nitrate | 38 | 38 | 0.694 (J-) | 6.1 (J-) | Nonparametric | 1.494 | 95% KM (BCA) |
| Perchlorate | 22 | 22 | 0.000609 (J) | 0.00632 (J+) | Nonparametric | 0.00168 | 95% KM (Percentile Bootstrap) |
| Selenium | 48 | 48 | 0.045 (U) | 8.22 (U) | Nonparametric | 1.094 | 95% KM (Percentile Bootstrap) |
| Zinc | 70 | 70 | 16 | 949 | Nonparametric | 150.6 | 95% Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 26 | 26 | 0.0124 (J) | 1.51 | Nonparametric | 0.155 | 95% KM (BCA) |
| Acenaphthylene | 1 | 1 | 0.0122 (J) | 0.68 (U) | n/a* | 0.0122 | Maximum detected concentration |
| Acetone | 4 | 4 | 0.00522 (U) | 0.35 | n/a | 0.35 | Maximum detected concentration |
| Anthracene | 40 | 40 | 0.00773 (J) | 2.38 | Nonparametric | 0.468 | 97.5% KM (Chebyshev) |
| Benzo(a)anthracene | 38 | 38 | 0.0146 (J) | 3.88 | Nonparametric | 0.98 | 97.5% KM (Chebyshev) |
| Benzo(a)pyrene | 40 | 40 | 0.0107 (U) | 3.92 | Nonparametric | 0.673 | 95% KM (Chebyshev) |
| Benzo(b)fluoranthene | 51 | 51 | 0.0135 (J) | 4.8 (J) | Nonparametric | 1.314 | 97.5% KM (Chebyshev) |
| Benzo(g,h,i)perylene | 40 | 40 | 0.0147 (J) | 2.11 (J) | Nonparametric | 0.287 | 95% KM (BCA) |
| Benzo(k)fluoranthene | 29 | 29 | 0.0124 (J) | 1.8 | Nonparametric | 0.234 | 95% KM (t) |

**Table H-2.2-48 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 2 | 2 | 0.0876 (J) | 0.37 (U) | n/a | 0.25 | Maximum detected concentration |
| Carbazole | 2 | 1 | 0.12 (J) | 0.68 (U) | n/a | 0.12 | Maximum detected concentration |
| Chloroform | 1 | 1 | 0.000215 (J) | 0.00125 (U) | n/a | 0.000215 | Maximum detected concentration |
| Chrysene | 50 | 50 | 0.014 (J) | 3.76 | Nonparametric | 0.802 | 95% KM (Chebyshev) |
| Dibenzofuran | 9 | 9 | 0.0754 (J) | 0.694 | Nonparametric | 0.224 | 95% KM (Percentile Bootstrap) |
| Dichlorobenzene[1,4-] | 1 | 1 | 0.000316 (J) | 0.68 (U) | n/a | 0.000316 | Maximum detected concentration |
| Fluoranthene | 53 | 53 | 0.0115 (J) | 10.5 | Nonparametric | 2.527 | 97.5% KM (Chebyshev) |
| Fluorene | 26 | 26 | 0.0109 (J) | 1.2 | Nonparametric | 0.135 | 95% KM (t) |
| Indeno(1,2,3-cd)pyrene | 42 | 42 | 0.0123 (J) | 2.03 (J) | Nonparametric | 0.399 | 95% KM (Chebyshev) |
| Isopropyltoluene[4-] | 2 | 2 | 0.000443 (J) | 0.00125 (U) | n/a | 0.000463 | Maximum detected concentration |
| Methylene chloride | 1 | 1 | 0.00411 (J) | 0.00625 (U) | n/a | 0.00411 | Maximum detected concentration |
| Methylnaphthalene[2-] | 14 | 14 | 0.00778 (J) | 0.68 (U) | Nonparametric | 0.0444 | 95% KM (t) |
| Naphthalene | 13 | 13 | 0.0112 (U) | 1.22 | Nonparametric | 0.112 | 95% KM (t) |
| Phenanthrene | 46 | 46 | 0.0182 (J) | 9.28 | Nonparametric | 2.023 | 97.5% KM (Chebyshev) |
| Pyrene | 51 | 51 | 0.0162 (J) | 7.37 | Nonparametric | 2.013 | 97.5% KM (Chebyshev) |
| Toluene | 15 | 15 | 0.000337 (U) | 0.00515 | Nonparametric | 0.00128 | 95% KM (Percentile Bootstrap) |
| Xylene[1,3-]+xylene[1,4-] | 1 | 1 | 0.000381 (J) | 0.0025 (U) | n/a | 0.000381 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 28 | 28 | -0.0152 (U) | 3.44 | Nonparametric | 0.478 | 97.5% KM (Chebyshev) |
| Cesium-137 | 12 | 12 | -0.102 (U) | 0.701 | Nonparametric | 0.165 | 95% KM (t) |
| Plutonium-238 | 16 | 16 | -0.0101 (U) | 4.9 | Nonparametric | 0.543 | 97.5% KM (Chebyshev) |
| Plutonium-239/240 | 67 | 67 | 0.0039 (UJ) | 103 | Nonparametric | 14.19 | 97.5% KM (Chebyshev) |
| Tritium | 48 | 48 | 0.0044551 (U) | 2.06204 | Nonparametric | 0.296 | 95% KM (Chebyshev) |
| Uranium-234 | 65 | 65 | 0.504 | 3.72 | Normal | 1.108 | 95% Modified-t |
| Uranium-235/236 | 39 | 39 | -0.33 (U) | 0.276 | Nonparametric | 0.0905 | 97.5% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-49**
**Exposure Point Concentrations for SWMU 21-024(o) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 12 | 12 | 3150 (J+) | 14300 (J+) | Normal | 11130 | 95% Student's-t |
| Chromium | 12 | 12 | 3.7 (J) | 12.1 | Normal | 9.287 | 95% Student's-t |
| Cyanide (total) | 12 | 6 | 0.084 (J) | 1.33 | Nonparametric | 0.445 | 95% KM (t) |
| Lead | 12 | 12 | 8.09 | 52.9 | Normal | 32.53 | 95% Student's-t |
| Nitrate | 12 | 11 | 0.927 (J) | 38 | Nonparametric | 26.85 | 97.5% KM (Chebyshev) |
| Perchlorate | 12 | 10 | 0.000539 (J-) | 0.00221 (UJ) | Nonparametric | 0.00107 | 95% KM (t) |
| Uranium | 12 | 12 | 0.84 (J) | 5.13 (J-) | Lognormal | 3.08 | 95% H |
| Zinc | 13 | 13 | 24 | 192 | Normal | 107.9 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 12 | 4 | 0.0353 (U) | 0.0877 | n/a* | 0.0877 | Maximum detected concentration |
| Anthracene | 12 | 7 | 0.0155 (J) | 0.173 | Nonparametric | 0.0988 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 12 | 7 | 0.0219 (U) | 0.44 | Nonparametric | 0.269 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 12 | 6 | 0.0358 (UJ) | 0.452 (J) | Nonparametric | 0.281 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 12 | 5 | 0.0358 (UJ) | 0.985 (J) | Nonparametric | 0.601 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 12 | 1 | 0.0353 (UJ) | 0.237 (J) | n/a | 0.237 | Maximum detected concentration |
| Benzo(k)fluoranthene | 12 | 2 | 0.0357 (UJ) | 0.775 (J) | n/a | 0.775 | Maximum detected concentration |
| Benzoic acid | 12 | 1 | 0.589 (J) | 0.776 (U) | n/a | 0.589 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 12 | 2 | 0.0937 (J) | 0.194 (U) | n/a | 0.119 | Maximum detected concentration |
| Chrysene | 12 | 8 | 0.0228 (J) | 0.553 | Nonparametric | 0.274 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 12 | 9 | 0.0292 (J) | 1.02 | Nonparametric | 0.507 | 95% KM (t) |
| Fluorene | 12 | 6 | 0.0122 (J) | 0.127 | Nonparametric | 0.0869 | 95% KM (Percentile Bootstrap) |
| Hexachlorobenzene | 12 | 1 | 0.0892 (J) | 0.388 (U) | n/a | 0.0892 | Maximum detected concentration |
| Methylnaphthalene[2-] | 12 | 4 | 0.0263 (J) | 0.052 | n/a | 0.052 | Maximum detected concentration |

**Table H-2.2-49 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Naphthalene | 12 | 4 | 0.0353 (U) | 0.104 | n/a | 0.104 | Maximum detected concentration |
| Phenanthrene | 12 | 9 | 0.0127 (J) | 0.734 | Nonparametric | 0.424 | 95% KM (t) |
| Pyrene | 12 | 9 | 0.034 (J) | 0.983 | Nonparametric | 0.529 | 95% KM (t) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 13 | 10 | 0.00115 (U) | 0.0941 | Nonparametric | 0.0552 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 12 | 12 | 0.129 | 0.994 | Normal | 0.602 | 95% Student's-t |
| Plutonium-238 | 13 | 1 | -0.00862 (U) | 0.0846 | n/a | 0.0846 | Maximum detected concentration |
| Plutonium-239/240 | 13 | 13 | 0.12 | 5.18 | Gamma | 2.321 | 95% Approximate Gamma |
| Tritium | 12 | 3 | -0.00465133 (U) | 0.021444 | n/a | 0.0214 | Maximum detected concentration |

* n/a = Not applicable.

**Table H-2.2-50**
**Exposure Point Concentrations for SWMU 21-024(o) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 22 | 22 | 970 (J+) | 14300 (J+) | Nonparametric | 9080 | 95% KM (t) |
| Chromium | 22 | 22 | 1.54 (J) | 24.7 | Nonparametric | 10.19 | 95% KM (BCA) |
| Cyanide (total) | 5 | 22 | 0.084 (J) | 1.33 | Nonparametric | 0.28 | 95% KM (t) |
| Lead | 22 | 22 | 4.12 | 52.9 | Nonparametric | 30.39 | 95% KM (Chebyshev) |
| Nitrate | 17 | 22 | 0.766 (J) | 38 | Nonparametric | 17.51 | 97.5% KM (Chebyshev) |
| Perchlorate | 10 | 22 | 0.000539 (J-) | 0.00248 (UJ) | Nonparametric | 0.00107 | 95% KM (t) |
| Selenium | 1 | 22 | 0.599 (J) | 1.78 (U) | n/a* | 0.599 | Maximum detected concentration |
| Uranium | 22 | 22 | 0.631 (J) | 5.13 (J-) | Nonparametric | 2.417 | 95% KM (Chebyshev) |
| Zinc | 23 | 23 | 18.7 | 192 | Nonparametric | 102.2 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 6 | 22 | 0.0156 (J) | 0.0877 | Nonparametric | 0.0614 | 95% KM (Percentile Bootstrap) |
| Acetone | 1 | 11 | 0.00268 (J) | 0.00599 (UJ) | n/a | 0.00268 | Maximum detected concentration |
| Anthracene | 8 | 22 | 0.0155 (J) | 0.173 | Nonparametric | 0.0674 | 95% KM (Percentile Bootstrap) |
| Aroclor-1260 | 1 | 1 | 0.0201 | 0.0201 | n/a | 0.0201 | Maximum detected concentration |
| Benzo(a)anthracene | 8 | 22 | 0.0219 (U) | 0.44 | Nonparametric | 0.18 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 6 | 22 | 0.0341 (U) | 0.452 (J) | Nonparametric | 0.265 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 5 | 22 | 0.0341 (U) | 0.985 (J) | Nonparametric | 0.563 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 1 | 22 | 0.0341 (U) | 0.237 (J) | n/a | 0.237 | Maximum detected concentration |
| Benzo(k)fluoranthene | 2 | 22 | 0.0341 (U) | 0.775 (J) | n/a | 0.775 | Maximum detected concentration |
| Benzoic acid | 1 | 22 | 0.589 (J) | 0.798 (UJ) | n/a | 0.589 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 3 | 22 | 0.0796 (J) | 0.2 (U) | n/a | 0.119 | Maximum detected concentration |
| Chrysene | 10 | 22 | 0.0228 (J) | 0.553 | Nonparametric | 0.168 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 16 | 22 | 0.013 (J) | 1.02 | Nonparametric | 0.466 | 95% KM (Chebyshev) |

**Table H-2.2-50 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Fluorene | 6 | 22 | 0.0122 (J) | 0.127 | Nonparametric | 0.0829 | 95% KM (Percentile Bootstrap) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 4.89E-06 | 4.89E-06 | n/a | 4.89E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 1.17E-06 (J) | 1.17E-06 (J) | n/a | 1.17E-06 | Maximum detected concentration |
| Hexachlorobenzene | 1 | 22 | 0.0892 (J) | 0.399 (U) | n/a | 0.0892 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 1.96E-07 (J) | 1.96E-07 (J) | n/a | 1.96E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 1.79E-07 (J) | 1.79E-07 (J) | n/a | 1.79E-07 | Maximum detected concentration |
| Methylnaphthalene[2-] | 4 | 22 | 0.0263 (J) | 0.052 | n/a | 0.052 | Maximum detected concentration |
| Naphthalene | 4 | 22 | 0.0341 (U) | 0.104 | n/a | 0.104 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 4.31E-05 | 4.31E-05 | n/a | 4.31E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 2.67E-06 (J) | 2.67E-06 (J) | n/a | 2.67E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 3.33E-07 (J) | 3.33E-07 (J) | n/a | 3.33E-07 | Maximum detected concentration |
| Phenanthrene | 14 | 22 | 0.0127 (J) | 0.734 | Nonparametric | 0.259 | 95% KM (BCA) |
| Pyrene | 16 | 22 | 0.015 (J) | 0.983 | Nonparametric | 0.487 | 95% KM (Chebyshev) |
| Toluene | 9 | 11 | 0.000493 (U) | 0.01 (J+) | Nonparametric | 0.00568 | 95% KM (Chebyshev) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 10 | 23 | -0.00784 (U) | 0.0941 | Nonparametric | 0.0469 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 12 | 19 | -0.00786 (U) | 0.994 | Nonparametric | 0.454 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 1 | 23 | -0.0247 (U) | 0.0846 | n/a | 0.0846 | Maximum detected concentration |
| Plutonium-239/240 | 20 | 23 | 0.00000000155 (U) | 5.18 | Nonparametric | 1.946 | 95% KM (Chebyshev) |
| Tritium | 6 | 22 | -0.00543 (U) | 0.0214 | Nonparametric | 0.0141 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-51**
**Exposure Point Concentrations for SWMU 21-024(o) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 24 | 24 | 970 (J+) | 14300 (J+) | Normal | 8786 | 95% Student's-t |
| Chromium | 24 | 24 | 1.54 (J) | 24.7 | Gamma | 9.946 | 95% Approximate Gamma |
| Cyanide (total) | 24 | 6 | 0.084 (J) | 1.33 | Nonparametric | 0.274 | 95% KM (t) |
| Lead | 24 | 24 | 4.12 | 52.9 | Lognormal | 23.75 | 95% H |
| Nitrate | 24 | 19 | 0.766 (J) | 38 | Nonparametric | 16.24 | 97.5% KM (Chebyshev) |
| Perchlorate | 24 | 11 | 0.000539 (J-) | 0.00248 (UJ) | Nonparametric | 0.00104 | 95% KM (t) |
| Selenium | 24 | 1 | 0.599 (J) | 1.78 (U) | n/a* | 0.599 | Maximum detected concentration |
| Uranium | 24 | 24 | 0.631 (J) | 5.13 (J-) | Nonparametric | 2.487 | 95% KM Chebyshev (Mean, Sd) |
| Zinc | 25 | 25 | 18.7 | 192 | Nonparametric | 96.77 | 95% KM Chebyshev (Mean, Sd) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 24 | 6 | 0.0156 (J) | 0.0877 | Nonparametric | 0.0613 | 95% KM (Percentile Bootstrap) |
| Acetone | 12 | 1 | 0.00268 (J) | 0.00599 (UJ) | n/a | 0.00268 | Maximum detected concentration |
| Anthracene | 24 | 8 | 0.0155 (J) | 0.173 | Nonparametric | 0.0658 | 95% KM (Percentile Bootstrap) |
| Benzo(a)anthracene | 24 | 8 | 0.0219 (U) | 0.44 | Nonparametric | 0.166 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 24 | 6 | 0.0341 (U) | 0.452 (J) | Nonparametric | 0.264 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 24 | 5 | 0.0341 (U) | 0.985 (J) | Nonparametric | 0.579 | 95% KM (Percentile Bootstrap) |
| Benzo(g,h,i)perylene | 24 | 1 | 0.0341 (U) | 0.237 (J) | n/a | 0.237 | Maximum detected concentration |
| Benzo(k)fluoranthene | 24 | 2 | 0.0341 (U) | 0.775 (J) | n/a | 0.775 | Maximum detected concentration |
| Benzoic acid | 24 | 1 | 0.589 (J) | 0.798 (UJ) | n/a | 0.589 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 24 | 3 | 0.0796 (J) | 0.2 (U) | n/a | 0.119 | Maximum detected concentration |
| Chrysene | 24 | 10 | 0.0228 (J) | 0.553 | Nonparametric | 0.16 | 95% KM (Percentile Bootstrap) |
| Fluoranthene | 24 | 16 | 0.013 (J) | 1.02 | Nonparametric | 0.282 | 95% KM [BCA] |
| Fluorene | 24 | 6 | 0.0122 (J) | 0.127 | Nonparametric | 0.0819 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-51 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000489 | 0.00000489 | n/a | 4.89E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000117 (J) | 0.00000117 (J) | n/a | 1.17E-06 | Maximum detected concentration |
| Hexachlorobenzene | 24 | 1 | 0.0892 (J) | 0.399 (U) | n/a | 0.0892 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 1 | 1 | 0.000000196 (J) | 0.000000196 (J) | n/a | 1.96E-07 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 1 | 1 | 0.000000179 (J) | 0.000000179 (J) | n/a | 1.79E-07 | Maximum detected concentration |
| Methylnaphthalene[2-] | 24 | 4 | 0.0263 (J) | 0.052 | n/a | 0.052 | Maximum detected concentration |
| Naphthalene | 24 | 4 | 0.0341 (U) | 0.104 | n/a | 0.104 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000431 | 0.0000431 | n/a | 4.31E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000267 (J) | 0.00000267 (J) | n/a | 2.67E-06 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 1 | 1 | 0.000000333 (J) | 0.000000333 (J) | n/a | 3.33E-07 | Maximum detected concentration |
| Phenanthrene | 24 | 14 | 0.0127 (J) | 0.734 | Nonparametric | 0.227 | 95% KM [BCA] |
| Pyrene | 24 | 16 | 0.015 (J) | 0.983 | Nonparametric | 0.285 | 95% KM [BCA] |
| Toluene | 12 | 10 | 0.000493 (U) | 0.01 (J+) | Nonparametric | 0.0034 | 95% KM [BCA] |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 25 | 10 | -0.00784 (U) | 0.0941 | Nonparametric | 0.0465 | 95% KM (Percentile Bootstrap) |
| Cesium-137 | 21 | 14 | -0.00786 (U) | 0.994 | Nonparametric | 0.427 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 25 | 1 | -0.0247 (U) | 0.0846 | n/a | 0.0846 | Maximum detected concentration |
| Plutonium-239/240 | 25 | 21 | 0.00000000155 (U) | 5.18 | Nonparametric | 1.819 | 95% KM (Chebyshev) |
| Tritium | 24 | 6 | -0.00543103 (U) | 0.0214444 | Nonparametric | 0.0138 | 95% KM (Percentile Bootstrap) |

* n/a = Not applicable.

**Table H-2.2-52**
**Exposure Point Concentrations for Consolidated Unit 21-026(a)-99 for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 24 | 23 | 5.5 (U) | 7440 | Nonparametric | 4264 | 95% KM (t) |
| Antimony | 24 | 7 | 0.067 (J-) | 1.5 (J-) | Nonparametric | 0.317 | 95% KM (BCA) |
| Arsenic | 24 | 23 | 0.83 (J) | 11.9 | Nonparametric | 4.395 | 95% KM (Chebyshev) |
| Barium | 23 | 22 | 2.2 (U) | 708 | Nonparametric | 290.9 | 97.5% KM (Chebyshev) |
| Cadmium | 24 | 13 | 0.023 (J) | 12.1 | Nonparametric | 6.117 | 99% KM (Chebyshev) |
| Calcium | 16 | 16 | 556 | 13900 | Gamma | 6600 | 95% Approximate Gamma |
| Chromium | 24 | 23 | 1.1 (U) | 252 | Nonparametric | 90.62 | 97.5% KM (Chebyshev) |
| Copper | 24 | 23 | 1 (J) | 556 | Nonparametric | 199.3 | 97.5% KM (Chebyshev) |
| Cyanide (total) | 25 | 3 | 0.104 (U) | 2.7 (J) | n/a* | 2.7 | Maximum detected concentration |
| Lead | 24 | 23 | 0.33 (U) | 249 | Nonparametric | 90.61 | 97.5% KM (Chebyshev) |
| Mercury | 24 | 23 | 0.0071 (J) | 14.7 | Nonparametric | 9.002 | 99% KM (Chebyshev) |
| Nickel | 24 | 24 | 0.3 | 62.6 | Nonparametric | 34.93 | 99% Chebyshev (Mean, Sd) |
| Nitrate | 24 | 20 | 0.2 (U) | 9.8 (J) | Nonparametric | 4.079 | 95% KM (Chebyshev) |
| Perchlorate | 24 | 1 | 0.000991 (J) | 0.0064 (UJ) | n/a | 0.000991 | Maximum detected concentration |
| Selenium | 24 | 9 | 0.16 (J) | 1.9 (U) | Nonparametric | 0.677 | 95% KM (t) |
| Silver | 25 | 24 | 0.055 (J) | 42.2 | Nonparametric | 26.19 | 99% KM (Chebyshev) |
| Uranium | 25 | 24 | 0.11 (U) | 19.2 | Nonparametric | 7.35 | 97.5% KM (Chebyshev) |
| Zinc | 24 | 23 | 2.2 (U) | 1640 | Nonparametric | 555.4 | 97.5% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 25 | 2 | 0.0322 (U) | 0.42 (U) | n/a | 0.24 | Maximum detected concentration |
| Anthracene | 25 | 2 | 0.0322 (U) | 0.65 | n/a | 0.65 | Maximum detected concentration |
| Benzo(a)anthracene | 25 | 3 | 0.0322 (U) | 5.9 | n/a | 5.9 | Maximum detected concentration |
| Benzo(a)pyrene | 25 | 4 | 0.0322 (U) | 4.4 (J) | n/a | 4.4 | Maximum detected concentration |
| Benzo(b)fluoranthene | 25 | 7 | 0.0123 (J) | 6 (J) | Nonparametric | 1.078 | 95% KM (t) |
| Benzo(g,h,i)perylene | 25 | 3 | 0.0322 (U) | 2.1 (J) | n/a | 2.1 | Maximum detected concentration |

**Table H-2.2-52 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | 25 | 4 | 0.0322 (U) | 4.6 (J) | n/a | 4.6 | Maximum detected concentration |
| Benzoic acid | 25 | 3 | 0.388 (U) | 2 (U) | n/a | 0.501 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 25 | 5 | 0.078 (J) | 4.2 | Nonparametric | 1.114 | 95% KM (Percentile Bootstrap) |
| Butylbenzylphthalate | 25 | 2 | 0.322 (U) | 1.2 | n/a | 1.2 | Maximum detected concentration |
| Chrysene | 25 | 5 | 0.0322 (U) | 6 | Nonparametric | 1.14 | 95% KM (t) |
| Dibenz(a,h)anthracene | 25 | 2 | 0.0322 (U) | 0.84 (J) | n/a | 0.84 | Maximum detected concentration |
| Dibenzofuran | 25 | 1 | 0.055 (J) | 0.42 (U) | n/a | 0.055 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 25 | 1 | 0.064 (J) | 0.42 (U) | n/a | 0.064 | Maximum detected concentration |
| Dimethylphenol[2,4-] | 25 | 1 | 0.063 (J) | 0.42 (U) | n/a | 0.063 | Maximum detected concentration |
| Di-n-butylphthalate | 25 | 4 | 0.04 (J) | 0.85 | n/a | 0.85 | Maximum detected concentration |
| Di-n-octylphthalate | 25 | 1 | 0.1 (J) | 0.42 (U) | n/a | 0.1 | Maximum detected concentration |
| Fluoranthene | 25 | 6 | 0.0137 (J) | 6.7 | Nonparametric | 4.279 | 99% KM (Chebyshev) |
| Fluorene | 25 | 2 | 0.0322 (U) | 0.42 (U) | n/a | 0.17 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 25 | 3 | 0.0322 (U) | 2.2 (J) | n/a | 2.2 | Maximum detected concentration |
| Phenanthrene | 25 | 2 | 0.0322 (UJ) | 2.2 | n/a | 2.2 | Maximum detected concentration |
| Pyrene | 25 | 6 | 0.0114 (J) | 6 | Nonparametric | 1.055 | 95% KM (t) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 24 | 10 | -0.0112 (U) | 58.1 | Nonparametric | 27.73 | 99% KM (Chebyshev) |
| Cesium-137 | 23 | 11 | -0.0055 (U) | 0.785 | Nonparametric | 0.356 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 24 | 6 | -0.0059 (U) | 3.24 | Nonparametric | 0.555 | 95% KM (t) |
| Plutonium-239/240 | 24 | 18 | 0.0016 (U) | 83.5 | Nonparametric | 40.04 | 99% KM (Chebyshev) |
| Tritium | 24 | 13 | 0.003199 | 6.12 | Nonparametric | 2.878 | 99% KM (Chebyshev) |
| Uranium-234 | 25 | 25 | 0.273 | 43.1 | Nonparametric | 20.25 | 99% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 25 | 16 | 0.009 (U) | 1.8 | Nonparametric | 0.605 | 97.5% KM (Chebyshev) |
| Uranium-238 | 25 | 25 | 0.225 | 5.2 | Nonparametric | 1.906 | 95% Chebyshev (Mean, Sd) |

* n/a = Not applicable.

**Table H-2.2-53**
**Exposure Point Concentrations for Consolidated Unit 21-026(a)-99 for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 49 | 50 | 5.5 (U) | 13200 | Nonparametric | 5056 | 95% KM (Chebyshev) |
| Antimony | 12 | 50 | 0.066 (J-) | 1.5 (J-) | Nonparametric | 0.214 | 95% KM (BCA) |
| Arsenic | 49 | 50 | 0.45 (J) | 11.9 | Nonparametric | 2.884 | 95% KM (Chebyshev) |
| Barium | 47 | 48 | 2.2 (U) | 708 | Nonparametric | 130.6 | 95% KM (Chebyshev) |
| Cadmium | 24 | 50 | 0.015 (J) | 12.1 | Nonparametric | 1.585 | 95% KM (Chebyshev) |
| Calcium | 34 | 34 | 433 | 42800 (J) | Nonparametric | 10465 | 95% KM (Chebyshev) |
| Chromium | 49 | 50 | 1.1 (U) | 252 | Nonparametric | 38.52 | 95% KM (Chebyshev) |
| Copper | 49 | 50 | 0.949 (J) | 556 | Nonparametric | 76.55 | 95% KM (Chebyshev) |
| Cyanide (total) | 4 | 51 | 0.0799 (J) | 2.7 (J) | n/a* | 2.7 | Maximum detected concentration |
| Lead | 49 | 50 | 0.33 (U) | 249 | Nonparametric | 41 | 95% KM (Chebyshev) |
| Mercury | 48 | 50 | 0.0043 (J) | 14.7 | Nonparametric | 3.009 | 97.5% KM (Chebyshev) |
| Nickel | 50 | 50 | 0.3 | 62.6 | Nonparametric | 11.48 | 95% KM (Chebyshev) |
| Nitrate | 23 | 50 | 0.093 (U) | 9.8 (J) | Nonparametric | 1.993 | 95% KM (% Bootstrap) |
| Perchlorate | 5 | 50 | 0.000675 (J) | 0.0064 (UJ) | Nonparametric | 0.00135 | 95% KM (t) |
| Selenium | 21 | 50 | 0.16 (J) | 1.9 | Nonparametric | 0.559 | 95% KM (% Bootstrap) |
| Silver | 48 | 52 | 0.046 (J) | 42.2 | Nonparametric | 8.849 | 97.5% KM (Chebyshev) |
| Uranium | 50 | 51 | 0.11 (U) | 19.2 | Nonparametric | 3.216 | 95% KM (Chebyshev) |
| Zinc | 49 | 50 | 2.2 (U) | 1640 | Nonparametric | 224.8 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 3 | 51 | 0.0322 (U) | 0.42 (U) | n/a | 0.281 | Maximum detected concentration |
| Anthracene | 4 | 51 | 0.0322 (U) | 0.65 | n/a | 0.65 | Maximum detected concentration |
| Aroclor-1254 | 1 | 1 | 0.0044 | 0.0044 | n/a | 0.0044 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0031 (J) | 0.0031 (J) | n/a | 0.0031 | Maximum detected concentration |

**Table H-2.2-53 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | 6 | 51 | 0.0291 (J) | 5.9 | Nonparametric | 0.552 | 95% KM (t) |
| Benzo(a)pyrene | 7 | 51 | 0.0184 (J) | 4.4 (J) | Nonparametric | 0.418 | 95% KM (t) |
| Benzo(b)fluoranthene | 10 | 51 | 0.0123 (J) | 6 (J) | Nonparametric | 0.547 | 95% KM (t) |
| Benzo(g,h,i)perylene | 5 | 51 | 0.0322 (U) | 2.1 (J) | Nonparametric | 0.233 | 95% KM (t) |
| Benzo(k)fluoranthene | 6 | 51 | 0.0322 (U) | 4.6 (J) | Nonparametric | 0.469 | 95% KM (t) |
| Benzoic acid | 4 | 51 | 0.388 (U) | 2 (U) | n/a | 0.501 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 8 | 51 | 0.078 (J) | 4.2 | Nonparametric | 0.689 | 95% KM (Chebyshev) |
| Butylbenzylphthalate | 5 | 51 | 0.069 (J) | 1.2 | Nonparametric | 0.216 | 95% KM (Percentile Bootstrap) |
| Chloroform | 2 | 26 | 0.000219 (J) | 0.0056 (U) | n/a | 0.000254 | Maximum detected concentration |
| Chrysene | 8 | 51 | 0.0248 (J) | 6 | Nonparametric | 0.571 | 95% KM (t) |
| Dibenzo(a,h)anthracene | 2 | 51 | 0.0322 (U) | 0.84 (J) | n/a | 0.84 | Maximum detected concentration |
| Dibenzofuran | 1 | 51 | 0.055 (J) | 0.42 (U) | n/a | 0.055 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 1 | 51 | 0.064 (J) | 0.42 (U) | n/a | 0.064 | Maximum detected concentration |
| Dimethylphenol[2,4-] | 1 | 51 | 0.063 (J) | 0.42 (U) | n/a | 0.063 | Maximum detected concentration |
| Di-n-butylphthalate | 5 | 51 | 0.04 (J) | 0.85 | Nonparametric | 0.239 | 95% KM (t) UCL |
| Di-n-octylphthalate | 1 | 51 | 0.1 (J) | 0.42 (U) | n/a | 0.1 | Maximum detected concentration |
| Ethylbenzene | 1 | 26 | 0.00043 (J) | 0.0056 (UJ) | n/a | 0.00043 | Maximum detected concentration |
| Fluoranthene | 9 | 51 | 0.0137 (J) | 6.7 | Nonparametric | 0.599 | 95% KM (t) |
| Fluorene | 2 | 51 | 0.0322 (U) | 0.42 (U) | n/a | 0.17 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 1.58E-06 (J) | 1.58E-06 (J) | n/a | 1.58E-06 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 5 | 51 | 0.0322 (U) | 2.2 (J) | Nonparametric | 0.235 | 95% KM (t) |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 9.95E-06 | 9.95E-06 | n/a | 9.95E-06 | Maximum detected concentration |
| Phenanthrene | 4 | 51 | 0.0322 (UJ) | 2.2 | n/a | 2.2 | Maximum detected concentration |
| Pyrene | 9 | 51 | 0.0114 (J) | 6 | Nonparametric | 0.537 | 95% KM (t) |

**Table H-2.2-53 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Trimethylbenzene[1,2,4-] | 2 | 26 | 0.000413 (J) | 0.0056 (UJ) | n/a | 0.00049 | Maximum detected concentration |
| Xylene (Total) | 1 | 9 | 0.0015 (J) | 0.0056 (U) | n/a | 0.0015 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 16 | 51 | -0.012 (UJ) | 58.1 | Nonparametric | 13.04 | 99% KM (Chebyshev) |
| Cesium-137 | 15 | 50 | -0.0155 (U) | 0.785 | Nonparametric | 0.232 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 10 | 50 | -0.0059 (U) | 3.24 | Nonparametric | 0.957 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 27 | 51 | -0.012 (U) | 83.5 | Nonparametric | 19.1 | 99% KM (Chebyshev) |
| Tritium | 36 | 50 | 0.0032 | 6.12 | Nonparametric | 0.717 | 95% KM (Chebyshev) |
| Uranium-234 | 51 | 51 | 0.273 | 43.1 | Nonparametric | 5.631 | 95% KM (Chebyshev) |
| Uranium-235/236 | 35 | 51 | 0.009 (U) | 1.8 | Nonparametric | 0.17 | 95% KM (BCA) |
| Uranium-238 | 51 | 51 | 0.225 | 5.2 | Nonparametric | 1.33 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-54**
**Exposure Point Concentrations for Consolidated Unit 21-026(a)-99 for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Aluminum | 58 | 57 | 5.5 (U) | 13200 | Nonparametric | 4696 | 95% KM (Chebyshev) |
| Antimony | 58 | 12 | 0.066 (J-) | 1.5 (J-) | Nonparametric | 0.2 | 95% KM (BCA) |
| Arsenic | 58 | 57 | 0.45 (J) | 11.9 | Nonparametric | 2.744 | 95% KM (Chebyshev) |
| Barium | 54 | 53 | 2.2 (U) | 708 | Nonparametric | 120.2 | 95% KM (Chebyshev) |
| Cadmium | 58 | 26 | 0.015 (J) | 12.1 | Nonparametric | 1.381 | 95% KM (Chebyshev) |
| Calcium | 43 | 43 | 433 | 42800 (J) | Gamma | 7081 | 95% Approximate Gamma |
| Chromium | 58 | 57 | 1.1 (U) | 252 | Nonparametric | 34.34 | 95% KM (Chebyshev) |
| Copper | 58 | 57 | 0.949 (J) | 556 | Nonparametric | 66.56 | 95% KM (Chebyshev) |
| Cyanide (total) | 59 | 4 | 0.0799 (J) | 2.7 (J) | n/a* | 2.7 | Maximum detected concentration |
| Lead | 58 | 57 | 0.33 (U) | 249 | Nonparametric | 50.7 | 95% KM (Chebyshev) |
| Mercury | 58 | 55 | 0.0043 (J) | 14.7 | Nonparametric | 2.603 | 97.5% KM (Chebyshev) |
| Nickel | 58 | 58 | 0.3 | 62.6 | Nonparametric | 10.3 | 95% Chebyshev (Mean, Sd) |
| Nitrate | 58 | 23 | 0.093 (U) | 9.8 (J) | Nonparametric | 1.883 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 58 | 9 | 0.000627 (J) | 0.0064 (UJ) | Nonparametric | 0.00132 | 95% KM (t) |
| Selenium | 58 | 24 | 0.16 (J) | 1.9 (U) | Nonparametric | 0.557 | 95% KM (Percentile Bootstrap) |
| Silver | 60 | 56 | 0.037 (J) | 42.2 | Nonparametric | 7.698 | 97.5% KM (Chebyshev) |
| Uranium | 59 | 58 | 0.11 (U) | 19.2 | Nonparametric | 2.882 | 95% KM (Chebyshev) |
| Zinc | 58 | 57 | 2.2 (U) | 1640 | Nonparametric | 199.6 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 59 | 3 | 0.0322 (U) | 0.42 (U) | n/a | 0.281 | Maximum detected concentration |
| Anthracene | 59 | 4 | 0.0322 (U) | 0.65 | n/a | 0.65 | Maximum detected concentration |
| Aroclor-1254 | 1 | 1 | 0.0044 | 0.0044 | n/a | 0.0044 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0031 | 0.0031 | n/a | 0.0031 | Maximum detected concentration |

**Table H-2.2-54 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene | 59 | 8 | 0.0142 (J) | 5.9 | Nonparametric | 0.471 | 95% KM (t) |
| Benzo(a)pyrene | 59 | 8 | 0.0184 (J) | 4.4 (J) | Nonparametric | 0.363 | 95% KM (t) |
| Benzo(b)fluoranthene | 59 | 12 | 0.0123 (J) | 6 (J) | Nonparametric | 1.662 | 99% KM (Chebyshev) |
| Benzo(g,h,i)perylene | 59 | 6 | 0.0322 (U) | 2.1 (J) | Nonparametric | 0.2 | 95% KM (t) |
| Benzo(k)fluoranthene | 59 | 7 | 0.0322 (U) | 4.6 (J) | Nonparametric | 0.4 | 95% KM (t) |
| Benzoic acid | 59 | 4 | 0.388 (U) | 2 (U) | n/a | 0.501 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 59 | 9 | 0.078 (J) | 4.2 | Nonparametric | 0.605 | 95% KM (Chebyshev) |
| Butylbenzylphthalate | 59 | 5 | 0.069 (J) | 1.2 | Nonparametric | 0.206 | 95% KM (Percentile Bootstrap) |
| Chloroform | 34 | 2 | 0.000219 (J) | 0.0056 (U) | n/a | 0.000254 | Maximum detected concentration |
| Chrysene | 59 | 9 | 0.0248 (J) | 6 | Nonparametric | 0.497 | 95% KM (t) |
| Dibenz(a,h)anthracene | 59 | 2 | 0.0322 (U) | 0.84 (J) | n/a | 0.84 | Maximum detected concentration |
| Dibenzofuran | 59 | 1 | 0.055 (J) | 0.42 (U) | n/a | 0.055 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 59 | 1 | 0.00103 (U) | 0.42 (U) | n/a | 0.064 | Maximum detected concentration |
| Dimethylphenol[2,4-] | 59 | 1 | 0.063 (J) | 0.42 (U) | n/a | 0.063 | Maximum detected concentration |
| Di-n-butylphthalate | 59 | 5 | 0.04 (J) | 0.85 | Nonparametric | 0.236 | 95% KM (t) |
| Di-n-octylphthalate | 59 | 1 | 0.1 (J) | 0.42 (U) | n/a | 0.1 | Maximum detected concentration |
| Ethylbenzene | 34 | 1 | 0.00043 (J) | 0.0056 (U) | n/a | 0.00043 | Maximum detected concentration |
| Fluoranthene | 59 | 11 | 0.0109 (J) | 6.7 | Nonparametric | 0.518 | 95% KM (t) |
| Fluorene | 59 | 2 | 0.0322 (U) | 0.42 (U) | n/a | 0.17 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000158 (J) | 1.58E-06 (J) | 1.58E-06 | n/a | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 59 | 5 | 0.0393 | 2.2 | Nonparametric | 0.208 | 95% KM (t) |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000995 | 9.95E-06 | 9.95E-06 | n/a | Maximum detected concentration |
| Phenanthrene | 59 | 5 | 0.0322 (UJ) | 2.2 | Nonparametric | 0.393 | 95% KM (Percentile Bootstrap) |
| Pyrene | 59 | 10 | 0.0114 (J) | 6 | Nonparametric | 0.467 | 95% KM (t) |

**Table H-2.2-54 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Trimethylbenzene[1,2,4-] | 34 | 2 | 0.000413 (J) | 0.0056 (U) | n/a | 0.00049 | Maximum detected concentration |
| Xylene[1,3-]+xylene[1,4-] | 24 | 2 | 0.000283 (J) | 0.00241 (U) | n/a | 0.000283 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 59 | 19 | -0.012 (UJ) | 58.1 | Nonparametric | 11.25 | 99% KM (Chebyshev) |
| Cesium-137 | 60 | 16 | -0.0421 (U) | 0.785 | Nonparametric | 0.192 | 95% KM (Percentile Bootstrap) |
| Plutonium-238 | 59 | 10 | -0.0059 (U) | 3.24 | Nonparametric | 0.817 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 59 | 31 | -0.012 (U) | 83.5 | Nonparametric | 16.52 | 99% KM (Chebyshev) |
| Tritium | 58 | 44 | 0.00319871 | 6.12 | Nonparametric | 0.624 | 95% KM (Chebyshev) |
| Uranium-234 | 59 | 59 | 0.273 | 43.1 | Nonparametric | 4.987 | 95% Chebyshev (Mean, Sd) |
| Uranium-235/236 | 59 | 40 | 0.009 (U) | 1.8 | Nonparametric | 0.15 | 95% KM (BCA) |
| Uranium-238 | 59 | 59 | 0.225 | 5.2 | Nonparametric | 1.027 | 95% Modified-t |

* n/a = Not applicable.

**Table H-2.2-55**
**Exposure Point Concentrations for SWMU 21-027(a) for Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 3 | 3 | 0.116 (J) | 0.299 (J) | n/a* | 0.299 | Maximum detected concentration |
| Arsenic | 9 | 9 | 0.796 (J) | 5.9 | Gamma | 3.44 | 95% Approximate Gamma |
| Barium | 9 | 9 | 14.7 | 114 | Normal | 72.73 | 95% Student's-t |
| Cadmium | 9 | 8 | 0.457 (J) | 2.86 | Nonparametric | 1.891 | 95% KM (t) |
| Chromium | 12 | 12 | 1.4 (J+) | 509 | Gamma | 248.5 | 95% Approximate Gamma |
| Copper | 10 | 10 | 1.34 | 148 | Gamma | 78.07 | 95% Approximate Gamma |
| Lead | 10 | 10 | 7.88 (J) | 57 | Normal | 37.5 | 95% Student's-t |
| Lithium | 9 | 9 | 6.73 | 15.3 | Normal | 11.01 | 95% Student's-t |
| Mercury | 10 | 10 | 0.009 (J) | 0.457 | Gamma | 0.26 | 95% Approximate Gamma |
| Nickel | 9 | 9 | 1.67 | 7.69 | Normal | 4.844 | 95% Student's-t |
| Nitrate | 9 | 9 | 2.6 | 13.9 | Nonparametric | 10.07 | 95% Chebyshev (Mean, Sd) |
| Perchlorate | 9 | 3 | 0.000581 (J) | 0.00364 | n/a | 0.00364 | Maximum detected concentration |
| Selenium | 9 | 5 | 0.538 (J) | 1.5 (U) | Nonparametric | 1.051 | 95% KM (t) |
| Strontium | 9 | 9 | 3.06 | 43.2 (J) | Normal | 28.68 | 95% Student's-t |
| Vanadium | 9 | 9 | 2.19 | 21.4 | Normal | 11.96 | 95% Student's-t |
| Zinc | 10 | 10 | 9.7 | 398 | Gamma | 224.7 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 10 | 3 | 0.0227 (J) | 0.35 (U) | n/a | 0.0557 | Maximum detected concentration |
| Anthracene | 10 | 5 | 0.00724 (J) | 0.35 (U) | Nonparametric | 0.0543 | 95% KM (t) |
| Aroclor-1254 | 1 | 1 | 0.0518 | 0.0518 | n/a | 0.0518 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0284 | 0.0284 | n/a | 0.0284 | Maximum detected concentration |
| Benzo(a)anthracene | 10 | 5 | 0.0335 (U) | 0.713 | Nonparametric | 0.355 | 95% KM (Percentile Bootstrap) |
| Benzo(a)pyrene | 10 | 3 | 0.0335 (U) | 0.819 | n/a | 0.819 | Maximum detected concentration |

**Table H-2.2-55 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 10 | 7 | 0.0335 (U) | 1.55 | Nonparametric | 0.64 | 95% KM (BCA) |
| Benzo(g,h,i)perylene | 10 | 6 | 0.0273 (J) | 0.457 | Nonparametric | 0.209 | 95% KM (Percentile Bootstrap) |
| Bis(2-ethylhexyl)phthalate | 10 | 1 | 0.168 (U) | 0.35 (U) | n/a | 0.287 | Maximum detected concentration |
| Chrysene | 10 | 8 | 0.0273 (J) | 0.801 | Nonparametric | 0.549 | 95% KM (Chebyshev) |
| Fluoranthene | 10 | 9 | 0.012 (J) | 1.84 | Nonparametric | 1.197 | 95% KM (Chebyshev) |
| Fluorene | 10 | 2 | 0.0156 (J) | 0.35 (U) | n/a | 0.0344 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 3 | 3 | 0.000000613 (J) | 0.0837 | n/a | 0.0837 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 3 | 3 | 0.000000177 (J) | 0.0109 | n/a | 0.0109 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 3 | 2 | 0.0000000741 (U) | 0.000799 | n/a | 0.000799 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 3 | 2 | 0.000000182 (U) | 0.000499 | n/a | 0.000499 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 3 | 2 | 0.000000187 (U) | 0.00304 | n/a | 0.00304 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 3 | 2 | 0.000000182 (U) | 0.00129 | n/a | 0.00129 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 3 | 2 | 0.0000000548 (U) | 0.000279 | n/a | 0.000279 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 3 | 2 | 0.0000000624 (U) | 0.000296 | n/a | 0.000296 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 3 | 1 | 0.0000000762 (U) | 7.85E-05 | n/a | 7.85E-05 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 3 | 2 | 0.0000000681 (U) | 0.000619 | n/a | 0.000619 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 10 | 5 | 0.0218 (J) | 0.721 | Nonparametric | 0.318 | 95% KM (Percentile Bootstrap) |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 3 | 3 | 0.00000441 (J) | 0.35 | n/a | 0.35 | Maximum detected concentration |

**Table H-2.2-55 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 3 | 3 | 0.000000395 (J) | 0.0351 | n/a | 0.0351 | Maximum detected concentration |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 3 | 2 | 0.000000122 (U) | 0.000247 | n/a | 0.000247 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 3 | 1 | 0.00000011 (U) | 3.03E-05 | n/a | 3.03E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 3 | 1 | 0.000000114 (U) | 8.49E-05 | n/a | 8.49E-05 | Maximum detected concentration |
| Phenanthrene | 10 | 8 | 0.0142 (J) | 0.611 | Nonparametric | 0.441 | 95% KM (Chebyshev) |
| Pyrene | 10 | 9 | 0.0109 (J) | 1.72 | Nonparametric | 1.1 | 95% KM (Chebyshev) |
| Tetrachlorodibenzodioxin [2,3,7,8-] | 3 | 1 | 0.0000000575 (U) | 2.59E-05 | n/a | 2.59E-05 | Maximum detected concentration |
| Tetrachlorodibenzofuran [2,3,7,8-] | 3 | 2 | 0.000000104 (U) | 9.24E-06 | n/a | 9.24E-06 | Maximum detected concentration |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 10 | 9 | 0.014 (U) | 54.5 (J) | Nonparametric | 36.18 | 95% KM (Chebyshev) |
| Cesium-137 | 9 | 9 | 0.322 | 1.32 | Gamma | 0.952 | 95% Approximate Gamma |
| Plutonium-238 | 10 | 9 | 0.018 (U) | 28.3 | Nonparametric | 19.02 | 95% KM (t) |
| Plutonium-239/240 | 10 | 10 | 0.211 | 159 | Normal | 92.22 | 95% Student's-t |
| Tritium | 9 | 3 | -2.61 (U) | 3.96 (U) | n/a | 0.109 | Maximum detected concentration |
| Uranium-234 | 10 | 10 | 0.905 | 51.9 | Gamma | 32.57 | 95% Approximate Gamma |
| Uranium-235/236 | 10 | 10 | 0.059 | 2.74 | Gamma | 1.66 | 95% Approximate Gamma |
| Uranium-238 | 10 | 10 | 0.761 | 2.77 | Normal | 2.01 | 95% Student's-t |

* n/a = Not applicable.

## Table H-2.2-56
## Exposure Point Concentrations for SWMU 21-027(a) for Ecological Risk

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 6 | 17 | 0.116 (J) | 1.8 (J-) | Nonparametric | 0.538 | 95% KM (t) |
| Arsenic | 27 | 29 | 0.596 (J) | 9.28 | Nonparametric | 4.587 | 95% KM (Chebyshev) |
| Barium | 29 | 29 | 2.98 | 161 | Nonparametric | 90.33 | 95% KM (Chebyshev) |
| Cadmium | 19 | 29 | 0.134 (J) | 2.86 | Nonparametric | 1.451 | 97.5% KM (Chebyshev) |
| Chromium | 32 | 32 | 1.4 (J+) | 561 (J) | Nonparametric | 359.7 | 99% KM (Chebyshev) |
| Copper | 28 | 28 | 0.334 (J) | 148 | Nonparametric | 46.36 | 95% KM (Chebyshev) |
| Lead | 30 | 30 | 5.6 (J) | 57 | Nonparametric | 24.03 | 95% KM (BCA) |
| Lithium | 29 | 29 | 1.86 (J) | 18.1 | Nonparametric | 9.698 | 95% KM (t) |
| Mercury | 29 | 30 | 0.0023 (J) | 0.598 (J+) | Nonparametric | 0.295 | 97.5% KM (Chebyshev) |
| Nickel | 29 | 29 | 0.448 | 11.9 | Nonparametric | 7.749 | 95% KM (Chebyshev) |
| Nitrate | 21 | 29 | 0.959 (U) | 13.9 | Nonparametric | 3.815 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 6 | 29 | 0.000581 (J) | 0.0052 (U) | Nonparametric | 0.00177 | 95% KM (Percentile Bootstrap) |
| Selenium | 18 | 29 | 0.18 (J) | 4.09 | Nonparametric | 1.589 | 95% KM (Percentile Bootstrap) |
| Strontium | 29 | 29 | 0.703 | 43.2 (J) | Nonparametric | 19.65 | 95% KM (t) |
| Vanadium | 29 | 29 | 1.15 | 35 | Nonparametric | 17.96 | 95% KM (Chebyshev) |
| Zinc | 30 | 30 | 9.7 | 698 (J) | Nonparametric | 235.9 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 5 | 30 | 0.0188 (J) | 0.35 (U) | Nonparametric | 0.0467 | 95% KM (Percentile Bootstrap) |
| Acetone | 1 | 20 | 0.00502 (UJ) | 0.0269 (J) | n/a* | 0.0269 | Maximum detected concentration |
| Anthracene | 8 | 30 | 0.00724 (J) | 0.35 (U) | Nonparametric | 0.035 | 95% KM (Percentile Bootstrap) |
| Aroclor-1254 | 2 | 2 | 0.0095 | 0.0518 | n/a | 0.0518 | Maximum detected concentration |
| Aroclor-1260 | 2 | 2 | 0.0069 | 0.0284 (J) | n/a | 0.0284 | Maximum detected concentration |
| Benzo(a)anthracene | 11 | 30 | 0.0189 (J) | 0.713 | Nonparametric | 0.136 | 95% KM (t) |
| Benzo(a)pyrene | 5 | 30 | 0.0185 (U) | 0.819 | Nonparametric | 0.393 | 95% KM (Percentile Bootstrap) |

**Table H-2.2-56 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 12 | 30 | 0.0306 (U) | 1.55 | Nonparametric | 0.262 | 95% KM (t) |
| Benzo(g,h,i)perylene | 8 | 30 | 0.0273 (J) | 0.457 | Nonparametric | 0.138 | 95% KM (Percentile Bootstrap) |
| Benzo(k)fluoranthene | 1 | 30 | 0.0246 (U) | 0.35 (U) | n/a | 0.244 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 2 | 30 | 0.044 (J) | 0.35 (U) | n/a | 0.287 | Maximum detected concentration |
| Butanone[2-] | 1 | 20 | 0.00502 (UJ) | 0.021 (U) | n/a | 0.00581 | Maximum detected concentration |
| Chrysene | 14 | 30 | 0.0206 (J) | 0.801 | Nonparametric | 0.158 | 95% KM (t) |
| Di-n-butylphthalate | 3 | 30 | 0.036 (J) | 1.37 (U) | n/a | 0.12 | Maximum detected concentration |
| Fluoranthene | 18 | 30 | 0.0108 (J) | 1.84 | Nonparametric | 0.354 | 95% KM (BCA) |
| Fluorene | 3 | 30 | 0.0156 (J) | 0.35 (U) | n/a | 0.0344 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 8 | 9 | 1.25E-07 (J) | 0.0837 | Nonparametric | 0.0505 | 95% KM (Chebyshev) |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 6 | 9 | 0.000000088 (U) | 0.0109 | Nonparametric | 0.00367 | 95% KM (BCA) |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 5 | 9 | 0.0000000631 (U) | 0.000799 | Nonparametric | 3.5525E-4 | 95% KM (BCA) |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 5 | 9 | 0.000000106 (U) | 0.000499 | Nonparametric | 6.3648E-4 | 99% KM (Chebyshev) |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 5 | 9 | 0.000000107 (U) | 0.00304 | Nonparametric | 0.00136 | 95% KM (BCA) |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 5 | 9 | 0.000000102 (U) | 0.00129 | Nonparametric | 4.3790E-4 | 95% KM (BCA) |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 5 | 9 | 0.0000000548 (U) | 0.000279 | Nonparametric | 1.2540E-4 | 95% KM (BCA) |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 5 | 9 | 0.0000000415 (U) | 0.000296 | Nonparametric | 1.0083E-4 | 95% KM (BCA) |
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 4 | 9 | 0.0000000561 (U) | 7.85E-05 | n/a | 7.85E-05 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 5 | 9 | 0.000000044 (U) | 0.000619 | Nonparametric | 2.0975E-4 | 95% KM (BCA) |
| Indeno(1,2,3-cd)pyrene | 7 | 30 | 0.0218 (J) | 0.721 | Nonparametric | 0.118 | 95% KM (t) |

**Table H-2.2-56 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Naphthalene | 1 | 30 | 0.0143 (J) | 0.35 (U) | n/a | 0.0143 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 9 | 9 | 4.75E-07 (J) | 0.35 | Nonparametric | 0.212 | 95% KM (Chebyshev) |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 6 | 9 | 0.00000023 (U) | 0.0351 | Nonparametric | 0.0118 | 95% KM (BCA) |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 5 | 9 | 0.000000111 (U) | 0.000247 | Nonparametric | 3.1502E-4 | 99% KM (Chebyshev) |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 3 | 9 | 0.0000000873 (U) | 3.03E-05 | n/a | 3.03E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 3 | 9 | 0.000000089 (U) | 8.49E-05 | n/a | 8.49E-05 | Maximum detected concentration |
| Phenanthrene | 12 | 30 | 0.0142 (J) | 0.611 | Nonparametric | 0.142 | 95% KM (t) |
| Pyrene | 17 | 30 | 0.0109 (J) | 1.72 | Nonparametric | 0.315 | 95% KM (BCA) |
| Tetrachlorodibenzodioxin [2,3,7,8-] | 4 | 9 | 0.0000000467 (U) | 2.59E-05 | n/a | 2.59E-05 | Maximum detected concentration |
| Tetrachlorodibenzofuran [2,3,7,8-] | 5 | 9 | 0.0000000732 (U) | 9.24E-06 | Nonparametric | 3.2996E-6 | 95% KM (BCA) |
| Tetrachloroethene | 4 | 20 | 0.000227 (J) | 0.00559 | n/a | 0.00559 | Maximum detected concentration |
| Toluene | 7 | 20 | 0.00018 (U) | 0.0051 (U) | Nonparametric | 0.000654 | 95% KM (Percentile Bootstrap) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 27 | 30 | 0.00139 (U) | 54.5 (J) | Nonparametric | 17.72 | 95% KM (Chebyshev) |
| Cesium-137 | 13 | 28 | -0.0414 (U) | 1.32 | Nonparametric | 0.456 | 95% KM (t) |
| Plutonium-238 | 26 | 30 | -0.00346 (U) | 89.4 (J) | Nonparametric | 40.01 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 30 | 30 | 0.0329 | 168 | Nonparametric | 81.91 | 95% KM (Chebyshev) |
| Tritium | 9 | 29 | -2.61 (U) | 3.96 (U) | Nonparametric | 0.368 | 99% KM (Chebyshev) |
| Uranium-234 | 28 | 30 | 0.905 | 51.9 | Nonparametric | 20.36 | 97.5% KM (Chebyshev) |
| Uranium-235/236 | 28 | 29 | 0.059 | 2.74 | Nonparametric | 1.103 | 97.5% KM (Chebyshev) |
| Uranium-238 | 28 | 30 | 0.761 | 2.77 | Nonparametric | 1.635 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-57**
**Exposure Point Concentrations for SWMU 21-027(a) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 18 | 6 | 0.116 (J) | 1.8 (J-) | Nonparametric | 0.524 | 95% KM (t) |
| Arsenic | 31 | 29 | 0.596 (J) | 9.28 | Nonparametric | 4.398 | 95% KM (Chebyshev) |
| Barium | 31 | 31 | 2.98 | 161 | Gamma | 70.51 | 95% Approximate Gamma |
| Cadmium | 31 | 19 | 0.134 (J) | 2.86 | Nonparametric | 1.383 | 97.5% KM (Chebyshev) |
| Chromium | 34 | 34 | 1.23 | 561 (J) | Nonparametric | 200.8 | 95% Chebyshev (Mean, Sd) |
| Copper | 30 | 30 | 0.334 (J) | 148 | Gamma | 29.85 | 95% Approximate Gamma |
| Lead | 32 | 32 | 3.88 | 57 | Gamma | 23.42 | 95% Approximate Gamma |
| Lithium | 31 | 31 | 1.86 (J) | 18.1 | Normal | 9.411 | 95% Student's-t |
| Mercury | 32 | 30 | 0.0023 (J) | 0.598 (J+) | Nonparametric | 0.279 | 97.5% KM (Chebyshev) |
| Nickel | 31 | 31 | 0.448 | 11.9 | Gamma | 6.021 | 95% Approximate Gamma |
| Nitrate | 31 | 22 | 0.959 (U) | 13.9 | Nonparametric | 3.692 | 95% KM (Percentile Bootstrap) |
| Perchlorate | 31 | 6 | 0.000581 (J) | 0.0052 (U) | Nonparametric | 0.00176 | 95% KM (Percentile Bootstrap) |
| Selenium | 31 | 19 | 0.18 (J) | 4.09 | Nonparametric | 1.581 | 95% KM (Percentile Bootstrap) |
| Strontium | 31 | 31 | 0.703 | 43.2 (J) | Gamma | 20.29 | 95% Approximate Gamma |
| Vanadium | 31 | 31 | 1.15 | 35 | Gamma | 13.67 | 95% Approximate Gamma |
| Zinc | 33 | 33 | 9.7 | 698 (J) | Lognormal | 177.9 | 95% H |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 32 | 5 | 0.0188 (J) | 0.35 (U) | Nonparametric | 0.0469 | 95% KM (Percentile Bootstrap) |
| Acetone | 22 | 1 | 0.00502 (UJ) | 0.0269 (J) | n/a* | 0.0269 | Maximum detected concentration |
| Anthracene | 32 | 8 | 0.00724 (J) | 0.35 (U) | Nonparametric | 0.0345 | 95% KM (Percentile Bootstrap) |
| Aroclor-1254 | 2 | 2 | 0.0095 | 0.0518 | n/a | 0.0518 | Maximum detected concentration |
| Aroclor-1260 | 2 | 2 | 0.0069 | 0.0284 (J) | n/a | 0.0284 | Maximum detected concentration |
| Benzo(a)anthracene | 32 | 11 | 0.0189 (J) | 0.713 | Nonparametric | 0.129 | 95% KM (t) |
| Benzo(a)pyrene | 32 | 5 | 0.0185 (U) | 0.819 | Nonparametric | 0.392 | 95% KM (Percentile Bootstrap) |
| Benzo(b)fluoranthene | 32 | 12 | 0.0306 (U) | 1.55 | Nonparametric | 0.248 | 95% KM (t) |

**Table H-2.2-57 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 32 | 8 | 0.0273 (J) | 0.457 | Nonparametric | 0.136 | 95% KM (Percentile Bootstrap) |
| Benzo(k)fluoranthene | 32 | 1 | 0.0246 (U) | 0.35 (U) | n/a | 0.244 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 32 | 2 | 0.044 (J) | 0.35 (U) | n/a | 0.287 | Maximum detected concentration |
| Butanone[2-] | 22 | 1 | 0.00502 (U) | 0.021 (U) | n/a | 0.00581 | Maximum detected concentration |
| Chrysene | 32 | 14 | 0.0206 (J) | 0.801 | Nonparametric | 0.15 | 95% KM (t) |
| Di-n-butylphthalate | 32 | 3 | 0.036 (J) | 1.37 (U) | n/a | 0.12 | Maximum detected concentration |
| Fluoranthene | 32 | 18 | 0.0108 (J) | 1.84 | Nonparametric | 0.316 | 95% KM (BCA) |
| Fluorene | 32 | 3 | 0.0156 (J) | 0.35 (U) | n/a | 0.0344 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 11 | 10 | 0.000000125 (J) | 0.0837 | Nonparametric | 0.0414 | 95% KM (Chebyshev) |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 11 | 8 | 0.000000088 (U) | 0.0109 | n/a | 0.0109 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,7,8,9-] | 11 | 7 | 0.0000000631 (U) | 0.000799 | n/a | 0.000799 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,4,7,8-] | 11 | 7 | 0.000000106 (U) | 0.000499 | n/a | 0.000499 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,6,7,8-] | 11 | 7 | 0.000000107 (U) | 0.00304 | n/a | 0.00304 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 11 | 7 | 0.000000102 (U) | 0.00129 | n/a | 0.00129 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,4,7,8-] | 11 | 7 | 0.0000000548 (U) | 0.000279 | n/a | 0.000279 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,6,7,8-] | 11 | 7 | 0.0000000415 (U) | 0.000296 | n/a | 0.000296 | Maximum detected concentration |
| Hexachlorodibenzofuran [1,2,3,7,8,9-] | 11 | 6 | 0.0000000561 (U) | 0.0000785 | n/a | 7.85E-05 | Maximum detected concentration |
| Hexachlorodibenzofuran [2,3,4,6,7,8-] | 11 | 7 | 0.000000044 (U) | 0.000619 | n/a | 0.000619 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 32 | 7 | 0.0218 (J) | 0.721 (J) | Nonparametric | 0.111 | 95% KM (t) |
| Naphthalene | 32 | 1 | 0.0143 (J) | 0.35 (U) | n/a | 0.0143 | Maximum detected concentration |

**Table H-2.2-57 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 11 | 11 | 0.000000475 (J) | 0.35 | Gamma | 0.301 | 95% Adjusted Gamma |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 11 | 8 | 0.00000023 (U) | 0.0351 | n/a | 0.0351 | Maximum detected concentration |
| Pentachlorodibenzodioxin [1,2,3,7,8-] | 11 | 7 | 0.000000111 (U) | 0.000247 | n/a | 0.000247 | Maximum detected concentration |
| Pentachlorodibenzofuran [1,2,3,7,8-] | 11 | 5 | 0.0000000873 (U) | 0.0000303 | n/a | 3.03E-05 | Maximum detected concentration |
| Pentachlorodibenzofuran [2,3,4,7,8-] | 11 | 5 | 0.000000089 (U) | 0.0000849 | n/a | 8.49E-05 | Maximum detected concentration |
| Phenanthrene | 32 | 12 | 0.0142 (J) | 0.0142 (J) | Nonparametric | 0.135 | 95% KM (t) |
| Pyrene | 32 | 17 | 0.0109 (J) | 0.0109 (J) | Nonparametric | 0.307 | 95% KM (BCA) |
| Tetrachlorodibenzodioxin [2,3,7,8-] | 11 | 5 | 0.0000000467 (U) | 0.0000259 | Nonparametric | 1.82E-05 | 97.5% KM (Chebyshev) |
| Tetrachlorodibenzofuran [2,3,7,8-] | 11 | 5 | 0.0000000732 (U) | 0.00000924 | Nonparametric | 2.64E-06 | 95% KM (t) |
| Tetrachloroethene | 23 | 4 | 0.000227 (J) | 0.0056 (U) | n/a | 0.00559 | Maximum detected concentration |
| Toluene | 22 | 7 | 0.00018 (U) | 0.0051 (U) | Nonparametric | 0.0006482 | 95% KM (Percentile Bootstrap) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 34 | 29 | -0.00621 (U) | 54.5 (J) | Nonparametric | 10.25 | 95% KM (BCA) |
| Cesium-137 | 30 | 13 | -0.0414 (U) | 1.32 | Nonparametric | 0.438 | 95% KM (t) |
| Plutonium-238 | 34 | 28 | -0.00346 (U) | 89.4 (J) | Nonparametric | 35.62 | 99% KM (Chebyshev) |
| Plutonium-239/240 | 34 | 34 | 0.0272 | 168 | Gamma | 61.27 | 95% Adjusted Gamma |
| Tritium | 32 | 11 | -2.61 (U) | 3.96 (U) | Nonparametric | 0.384 | 99% KM (Chebyshev) |
| Uranium-234 | 32 | 30 | 0.737 | 51.9 | Nonparametric | 19.24 | 97.5% KM (Chebyshev) |
| Uranium-235/236 | 31 | 29 | 0.021 (U) | 2.74 | Nonparametric | 0.843 | 95% KM (Chebyshev) |
| Uranium-238 | 32 | 30 | 0.669 | 2.77 | Nonparametric | 1.597 | 95% KM (Chebyshev) |

* n/a = Not applicable.

## Table H-2.2-58
## Exposure Point Concentrations for SWMU 21-027(c) for Industrial Scenario

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Barium | 14 | 14 | 11.6 (J-) | 114 (J-) | Gamma | 78.59 | 95% Approximate Gamma |
| Chromium | 14 | 14 | 1.11 | 15.6 | Normal | 8.767 | 95% Student's-t |
| Cobalt | 14 | 13 | 0.358 (J) | 4.79 | Nonparametric | 2.701 | 95% KM (t) |
| Copper | 14 | 14 | 0.798 (J) | 17.7 | Normal | 8.866 | 95% Student's-t |
| Lead | 16 | 16 | 5.54 | 120 | Gamma | 46.26 | 95% Approximate Gamma |
| Mercury | 14 | 14 | 0.0031 (J) | 0.111 | Gamma | 0.0529 | 95% Approximate Gamma |
| Nitrate | 14 | 9 | 0.788 (J-) | 2.75 | Nonparametric | 1.376 | 95% KM (BCA) |
| Perchlorate | 14 | 2 | 0.00104 (J) | 0.00247 (U) | n/a* | 0.00155 | Maximum detected concentration |
| Selenium | 14 | 5 | 0.649 (J) | 1.81 (U) | Nonparametric | 0.819 | 95% KM (t) |
| Uranium | 14 | 14 | 0.418 | 2.77 | Gamma | 1.167 | 95% Approximate Gamma |
| Zinc | 14 | 14 | 7.72 (J-) | 108 (J-) | Normal | 61.03 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 14 | 3 | 0.032 (J) | 0.565 | n/a | 0.565 | Maximum detected concentration |
| Anthracene | 14 | 4 | 0.0108 (J) | 0.949 | n/a | 0.949 | Maximum detected concentration |
| Aroclor-1260 | 1 | 1 | 0.0016 | 0.0016 | n/a | 0.0016 | Maximum detected concentration |
| Benzo(a)anthracene | 14 | 3 | 0.035 (U) | 3.08 (J) | n/a | 3.08 | Maximum detected concentration |
| Benzo(a)pyrene | 14 | 6 | 0.0301 (J) | 2.43 (J) | Nonparametric | 0.584 | 95% KM (t) |
| Benzo(b)fluoranthene | 14 | 10 | 0.0127 (J) | 5.67 (J) | Nonparametric | 2.365 | 95% KM (Chebyshev) |
| Benzo(g,h,i)perylene | 14 | 2 | 0.035 (UJ) | 1.12 (J) | n/a | 1.12 | Maximum detected concentration |
| Benzo(k)fluoranthene | 14 | 2 | 0.0116 (J) | 0.352 (U) | n/a | 0.0212 | Maximum detected concentration |
| Benzoic acid | 14 | 1 | 0.306 (J) | 7.04 (U) | n/a | 0.306 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 14 | 3 | 0.159 (J) | 48.8 | n/a | 48.8 | Maximum detected concentration |
| Chrysene | 14 | 8 | 0.0154 (J) | 3.18 (J) | Nonparametric | 0.781 | 95% KM (BCA) |
| Di-n-butylphthalate | 14 | 3 | 0.0381 (J) | 3.52 (U) | n/a | 0.506 | Maximum detected concentration |
| Dibenzofuran | 14 | 1 | 0.25 (J) | 3.52 (U) | n/a | 0.25 | Maximum detected concentration |

**Table H-2.2-58 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Fluoranthene | 14 | 10 | 0.0142 (J) | 5.78 | Nonparametric | 2.385 | 95% KM (Chebyshev) |
| Fluorene | 14 | 3 | 0.0244 (J) | 0.48 | n/a | 0.48 | Maximum detected concentration |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 5.16E-06 | 5.16E-06 | n/a | 5.16E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 1.2E-06(J) | 1.2E-06(J) | n/a | 1.2E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 1.91E-07(J) | 1.91E-07(J) | n/a | 1.91E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 14 | 4 | 0.035 (UJ) | 1.11 (J) | n/a | 1.11 | Maximum detected concentration |
| Methylnaphthalene[2-] | 14 | 1 | 0.035 (U) | 0.352 (U) | n/a | 0.0794 | Maximum detected concentration |
| Naphthalene | 14 | 1 | 0.035 (U) | 0.352 (U) | n/a | 0.223 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 4.96E-05 | 4.96E-05 | n/a | 4.96E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 2.18E-06(J) | 2.18E-06(J) | n/a | 2.18E-06 | Maximum detected concentration |
| Phenanthrene | 14 | 8 | 0.0158 (J) | 4.98 | Nonparametric | 1.165 | 95% KM (BCA) |
| Pyrene | 14 | 10 | 0.0237 (J) | 9.91 (J) | Nonparametric | 4.081 | 95% KM (Chebyshev) |
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 15 | 10 | 0.00275 (U) | 3.59 | Nonparametric | 1.158 | 95% KM (BCA) |
| Cesium-134 | 5 | 1 | 0.0352 (U) | 0.141 | n/a | 0.141 | Maximum detected concentration |
| Cesium-137 | 12 | 8 | 0.0067 (U) | 0.458 | Nonparametric | 0.394 | 95% KM (BCA) |
| Plutonium-238 | 15 | 7 | -0.00871 (U) | 0.248 | Nonparametric | 0.113 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 15 | 15 | 0.0688 | 17.8 | Gamma | 9.59 | 95% Approximate Gamma |
| Strontium-90 | 15 | 1 | 0.141 (U) | 2.97 | n/a | 2.97 | Maximum detected concentration |
| Tritium | 14 | 5 | 0.0132973 (U) | 0.04843 | Nonparametric | 0.0325 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 14 | 14 | 0.55 | 3.31 | Gamma | 1.617 | 95% Approximate Gamma |

* n/a = Not applicable.

**Table H-2.2-59**
**Exposure Point Concentrations for SWMU 21-027(c) for Ecological Risk**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Barium | 31 | 31 | 2.64 | 197 (J+) | Nonparametric | 92.73 | 95% KM (Chebyshev) |
| Calcium | 31 | 31 | 233 (J) | 21500 (J) | Nonparametric | 5434 | 95% KM (Chebyshev) |
| Chromium | 31 | 31 | 0.742 | 52.3 | Nonparametric | 17.34 | 95% KM (Chebyshev) |
| Cobalt | 27 | 31 | 0.211 (J) | 8.57 | Nonparametric | 2.725 | 95% KM (BCA) |
| Copper | 31 | 31 | 0.47 (J) | 35.3 (J+) | Nonparametric | 13.86 | 95% KM (Chebyshev) |
| Lead | 34 | 34 | 4.72 | 120 (J) | Nonparametric | 57.62 | 95% KM (Chebyshev) |
| Mercury | 28 | 31 | 0.0031 (J) | 0.37 | Nonparametric | 0.0903 | 95% KM (Chebyshev) |
| Nitrate | 10 | 31 | 0.788 (J-) | 2.75 | Nonparametric | 1.103 | 95% KM (% Bootstrap) |
| Perchlorate | 3 | 31 | 0.000649 (J) | 0.00247 (U) | n/a* | 0.00155 | Maximum detected concentration |
| Selenium | 11 | 31 | 0.649 (J) | 1.81 (U) | Nonparametric | 0.907 | 95% KM (t) |
| Uranium | 31 | 31 | 0.418 | 3.92 | Nonparametric | 1.22 | 95% KM (BCA) |
| Zinc | 31 | 31 | 5.76 (J-) | 231 (J+) | Nonparametric | 83.9 | 95% KM (Chebyshev) |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 6 | 32 | 0.0215 (J) | 0.565 | Nonparametric | 0.0805 | 95% KM (BCA) |
| Acenaphthylene | 1 | 32 | 0.0206 (J) | 0.39 (U) | n/a | 0.0206 | Maximum detected concentration |
| Acetone | 3 | 17 | 0.0044 (J) | 0.0112 (J) | n/a | 0.0112 | Maximum detected concentration |
| Anthracene | 9 | 32 | 0.0106 (J) | 0.949 | Nonparametric | 0.113 | 95% KM (BCA) |
| Aroclor-1260 | 1 | 1 | 0.0016 (J) | 0.0016 (J) | n/a | 0.0016 | Maximum detected concentration |
| Benzo(a)anthracene | 7 | 32 | 0.0342 (U) | 3.08 (J) | Nonparametric | 0.567 | 95% KM (BCA) |
| Benzo(a)pyrene | 9 | 29 | 0.0301 (J) | 2.43 (J) | Nonparametric | 0.331 | 95% KM (t) |
| Benzo(b)fluoranthene | 13 | 29 | 0.0127 (J) | 5.67 (J) | Nonparametric | 0.702 | 95% KM (t) |
| Benzo(g,h,i)perylene | 3 | 27 | 0.0342 (UJ) | 1.12 (J) | n/a | 1.12 | Maximum detected concentration |
| Benzo(k)fluoranthene | 3 | 28 | 0.0116 (J) | 0.39 (U) | n/a | 0.228 | Maximum detected concentration |
| Benzoic acid | 2 | 32 | 0.256 (J) | 7.45 (U) | n/a | 0.306 | Maximum detected concentration |

**Table H-2.2-59 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 7 | 32 | 0.0767 (J) | 48.8 | Nonparametric | 17.74 | 99% KM (Chebyshev) |
| Chrysene | 12 | 32 | 0.0154 (J) | 3.18 (J) | Nonparametric | 0.376 | 95% KM (t) |
| Dibenzofuran | 1 | 32 | 0.25 (J) | 3.72 (U) | n/a | 0.25 | Maximum detected concentration |
| Di-n-butylphthalate | 5 | 32 | 0.0381 (J) | 3.72 (U) | Nonparametric | 0.125 | 95% KM (t) |
| Fluoranthene | 17 | 32 | 0.0114 (J) | 5.78 | Nonparametric | 0.678 | 95% KM (BCA) |
| Fluorene | 6 | 32 | 0.0159 (J) | 0.48 | Nonparametric | 0.0789 | 95% KM (BCA) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 5.16E-06 | 5.16E-06 | n/a | 5.16E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 1.2E-06 (J) | 1.2E-06 (J) | n/a | 1.2E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 1.91E-07 (J) | 1.91E-07 (J) | n/a | 1.91E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 5 | 27 | 0.0342 (UJ) | 1.11 (J) | Nonparametric | 0.185 | 95% KM (t) |
| Isopropyltoluene[4-] | 2 | 17 | 0.0003 (J) | 0.00162 (J) | n/a | 0.00162 | Maximum detected concentration |
| Methylene chloride | 2 | 17 | 0.00477 (J) | 0.00699 (J+) | n/a | 0.00699 | Maximum detected concentration |
| Methylnaphthalene[2-] | 1 | 32 | 0.0342 (U) | 0.39 (U) | n/a | 0.0794 | Maximum detected concentration |
| Naphthalene | 1 | 32 | 0.0342 (UJ) | 0.39 (U) | n/a | 0.223 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 4.96E-05 | 4.96E-05 | n/a | 4.96E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 2.18E-06 (J) | 2.18E-06 (J) | n/a | 2.18E-06 | Maximum detected concentration |
| Phenanthrene | 13 | 32 | 0.0151 (J) | 4.98 | Nonparametric | 0.519 | 95% KM (t) |
| Pyrene | 17 | 32 | 0.0173 (J) | 9.91 (J) | Nonparametric | 1.15 | 95% KM (BCA) |
| Toluene | 15 | 17 | 0.000378 (J) | 0.00516 (J) | Nonparametric | 0.00183 | 95% KM (BCA) |
| Trichloroethene | 2 | 17 | 0.000874 (J) | 0.00188 | n/a | 0.00188 | Maximum detected concentration |

**Table H-2.2-59 (continued)**

| COPC | Number of Detects | Number of Analyses | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Calculation Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 19 | 33 | -0.0125 (U) | 3.59 | Nonparametric | 0.66 | 95% KM (t) |
| Cesium-134 | 1 | 12 | 0.007 (U) | 0.141 | n/a | 0.141 | Maximum detected concentration |
| Cesium-137 | 11 | 29 | -0.0395 (U) | 1.12 | Nonparametric | 0.263 | 95% KM (t) |
| Plutonium-238 | 12 | 33 | -0.00871 (U) | 0.248 | Nonparametric | 0.0918 | 95% KM (Percentile Bootstrap) |
| Plutonium-239/240 | 31 | 33 | -0.00176 (U) | 43.3 | Nonparametric | 7.841 | 95% KM (BCA) |
| Strontium-90 | 2 | 32 | -0.169 (U) | 2.97 | n/a | 2.97 | Maximum detected concentration |
| Tritium | 14 | 31 | -0.0133 (U) | 0.0586 | Nonparametric | 0.0255 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 31 | 31 | 0.55 | 3.31 | Nonparametric | 1.645 | 95% KM (Chebyshev) |

* n/a = Not applicable.

**Table H-2.2-60**
**Exposure Point Concentrations for SWMU 21-027(c) for Construction Worker and Residential Scenarios**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Barium | 35 | 35 | 2.64 | 197 (J+) | Nonparametric | 138 | 99% Chebyshev (Mean, Sd) |
| Chromium | 35 | 35 | 0.742 | 52.3 | Gamma | 11.56 | 95% Approximate Gamma |
| Cobalt | 35 | 31 | 0.211 (J) | 8.57 | Nonparametric | 3.656 | 95% KM (Chebyshev) |
| Copper | 35 | 35 | 0.47 (J) | 35.3 (J+) | Gamma | 10.97 | 95% Approximate Gamma |
| Lead | 39 | 39 | 4.72 | 120 (J) | Gamma | 42.92 | 95% Approximate Gamma |
| Mercury | 35 | 32 | 0.0031 (J) | 0.895 | Nonparametric | 0.233 | 97.5% KM (Chebyshev) |
| Nitrate | 35 | 10 | 0.788 (J-) | 2.75 | Nonparametric | 1.077 | 95% KM (t) |
| Perchlorate | 35 | 4 | 0.000649 (J) | 0.00247 (U) | n/a* | 0.00155 | Maximum detected concentration |
| Selenium | 35 | 13 | 0.649 (J) | 1.81 (U) | Nonparametric | 0.914 | 95% KM (t) |
| Uranium | 35 | 35 | 0.418 | 3.92 | Normal | 1.221 | 95% Modified-t |
| Zinc | 35 | 35 | 5.76 (J-) | 231 (J+) | Gamma | 62.03 | 95% Approximate Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Acenaphthene | 36 | 6 | 0.0215 (J) | 0.565 | Nonparametric | 0.0791 | 95% KM (BCA) |
| Acenaphthylene | 36 | 1 | 0.0206 (J) | 0.39 (U) | n/a | 0.0206 | Maximum detected concentration |
| Acetone | 21 | 4 | 0.00417 (J) | 0.0112 (J) | n/a | 0.0112 | Maximum detected concentration |
| Anthracene | 36 | 10 | 0.0106 (J) | 0.949 | Nonparametric | 0.103 | 95% KM (BCA) |
| Aroclor-1260 | 1 | 1 | 0.0016 | 0.0016 | n/a | 0.0016 | Maximum detected concentration |
| Benzo(a)anthracene | 36 | 7 | 0.0342 (U) | 3.08 (J) | Nonparametric | 0.532 | 95% KM (BCA) |
| Benzo(a)pyrene | 33 | 10 | 0.0301 (J) | 2.43 (J) | Nonparametric | 0.3 | 95% KM (t) |
| Benzo(b)fluoranthene | 33 | 15 | 0.0127 (J) | 5.67 (J) | Nonparametric | 0.631 | 95% KM (t) |
| Benzo(g,h,i)perylene | 31 | 3 | 0.0342 (UJ) | 1.12 (J) | n/a | 1.12 | Maximum detected concentration |
| Benzo(k)fluoranthene | 32 | 3 | 0.0116 (J) | 0.39 (U) | n/a | 0.228 | Maximum detected concentration |
| Benzoic acid | 36 | 2 | 0.256 (J) | 7.46 (UJ) | n/a | 0.306 | Maximum detected concentration |

**Table H-2.2-60 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 36 | 7 | 0.0767 (J) | 48.8 | Nonparametric | 15.81 | 99% KM (Chebyshev) |
| Chrysene | 36 | 14 | 0.0154 (J) | 3.18 (J) | Nonparametric | 0.344 | 95% KM (t) |
| Di-n-butylphthalate | 36 | 5 | 0.0381 (J) | 3.73 (U) | Nonparametric | 0.124 | 95% KM (t) |
| Dibenzofuran | 36 | 1 | 0.25 (J) | 3.73 (U) | n/a | 0.25 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 57 | 3 | 0.000302 (J) | 3.73 (U) | n/a | 0.000461 | Maximum detected concentration |
| Fluoranthene | 36 | 19 | 0.0114 (J) | 5.78 | Nonparametric | 0.631 | 95% KM (BCA) |
| Fluorene | 36 | 6 | 0.0159 (J) | 0.48 | Nonparametric | 0.0734 | 95% KM (BCA) |
| Heptachlorodibenzodioxin [1,2,3,4,6,7,8-] | 1 | 1 | 0.00000516 | 0.00000516 | n/a | 5.16E-06 | Maximum detected concentration |
| Heptachlorodibenzofuran [1,2,3,4,6,7,8-] | 1 | 1 | 0.0000012 (J) | 0.0000012 (J) | n/a | 1.2E-06 | Maximum detected concentration |
| Hexachlorodibenzodioxin [1,2,3,7,8,9-] | 1 | 1 | 0.000000191 (J) | 0.000000191 (J) | n/a | 1.91E-07 | Maximum detected concentration |
| Indeno(1,2,3-cd)pyrene | 31 | 5 | 0.0342 (UJ) | 1.11 (J) | Nonparametric | 0.17 | 95% KM (t) |
| Isopropyltoluene[4-] | 21 | 2 | 0.0003 (J) | 0.00162 (J) | n/a | 0.00162 | Maximum detected concentration |
| Methylene chloride | 21 | 4 | 0.00293 (J) | 0.00699 (J+) | n/a | 0.00699 | Maximum detected concentration |
| Methylnaphthalene[2-] | 36 | 1 | 0.00992 (U) | 0.39 (U) | n/a | 0.0794 | Maximum detected concentration |
| Naphthalene | 36 | 1 | 0.0342 (UJ) | 0.39 (U) | n/a | 0.223 | Maximum detected concentration |
| Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.0000496 | 0.0000496 | n/a | 4.96E-05 | Maximum detected concentration |
| Octachlorodibenzofuran [1,2,3,4,6,7,8,9-] | 1 | 1 | 0.00000218 (J) | 0.00000218 (J) | n/a | 2.18E-06 | Maximum detected concentration |
| Phenanthrene | 36 | 15 | 0.0151 (J) | 4.98 | Nonparametric | 0.473 | 95% KM (t) |
| Pyrene | 36 | 19 | 0.0173 (J) | 9.91 (J) | Nonparametric | 1.075 | 95% KM (BCA) |
| Toluene | 21 | 18 | 0.000358 (J) | 0.00516 (J) | Nonparametric | 0.00158 | 95% KM (BCA) |
| Trichloroethene | 21 | 2 | 0.000874 (J) | 0.00188 | n/a | 0.00188 | Maximum detected concentration |

**Table H-2.2-60 (continued)**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | |
| Americium-241 | 37 | 23 | -0.0125 (U) | 3.59 | Nonparametric | 0.648 | 95% KM (Percentile Bootstrap) |
| Cesium-134 | 15 | 1 | 0.007 (U) | 0.141 | n/a | 0.141 | Maximum detected concentration |
| Cesium-137 | 32 | 12 | -0.0395 (U) | 1.12 | Nonparametric | 0.248 | 95% KM (t) |
| Plutonium-238 | 37 | 14 | -0.00871 (U) | 0.248 | Nonparametric | 0.0772 | 95% KM (t) |
| Plutonium-239/240 | 37 | 35 | -0.00176 (U) | 43.3 | Nonparametric | 8.567 | 95% KM (BCA) |
| Strontium-90 | 36 | 2 | -0.169 (U) | 2.97 | n/a | 2.97 | Maximum detected concentration |
| Tritium | 35 | 14 | -0.0132973 (U) | 0.0585882 | Nonparametric | 0.0244 | 95% KM (Percentile Bootstrap) |
| Uranium-234 | 35 | 35 | 0.55 | 3.31 | Normal | 1.373 | 95% Modified-t |

* n/a = Not applicable.

**Table H-3.3-1**
**Physical and Chemical Properties of Inorganic COPCs**
**for DP Site Aggregate Area**

| COPC | $K_d$[a] ($cm^3/g$) | Water Solubility[a,b] (g/L) |
|---|---|---|
| Aluminum | 1.50E+03 | Insoluble |
| Antimony | 45 | Insoluble |
| Arsenic | 29 | Insoluble |
| Barium | 41 | Insoluble |
| Beryllium | 7.90E+02 | Insoluble |
| Cadmium | 75 | Insoluble |
| Calcium | na | na[c] |
| Chromium (VI) | 19 | Insoluble |
| Cobalt | 45 | Insoluble |
| Copper | 35 | Insoluble |
| Cyanide (total) | 9.9 | na |
| Iron | 25 | Insoluble |
| Lead | 900 | Insoluble |
| Lithium | 3.00E+02 | Insoluble |
| Manganese | 65 | Insoluble |
| Mercury | 52 | Insoluble |
| Molybdenum | 20 | Insoluble |
| Nickel | 6.50E+01[d] | Insoluble |
| Nitrate | 0.0356 | na |
| Perchlorate | na | 245000 |
| Selenium | 5 | Insoluble |
| Silver | 8.3 | Insoluble |
| Strontium | 3.50E+01 | Insoluble |
| Thallium | 71[e] | Insoluble |
| Uranium | 4.50E+02[f] | Insoluble |
| Vanadium | 1.00E+03 | Insoluble |
| Zinc | 62 | Insoluble |

[a] Information from http://rais.ornl.gov/cgi-bin/tox/TOX_select?select=nrad.

[b] Denotes reference information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] na = Not available.

[d] As nickel salts.

[e] As thallium salts.

[f] As uranium salts.

**Table H-3.3-2**
**Physical and Chemical Properties of Organic COPCs for DP Site Aggregate Area**

| COPC | Water Solubility[a] (mg/L) | Organic Carbon Coefficient $K_{oc}$[a] (L/kg) | Log Octanol-Water Partition Coefficient $K_{ow}$[a] | Vapor Pressure[a] (mm Hg at 25°C) |
|---|---|---|---|---|
| Acenaphthene | 3.6E+00[b] | 6.12E+03 | 3.92E+00[b] | 2.5E-03[b] |
| Acenaphthylene | 1.61E+01 | 5.03E+03 | 3.94E+00 | 6.68E-03 |
| Acetone | 1.00E+06[b] | 1.98E+00 | -2.40E-01[b] | 2.31E+02[b] |
| Anthracene | 4.34E-02[b] | 2.04E+04 | 4.45E+00[b] | 2.67E-06[b] |
| Aroclor-1242 | 2.77E-01 | 7.81E+04 | 6.29E+00 | 8.63E-05 |
| Aroclor-1254 | 3.40E-03[b] | 5.30E+05[c] | 6.79E+00[b] | 6.53E-06[b] |
| Aroclor-1260 | 2.84E-04[b] | 5.30E+05[c] | 8.27E+00[b] | 4.05E-05[b] |
| Benzo(a)anthracene | 9.40E-03[b] | 2.31E+05 | 5.76+00[b] | 1.90E-06[b] |
| Benzo(a)pyrene | 1.62E-03[b] | 7.87E+05 | 6.13E+00[b] | 5.49E-09[b] |
| Benzo(b)fluoranthene | 1.50E-03[b] | 8.03E+05 | 5.78E+00[b] | 5.00E-07[b] |
| Benzo(g,h,i)perylene | 2.60E-04[b] | 2.68E+06 | 6.63E+00[b] | 1.00E-10[b] |
| Benzo(k)fluoranthene | 8.00E-04[b] | 7.87E+05 | 6.1E+00[b] | 9.65E-10[b] |
| Benzoic acid | 3.40E+03[b] | 1.45E+01 | 1.87E+00[b] | 7.00E-04[b] |
| Bis(2-ethylhexyl)phthalate | 2.70E-01[b] | 1.65E+05 | 7.60E+00[b] | 1.42E-07[b] |
| Bromomethane | 1.52E+04 | 1.32E+01 | 1.19E+00 | 1.62E+03 |
| Butanone[2-] | 2.23E+05 | 3.83E+00 | 2.90E-01 | 9.06E+01 |
| Butylbenzylphthalate | 2.69E+00 | 7.16E+03 | 4.73E+00 | 8.25E-06 |
| Carbazole | 1.80E+00 | 1.13E+04 | 3.72E+00 | 7.50E-07 |
| Chloroaniline[4-] | 3.90E+03 | 1.13E+02 | 1.83E+00 | 2.70E-02 |
| Chloroform | 7.95E+03 | 3.18E+01 | 1.97E+00 | 1.97E+02 |
| Chrysene | 6.30E-03[b] | 2.36E+05 | 5.81E+00[b] | 6.23E-09[b] |
| DDT[4,4-] | 5.50E-03 | 1.69E+05 | 6.91E+00 | 1.60E-07 |
| Dibenz(a,h)anthracene | 1.03E-03 | 2.62E+06 | 6.54E+00 | 1.39E-11 |
| Dibenzofuran | 3.10E+00 | 1.13E+04 | 4.12E+00 | 2.48E-03 |
| Dichlorobenzene[1,4-] | 8.13E+01 | 3.75E+02 | 3.44E+00 | 1.74E+00 |
| Dichloroethene[1,1-] | 2.42E+03 | 3.18E+01 | 2.13E+00 | 6.34E+02 |
| Dimethylphenol[2,4-] | 2.80E+02 | 4.86E+01 | 2.16E+00 | 4.85E+03 |
| Dimethylphthalate | 4.00E+03 | 3.16E+01 | 1.60E+00 | 3.08E-03 |
| Di-n-butylphthalate | 1.12E+01 | 1.46E+03 | 4.50E+00 | 2.01E-05 |
| Di-n-octylphthalate | na[d] | na | na | na |
| Ethylbenzene | 1.69E+02 | 4.46E+02 | 3.15E+00 | 9.60E+00 |

**Table H-3.3-2 (continued)**

| COPC | Water Solubility[a] (mg/L) | Organic Carbon Coefficient $K_{oc}$[a] (L/kg) | Log Octanol-Water Partition Coefficient $K_{ow}$[a] | Vapor Pressure[a] (mm Hg at 25°C) |
|---|---|---|---|---|
| Fluoranthene | 2.06E-01[c] | 7.09E+04[c] | 5.16E+00[c] | 9.22E-06[c] |
| Fluorene | 1.89E+00[b] | 1.13E+04 | 4.18E+00[b] | 8.42E-04[b] |
| Hexachlorobenzene | 6.20E-03 | 6.20E+03 | 5.73E+00 | 1.80E-05 |
| Indeno(1,2,3-cd)pyrene | 1.90E-04[b] | 2.68E+06 | 6.70E+00[b] | 1.25E-10[b] |
| Isopropylbenzene (Cumene) | 6.13E+01 | 6.98E+02 | 3.66E+00 | 4.50E+00 |
| Isopropyltoluene[4-] | 2.34E+01[b] | na | 4.10E+00[b] | 1.64E+00[b] |
| Methyl-2-pentanone[4-] | 1.64E+04 | 8.16E+00 | 1.68E+00 | 5.30E+00 |
| Methylene chloride | 1.30E+04[b] | 2.37E+01 | 1.30E+00b | 4.30E+02[b] |
| Methylnaphthalene[2-] | 2.46E+01 | 2.98E+03 | 3.86E+00 | 5.50E-02 |
| Naphthalene | 3.10E+01 | 1.84E+03 | 3.30E+00 | 8.50E-02 |
| Phenanthrene | 1.15E+00[b] | 2.08E+04 | 4.46E+00[b] | 1.12E-04[b] |
| Pyrene | 1.35E-01[b] | 6.94E+04 | 4.88E+00[b] | 4.50E-06[b] |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 2.00E-04 | 2.49E+05 | 6.80E+00 | 1.50E-09 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 6.92E-04 | 1.40E+05 | 6.53E+00 | 1.47E-07 |
| Tetrachloroethene | 2.06E+02 | 9.49E+01 | 3.40E+00 | 1.85E+01 |
| Toluene | 5.26E+02 | 2.68E+02 | 2.73E+00 | 2.84E+01 |
| Trichloroethene | 1.28E+03 | 6.07E+01 | 2.42E+00 | 6.90E+01 |
| Trichlorofluoromethane | 1.10E+03 | 4.86E+01 | 2.53E+00 | 8.03E+02 |
| Trimethylbenzene[1,2,4-] | 5.70E+01 | 7.18E+02 | 3.63E+00 | 2.10E+00 |
| Trimethylbenzene[1,3,5-] | 4.82E+01 | 6.02E+02 | 3.42E+00 | 2.10E+00 |
| Xylene[1,2-] | 1.78E+02 | 3.83E+02 | 3.12E+00 | 7.99E+00 |
| Xylene[1,3-]+Xylene[1,4-] | 1.06E+02 | 3.83E+02 | 3.12E+00 | 7.99E+00 |

[a] Information from http://rais.ornl.gov/cgi-bin/tools/TOX_search, unless noted otherwise.

[b] Information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] Information from NMED 2009, 108070.

[d] na = Not available.

**Table H-3.3-3**
**Physical and Chemical Properties of Radionuclide COPC for DP Site Aggregate Area**

| COPC | Soil-Water Partition Coefficient, $K_d$[a] ($cm^3/g$) | Water Solubility[b] (g/L) |
|---|---|---|
| Americium-241 | 680 | Insoluble |
| Cesium-134 | na[c] | na |
| Cesium-137 | 1000 | Insoluble |
| Europium-152 | na | na |
| Plutonium-238 | 4500 | Insoluble |
| Plutonium-239/240 | 4500 | Insoluble |
| Strontium-90 | 35 | Soluble |
| Thorium-228 | 20 | Insoluble |
| Thorium-230 | 20 | Insoluble |
| Tritium | 9.9 | Soluble |
| Uranium-234 | 0.4 | Insoluble |
| Uranium-235/236 | 0.4 | Insoluble |
| Uranium-238 | 0.4 | Insoluble |

[a] Denotes reference information from Superfund Chemical Data Matrix (EPA 1996, 064708).

[b] Denotes reference information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] na = Not available.

**Table H-4.1-1**
**Exposure Parameter Values Used to Calculate**
**Chemical SSLs for the Industrial, Construction Worker, and Residential Scenarios**

| Parameters | Residential Values | Industrial Values | Construction Worker Values |
|---|---|---|---|
| Target HQ | 1 | 1 | 1 |
| Target cancer risk | $10^{-5}$ | $10^{-5}$ | $10^{-5}$ |
| Averaging time (carcinogen) | 70 yr x 365 days | 70 yr x 365 days | 70 yr x 365 days |
| Averaging time (noncarcinogen) | ED x 365 days | ED x 365 days | ED x 365 days |
| Skin absorption factor | Semivolatile organic compound (SVOC) = 0.1 | SVOC = 0.1 | SVOC = 0.1 |
| | Chemical-specific | Chemical-specific | Chemical-specific |
| Adherence factor–child | 0.2 mg/cm$^2$ | n/a[a] | n/a |
| Body weight–child | 15 kg (0–6 years of age) | n/a | n/a |
| Cancer slope factor–oral (chemical-specific) | (mg/kg-day-)$^1$ | (mg/kg-day-)$^1$ | (mg/kg-day-)$^1$ |
| Cancer slope factor–inhalation (chemical-specific) | (mg/kg-day-)$^1$ | (mg/kg-day-)$^1$ | (mg/kg-day-)$^1$ |
| Exposure frequency | 350 day/yr | 225 day/yr | 250 day/yr |
| Exposure time | 24 hr/day | 8 hr/day | 8 hr/day |
| Exposure duration–child | 6 yr | n/a | n/a |
| Age-adjusted ingestion factor | 114 mg-yr/kg-day | n/a | n/a |
| Age-adjusted inhalation factor | 11 m$^3$-yr/kg-day | n/a | n/a |
| Inhalation rate–child | 10 m$^3$/day | n/a | n/a |
| Soil ingestion rate–child | 200 mg/day | n/a | n/a |
| Particulate emission factor | 6.61 x $10^9$ m$^3$/kg | 6.61 x $10^9$ m$^3$/kg | 2.1 x $10^6$ m$^3$/kg |
| Reference dose–oral (chemical-specific) | (mg/kg-day) | (mg/kg-day) | (mg/kg-day) |
| Reference dose–inhalation (chemical-specific) | (mg/kg-day) | (mg/kg-day) | (mg/kg-day) |
| Exposed surface area–child | 2800 cm$^2$/day | n/a | n/a |
| Age-adjusted skin contact factor for carcinogens | 361 mg-yr/kg-day | n/a | n/a |
| Volatilization factor for soil (chemical-specific) | (m$^3$/kg) | (m$^3$/kg) | (m$^3$/kg) |
| Body weight–adult | 70 kg | 70 kg | 70 kg |
| Exposure duration[b] | 30 yr | 25 yr | 1 yr |
| Adherence factor–adult | 0.07 mg/cm$^2$ | 0.2 mg/cm$^2$ | 0.3 mg/cm$^2$ |
| Soil ingestion rate–adult | 100 mg/day | 100 mg/day | 330 mg/day |
| Exposed surface area–adult | 5700 cm$^2$/day | 3300 cm$^2$/day | 3300 cm$^2$/day |
| Inhalation rate–adult | 20 m$^3$/day | 20 m$^3$/day | 20 m$^3$/day |

Note: Parameter values from NMED 2009, 108070.

[a] n/a = Not applicable.

[b] Exposure duration for lifetime resident is 30 years. For carcinogens, the exposures are combined for child (6 yr) and adult (24 yr).

**Table H-4.1-2**
**Parameters Used in the SAL Calculations for Radionuclides, Residential**

| Parameters | Residential, Child | Residential, Adult |
|---|---|---|
| Inhalation rate ($m^3$/yr) | 3652.5[a] | 7305[b] |
| Mass loading (g/$m^3$) | $1.5 \times 10^{-7}$[c] | $1.5 \times 10^{-7}$[c] |
| Outdoor time fraction | 0.2236[d] | 0.0599[e] |
| Indoor time fraction | 0.7347[f] | 0.8984[g] |
| Soil ingestion (g/yr) | 73[h] | 36.5[i] |

[a] Calculated as (10 $m^3$/d × 350 d/yr] / (indoor + outdoor time fractions], where 10 $m^3$/d is the daily inhalation rate of a child (NMED 2009, 108070).

[b] Calculated as (20 $m^3$/d × 350 d/yr] / (indoor + outdoor time fractions], where 20 $m^3$/d is the daily inhalation rate of an adult (NMED 2009, 108070).

[c] Calculated as (1/ $6.6 \times 10^{+9}$ $m^3$/kg) x 1000 g/kg, where $6.6 \times 10^{+9}$ $m^3$/kg is the particulate emission factor (NMED 2009, 108070).

[d] Calculated as (5.6 hr/d × 350 d/yr] / 8766 hr/yr, where 5.6 hr/dis an estimate of time spent outdoors for a 3- to 11-yr-old child (EPA 1997, 066598, section 15.4-1).

[e] Calculated as (1.5 hr/d × 350 d/yr] / 8766 hr/yr, where 1.5 hr/d is an estimate of time spent outdoors for an adult 12 yr and older (EPA 1997, 066598, section 15.4-1).

[f] Calculated as [(24–5.6 hr/d × 350 d/yr] / 8766 hr/yr.

[g] Calculated as [(24–1.5 hr/d × 350 d/yr] / 8766 hr/yr.

[h] Calculated as [0.2 g/d × 350 d/yr] / [indoor + outdoor time fractions], where 0.2 g/d is the child soil-ingestion rate (NMED 2009, 108070).

[i] Calculated as [0.1 g/d × 350 d/yr] / [indoor + outdoor time fractions], where 0.1 g/d is the adult soil-ingestion rate (NMED 2009, 108070).

**Table H-4.1-3**
**Parameter Values Used to Calculate Radionuclide SALs**
**for the Industrial and Construction Worker Scenarios**

| Parameters | Industrial, Adult | Construction Worker, Adult |
|---|---|---|
| Inhalation rate ($m^3$/yr) | 19,481[a] | 19,478[b] |
| Mass loading ($g/m^3$) | $1.5 \times 10^{-7}$[c] | 0.0004[d] |
| Outdoor time fraction | 0.2053[e] | 0.2567[f] |
| Indoor time fraction | 0 | 0 |
| Soil ingestion (g/yr) | 97.4[g] | 321[h] |

[a] Calculated as [20 $m^3$/day x 225 day/yr] / [indoor + outdoor time fractions], where 20 $m^3$/day is the daily inhalation rate of an adult and 225 days/yr is the exposure frequency (NMED 2009, 108070).

[b] Calculated as [20 $m^3$/day x 250 day/yr] / [indoor + outdoor time fractions], where 20 $m^3$/day is the daily inhalation rate of an adult and 250 days/yr is the exposure frequency (NMED 2009, 108070).

[c] Calculated as [1/ $6.6 \times 10^{+9}$ $m^3$/kg) x 1000 g/kg, where $6.6 \times 10^{+9}$ $m^3$/kg is the particulate emission factor (NMED 2009, 108070).

[d] Calculated as [1/ $2.1 \times 10^{+6}$ $m^3$/kg) x 1000 g/kg, where $2.1 \times 10^{+6}$ $m^3$/kg is the particulate emission factor (NMED 2009, 108070).

[e] Calculated as [8 hr/day x 225 day/yr] / 8766 hr/yr, where 8 hr/day is an estimate of the average length of the work day.

[f] Calculated as [9 hr/day x 250 day/yr] / 8766 hr/yr, where 9 hr/day is an estimate of the average length of the work day.

[g] Calculated as [0.1 g/day x 225 day/yr] / [indoor + outdoor time fractions], where 0.1 g/day is the adult soil ingestion rate (NMED 2009, 108070).

[h] Calculated as [0.33 g/day x 250 day/yr] / [indoor + outdoor time fractions], where 0.33 g/day is the adult soil ingestion rate NMED 2009, 108070).

**Table H-4.2-1**
**Industrial Noncarcinogenic**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Aluminum | 9137 | 1.13E+06 | 8E-03 |
| Anthracene | 0.0149 | 1.83E+05 | 8E-08 |
| Barium | 121.9 | 2.24E+05 | 5E-04 |
| Benzo(g,h,i)perylene | 0.139 | 1.83E+04[b] | 8E-06 |
| Cadmium | 0.575 | 1.12E+03 | 5E-04 |
| Chromium | 13.99 | 2.92E+03[c] | 5E-03 |
| Cyanide (total) | 0.574 | 2.27E+04 | 3E-05 |
| Dimethylphthalate | 0.12 | 6.84E+06 | 2E-08 |
| Di-n-butylphthalate | 0.47 | 6.84E+04 | 7E-06 |
| Fluoranthene | 0.0733 | 2.44E+04 | 3E-06 |
| Lead | 171.4 | 8.00E+02 | 2E-01 |
| Nitrate | 5.742 | 1.82E+06 | 3E-06 |
| Perchlorate | 0.00127 | 7.95E+02 | 2E-06 |
| Phenanthrene | 0.0368 | 2.05E+04 | 2E-06 |
| Pyrene | 0.0708 | 1.83E+04 | 4E-06 |
| Selenium | 6.915 | 5.68E+03 | 1E-03 |
| Silver | 0.569 | 5.68E+03 | 1E-04 |
| Zinc | 121.4 | 3.41E+05 | 4E-04 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

**Table H-4.2-2**
**Industrial Carcinogenic Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 2.742 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 0.0654 | 2.34E+01 | 3E-08 |
| Benzo(a)pyrene | 0.076 | 2.34E+00 | 3E-07 |
| Benzo(b)fluoranthene | 0.167 | 2.34E+01 | 7E-08 |
| Benzo(k)fluoranthene | 0.41 | 2.34E+02 | 2E-08 |
| Bis(2-ethylhexyl)phthalate | 1.99 | 1.37E+03 | 1E-08 |
| Chrysene | 0.0656 | 2.34E+03 | 3E-10 |
| Indeno(1,2,3-cd)pyrene | 0.144 | 2.34E+01 | 6E-08 |
| | | **Total Excess Cancer Risk** | **2E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-3**
**Industrial Radionuclide Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0673 | 180 | 0.006 |
| Plutonium-238 | 0.0417 | 240 | 0.003 |
| Plutonium-239/240 | 2.178 | 210 | 0.2 |
| Tritium | 0.0423 | 4.4E+05 | 1E-06 |
| | | **Total Dose** | **0.2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-4**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for AOC 21-002(b)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 2.63E-06 | 0.01 | 2.6E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.07E-06 | 0.01 | 1.1E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1.96E-07 | 0.1 | 2.0E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1.24E-07 | 0.1 | 1.2E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 9.43E-08 | 0.1 | 9.4E-09 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 2.5E-05 | 0.0003 | 7.5E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 2.78E-06 | 0.0003 | 8.3E-10 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 8.52E-08 | 1 | 8.5E-08 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 2.04E-07 | 0.3 | 6.1E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 4.66E-07 | 0.1 | 4.7E-08 |
| | | **2,3,7,8-TCDD Equivalent** | 2.8E-07 |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-5**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.0123 | 2.63E+05 | 4.7E-08 |
| Aluminum | 8486 | 4.07E+04 | 2.1E-01 |
| Anthracene | 0.0149 | 6.68E+04 | 2.2E-07 |
| Aroclor-1254 | 0.0418 | 4.36E+00 | 9.6E-03 |
| Arsenic | 3.805 | 6.54E+01 | 5.8E-02 |
| Barium | 92.65 | 4.35E+03 | 2.1E-02 |
| Benzo(g,h,i)perylene | 0.172 | 6.68E+03[b] | 2.6E-05 |
| Bis(2-ethylhexyl)phthalate | 1.99 | 4.76E+03 | 4.2E-04 |
| Cadmium | 0.403 | 3.09E+02 | 1.3E-03 |
| Chromium | 14.85 | 4.49E+02[c] | 3.3E-02 |
| Cyanide (total) | 0.4 | 6.19E+03 | 6.5E-05 |
| Dimethylphthalate | 0.12 | 2.38E+06 | 5.0E-08 |
| Di-n-butylphthalate | 0.47 | 2.38E+04 | 2.0E-05 |
| Fluoranthene | 0.0517 | 8.91E+03 | 5.8E-06 |
| Lead | 183.5 | 8.00E+02 | 2.3E-01 |
| Methyl-2-pentanone[4-] | 0.00171 | 2.31E+04 | 7.4E-08 |
| Methylene chloride | 0.00547 | 1.06E+04 | 5.2E-07 |
| Nitrate | 3.481 | 4.96E+05 | 7.0E-06 |
| Perchlorate | 0.00117 | 2.17E+02 | 5.4E-06 |
| Phenanthrene | 0.0368 | 7.15E+03 | 5.1E-06 |
| Pyrene | 0.0485 | 6.68E+03 | 7.3E-06 |
| Selenium | 4.648 | 1.55E+03 | 3.0E-03 |
| Silver | 0.334 | 1.55E+03 | 2.2E-04 |
| 2,3,7,8-TCDD equivalent | 2.8E-07 | 2.84E-04 | 9.9E-04 |
| Xylene[1,3-]+xylene[1,4-] | 0.000502 | 3.13E+03[d] | 1.6E-07 |
| Zinc | 78.6 | 9.29E+04 | 8.5E-04 |
| | | **Hazard Index** | **0.6** |

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-6**
**Construction Worker Carcinogenic**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.017 | 7.58E+01 | 2E-09 |
| Benzo(a)anthracene | 0.0654 | 2.13E+02 | 3E-09 |
| Benzo(a)pyrene | 0.0807 | 2.13E+01 | 4E-08 |
| Benzo(b)fluoranthene | 0.168 | 2.13E+02 | 8E-09 |
| Benzo(k)fluoranthene | 0.41 | 2.06E+03 | 2E-09 |
| Chrysene | 0.0594 | 2.06E+04 | 3E-11 |
| Indeno(1,2,3-cd)pyrene | 0.166 | 2.13E+02 | 8E-09 |
| **Total Excess Cancer Risk** | | | **6E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-7**
**Construction Worker Radionuclide**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0546 | 34 | 0.02 |
| Plutonium-238 | 0.0373 | 40 | 0.01 |
| Plutonium-239/240 | 0.844 | 36 | 0.4 |
| Tritium | 0.0199 | 3.2E+05 | 9E-07 |
| **Total Dose** | | | **0.4** |

* SALs from LANL (2009, 107655).

**Table H-4.2-8**
**Residential Noncarcinogenic**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.0123 | 6.75E+04 | 2E-07 |
| Aluminum | 8486 | 7.81E+04 | 1E-01 |
| Anthracene | 0.0149 | 1.72E+04 | 9E-07 |
| Aroclor-1254 | 0.0418 | 1.12E+00 | 4E-02 |
| Barium | 92.65 | 1.56E+04 | 6E-03 |
| Benzo(g,h,i)perylene | 0.172 | 1.72E+03[b] | 1E-04 |
| Cadmium | 0.403 | 7.79E+01 | 5E-03 |
| Chromium | 14.85 | 2.19E+02[c] | 7E-02 |
| Cyanide (total) | 0.4 | 1.56E+03 | 3E-04 |
| Dimethylphthalate | 0.12 | 6.11E+05 | 2E-07 |
| Di-n-butylphthalate | 0.47 | 6.11E+03 | 8E-05 |
| Fluoranthene | 0.0517 | 2.29E+03 | 2E-05 |
| Lead | 183.5 | 4.00E+02 | 5E-01 |
| Methyl-2-pentanone[4-] | 0.00171 | 5.95E+03 | 3E-07 |
| Nitrate | 3.481 | 1.25E+05 | 3E-05 |
| Perchlorate | 0.00117 | 5.48E+01 | 2E-05 |
| Phenanthrene | 0.0368 | 1.83E+03 | 2E-05 |
| Pyrene | 0.0485 | 1.72E+03 | 3E-05 |
| Selenium | 4.648 | 3.91E+02 | 1E-02 |
| Silver | 0.334 | 3.91E+02 | 9E-04 |
| Xylene[1,3-]+xylene[1,4-] | 0.000502 | 1.09E+03[d] | 5E-07 |
| Zinc | 78.6 | 2.35E+04 | 3E-03 |
| | | **Hazard Index** | **0.7** |

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-9**
**Residential Carcinogenic**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.017 | 2.22E+00 | 8E-08 |
| Arsenic | 3.805 | 3.90E+00 | 1E-05 |
| Benzo(a)anthracene | 0.0654 | 6.21E+00 | 1E-07 |
| Benzo(a)pyrene | 0.0807 | 6.21E-01 | 1E-06 |
| Benzo(b)fluoranthene | 0.168 | 6.21E+00 | 3E-07 |
| Benzo(k)fluoranthene | 0.41 | 6.21E+01 | 7E-08 |
| Bis(2-ethylhexyl)phthalate | 1.99 | 3.47E+02 | 6E-08 |
| Chrysene | 0.0594 | 6.21E+02 | 1E-09 |
| Indeno(1,2,3-cd)pyrene | 0.166 | 6.21E+00 | 3E-07 |
| Methylene chloride | 0.00547 | 1.99E+02 | 3E-10 |
| 2,3,7,8-TCDD Equivalent | 2.8E-07 | 4.50E-05 | 6E-08 |
| | | **Total Excess Cancer Risk** | **1E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-10**
**Residential Radionuclide**
**Screening Evaluation for AOC 21-002(b)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0546 | 30 | 0.03 |
| Plutonium-238 | 0.0373 | 37 | 0.02 |
| Plutonium-239/240 | 0.844 | 33 | 0.38 |
| Tritium | 0.0199 | 750 | 0.0004 |
| | | **Total Dose** | **0.4** |

* SALs from LANL (2009, 107655).

**Table H-4.2-11**
**Dioxin/Furan TEF Calculations for the Industrial, Construction Worker, and Residential Scenarios for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 2.19E-05 | 0.01 | 2.2E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 5.17E-06 | 0.01 | 5.2E-08 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 2.89E-07 | 0.01 | 2.9E-09 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 3E-07 | 0.1 | 3.0E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 8.57E-07 | 0.1 | 8.6E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 8.93E-07 | 0.1 | 8.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 2.51E-07 | 0.1 | 2.5E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.46E-07 | 0.1 | 2.5E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2.68E-07 | 0.1 | 2.7E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 2.41E-04 | 0.0003 | 7.2E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1.59E-05 | 0.0003 | 4.8E-09 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 9.64E-08 | 0.03 | 2.9E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1.9E-07 | 0.3 | 5.7E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 2.12E-07 | 0.1 | 2.1E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **7.1E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-12**
**Industrial Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Barium | 59.84 | 2.24E+05 | 3E-04 |
| Benzo(g,h,i)perylene | 2.81 | 1.83E+04[b] | 2E-04 |
| Chromium | 6.719 | 2.92E+03[c] | 2E-03 |
| Copper | 5.627 | 4.54E+04 | 1E-04 |
| Fluoranthene | 2.92 | 2.44E+04 | 1E-04 |
| Lead | 32.77 | 8.00E+02 | 4E-02 |
| Mercury | 0.0182 | 3.1E+02[d] | 6E-05 |
| Nickel | 3.55 | 2.27E+04 | 2E-04 |
| Nitrate | 45.91 | 1.82E+06 | 3E-05 |
| Perchlorate | 0.0345 | 7.95E+02 | 4E-05 |
| Phenanthrene | 1.38 | 2.05E+04 | 7E-05 |
| Pyrene | 2.26 | 1.83E+04 | 1E-04 |
| Selenium | 1.3 | 5.68E+03 | 2E-04 |
| Zinc | 42.94 | 3.41E+05 | 1E-04 |
| | | **Hazard Index** | **0.04** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-13**
**Industrial Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.98 | 2.34E+01 | 4E-07 |
| Benzo(a)pyrene | 0.948 | 2.34E+00 | 4E-06 |
| Benzo(b)fluoranthene | 1.81 | 2.34E+01 | 8E-07 |
| Benzo(k)fluoranthene | 0.635 | 2.34E+02 | 3E-08 |
| Bis(2-ethylhexyl)phthalate | 8.73 | 1.37E+03 | 6E-08 |
| Chrysene | 1.5 | 2.34E+03 | 6E-09 |
| Indeno(1,2,3-cd)pyrene | 2.25 | 2.34E+01 | 1E-06 |
| 2,3,7,8-TCDD equivalent | 7.1E-07 | 2.04E-04 | 4E-08 |
| | | **Total Excess Cancer Risk** | **6E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-14**
**Industrial Radionuclide**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.308 | 180 | 0.03 |
| Cesium-137 | 1.144 | 23 | 0.8 |
| Plutonium-238 | 0.096 | 240 | 0.01 |
| Plutonium-239/240 | 15.8 | 210 | 1 |
| Uranium-234 | 2.249 | 1500 | 0.02 |
| Uranium-235/236 | 0.154 | 87 | 0.03 |
| Uranium-238 | 1.742 | 430 | 0.06 |
| | | **Total Dose** | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-15**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Anthracene | 0.00966 | 6.68E+04 | 2E-07 |
| Antimony | 1.7 | 1.24E+02 | 1E-02 |
| Barium | 46.08 | 4.35E+03 | 1E-02 |
| Benzo(g,h,i)perylene | 2.81 | 6.68E+03[b] | 4E-04 |
| Bis(2-ethylhexyl)phthalate | 8.73 | 4.76E+03 | 2E-03 |
| Chromium | 8.151 | 4.49E+02[c] | 2E-02 |
| Copper | 60.65 | 1.24E+04 | 5E-03 |
| Cyanide (total) | 0.205 | 6.19E+03 | 3E-05 |
| Fluoranthene | 0.347 | 8.91E+03 | 4E-05 |
| Lead | 13.54 | 8.00E+02 | 2E-02 |
| Mercury | 0.0527 | 9.29E+01[d] | 6E-04 |
| Methylene chloride | 0.00223 | 1.06E+04 | 2E-07 |
| Nickel | 4.186 | 6.19E+03 | 7E-04 |
| Nitrate | 40.28 | 4.96E+05 | 8E-05 |
| Perchlorate | 0.0345 | 2.17E+02 | 2E-04 |
| Phenanthrene | 1.38 | 7.15E+03 | 2E-04 |
| Pyrene | 0.276 | 6.68E+03 | 4E-05 |
| Selenium | 1.658 | 1.55E+03 | 1E-03 |
| 2,3,7,8-TCDD equivalent | 7.1E-07 | 2.84E-04 | 3E-03 |
| Toluene | 0.000533 | 2.11E+04 | 3E-08 |
| Xylene[1,2-] | 0.000481 | 2.75E+04 | 2E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.000566 | 3.13E+03[e] | 2E-07 |
| Zinc | 283 | 9.29E+04 | 3E-03 |
| | | **Hazard Index** | **0.08** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009,108070).

[e] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-16**
**Construction Worker Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.98 | 2.13E+02 | 5E-08 |
| Benzo(a)pyrene | 0.948 | 2.13E+01 | 5E-07 |
| Benzo(b)fluoranthene | 1.81 | 2.13E+02 | 9E-08 |
| Benzo(k)fluoranthene | 0.635 | 2.06E+03 | 3E-09 |
| Chrysene | 1.5 | 2.06E+04 | 7E-10 |
| Indeno(1,2,3-cd)pyrene | 2.25 | 2.13E+02 | 1E-07 |
| Tetrachloroethene | 0.00626 | 3.38E+02 | 2E-10 |
| **Total Excess Cancer Risk** | | | **7E-07** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-17**
**Construction Worker Radionuclide**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.724 | 34 | 0.3 |
| Cesium-137 | 0.74 | 18 | 0.6 |
| Plutonium-238 | 0.107 | 40 | 0.04 |
| Plutonium-239/240 | 15.5 | 36 | 6.5 |
| Strontium-90 | 0.49 | 800 | 0.009 |
| Tritium | 0.279 | 3.2E+05 | 1E-05 |
| Uranium-234 | 4.576 | 220 | 0.3 |
| Uranium-235/236 | 0.167 | 43 | 0.06 |
| Uranium-238 | 1.106 | 160 | 0.1 |
| **Total Dose** | | | **8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-18**
**Residential Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Anthracene | 0.00966 | 1.72E+04 | 6E-07 |
| Antimony | 1.7 | 3.13E+01 | 5E-02 |
| Barium | 46.08 | 1.56E+04 | 3E-03 |
| Benzo(g,h,i)perylene | 2.81 | 1.72E+03[b] | 2E-03 |
| Chromium | 8.151 | 2.19E+02[c] | 4E-02 |
| Copper | 60.65 | 3.13E+03 | 2E-02 |
| Cyanide (total) | 0.205 | 1.56E+03 | 1E-04 |
| Fluoranthene | 0.347 | 2.29E+03 | 2E-04 |
| Lead | 13.54 | 4.00E+02 | 3E-02 |
| Mercury | 0.0527 | 2.3E+01[d] | 2E-03 |
| Nickel | 4.186 | 1.56E+03 | 3E-03 |
| Nitrate | 40.28 | 1.25E+05 | 3E-04 |
| Perchlorate | 0.0345 | 5.48E+01 | 6E-04 |
| Phenanthrene | 1.38 | 1.83E+03 | 8E-04 |
| Pyrene | 0.276 | 1.72E+03 | 2E-04 |
| Selenium | 1.658 | 3.91E+02 | 4E-03 |
| Toluene | 0.000533 | 5.57E+03 | 1E-07 |
| Xylene[1,2-] | 0.000481 | 9.55E+03 | 5E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.000566 | 1.09E+03[e] | 5E-07 |
| Zinc | 283 | 2.35E+04 | 1E-02 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-19**
**Residential Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.98 | 6.21E+00 | 1.6E-06 |
| Benzo(a)pyrene | 0.948 | 6.21E-01 | 1.5E-05 |
| Benzo(b)fluoranthene | 1.81 | 6.21E+00 | 2.9E-06 |
| Benzo(k)fluoranthene | 0.635 | 6.21E+01 | 1.0E-07 |
| Bis(2-ethylhexyl)phthalate | 8.73 | 3.47E+02 | 2.5E-07 |
| Chrysene | 1.5 | 6.21E+02 | 2.4E-08 |
| Indeno(1,2,3-cd)pyrene | 2.25 | 6.21E+00 | 3.6E-06 |
| Methylene chloride | 0.00223 | 1.99E+02 | 1.1E-10 |
| 2,3,7,8-TCDD equivalent | 7.1E-07 | 4.50E-05 | 1.6E-07 |
| Tetrachloroethene | 0.00626 | 6.99E+00 | 9.0E-09 |
| | | **Total Excess Cancer Risk** | **2E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-20**
**Residential Radionuclide**
**Screening Evaluation for Consolidated Unit 21-006(c)-99**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.724 | 30 | 0.3 |
| Cesium-137 | 0.74 | 5.6 | 2 |
| Plutonium-238 | 0.107 | 37 | 0.04 |
| Plutonium-239/240 | 15.5 | 33 | 7 |
| Strontium-90 | 0.49 | 5.7 | 1 |
| Tritium | 0.279 | 750 | 0.006 |
| Uranium-234 | 4.576 | 170 | 0.4 |
| Uranium-235/236 | 0.167 | 17 | 0.2 |
| Uranium-238 | 1.106 | 87 | 0.2 |
| | | **Total Dose** | **11** |

* SALs from LANL (2009, 107655).

**Table H-4.2-21**
**Industrial Noncarcinogenic Screening Evaluation for SWMU 21-009**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Aluminum | 17393 | 1.13E+06 | 1.5E-02 |
| Barium | 162 | 2.24E+05 | 7.2E-04 |
| Chromium | 13.68 | 2.92E+03[b] | 4.7E-03 |
| Cyanide (total) | 0.709 | 2.27E+04 | 3.1E-05 |
| Fluoranthene | 0.103 | 2.44E+04 | 4.2E-06 |
| Lead | 22.92 | 8.00E+02 | 2.9E-02 |
| Nitrate | 6.455 | 1.82E+06 | 3.5E-06 |
| Perchlorate | 0.000659 | 7.95E+02 | 8.3E-07 |
| Pyrene | 0.162 | 1.83E+04 | 8.9E-06 |
| Selenium | 11.44 | 5.68E+03 | 2.0E-03 |
| Zinc | 67.2 | 3.41E+05 | 2.0E-04 |
| | | **Hazard Index** | **0.05** |

[a] SSLs from NMED (2009, 108070).

[b] Chromium VI SSL used.

**Table H-4.2-22**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-009**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)pyrene | 0.0686 | 2.34E+00 | 3E-07 |
| Benzo(b)fluoranthene | 0.16 | 2.34E+01 | 7E-08 |
| Benzo(k)fluoranthene | 0.0573 | 2.34E+02 | 2E-09 |
| | | **Total Excess Cancer Risk** | **4E-07** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-23**
**Industrial Radionuclide Screening Evaluation for SWMU 21-009**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.108 | 180 | 0.009 |
| Plutonium-239/240 | 0.479 | 210 | 0.03 |
| Tritium | 0.0445 | 4.4E+05 | 2E-06 |
| | | **Total Dose** | **0.04** |

* SALs from LANL (2009, 107655).

**Table H-4.2-24**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-009**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.1E-05 | 0.01 | 1.1E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.55E-06 | 0.01 | 1.6E-08 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 3.47E-07 | 0.1 | 3.5E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 6.74E-07 | 0.1 | 6.7E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 5.52E-07 | 0.1 | 5.5E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1.07E-07 | 0.1 | 1.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1.45E-07 | 0.1 | 1.5E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 8.7E-05 | 0.0003 | 2.6E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 3.66E-06 | 0.0003 | 1.1E-09 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1.77E-07 | 1 | 1.8E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 1.47E-07 | 0.1 | 1.5E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **5.3E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-25**
**Construction Worker Noncarcinogenic Screening Evaluation for SWMU 21-009**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Aluminum | 17222 | 4.07E+04 | 4E-01 |
| Anthracene | 0.0149 | 6.68E+04 | 2E-07 |
| Barium | 153 | 4.35E+03 | 4E-02 |
| Chromium | 14.37 | 4.49E+02[b] | 3E-02 |
| Cyanide (total) | 0.315 | 6.19E+03 | 5E-05 |
| Dichloroethene[1,1-] | 0.000891 | 1.83E+03 | 5E-07 |
| Fluoranthene | 0.103 | 8.91E+03 | 1E-05 |
| Lead | 16.74 | 8.00E+02 | 2E-02 |
| Nitrate | 6.179 | 4.96E+05 | 1E-05 |
| Perchlorate | 0.000659 | 2.17E+02 | 3E-06 |
| Pyrene | 0.051 | 6.68E+03 | 8E-06 |
| Selenium | 10.63 | 1.55E+03 | 7E-03 |
| 2,3,7,8-TCDD equivalent | 5.3E-07 | 2.84E-04 | 2E-03 |
| Zinc | 49.36 | 9.29E+04 | 5E-04 |
| | | **Hazard Index** | **0.5** |

[a] SSLs from NMED (2009, 108070).

[b] Chromium VI SSL used.

**Table H-4.2-26**
**Construction Worker**
**Carcinogenic Screening Evaluation for SWMU 21-009**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)pyrene | 0.0686 | 2.13E+01 | 3E-08 |
| Benzo(b)fluoranthene | 0.1600 | 2.13E+02 | 8E-09 |
| Benzo(k)fluoranthene | 0.0573 | 2.06E+03 | 3E-10 |
| Chloroform | 0.0012 | 6.71E+02 | 2E-11 |
| Tetrachloroethene | 0.0007 | 3.38E+02 | 2E-11 |
| **Total Excess Cancer Risk** | | | **4E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-27**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-009**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.211 | 34 | 0.09 |
| Plutonium-239/240 | 0.289 | 36 | 0.1 |
| Tritium | 0.044 | 3.2E+05 | 2E-06 |
| **Total Dose** | | | **0.2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-28**
**Residential Noncarcinogenic Screening Evaluation for SWMU 21-009**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Aluminum | 17222 | 7.81E+04 | 2E-01 |
| Anthracene | 0.0149 | 1.72E+04 | 9E-07 |
| Barium | 153 | 1.56E+04 | 1E-02 |
| Chromium | 14.37 | 2.19E+02[b] | 7E-02 |
| Cyanide (total) | 0.315 | 1.56E+03 | 2E-04 |
| Dichloroethene[1,1-] | 0.000891 | 6.18E+02 | 1E-06 |
| Fluoranthene | 0.103 | 2.29E+03 | 5E-05 |
| Lead | 16.74 | 4.00E+02 | 4E-02 |
| Nitrate | 6.179 | 1.25E+05 | 5E-05 |
| Perchlorate | 0.000659 | 5.48E+01 | 1E-05 |
| Pyrene | 0.051 | 1.72E+03 | 3E-05 |
| Selenium | 10.63 | 3.91E+02 | 3E-02 |
| Zinc | 49.36 | 2.35E+04 | 2E-03 |
| | | **Hazard Index** | **0.4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

**Table H-4.2-29**
**Residential Carcinogenic Screening Evaluation for SWMU 21-009**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)pyrene | 0.0686 | 6.21E-01 | 1E-06 |
| Benzo(b)fluoranthene | 0.1600 | 6.21E+00 | 3E-07 |
| Benzo(k)fluoranthene | 0.0573 | 6.21E+01 | 9E-09 |
| Chloroform | 0.0012 | 5.72E+00 | 2E-09 |
| 2,3,7,8-TCDD equivalent | 5.3E-07 | 4.50E-05 | 1E-07 |
| Tetrachloroethene | 0.0007 | 6.99E+00 | 1E-09 |
| | | **Total Excess Cancer Risk** | **1E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-30**
**Residential Radionuclide Screening Evaluation for SWMU 21-009**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.211 | 30 | 0.1 |
| Plutonium-239/240 | 0.289 | 33 | 0.1 |
| Tritium | 0.044 | 750 | 0.0009 |
| | | **Total Dose** | **0.2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-31**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Aluminum | 12258 | 1.13E+06 | 1E-02 |
| Antimony | 0.239 | 4.54E+02 | 5E-04 |
| Barium | 88.79 | 2.24E+05 | 4E-04 |
| Beryllium | 0.719 | 2.26E+03 | 3E-04 |
| Cadmium | 0.302 | 1.12E+03 | 3E-04 |
| Chromium | 9.324 | 2.92E+03[b] | 3E-03 |
| Cobalt | 2.334 | 3.0E+02[c] | 8E-03 |
| Copper | 115.6 | 4.54E+04 | 3E-03 |
| Cyanide (total) | 0.344 | 2.27E+04 | 2E-05 |
| Fluoranthene | 0.0209 | 2.44E+04 | 9E-07 |
| Iron | 10861 | 7.95E+05 | 1E-02 |
| Lead | 25.59 | 8.00E+02 | 3E-02 |
| Lithium | 14.85 | 2.0E+03[c] | 7E-03 |
| Mercury | 2.453 | 3.1E+02[c] | 8E-03 |
| Molybdenum | 1.299 | 5.68E+03 | 2E-04 |
| Nickel | 6.224 | 2.27E+04 | 3E-04 |
| Nitrate | 5.005 | 1.82E+06 | 3E-06 |
| Perchlorate | 0.00183 | 7.95E+02 | 2E-06 |
| Phenanthrene | 0.0264 | 2.05E+04 | 1E-06 |
| Pyrene | 0.022 | 1.83E+04 | 1E-06 |
| Selenium | 0.956 | 5.68E+03 | 2E-04 |
| Strontium | 34.68 | 6.81E+05 | 5E-05 |
| Uranium | 2.29 | 3.41E+03 | 7E-04 |
| Vanadium | 14.21 | 5.68E+03 | 3E-03 |
| Zinc | 135.3 | 3.41E+05 | 4E-04 |
| | | **Hazard Index** | **0.09** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-32**
**Industrial Carcinogenic**
**Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 2.696 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 0.024 | 2.34E+01 | 1E-08 |
| Benzo(b)fluoranthene | 0.0161 | 2.34E+01 | 7E-09 |
| Chrysene | 0.0306 | 2.34E+03 | 1E-10 |
| **Total Excess Cancer Risk** | | | **2E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-33**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.175 | 180 | 0.01 |
| Cesium-134 | 0.128 | 9.7 | 0.2 |
| Cesium-137 | 0.758 | 23 | 0.5 |
| Plutonium-238 | 0.0971 | 240 | 0.006 |
| Plutonium-239/240 | 0.945 | 210 | 0.07 |
| Tritium | 0.0534 | 4.4E+05 | 2E-06 |
| Uranium-234 | 1.677 | 1500 | 0.02 |
| Uranium-235/236 | 0.096 | 87 | 0.02 |
| Uranium-238 | 1.541 | 430 | 0.05 |
| **Total Dose** | | | **0.9** |

* SALs from LANL (2009, 107655).

**Table H-4.2-34**
**Construction Worker**
**Noncarcinogenic Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.00729 | 2.63E+05 | 3E-08 |
| Aluminum | 11338 | 4.07E+04 | 3E-01 |
| Antimony | 0.193 | 1.24E+02 | 2E-03 |
| Arsenic | 2.866 | 6.54E+01 | 4E-02 |
| Barium | 76.41 | 4.35E+03 | 2E-02 |
| Benzoic acid | 0.629 | 9.52E+05[b] | 7E-07 |
| Beryllium | 0.638 | 1.44E+02 | 4E-03 |
| Cadmium | 0.293 | 3.09E+02 | 1E-03 |
| Chromium | 16.95 | 4.49E+02[c] | 4E-02 |
| Cobalt | 1.857 | 3.49E+01[b] | 5E-02 |
| Copper | 75.17 | 1.24E+04 | 6E-03 |
| Cyanide (total) | 0.194 | 6.19E+03 | 3E-05 |
| Fluoranthene | 0.0168 | 8.91E+03 | 2E-06 |
| Iron | 10016 | 2.17E+05 | 5E-02 |
| Isopropyltoluene[4-] | 0.00153 | 1.03E+04[d] | 2E-07 |
| Lead | 15.96 | 8.00E+02 | 2E-02 |
| Lithium | 11.32 | 6.19E+02[b] | 2E-02 |
| Mercury | 1.239 | 9.29E+01[b] | 1E-02 |
| Methylene chloride | 0.00476 | 1.06E+04 | 5E-07 |
| Molybdenum | 1.219 | 1.55E+03 | 8E-04 |
| Nickel | 5.418 | 6.19E+03 | 9E-04 |
| Nitrate | 3.503 | 4.96E+05 | 7E-06 |
| Perchlorate | 0.00125 | 2.17E+02 | 6E-06 |
| Phenanthrene | 0.0264 | 7.15E+03 | 4E-06 |
| Pyrene | 0.02 | 6.68E+03 | 3E-06 |
| Selenium | 0.954 | 1.55E+03 | 6E-04 |
| Strontium | 27.77 | 1.86E+05 | 2E-04 |
| Toluene | 0.0043 | 2.11E+04 | 2E-07 |
| Trimethylbenzene[1,2,4-] | 0.000281 | 6.88E+02[b] | 4E-07 |
| Uranium | 2.042 | 9.29E+02 | 2E-03 |
| Vanadium | 14.54 | 1.55E+03 | 9E-03 |
| Xylene[1,3-]+xylene[1,4-] | 0.000553 | 3.13E+03[e] | 2E-07 |
| Zinc | 112.1 | 9.29E+04 | 1E-03 |
| | | **Hazard Index** | **0.6** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-35**
**Construction Worker**
**Carcinogenic Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0015 | 7.58E+01 | 2E-10 |
| Benzo(a)anthracene | 0.024 | 2.13E+02 | 1E-09 |
| Benzo(b)fluoranthene | 0.0161 | 2.13E+02 | 8E-10 |
| Chloroform | 0.000365 | 6.71E+02 | 5E-12 |
| Chrysene | 0.0306 | 2.06E+04 | 2E-11 |
| Dichlorobenzene[1,4-] | 0.00042 | 3.78E+03 | 1E-12 |
| Trichloroethene | 0.000322 | 4.60E+03 | 7E-13 |
| | | **Total Excess Cancer Risk** | **2E-09** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-36**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.675 | 34 | 0.3 |
| Cesium-134 | 0.128 | 7.7 | 0.2 |
| Cesium-137 | 0.36 | 18 | 0.3 |
| Plutonium-238 | 0.0373 | 40 | 0.01 |
| Plutonium-239/240 | 0.388 | 36 | 0.2 |
| Tritium | 0.0802 | 3.2E+05 | 4E-06 |
| Uranium-234 | 1.364 | 220 | 0.09 |
| Uranium-235/236 | 0.0945 | 43 | 0.03 |
| Uranium-238 | 1.312 | 160 | 0.1 |
| | | **Total Dose** | **1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-37**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.00729 | 6.75E+04 | 1E-07 |
| Aluminum | 11338 | 7.81E+04 | 2E-01 |
| Antimony | 0.193 | 3.13E+01 | 6E-03 |
| Barium | 76.41 | 1.56E+04 | 5E-03 |
| Benzoic acid | 0.629 | 2.4E+05[b] | 3E-06 |
| Beryllium | 0.638 | 1.56E+02 | 4E-03 |
| Cadmium | 0.293 | 7.79E+01 | 4E-03 |
| Chromium | 16.95 | 2.19E+02[c] | 8E-02 |
| Cobalt | 1.857 | 2.3E+01[b] | 8E-02 |
| Copper | 75.17 | 3.13E+03 | 2E-02 |
| Cyanide (total) | 0.194 | 1.56E+03 | 1E-04 |
| Fluoranthene | 0.0168 | 2.29E+03 | 7E-06 |
| Iron | 10016 | 5.48E+04 | 2E-01 |
| Isopropyltoluene[4-] | 0.00153 | 3.21E+03[d] | 5E-07 |
| Lead | 15.96 | 4.00E+02 | 4E-02 |
| Lithium | 11.32 | 1.6E+02[b] | 7E-02 |
| Mercury | 1.239 | 2.3E+01[b] | 5E-02 |
| Molybdenum | 1.219 | 3.91E+02 | 3E-03 |
| Nickel | 5.418 | 1.56E+03 | 4E-03 |
| Nitrate | 3.503 | 1.25E+05 | 3E-05 |
| Perchlorate | 0.00125 | 5.48E+01 | 2E-05 |
| Phenanthrene | 0.0264 | 1.83E+03 | 1E-05 |
| Pyrene | 0.02 | 1.72E+03 | 1E-05 |
| Selenium | 0.954 | 3.91E+02 | 2E-03 |
| Strontium | 27.77 | 4.69E+04 | 6E-04 |
| Toluene | 0.0043 | 5.57E+03 | 8E-07 |
| Trimethylbenzene[1,2,4-] | 0.000281 | 6.2E+01[b] | 5E-06 |
| Uranium | 2.042 | 2.35E+02 | 9E-03 |
| Vanadium | 14.54 | 3.91E+02 | 4E-02 |
| Xylene[1,3-]+xylene[1,4-] | 0.000553 | 1.09E+03[e] | 5E-07 |
| Zinc | 112.1 | 2.35E+04 | 5E-03 |
| | | **Hazard Index** | **0.8** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-38**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0015 | 2.22E+00 | 7E-09 |
| Arsenic | 2.866 | 3.90E+00 | 7E-06 |
| Benzo(a)anthracene | 0.024 | 6.21E+00 | 4E-08 |
| Benzo(b)fluoranthene | 0.0161 | 6.21E+00 | 3E-08 |
| Chloroform | 0.000365 | 5.72E+00 | 6E-10 |
| Chrysene | 0.0306 | 6.21E+02 | 5E-10 |
| Dichlorobenzene[1,4-] | 0.00042 | 3.22E+01 | 1E-10 |
| Methylene chloride | 0.00476 | 1.99E+02 | 2E-10 |
| Trichloroethene | 0.000322 | 4.57E+01 | 7E-11 |
| **Total Excess Cancer Risk** | | | **7E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-39**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-012(b)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.675 | 30 | 0.3 |
| Cesium-134 | 0.128 | 2.4 | 0.8 |
| Cesium-137 | 0.36 | 5.6 | 1 |
| Plutonium-238 | 0.0373 | 37 | 0.02 |
| Plutonium-239/240 | 0.388 | 33 | 0.2 |
| Tritium | 0.0802 | 750 | 0.002 |
| Uranium-234 | 1.364 | 170 | 0.1 |
| Uranium-235/236 | 0.0945 | 17 | 0.08 |
| Uranium-238 | 1.312 | 87 | 0.2 |
| **Total Dose** | | | **3** |

* SALs from LANL (2009, 107655).

**Table H-4.2-40**
**Dioxin/Furan TEF Calculations for the Industrial Scenario for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.32E-05 | 0.01 | 1.3E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 2.4E-06 | 0.01 | 2.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 5.37E-07 | 0.1 | 5.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 4.87E-07 | 0.1 | 4.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 3.93E-07 | 0.1 | 3.9E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.14E-07 | 0.1 | 2.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2.25E-07 | 0.1 | 2.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1.12E-04 | 0.0003 | 3.4E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 5.21E-06 | 0.0003 | 1.6E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 2.69E-07 | 0.3 | 8.1E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 2.56E-07 | 0.1 | 2.6E-08 |
| | **2,3,7,8-TCDD Equivalent** | | **4.8E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-41**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0194 | 3.67E+04 | 5E-07 |
| Aluminum | 15903 | 1.13E+06 | 1E-02 |
| Anthracene | 0.026 | 1.83E+05 | 1E-07 |
| Barium | 119.6 | 2.24E+05 | 5E-04 |
| Benzo(g,h,i)perylene | 0.0464 | 1.83E+04[b] | 3E-06 |
| Benzoic acid | 0.464 | 2.5E+06[c] | 2E-07 |
| Cadmium | 0.223 | 1.12E+03 | 2E-04 |
| Chromium | 10.43 | 2.92E+03[d] | 4E-03 |
| Fluoranthene | 0.0995 | 2.44E+04 | 4E-06 |
| Fluorene | 0.0214 | 2.44E+04 | 9E-07 |
| Lead | 16.81 | 8.00E+02 | 2E-02 |
| Mercury | 0.741 | 3.1E+02[c] | 2E-03 |
| Nickel | 8.511 | 2.27E+04 | 4E-04 |
| Nitrate | 2.493 | 1.82E+06 | 1E-06 |
| Perchlorate | 0.00114 | 7.95E+02 | 1E-06 |
| Phenanthrene | 0.0637 | 2.05E+04 | 3E-06 |
| Pyrene | 0.102 | 1.83E+04 | 6E-06 |
| Selenium | 2.611 | 5.68E+03 | 5E-04 |
| Thallium | 0.193 | 7.49E+01 | 3E-03 |
| Uranium | 1.553 | 3.41E+03 | 5E-04 |
| Vanadium | 22.4 | 5.68E+03 | 4E-03 |
| | | **Hazard Index** | **0.05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

**Table H-4.2-42**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1254 | 0.00444 | 8.26E+00 | 5.4E-09 |
| Aroclor-1260 | 0.00236 | 8.26E+00 | 2.9E-09 |
| Arsenic | 3.881 | 1.77E+01 | 2.2E-06 |
| Benzo(a)anthracene | 0.08 | 2.34E+01 | 3.4E-08 |
| Benzo(a)pyrene | 0.0446 | 2.34E+00 | 1.9E-07 |
| Benzo(b)fluoranthene | 0.0828 | 2.34E+01 | 3.5E-08 |
| Benzo(k)fluoranthene | 0.18 | 2.34E+02 | 7.7E-09 |
| Bis(2-ethylhexyl)phthalate | 0.355 | 1.37E+03 | 2.6E-09 |
| Chloroform | 0.000287 | 3.19E+01 | 9.0E-11 |
| Chrysene | 0.059 | 2.34E+03 | 2.5E-10 |
| Indeno(1,2,3-cd)pyrene | 0.0436 | 2.34E+01 | 1.9E-08 |
| 2,3,7,8-TCDD equivalent | 4.8E-07 | 2.04E-04 | 2.4E-08 |
| | | **Total Excess Cancer Risk** | **3E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-43**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0437 | 180 | 0.004 |
| Cesium-137 | 0.386 | 23 | 0.3 |
| Plutonium-239/240 | 0.191 | 210 | 0.01 |
| Strontium-90 | 0.108 | 1900 | 0.0009 |
| Tritium | 0.151 | 4.4E+05 | 5E-06 |
| Uranium-235/236 | 0.0668 | 87 | 0.01 |
| | | **Total Dose** | **0.3** |

* SALs from LANL (2009, 107655).

**Table H-4.2-44**
**Dioxin/Furan TEF Calculations for**
**Construction Worker and Residential Scenarios for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.32E-05 | 0.01 | 1.3E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 2.4E-06 | 0.01 | 2.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 5.37E-07 | 0.1 | 5.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 4.87E-07 | 0.1 | 4.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 3.93E-07 | 0.1 | 3.9E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.14E-07 | 0.1 | 2.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2.25E-07 | 0.1 | 2.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1.12E-04 | 0.0003 | 3.4E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 5.21E-06 | 0.0003 | 1.6E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 2.69E-07 | 0.3 | 8.1E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 2.56E-07 | 0.1 | 2.6E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **4.8E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-45**
**Construction Worker**
**Noncarcinogenic Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0366 | 1.86E+04 | 2E-06 |
| Aluminum | 14425 | 4.07E+04 | 4E-01 |
| Anthracene | 0.024 | 6.68E+04 | 4E-07 |
| Aroclor-1254 | 0.00412 | 4.36E+00 | 9E-04 |
| Arsenic | 3.802 | 6.54E+01 | 6E-02 |
| Barium | 107.3 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.0419 | 6.68E+03[b] | 6E-06 |
| Benzoic acid | 0.458 | 9.52E+05[c] | 5E-07 |
| Bis(2-ethylhexyl)phthalate | 0.355 | 4.76E+03 | 7E-05 |
| Cadmium | 0.215 | 3.09E+02 | 7E-04 |
| Chromium | 10.42 | 4.49E+02[d] | 2E-02 |
| Fluoranthene | 0.0651 | 8.91E+03 | 7E-06 |
| Fluorene | 0.0214 | 8.91E+03 | 2E-06 |
| Lead | 14.13 | 8.00E+02 | 2E-02 |
| Mercury | 0.319 | 9.29E+01[c] | 3E-03 |
| Nickel | 6.66 | 6.19E+03 | 1E-03 |
| Nitrate | 1.904 | 4.96E+05 | 4E-06 |
| Perchlorate | 0.00171 | 2.17E+02 | 8E-06 |
| Phenanthrene | 0.0448 | 7.15E+03 | 6E-06 |
| Pyrene | 0.0679 | 6.68E+03 | 1E-05 |
| Selenium | 2.054 | 1.55E+03 | 1E-03 |
| Thallium | 0.19 | 2.04E+01 | 9E-03 |
| Uranium | 1.275 | 9.29E+02 | 1E-03 |
| Vanadium | 23.07 | 1.55E+03 | 1E-02 |
| | | **Hazard Index** | **0.5** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

**Table H-4.2-46**
**Construction Worker**
**Carcinogenic Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.00227 | 7.58E+01 | 3.0E-10 |
| Benzo(a)anthracene | 0.08 | 2.13E+02 | 3.8E-09 |
| Benzo(a)pyrene | 0.0346 | 2.13E+01 | 1.6E-08 |
| Benzo(b)fluoranthene | 0.0564 | 2.13E+02 | 2.6E-09 |
| Benzo(k)fluoranthene | 0.18 | 2.06E+03 | 8.7E-10 |
| Chloroform | 0.000287 | 6.71E+02 | 4.3E-12 |
| Chrysene | 0.0464 | 2.06E+04 | 2.3E-11 |
| Indeno(1,2,3-cd)pyrene | 0.0382 | 2.13E+02 | 1.8E-09 |
| 2,3,7,8-TCDD equivalent | 4.8E-07 | 2.84E-04 | 1.7E-08 |
| | | **Total Excess Cancer Risk** | **4E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-47**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.042 | 34 | 0.02 |
| Cesium-137 | 0.254 | 18 | 0.2 |
| Plutonium-239/240 | 0.126 | 36 | 0.05 |
| Strontium-90 | 0.108 | 800 | 0.002 |
| Tritium | 0.116 | 3.2E+05 | 5E-06 |
| Uranium-235/236 | 0.0646 | 43 | 0.02 |
| | | **Total Dose** | **0.3** |

* SALs from LANL (2009, 107655).

**Table H-4.2-48**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0366 | 3.44E+03 | 1E-05 |
| Aluminum | 14425 | 7.81E+04 | 2E-01 |
| Anthracene | 0.024 | 1.72E+04 | 1E-06 |
| Aroclor-1254 | 0.00412 | 1.12E+00 | 4E-03 |
| Barium | 107.3 | 1.56E+04 | 7E-03 |
| Benzo(g,h,i)perylene | 0.0419 | 1.72E+03[b] | 2E-05 |
| Benzoic acid | 0.458 | 2.4E+05[c] | 2E-06 |
| Cadmium | 0.215 | 7.79E+01 | 3E-03 |
| Chromium | 10.42 | 2.19E+02[d] | 5E-02 |
| Fluoranthene | 0.0651 | 2.29E+03 | 3E-05 |
| Fluorene | 0.0214 | 2.29E+03 | 9E-06 |
| Lead | 14.13 | 4.00E+02 | 4E-02 |
| Mercury | 0.319 | 2.3E+01[c] | 1E-02 |
| Nickel | 6.66 | 1.56E+03 | 4E-03 |
| Nitrate | 1.904 | 1.25E+05 | 2E-05 |
| Perchlorate | 0.00171 | 5.48E+01 | 3E-05 |
| Phenanthrene | 0.0448 | 1.83E+03 | 3E-05 |
| Pyrene | 0.0679 | 1.72E+03 | 4E-05 |
| Selenium | 2.054 | 3.91E+02 | 5E-03 |
| Thallium | 0.19 | 5.16E+00 | 4E-02 |
| Uranium | 1.275 | 2.35E+02 | 5E-03 |
| Vanadium | 23.07 | 3.91E+02 | 6E-02 |
| | | **Hazard Index** | **0.4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

**Table H-4.2-49**
**Residential Carcinogenic Screening Evaluation or SWMU 21-013(c)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.00227 | 2.22E+00 | 1E-08 |
| Arsenic | 3.802 | 3.90E+00 | 1E-05 |
| Benzo(a)anthracene | 0.08 | 6.21E+00 | 1E-07 |
| Benzo(a)pyrene | 0.0346 | 6.21E-01 | 6E-07 |
| Benzo(b)fluoranthene | 0.0564 | 6.21E+00 | 9E-08 |
| Benzo(k)fluoranthene | 0.18 | 6.21E+01 | 3E-08 |
| Bis(2-ethylhexyl)phthalate | 0.355 | 3.47E+02 | 1E-08 |
| Chloroform | 0.000287 | 5.72E+00 | 5E-10 |
| Chrysene | 0.0464 | 6.21E+02 | 8E-10 |
| Indeno(1,2,3-cd)pyrene | 0.0382 | 6.21E+00 | 6E-08 |
| 2,3,7,8-TCDD equivalent | 4.8E-07 | 4.50E-05 | 1E-07 |
| | | **Total Excess Cancer Risk** | **1E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-50**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-013(c)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.042 | 30 | 0.02 |
| Cesium-137 | 0.254 | 5.6 | 0.7 |
| Plutonium-239/240 | 0.126 | 33 | 0.06 |
| Strontium-90 | 0.108 | 5.7 | 0.3 |
| Tritium | 0.116 | 750 | 0.002 |
| Uranium-235/236 | 0.0646 | 17 | 0.06 |
| | | **Total Dose** | **1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-51**
**Dioxin/Furan TEF Calculations for**
**Construction Worker and Residential Scenarios for SWMU 21-022(f)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1.87E-06 | 0.0003 | 5.6E-10 |
| | | **2,3,7,8-TCDD Equivalent** | **5.6E-10** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-52**
**Construction Worker**
**Noncarcinogenic Screening Evaluation for SWMU 21-022(f)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.202 | 2.63E+05 | 7.7E-07 |
| Barium | 42.46 | 4.35E+03 | 9.8E-03 |
| Benzo(g,h,i)perylene | 0.0264 | 6.68E+03[b] | 4.0E-06 |
| Cobalt | 3.911 | 3.49E+01[c] | 1.1E-01 |
| Copper | 6.369 | 1.24E+04 | 5.1E-04 |
| Fluoranthene | 0.0807 | 8.91E+03 | 9.1E-06 |
| Lead | 28.47 | 8.00E+02 | 3.6E-02 |
| Manganese | 1121 | 4.63E+02 | 2.4E+00 |
| Nitrate | 1.95 | 4.96E+05 | 3.9E-06 |
| Phenanthrene | 0.0174 | 7.15E+03 | 2.4E-06 |
| Pyrene | 0.0735 | 6.68E+03 | 1.1E-05 |
| Selenium | 1.221 | 1.55E+03 | 7.9E-04 |
| Silver | 1.564 | 1.55E+03 | 1.0E-03 |
| 2,3,7,8-TCDD equivalent | 5.6E-10 | 2.84E-04 | 2.0E-06 |
| Zinc | 3840 | 9.29E+04 | 4.1E-02 |
| | | **Hazard Index** | **3** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-53**
**Construction Worker**
**Carcinogenic Screening Evaluation for SWMU 21-022(f)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.0738 | 2.13E+02 | 4E-09 |
| Benzo(a)pyrene | 0.0634 | 2.13E+01 | 3E-08 |
| Benzo(b)fluoranthene | 0.122 | 2.13E+02 | 6E-09 |
| Benzo(k)fluoranthene | 0.012 | 2.06E+03 | 6E-11 |
| Chrysene | 0.0741 | 2.06E+04 | 4E-11 |
| Indeno(1,2,3-cd)pyrene | 0.0275 | 2.13E+02 | 1E-09 |
| | | **Total Excess Cancer Risk** | **4E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-54**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-022(f)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Tritium | 2.099 | 3.2E+05 | 0.0001 |
| Uranium-234 | 1.234 | 220 | 0.08 |
| Uranium-235/236 | 0.0776 | 43 | 0.03 |
| | | **Total Dose** | **0.1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-55**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-022(f)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.202 | 6.75E+04 | 3.0E-06 |
| Barium | 42.46 | 1.56E+04 | 2.7E-03 |
| Benzo(g,h,i)perylene | 0.0264 | 1.72E+03[b] | 1.5E-05 |
| Cobalt | 3.911 | 2.3E+01[c] | 1.7E-01 |
| Copper | 6.369 | 3.13E+03 | 2.0E-03 |
| Fluoranthene | 0.0807 | 2.29E+03 | 3.5E-05 |
| Lead | 28.47 | 4.00E+02 | 7.1E-02 |
| Manganese | 1121 | 1.07E+04 | 1.0E-01 |
| Nitrate | 1.95 | 1.25E+05 | 1.6E-05 |
| Phenanthrene | 0.0174 | 1.83E+03 | 9.5E-06 |
| Pyrene | 0.0735 | 1.72E+03 | 4.3E-05 |
| Selenium | 1.221 | 3.91E+02 | 3.1E-03 |
| Silver | 1.564 | 3.91E+02 | 4.0E-03 |
| Zinc | 3840 | 2.35E+04 | 1.6E-01 |
| | | **Hazard Index** | **0.5** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-56**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-022(f)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.0738 | 6.21E+00 | 1E-07 |
| Benzo(a)pyrene | 0.0634 | 6.21E-01 | 1E-06 |
| Benzo(b)fluoranthene | 0.122 | 6.21E+00 | 2E-07 |
| Benzo(k)fluoranthene | 0.012 | 6.21E+01 | 2E-09 |
| Chrysene | 0.0741 | 6.21E+02 | 1E-09 |
| Indeno(1,2,3-cd)pyrene | 0.0275 | 6.21E+00 | 4E-08 |
| 2,3,7,8-TCDD equivalent | 5.6E-10 | 4.50E-05 | 1E-10 |
| | | **Total Excess Cancer Risk** | **1E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-57**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-022(f)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Tritium | 2.099 | 750 | 0.04 |
| Uranium-234 | 1.234 | 170 | 0.1 |
| Uranium-235/236 | 0.0776 | 17 | 0.07 |
| | | **Total Dose** | **0.2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-58**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 2 | 3.67E+04 | 5E-05 |
| Aluminum | 6899 | 1.13E+06 | 6E-03 |
| Anthracene | 2.3 | 1.83E+05 | 1E-05 |
| Antimony | 0.218 | 4.54E+02 | 5E-04 |
| Barium | 67.76 | 2.24E+05 | 3E-04 |
| Benzo(g,h,i)perylene | 6.4 | 1.83E+04[b] | 4E-04 |
| Cadmium | 2.371 | 1.12E+03 | 2E-03 |
| Chromium | 326.5 | 2.92E+03[c] | 1E-01 |
| Copper | 249 | 4.54E+04 | 6E-03 |
| Cyanide (total) | 0.277 | 2.27E+04 | 1E-05 |
| Dibenzofuran | 1.1 | 1.0E+03[d] | 1E-03 |
| Di-n-butylphthalate | 0.35 | 6.84E+04 | 5E-06 |
| Fluoranthene | 3.576 | 2.44E+04 | 2E-04 |
| Fluorene | 1.6 | 2.44E+04 | 7E-05 |
| Lead | 3602 | 8.00E+02 | 5E+00 |
| Mercury | 1.92 | 3.1E+02[d] | 6E-02 |
| Methylnaphthalene[2-] | 0.51 | 4.1E+03[d] | 1E-04 |
| Molybdenum | 14.19 | 5.68E+03 | 3E-03 |
| Nickel | 8.17 | 2.27E+04 | 4E-04 |
| Nitrate | 33.04 | 1.82E+06 | 2E-05 |
| Perchlorate | 0.015 | 7.95E+02 | 2E-05 |
| Phenanthrene | 5.767 | 2.05E+04 | 3E-04 |
| Pyrene | 6.178 | 1.83E+04 | 3E-04 |
| Selenium | 0.483 | 5.68E+03 | 9E-05 |
| Silver | 43.24 | 5.68E+03 | 8E-03 |
| Zinc | 1200 | 3.41E+05 | 4E-03 |
| | | **Hazard Index** | **5** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-59**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 5.5 | 2.34E+01 | 2.4E-06 |
| Benzo(a)pyrene | 5.9 | 2.34E+00 | 2.5E-05 |
| Benzo(b)fluoranthene | 2.636 | 2.34E+01 | 1.1E-06 |
| Benzo(k)fluoranthene | 2.7 | 2.34E+02 | 1.2E-07 |
| Bis(2-ethylhexyl)phthalate | 3.109 | 1.37E+03 | 2.3E-08 |
| Butylbenzylphthalate | 0.51 | 9.1E+03[b] | 5.6E-10 |
| Carbazole | 1.5 | 9.6E+02[c] | 1.6E-08 |
| Chrysene | 2.376 | 2.34E+03 | 1.0E-08 |
| Dibenz(a,h)anthracene | 0.43 | 2.34E+00 | 1.8E-06 |
| Indeno(1,2,3-cd)pyrene | 5 | 2.34E+01 | 2.1E-06 |
| Naphthalene | 1.7 | 2.52E+02 | 6.7E-08 |
| | | **Total Excess Cancer Risk** | **3E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] EPA Region 6 SSL (EPA 2007, 099314).

**Table H-4.2-60**
**Industrial Radionuclide Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 2.15 | 180 | 0.2 |
| Cesium-137 | 0.658 | 23 | 0.4 |
| Plutonium-238 | 12.9 | 240 | 0.8 |
| Plutonium-239/240 | 41.81 | 210 | 3 |
| Strontium-90 | 0.377 | 1900 | 0.003 |
| Tritium | 0.0344 | 4.4E+05 | 1E-06 |
| Uranium-235/236 | 0.0928 | 87 | 0.02 |
| | | **Total Dose** | **4** |

* SALs from LANL (2009, 107655).

**Table H-4.2-61**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-022(h)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.81E-05 | 0.01 | 1.8E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 2.85E-06 | 0.01 | 2.9E-08 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 2.46E-07 | 0.01 | 2.5E-09 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 2.14E-07 | 0.1 | 2.1E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 9.22E-07 | 0.1 | 9.2E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 4.88E-07 | 0.1 | 4.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 4.1E-07 | 0.1 | 4.1E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.52E-07 | 0.1 | 2.5E-08 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 1.05E-07 | 0.1 | 1.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2.65E-07 | 0.1 | 2.7E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1.32E-04 | 0.0003 | 4.0E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 6.63E-06 | 0.0003 | 2.0E-09 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1.36E-07 | 1 | 1.4E-07 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 1.08E-07 | 0.03 | 3.2E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 3.35E-07 | 0.3 | 1.0E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 3.53E-07 | 0.1 | 3.5E-08 |
| | **2,3,7,8-TCDD Equivalent** | | **8.0E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-62**
**Construction Worker**
**Noncarcinogenic Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.322 | 1.86E+04 | 2E-05 |
| Aluminum | 1.024 | 4.07E+04 | 3E-05 |
| Anthracene | 0.444 | 6.68E+04 | 7E-06 |
| Antimony | 0.179 | 1.24E+02 | 1E-03 |
| Aroclor-1254 | 0.0478 | 4.36E+00 | 1E-02 |
| Barium | 64.11 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.954 | 6.68E+03[b] | 1E-04 |
| Bis(2-ethylhexyl)phthalate | 1.176 | 4.76E+03 | 3E-04 |
| Cadmium | 2.76 | 3.09E+02 | 9E-03 |
| Chromium | 28.18 | 4.49E+02[c] | 6E-02 |
| Copper | 162.2 | 1.24E+04 | 1E-02 |
| Cyanide (total) | 0.227 | 6.19E+03 | 4E-05 |
| Dibenzofuran | 1.1 | 2.38E+02[d] | 5E-03 |
| Di-n-butylphthalate | 0.35 | 2.4E+04 | 2E-05 |
| Fluoranthene | 5.183 | 8.91E+03 | 6E-04 |
| Fluorene | 0.266 | 8.91E+03 | 3E-05 |
| Isopropyltoluene[4-] | 0.0019 | 1.03E+04[e] | 2E-07 |
| Lead | 1556 | 8.00E+02 | 2E+00 |
| Mercury | 0.726 | 9.29E+01[d] | 6E-03 |
| Methylene chloride | 0.0033 | 1.06E+04 | 3E-07 |
| Methylnaphthalene[2-] | 0.51 | 1.24E+03[d] | 4E-04 |
| Molybdenum | 9.257 | 1.55E+03 | 6E-03 |
| Naphthalene | 0.394 | 7.02E+02 | 6E-04 |
| Nickel | 5.513 | 6.19E+03 | 9E-04 |
| Nitrate | 28.81 | 4.96E+05 | 6E-05 |
| Perchlorate | 0.015 | 2.17E+02 | 7E-05 |
| Phenanthrene | 1.662 | 7.15E+03 | 2E-04 |
| Pyrene | 2.823 | 6.68E+03 | 4E-04 |
| Selenium | 0.45 | 1.55E+03 | 3E-04 |
| Silver | 18.99 | 1.55E+03 | 1E-02 |
| 2,3,7,8-TCDD equivalent | 8.0E-07 | 2.84E-04 | 3E-03 |
| Zinc | 745.9 | 9.29E+04 | 8E-03 |
| | | **Hazard Index** | **2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-63**
**Construction Worker**
**Carcinogenic Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (mg/kg | Construction Worker SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0211 | 7.58E+01 | 3E-09 |
| Benzo(a)anthracene | 0.905 | 2.13E+02 | 4E-08 |
| Benzo(a)pyrene | 0.864 | 2.13E+01 | 4E-07 |
| Benzo(b)fluoranthene | 1.176 | 2.13E+02 | 6E-08 |
| Benzo(k)fluoranthene | 0.774 | 2.06E+03 | 4E-09 |
| Butylbenzylphthalate | 0.51 | 4.76E+04[b] | 1E-10 |
| Carbazole | 1.5 | 1.08E+04[c] | 1E-09 |
| Chrysene | 0.999 | 2.06E+04 | 5E-10 |
| Dibenz(a,h)anthracene | 0.43 | 2.13E+01 | 2E-07 |
| Indeno(1,2,3-cd)pyrene | 2.086 | 2.13E+02 | 1E-07 |
| | | **Total Excess Cancer Risk** | **8E-07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-64**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 1.024 | 34 | 0.5 |
| Cesium-137 | 0.376 | 18 | 0.3 |
| Plutonium-238 | 19.48 | 40 | 7.3 |
| Plutonium-239/240 | 34.63 | 36 | 14.4 |
| Strontium-90 | 0.377 | 800 | 0.007 |
| Tritium | 0.0545 | 3.2E+05 | 3E-06 |
| Uranium-235/236 | 0.0799 | 43 | 0.03 |
| | | **Total Dose** | **23** |

* SALs from LANL (2009, 107655).

**Table H-4.2-65**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.322 | 3.44E+03 | 9E-05 |
| Aluminum | 1.024 | 7.81E+04 | 1E-05 |
| Anthracene | 0.444 | 1.72E+04 | 3E-05 |
| Antimony | 0.179 | 3.13E+01 | 6E-03 |
| Aroclor-1254 | 0.0478 | 1.12E+00 | 4E-02 |
| Barium | 64.11 | 1.56E+04 | 4E-03 |
| Benzo(g,h,i)perylene | 0.954 | 1.72E+03[b] | 6E-04 |
| Cadmium | 2.76 | 7.79E+01 | 4E-02 |
| Chromium | 28.18 | 2.19E+02[c] | 1E-01 |
| Copper | 162.2 | 3.13E+03 | 5E-02 |
| Cyanide (total) | 0.227 | 1.56E+03 | 2E-04 |
| Dibenzofuran | 1.1 | 7.8E+01[d] | 1E-02 |
| Di-n-butylphthalate | 0.35 | 6.1E+03 | 6E-05 |
| Fluoranthene | 5.183 | 2.29E+03 | 2E-03 |
| Fluorene | 0.266 | 2.29E+03 | 1E-04 |
| Isopropyltoluene[4-] | 0.0019 | 3.21E+03[e] | 6E-07 |
| Lead | 1556 | 4.00E+02 | 4E+00 |
| Mercury | 0.726 | 2.3E+01[d] | 3E-02 |
| Methylnaphthalene[2-] | 0.51 | 3.1E+02[d] | 2E-03 |
| Molybdenum | 9.257 | 3.91E+02 | 2E-02 |
| Nickel | 5.513 | 1.56E+03 | 4E-03 |
| Nitrate | 28.81 | 1.25E+05 | 2E-04 |
| Perchlorate | 0.015 | 5.48E+01 | 3E-04 |
| Phenanthrene | 1.662 | 1.83E+03 | 9E-04 |
| Pyrene | 2.823 | 1.72E+03 | 2E-03 |
| Selenium | 0.45 | 3.91E+02 | 1E-03 |
| Silver | 18.99 | 3.91E+02 | 5E-02 |
| Zinc | 745.9 | 2.35E+04 | 3E-02 |
| | | **Hazard Index** | **4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-66**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0211 | 2.22E+00 | 9.5E-08 |
| Benzo(a)anthracene | 0.905 | 6.21E+00 | 1.5E-06 |
| Benzo(a)pyrene | 0.864 | 6.21E-01 | 1.4E-05 |
| Benzo(b)fluoranthene | 1.176 | 6.21E+00 | 1.9E-06 |
| Benzo(k)fluoranthene | 0.774 | 6.21E+01 | 1.2E-07 |
| Bis(2-ethylhexyl)phthalate | 1.176 | 3.47E+02 | 3.4E-08 |
| Butylbenzylphthalate | 0.51 | 2.6E+03[b] | 2.0E-09 |
| Carbazole | 1.5 | 2.4E+02[c] | 6.3E-08 |
| Chrysene | 0.999 | 6.21E+02 | 1.6E-08 |
| Dibenz(a,h)anthracene | 0.43 | 6.21E-01 | 6.9E-06 |
| Indeno(1,2,3-cd)pyrene | 2.086 | 6.21E+00 | 3.4E-06 |
| Methylene chloride | 0.0033 | 1.99E+02 | 1.7E-10 |
| Naphthalene | 0.394 | 4.50E+01 | 8.8E-08 |
| 2,3,7,8-TCDD equivalent | 8.0E-07 | 4.50E-05 | 1.8E-07 |
| | | **Total Excess Cancer Risk** | **3E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] EPA Region 6 SSL (EPA 2007, 099314).

**Table H-4.2-67**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-022(h)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 1.024 | 30 | 0.5 |
| Cesium-137 | 0.376 | 5.6 | 1 |
| Plutonium-238 | 19.48 | 37 | 7.9 |
| Plutonium-239/240 | 34.63 | 33 | 16 |
| Strontium-90 | 0.377 | 5.7 | 0.99 |
| Tritium | 0.0545 | 750 | 0.001 |
| Uranium-235/236 | 0.0799 | 17 | 0.07 |
| | | **Total Dose** | **26** |

* SALs from LANL (2009, 107655).

**Table H-4.2-68**
**Dioxin/Furan TEF Calculations for the Construction Worker and Residential Scenarios for Consolidated Unit 21-023(a)-99**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 9.6E-06 | 0.01 | 9.6E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 5.55E-05 | 0.01 | 5.6E-07 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 6.05E-07 | 0.1 | 6.1E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1.93E-07 | 0.1 | 1.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 3.13E-07 | 0.1 | 3.1E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 1.92E-07 | 0.1 | 1.9E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 9.69E-05 | 0.0003 | 2.9E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1.8E-05 | 0.0003 | 5.4E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 1.33E-07 | 0.3 | 4.0E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 9.51E-08 | 0.1 | 9.5E-09 |
| **2,3,7,8-TCDD Equivalent** | | | **8.7E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-69**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-023(a)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 1.38 | 1.86E+04 | 7.4E-05 |
| Acetone | 0.0114 | 2.63E+05 | 4.3E-08 |
| Anthracene | 0.251 | 6.68E+04 | 3.8E-06 |
| Antimony | 0.27 | 1.24E+02 | 2.2E-03 |
| Aroclor-1260 | 0.0069 | 7.58E+01 | 9.1E-05 |
| Arsenic | 3.21 | 6.54E+01 | 4.9E-02 |
| Barium | 71.67 | 4.35E+03 | 1.6E-02 |
| Benzo(g,h,i)perylene | 0.225 | 6.68E+03[b] | 3.4E-05 |
| Bis(2-ethylhexyl)phthalate | 2.12 | 4.76E+03 | 4.5E-04 |
| Chromium | 6.073 | 4.49E+02[c] | 1.4E-02 |
| Cobalt | 2.38 | 3.49E+01[d] | 6.8E-02 |
| Copper | 4.184 | 1.24E+04 | 3.4E-04 |
| Di-n-butylphthalate | 0.0854 | 2.38E+04 | 3.6E-06 |
| Fluoranthene | 2.006 | 8.91E+03 | 2.3E-04 |
| Fluorene | 0.42 | 8.91E+03 | 4.7E-05 |
| Isopropyltoluene[4-] | 0.000399 | 1.03E+04[e] | 3.9E-08 |
| Lead | 222.2 | 8.00E+02 | 2.8E-01 |
| Manganese | 222.8 | 4.63E+02 | 4.8E-01 |
| Mercury | 0.255 | 9.29E+01[d] | 2.7E-03 |
| Methylnaphthalene[2-] | 0.396 | 1.24E+03[d] | 3.2E-04 |
| Naphthalene | 1.17 | 7.02E+02 | 1.7E-03 |
| Nitrate | 2.129 | 4.96E+05 | 4.3E-06 |
| Perchlorate | 0.00142 | 2.17E+02 | 6.5E-06 |
| Phenanthrene | 0.659 | 7.15E+03 | 9.2E-05 |
| Pyrene | 1.837 | 6.68E+03 | 2.8E-04 |
| Selenium | 4.261 | 1.55E+03 | 2.7E-03 |
| 2,3,7,8-TCDD equivalent | 8.7E-07 | 2.84E-04 | 3.1E-03 |
| Toluene | 0.000401 | 2.11E+04 | 1.9E-08 |
| Vanadium | 10.45 | 1.55E+03 | 6.7E-03 |
| Xylene[1,2-] | 0.00101 | 2.75E+04 | 3.7E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.00203 | 3.13E+03[f] | 6.5E-07 |
| | | **Hazard Index** | **0.9** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-70**
**Construction Worker Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-023(a)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.844 | 2.13E+02 | 4E-08 |
| Benzo(a)pyrene | 2.492 | 2.13E+01 | 1E-06 |
| Benzo(b)fluoranthene | 1.478 | 2.13E+02 | 7E-08 |
| Benzo(k)fluoranthene | 0.0324 | 2.06E+03 | 2E-10 |
| Chrysene | 3.001 | 2.06E+04 | 2E-09 |
| Ethylbenzene | 0.000565 | 6.63E+03 | 9E-13 |
| Indeno(1,2,3-cd)pyrene | 0.228 | 2.13E+02 | 1E-08 |
| Tetrachloroethene | 0.00138 | 3.38E+02 | 4E-11 |
| | | **Total Excess Cancer Risk** | **1E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-71**
**Construction Worker Radionuclide**
**Screening Evaluation for Consolidated Unit 21-023(a)-99**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.635 | 34 | 0.3 |
| Cesium-137 | 0.133 | 18 | 0.1 |
| Plutonium-238 | 0.0544 | 40 | 0.02 |
| Plutonium-239/240 | 1.393 | 36 | 0.6 |
| Strontium-90 | 1.95 | 800 | 0.04 |
| Tritium | 1.0990 | 3.2E+05 | 5E-05 |
| Uranium-234 | 1.4680 | 220 | 0.1 |
| Uranium-235/236 | 0.0936 | 43 | 0.03 |
| | | **Total Dose** | **1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-72**
**Residential Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-023(a)-99**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 1.38 | 3.44E+03 | 4E-04 |
| Acetone | 0.0114 | 6.75E+04 | 2E-07 |
| Anthracene | 0.251 | 1.72E+04 | 2E-05 |
| Antimony | 0.27 | 3.13E+01 | 9E-03 |
| Aroclor-1260 | 0.0069 | 2.22E+00 | 3E-03 |
| Barium | 71.67 | 1.56E+04 | 5E-03 |
| Benzo(g,h,i)perylene | 0.225 | 1.72E+03[b] | 1E-04 |
| Chromium | 6.073 | 2.19E+02[c] | 3E-02 |
| Cobalt | 2.38 | 2.3E+01[d] | 1E-01 |
| Copper | 4.184 | 3.13E+03 | 1E-03 |
| Di-n-butylphthalate | 0.0854 | 6.11E+03 | 1E-05 |
| Fluoranthene | 2.006 | 2.29E+03 | 9E-04 |
| Fluorene | 0.42 | 2.29E+03 | 2E-04 |
| Isopropyltoluene[4-] | 0.000399 | 3.21E+03[e] | 1E-07 |
| Lead | 222.2 | 4.00E+02 | 6E-01 |
| Manganese | 222.8 | 1.07E+04 | 2E-02 |
| Mercury | 0.255 | 2.3+01[d] | 1E-02 |
| Methylnaphthalene[2-] | 0.396 | 3.1E+02[d] | 1E-03 |
| Nitrate | 2.129 | 1.25E+05 | 2E-05 |
| Perchlorate | 0.00142 | 5.48E+01 | 3E-05 |
| Phenanthrene | 0.659 | 1.83E+03 | 4E-04 |
| Pyrene | 1.837 | 1.72E+03 | 1E-03 |
| Selenium | 4.261 | 3.91E+02 | 1E-02 |
| Toluene | 0.000401 | 5.57E+03 | 7E-08 |
| Vanadium | 10.45 | 3.91E+02 | 3E-02 |
| Xylene[1,2-] | 0.00101 | 9.55E+03 | 1E-07 |
| Xylene[1,3-]+xylene[1,4-] | 0.00203 | 1.09E+03[f] | 2E-06 |
| | | **Hazard Index** | **0.8** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-73**
**Residential Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-023(a)-99**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 3.21 | 3.90E+00 | 8E-06 |
| Benzo(a)anthracene | 0.844 | 6.21E+00 | 1E-06 |
| Benzo(a)pyrene | 2.492 | 6.21E-01 | 4E-05 |
| Benzo(b)fluoranthene | 1.478 | 6.21E+00 | 2E-06 |
| Benzo(k)fluoranthene | 0.0324 | 6.21E+01 | 5E-09 |
| Bis(2-ethylhexyl)phthalate | 2.12 | 3.47E+02 | 6E-08 |
| Chrysene | 3.001 | 6.21E+02 | 5E-08 |
| Ethylbenzene | 0.000565 | 6.97E+01 | 8E-11 |
| Indeno(1,2,3-cd)pyrene | 0.228 | 6.21E+00 | 4E-07 |
| Naphthalene | 1.17 | 4.50E+01 | 3E-07 |
| 2,3,7,8-TCDD equivalent | 8.7E-07 | 4.50E-05 | 2E-07 |
| Tetrachloroethene | 0.00138 | 6.99E+00 | 2E-09 |
| | | **Total Excess Cancer Risk** | **5E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-74**
**Residential Radionuclide**
**Screening Evaluation for Consolidated Unit 21-023(a)-99**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.635 | 30 | 0.3 |
| Cesium-137 | 0.133 | 5.6 | 0.4 |
| Plutonium-238 | 0.0544 | 37 | 0.02 |
| Plutonium-239/240 | 1.393 | 33 | 0.6 |
| Strontium-90 | 1.95 | 5.7 | 5 |
| Tritium | 1.099 | 750 | 0.02 |
| Uranium-234 | 1.468 | 170 | 0.1 |
| Uranium-235/236 | 0.0936 | 17 | 0.08 |
| | | **Total Dose** | **7** |

* SALs from LANL (2009, 107655).

**Table H-4.2-75**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Aluminum | 10206 | 1.13E+06 | 9.0E-03 |
| Anthracene | 0.00916 | 1.83E+05 | 5.0E-08 |
| Barium | 87.31 | 2.24E+05 | 3.9E-04 |
| Benzoic acid | 0.621 | 2.5E+06[b] | 2.5E-07 |
| Chromium | 7.753 | 2.92E+03[c] | 2.7E-03 |
| Cobalt | 2.681 | 3.0E+02[b] | 8.9E-03 |
| Copper | 49.42 | 4.54E+04 | 1.1E-03 |
| Fluoranthene | 0.0222 | 2.44E+04 | 9.1E-07 |
| Lead | 21.93 | 8.00E+02 | 2.7E-02 |
| Mercury | 0.225 | 3.1E+02[b] | 7.3E-04 |
| Nickel | 4.78 | 2.27E+04 | 2.1E-04 |
| Nitrate | 2.331 | 1.82E+06 | 1.3E-06 |
| Perchlorate | 0.000959 | 7.95E+02 | 1.2E-06 |
| Phenanthrene | 0.0115 | 2.05E+04 | 5.6E-07 |
| Pyrene | 0.024 | 1.83E+04 | 1.3E-06 |
| Uranium | 2.093 | 3.41E+03 | 6.1E-04 |
| Vanadium | 13.8 | 5.68E+03 | 2.4E-03 |
| Zinc | 54.52 | 3.41E+05 | 1.6E-04 |
| | | **Hazard Index** | **0.05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

**Table H-4.2-76**
**Industrial Carcinogenic**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.0146 | 2.34E+01 | 6E-09 |
| Benzo(b)fluoranthene | 0.0164 | 2.34E+01 | 7E-09 |
| Bis(2-ethylhexyl)phthalate | 0.116 | 1.37E+03 | 9E-10 |
| Chloroaniline[4-] | 0.0804 | 8.6E+01[b] | 9E-09 |
| Chrysene | 0.0148 | 2.34E+03 | 6E-11 |
| | | **Total Excess Cancer Risk** | **2E-08** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-77**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.106 | 180 | 0.009 |
| Cesium-137 | 0.608 | 23 | 0.4 |
| Plutonium-238 | 0.0268 | 240 | 0.002 |
| Plutonium-239/240 | 1.38 | 210 | 0.1 |
| Strontium-90 | 0.18 | 1900 | 0.001 |
| Tritium | 0.033 | 4.4E+05 | 1E-06 |
| Uranium-234 | 1.572 | 1500 | 0.02 |
| Uranium-235/236 | 0.0701 | 87 | 0.01 |
| Uranium-238 | 1.457 | 430 | 0.05 |
| | | **Total Dose** | **0.6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-78**
**Dioxin/Furan TEF Calculations for**
**Construction Worker and Residential Scenarios for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.47E-06 | 0.01 | 1.5E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 5.14E-07 | 0.01 | 5.1E-09 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 5.17E-08 | 0.1 | 5.2E-09 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1.3E-05 | 0.0003 | 3.9E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1.11E-06 | 0.0003 | 3.3E-10 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 7.73E-08 | 0.1 | 7.7E-09 |
| | | **2,3,7,8-TCDD Equivalent** | 3.7E-08 |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-79**
**Construction Worker**
**Noncarcinogenic Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.26 | 2.63E+05 | 1E-06 |
| Aluminum | 7768 | 4.07E+04 | 2E-01 |
| Anthracene | 0.00916 | 6.68E+04 | 1E-07 |
| Barium | 65.02 | 4.35E+03 | 2E-02 |
| Benzoic acid | 0.621 | 9.52E+05[b] | 7E-07 |
| Bis(2-ethylhexyl)phthalate | 0.116 | 4.76E+03 | 2E-05 |
| Chromium | 9.6 | 4.49E+02[c] | 2E-02 |
| Cobalt | 2.015 | 3.49E+01[b] | 6E-02 |
| Copper | 24.81 | 1.24E+04 | 2E-03 |
| Fluoranthene | 0.0213 | 8.91E+03 | 2E-06 |
| Isopropyltoluene[4-] | 0.000488 | 1.03E+04[d] | 5E-08 |
| Lead | 16.8 | 8.00E+02 | 2E-02 |
| Mercury | 0.283 | 9.29E+01[b] | 3E-03 |
| Methylene chloride | 0.0055 | 1.06E+04 | 5E-07 |
| Nickel | 4.164 | 6.19E+03 | 7E-04 |
| Nitrate | 1.899 | 4.96E+05 | 4E-06 |
| Perchlorate | 0.00118 | 2.17E+02 | 5E-06 |
| Phenanthrene | 0.0115 | 7.15E+03 | 2E-06 |
| Pyrene | 0.0203 | 6.68E+03 | 3E-06 |
| Selenium | 1.155 | 1.55E+03 | 8E-04 |
| 2,3,7,8-TCDD equivalent | 3.7E-08 | 2.84E-04 | 1E-04 |
| Toluene | 0.00214 | 2.11E+04 | 1E-07 |
| Uranium | 2.914 | 9.29E+02 | 3E-03 |
| Vanadium | 11.78 | 1.55E+03 | 8E-03 |
| Xylene[1,3-]+xylene[1,4-] | 0.000333 | 3.13E+03[e] | 1E-07 |
| Zinc | 46.14 | 9.29E+04 | 5E-04 |
| | | **Hazard Index** | **0.3** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-80**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.0146 | 2.13E+02 | 7E-10 |
| Benzo(b)fluoranthene | 0.0164 | 2.13E+02 | 8E-10 |
| Chloroaniline[4-] | 0.462 | 1.08E+03[b] | 4E-09 |
| Chloroform | 0.000251 | 6.71E+02 | 4E-12 |
| Chrysene | 0.0148 | 2.06E+04 | 7E-12 |
| Dichlorobenzene[1,4-] | 0.000442 | 3.78E+03 | 1E-12 |
| Trichloroethene | 0.00286 | 4.60E+03 | 6E-12 |
| | | **Total Excess Cancer Risk** | **6E-09** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-81**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.104 | 34 | 0.05 |
| Cesium-137 | 0.263 | 18 | 0.2 |
| Plutonium-238 | 0.0268 | 40 | 0.01 |
| Plutonium-239/240 | 0.66 | 36 | 0.3 |
| Strontium-90 | 0.166 | 800 | 0.003 |
| Tritium | 0.0333 | 3.2E+05 | 2E-06 |
| Uranium-234 | 1.374 | 220 | 0.09 |
| Uranium-235/236 | 0.0893 | 43 | 0.03 |
| Uranium-238 | 1.35 | 160 | 0.1 |
| | | **Total Dose** | **0.8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-82**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acetone | 0.26 | 6.75E+04 | 4E-06 |
| Aluminum | 7768 | 7.81E+04 | 1E-01 |
| Anthracene | 0.00916 | 1.72E+04 | 5E-07 |
| Barium | 65.02 | 1.56E+04 | 4E-03 |
| Benzoic acid | 0.621 | 2.4E+05[b] | 3E-06 |
| Chromium | 9.6 | 2.19E+02[c] | 4E-02 |
| Cobalt | 2.015 | 2.3E+01[b] | 9E-02 |
| Copper | 24.81 | 3.13E+03 | 8E-03 |
| Fluoranthene | 0.0213 | 2.29E+03 | 9E-06 |
| Isopropyltoluene[4-] | 0.000488 | 3.21E+03[d] | 2E-07 |
| Lead | 16.8 | 4.00E+02 | 4E-02 |
| Mercury | 0.283 | 2.3E+01[b] | 1E-02 |
| Nickel | 4.164 | 1.56E+03 | 3E-03 |
| Nitrate | 1.899 | 1.25E+05 | 2E-05 |
| Perchlorate | 0.00118 | 5.48E+01 | 2E-05 |
| Phenanthrene | 0.0115 | 1.83E+03 | 6E-06 |
| Pyrene | 0.0203 | 1.72E+03 | 1E-05 |
| Selenium | 1.155 | 3.91E+02 | 3E-03 |
| Toluene | 0.00214 | 5.57E+03 | 4E-07 |
| Uranium | 2.914 | 2.35E+02 | 1E-02 |
| Vanadium | 11.78 | 3.91E+02 | 3E-02 |
| Xylene[1,3-]+xylene[1,4-] | 0.000333 | 1.09E+03[e] | 3E-07 |
| Zinc | 46.14 | 2.35E+04 | 2E-03 |
| | | **Hazard Index** | **0.3** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-83**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.0146 | 6.21E+00 | 2E-08 |
| Benzo(b)fluoranthene | 0.0164 | 6.21E+00 | 3E-08 |
| Bis(2-ethylhexyl)phthalate | 0.116 | 3.47E+02 | 3E-09 |
| Chloroaniline[4-] | 0.462 | 2.4E+01[b] | 2E-07 |
| Chloroform | 0.000251 | 5.72E+00 | 4E-10 |
| Chrysene | 0.0148 | 6.21E+02 | 2E-10 |
| Dichlorobenzene[1,4-] | 0.000442 | 3.22E+01 | 1E-10 |
| Methylene chloride | 0.0055 | 1.99E+02 | 3E-10 |
| Trichloroethene | 0.00286 | 4.57E+01 | 6E-10 |
| 2,3,7,8-TCDD equivalent | 3.7E-08 | 4.50E-05 | 8E-09 |
| | | **Total Excess Cancer Risk** | **3E-07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-84**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(a)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.104 | 30 | 0.05 |
| Cesium-137 | 0.263 | 5.6 | 0.7 |
| Plutonium-238 | 0.0268 | 37 | 0.01 |
| Plutonium-239/240 | 0.66 | 33 | 0.3 |
| Strontium-90 | 0.166 | 5.7 | 0.4 |
| Tritium | 0.0333 | 750 | 0.0007 |
| Uranium-234 | 1.374 | 170 | 0.1 |
| Uranium-235/236 | 0.0893 | 17 | 0.08 |
| Uranium-238 | 1.35 | 87 | 0.2 |
| | | **Total Dose** | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-85**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Barium | 65.07 | 2.24E+05 | 3E-04 |
| Chromium | 6.268 | 2.92E+03[b] | 2E-03 |
| Cobalt | 2.258 | 3.0E+02[c] | 8E-03 |
| Copper | 6.769 | 4.54E+04 | 2E-04 |
| Cyanide (total) | 0.945 | 2.27E+04 | 4E-05 |
| Fluoranthene | 0.0268 | 2.44E+04 | 1E-06 |
| Lead | 14.53 | 8.00E+02 | 2E-02 |
| Mercury | 0.0722 | 3.1E+02[c] | 2E-04 |
| Nickel | 4.245 | 2.27E+04 | 2E-04 |
| Nitrate | 34.48 | 1.82E+06 | 2E-05 |
| Perchlorate | 0.00631 | 7.95E+02 | 8E-06 |
| Phenanthrene | 0.016 | 2.05E+04 | 8E-07 |
| Pyrene | 0.0234 | 1.83E+04 | 1E-06 |
| Selenium | 1.195 | 5.68E+03 | 2E-04 |
| Silver | 0.0868 | 5.68E+03 | 2E-05 |
| Zinc | 60.99 | 3.41E+05 | 2E-04 |
| | | **Hazard Index** | **0.03** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-86**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 2.402 | 1.77E+01 | 1E-06 |
| Benzo(b)fluoranthene | 0.0203 | 2.34E+01 | 9E-09 |
| Chrysene | 0.0146 | 2.34E+03 | 6E-11 |
| | | **Total Excess Cancer Risk** | **1E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-87**
**Industrial Radionuclide Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 1.896 | 180 | 0.2 |
| Cesium-137 | 0.772 | 23 | 0.5 |
| Plutonium-238 | 0.642 | 240 | 0.04 |
| Plutonium-239/240 | 76.3 | 210 | 5 |
| Tritium | 0.0129 | 4.4E+05 | 4E-07 |
| Uranium-234 | 2.055 | 1500 | 0.02 |
| Uranium-235/236 | 0.146 | 87 | 0.03 |
| Uranium-238 | 1.919 | 430 | 0.07 |
| | | **Total Dose** | **6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-88**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 8.21E-06 | 0.01 | 8.2E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 2.07E-06 | 0.01 | 2.1E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 5.92E-07 | 0.1 | 5.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 6.0E-07 | 0.1 | 6.0E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 3.24E-07 | 0.1 | 3.2E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2.29E-07 | 0.1 | 2.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 7.48E-05 | 0.0003 | 2.2E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 3.49E-06 | 0.0003 | 1.0E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 3.80E-07 | 0.3 | 1.1E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 5.22E-07 | 0.1 | 5.2E-08 |
| | | **2,3,7,8-TCDD Equivalent** | **4.6E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-89**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthylene | 0.0129 | 6.68E+03[b] | 2E-06 |
| Anthracene | 0.0576 | 6.68E+04 | 9E-07 |
| Aroclor-1254 | 0.0909 | 4.36E+00 | 2E-02 |
| Arsenic | 4.702 | 6.54E+01 | 7E-02 |
| Barium | 84.44 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.0515 | 6.68E+03[b] | 8E-06 |
| Bis(2-ethylhexyl)phthalate | 0.147 | 4.76E+03 | 3E-05 |
| Chromium | 13.31 | 4.49E+02[c] | 3E-02 |
| Cobalt | 2.708 | 3.49E+01[d] | 8E-02 |
| Copper | 22.67 | 1.24E+04 | 2E-03 |
| Cyanide (total) | 0.316 | 6.19E+03 | 5E-05 |
| Di-n-butylphthalate | 0.497 | 2.38E+04 | 2E-05 |
| Fluoranthene | 0.0878 | 8.91E+03 | 1E-05 |
| Lead | 24 | 8.00E+02 | 3E-02 |
| Mercury | 2.048 | 9.29E+01[d] | 2E-02 |
| Nickel | 5.511 | 6.19E+03 | 9E-04 |
| Nitrate | 26.33 | 4.96E+05 | 5E-05 |
| Perchlorate | 0.00865 | 2.17E+02 | 4E-05 |
| Phenanthrene | 0.04 | 7.15E+03 | 6E-06 |
| Pyrene | 0.0864 | 6.68E+03 | 1E-05 |
| Selenium | 0.998 | 1.55E+03 | 6E-04 |
| Silver | 8.614 | 1.55E+03 | 6E-03 |
| Strontium | 21.38 | 1.86E+05 | 1E-04 |
| 2,3,7,8-TCDD equivalent | 4.6E-07 | 2.84E-04 | 2E-03 |
| Toluene | 0.0008448 | 2.11E+04 | 4E-08 |
| Zinc | 221.5 | 9.29E+04 | 2E-03 |
| | | **Hazard Index** | **0.3** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-90**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0519 | 7.58E+01 | 7E-09 |
| Benzo(a)anthracene | 0.419 | 2.13E+02 | 2E-08 |
| Benzo(a)pyrene | 0.0815 | 2.13E+01 | 4E-08 |
| Benzo(b)fluoranthene | 0.109 | 2.13E+02 | 5E-09 |
| Benzo(k)fluoranthene | 0.0739 | 2.06E+03 | 4E-10 |
| Chrysene | 0.0761 | 2.06E+04 | 4E-11 |
| Dichlorobenzene[1,4-] | 0.237 | 3.78E+03 | 6E-10 |
| Indeno(1,2,3-cd)pyrene | 0.276 | 2.13E+02 | 1E-08 |
| **Total Excess Cancer Risk** | | | **8E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-91**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 30.43 | 34 | 13 |
| Cesium-137 | 0.37 | 18 | 0.3 |
| Plutonium-238 | 0.793 | 40 | 0.3 |
| Plutonium-239/240 | 178.9 | 36 | 75 |
| Tritium | 0.0253 | 3.2E+05 | 1E-06 |
| Uranium-234 | 3.081 | 220 | 0.2 |
| Uranium-235/236 | 0.162 | 43 | 0.06 |
| Uranium-238 | 1.517 | 160 | 0.1 |
| **Total Dose** | | | **89** |

* SALs from LANL (2009, 107655).

**Table H-4.2-92**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthylene | 0.0129 | 1.72E+03[b] | 7.5E-06 |
| Anthracene | 0.0576 | 1.72E+04 | 3.3E-06 |
| Aroclor-1254 | 0.0909 | 1.12E+00 | 8.1E-02 |
| Barium | 84.44 | 1.56E+04 | 5.4E-03 |
| Benzo(g,h,i)perylene | 0.0515 | 1.72E+03[b] | 3.0E-05 |
| Chromium | 13.31 | 2.19E+02[c] | 6.1E-02 |
| Cobalt | 2.708 | 2.3E+01[d] | 1.2E-01 |
| Copper | 22.67 | 3.13E+03 | 7.2E-03 |
| Cyanide (total) | 0.316 | 1.56E+03 | 2.0E-04 |
| Di-n-butylphthalate | 0.497 | 6.11E+03 | 8.1E-05 |
| Fluoranthene | 0.0878 | 2.29E+03 | 3.8E-05 |
| Lead | 24 | 4.00E+02 | 6.0E-02 |
| Mercury | 2.048 | 2.3E+01[d] | 8.9E-02 |
| Nickel | 5.511 | 1.56E+03 | 3.5E-03 |
| Nitrate | 26.33 | 1.25E+05 | 2.1E-04 |
| Perchlorate | 0.00865 | 5.48E+01 | 1.6E-04 |
| Phenanthrene | 0.04 | 1.83E+03 | 2.2E-05 |
| Pyrene | 0.0864 | 1.72E+03 | 5.0E-05 |
| Selenium | 0.998 | 3.91E+02 | 2.6E-03 |
| Silver | 8.614 | 3.91E+02 | 2.2E-02 |
| Strontium | 21.38 | 4.69E+04 | 4.6E-04 |
| Toluene | 0.0008448 | 5.57E+03 | 1.5E-07 |
| Zinc | 221.5 | 2.35E+04 | 9.4E-03 |
| | | **Hazard Index** | **0.5** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-93**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0519 | 2.22E+00 | 2.3E-07 |
| Arsenic | 4.702 | 3.90E+00 | 1.2E-05 |
| Benzo(a)anthracene | 0.419 | 6.21E+00 | 6.7E-07 |
| Benzo(a)pyrene | 0.0815 | 6.21E-01 | 1.3E-06 |
| Benzo(b)fluoranthene | 0.109 | 6.21E+00 | 1.8E-07 |
| Benzo(k)fluoranthene | 0.0739 | 6.21E+01 | 1.2E-08 |
| Bis(2-ethylhexyl)phthalate | 0.147 | 3.47E+02 | 4.2E-09 |
| Chrysene | 0.0761 | 6.21E+02 | 1.2E-09 |
| Dichlorobenzene[1,4-] | 0.237 | 3.22E+01 | 7.4E-08 |
| Indeno(1,2,3-cd)pyrene | 0.276 | 6.21E+00 | 4.4E-07 |
| 2,3,7,8-TCDD equivalent | 4.6E-07 | 4.50E-05 | 1.0E-07 |
| | | **Total Excess Cancer Risk** | **2E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-94**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(b)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 30.43 | 30 | 15 |
| Cesium-137 | 0.37 | 5.6 | 1 |
| Plutonium-238 | 0.793 | 37 | 0.3 |
| Plutonium-239/240 | 178.9 | 33 | 81 |
| Tritium | 0.0253 | 7.50E+02 | 0.0005 |
| Uranium-234 | 3.081 | 170 | 0.3 |
| Uranium-235/236 | 0.162 | 17 | 0.1 |
| Uranium-238 | 1.517 | 87 | 0.3 |
| | | **Total Dose** | **98** |

* SALs from LANL (2009, 107655).

**Table H-4.2-95**
**Dioxin/Furan TEF Calculations for the**
**Industrial Scenario for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.000677 | 0.01 | 6.8E-06 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 0.0000333 | 0.1 | 3.3E-06 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.0000388 | 0.1 | 3.9E-06 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.0000332 | 0.1 | 3.3E-06 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.00439 | 0.0003 | 1.3E-06 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.0000154 | 1 | 1.5E-05 |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 2.23E-06 | 1 | 2.2E-06 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.000175 | 0.01 | 1.8E-06 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 7.31E-06 | 0.01 | 7.3E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.0000114 | 0.1 | 1.1E-06 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 4.82E-06 | 0.1 | 4.8E-07 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 2.67E-06 | 0.1 | 2.7E-07 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 6.98E-06 | 0.1 | 7.0E-07 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.000414 | 0.0003 | 1.2E-07 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 2.65E-06 | 0.03 | 8.0E-08 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 6.36E-06 | 0.3 | 1.9E-06 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 6.11E-06 | 0.1 | 6.1E-07 |
| **2,3,7,8-TCDD Equivalent** | | | **4.3E-05** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-96**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0758 | 3.67E+04 | 2E-06 |
| Acenaphthylene | 0.0162 | 1.83E+04[b] | 9E-07 |
| Barium | 100.4 | 2.24E+05 | 5E-04 |
| Benzoic acid | 0.445 | 2.5E+06[c] | 2E-07 |
| Chromium | 25.61 | 2.92E+03[d] | 9E-08 |
| Cobalt | 3.136 | 3.0E+02[c] | 1E-07 |
| Copper | 97.49 | 4.54E+04 | 2E-03 |
| Cyanide (total) | 1.273 | 2.27E+04 | 6E-05 |
| Di-n-butylphthalate | 0.395 | 6.84E+04 | 6E-06 |
| Fluoranthene | 0.0407 | 2.44E+04 | 2E-06 |
| Lead | 44.76 | 8.00E+02 | 6E-02 |
| Manganese | 239.4 | 1.45E+05 | 2E-03 |
| Mercury | 0.511 | 3.1E+02[c] | 2E-03 |
| Nickel | 4.901 | 2.27E+04 | 2E-04 |
| Nitrate | 74.76 | 1.82E+06 | 4E-05 |
| Perchlorate | 0.00591 | 7.95E+02 | 7E-06 |
| Pyrene | 0.0756 | 1.83E+04 | 4E-06 |
| Selenium | 0.77 | 5.68E+03 | 1E-04 |
| Silver | 9.683 | 5.68E+03 | 2E-03 |
| Uranium | 7.362 | 3.41E+03 | 2E-03 |
| Zinc | 97.9 | 3.41E+05 | 3E-04 |
| | | **Hazard Index** | **0.07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

**Table H-4.2-97**
**Industrial Carcinogenic**
**Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1242 | 0.178 | 8.26E+00 | 2E-07 |
| Aroclor-1254 | 0.422 | 8.26E+00 | 5E-07 |
| Aroclor-1260 | 0.186 | 8.26E+00 | 2E-07 |
| Arsenic | 3.312 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 0.1 | 2.34E+01 | 4E-08 |
| Benzo(b)fluoranthene | 0.42 | 2.34E+01 | 2E-07 |
| Bis(2-ethylhexyl)phthalate | 0.43 | 1.37E+03 | 3E-09 |
| Chrysene | 0.198 | 2.34E+03 | 9E-10 |
| 2,3,7,8-TCDD equivalent | 4.3E-05 | 2.04E-04 | 2E-06 |
| **Total Excess Cancer Risk** | | | **5E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-98**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 1.65 | 180 | 0.1 |
| Cesium-137 | 0.485 | 23 | 0.3 |
| Plutonium-238 | 0.223 | 240 | 0.01 |
| Plutonium-239/240 | 15.72 | 210 | 1 |
| Strontium-90 | 0.293 | 1900 | 0.002 |
| Tritium | 0.139 | 4.4E+05 | 5E-06 |
| Uranium-234 | 6.458 | 1500 | 0.06 |
| Uranium-235/236 | 0.479 | 87 | 0.08 |
| Uranium-238 | 4.578 | 430 | 0.2 |
| **Total Dose** | | | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-99**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0004661 | 0.01 | 4.7E-06 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 2.16E-05 | 0.1 | 2.2E-06 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 2.583E-05 | 0.1 | 2.6E-06 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 2.251E-05 | 0.1 | 2.3E-06 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.00289 | 0.0003 | 8.7E-07 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.0000154 | 1 | 1.5E-05 |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 2.23E-06 | 1 | 2.2E-06 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0001295 | 0.01 | 1.3E-06 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 7.31E-06 | 0.01 | 7.3E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.0000114 | 0.1 | 1.1E-06 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 4.82E-06 | 0.1 | 4.8E-07 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 2.67E-06 | 0.1 | 2.7E-07 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 6.98E-06 | 0.1 | 7.0E-07 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0002876 | 0.0003 | 8.6E-08 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 2.65E-06 | 0.03 | 8.0E-08 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 6.36E-06 | 0.3 | 1.9E-06 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 4.83E-06 | 0.1 | 4.8E-07 |
| **2,3,7,8-TCDD Equivalent** | | | **3.7E-05** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-100**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0758 | 1.86E+04 | 4E-06 |
| Acenaphthylene | 0.0162 | 6.68E+03[b] | 2E-06 |
| Anthracene | 0.166 | 6.68E+04 | 3E-06 |
| Aroclor-1254 | 0.332 | 4.36E+00 | 8E-02 |
| Arsenic | 3.556 | 6.54E+01 | 5E-02 |
| Barium | 64.17 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.0519 | 6.68E+03[b] | 8E-06 |
| Benzoic acid | 0.453 | 9.52E+05[c] | 5E-07 |
| Bis(2-ethylhexyl)phthalate | 0.194 | 4.76E+03 | 4E-05 |
| Chromium | 34.22 | 4.49E+02[d] | 8E-02 |
| Cobalt | 2.866 | 3.49E+01[c] | 8E-02 |
| Copper | 114 | 1.24E+04 | 9E-03 |
| Cyanide (total) | 0.455 | 6.19E+03 | 7E-05 |
| Di-n-butylphthalate | 0.214 | 2.38E+04 | 9E-06 |
| Fluoranthene | 0.149 | 8.91E+03 | 2E-05 |
| Fluorene | 0.0206 | 8.91E+03 | 2E-06 |
| Isopropyltoluene[4-] | 0.000495 | 1.03E+04[e] | 5E-08 |
| Lead | 36.34 | 8.00E+02 | 5E-02 |
| Manganese | 252.9 | 4.63E+02 | 6E-01 |
| Mercury | 0.404 | 9.29E+01[c] | 4E-03 |
| Methylene chloride | 0.019 | 1.06E+04 | 2E-06 |
| Nickel | 13.14 | 6.19E+03 | 2E-03 |
| Nitrate | 26.88 | 4.96E+05 | 5E-05 |
| Perchlorate | 0.0022 | 2.17E+02 | 1E-05 |
| Phenanthrene | 0.215 | 7.15E+03 | 3E-05 |
| Pyrene | 0.142 | 6.68E+03 | 2E-05 |
| Selenium | 1.807 | 1.55E+03 | 1E-03 |
| Silver | 8.982 | 1.55E+03 | 6E-03 |
| 2,3,7,8-TCDD equivalent | 3.7E-05 | 2.84E-04 | 1E-01 |
| Toluene | 0.00243 | 2.11E+04 | 1E-07 |
| Uranium | 4.57 | 9.29E+02 | 5E-03 |
| Zinc | 80.24 | 9.29E+04 | 9E-04 |
| | | **Hazard Index** | **1** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-101**
**Construction Worker Carcinogenic Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1242 | 0.256 | 7.58E+01 | 3E-08 |
| Aroclor-1260 | 0.13 | 7.58E+01 | 2E-08 |
| Benzo(a)anthracene | 0.149 | 2.13E+02 | 7E-09 |
| Benzo(a)pyrene | 0.159 | 2.13E+01 | 8E-08 |
| Benzo(b)fluoranthene | 0.176 | 2.13E+02 | 8E-09 |
| Benzo(k)fluoranthene | 0.33 | 2.06E+03 | 2E-09 |
| Butylbenzylphthalate | 0.248 | 4.76E+04[b] | 5E-11 |
| Carbazole | 0.1 | 1.08E+04[c] | 9E-11 |
| Chrysene | 0.219 | 2.06E+04 | 1E-10 |
| Dibenz(a,h)anthracene | 0.085 | 2.13E+01 | 4E-08 |
| Dichlorobenzene[1,4-] | 0.097 | 3.78E+03 | 3E-10 |
| Indeno(1,2,3-cd)pyrene | 0.0484 | 2.13E+02 | 2E-09 |
| Trichloroethene | 0.0023 | 4.60E+03 | 5E-12 |
| | | **Total Excess Cancer Risk** | **2E-07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-102**
**Construction Worker Radionuclide Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.388 | 34 | 0.2 |
| Cesium-137 | 0.364 | 18 | 0.3 |
| Europium-152 | 0.393 | 9.1 | 0.6 |
| Plutonium-238 | 0.0714 | 40 | 0.03 |
| Plutonium-239/240 | 5.892 | 36 | 2 |
| Strontium-90 | 0.375 | 800 | 0.007 |
| Tritium | 0.036 | 3.2E+05 | 2E-06 |
| Uranium-234 | 2.553 | 220 | 0.2 |
| Uranium-235/236 | 0.128 | 43 | 0.04 |
| Uranium-238 | 1.6 | 160 | 0.2 |
| | | **Total Dose** | **4** |

* SALs from LANL (2009, 107655).

**Table H-4.2-103**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0758 | 3.44E+03 | 2E-05 |
| Acenaphthylene | 0.0162 | 1.72E+03[b] | 9E-06 |
| Anthracene | 0.166 | 1.72E+04 | 1E-05 |
| Aroclor-1254 | 0.332 | 1.12E+00 | 3E-01 |
| Barium | 64.17 | 1.56E+04 | 4E-03 |
| Benzo(g,h,i)perylene | 0.0519 | 1.72E+03[b] | 3E-05 |
| Benzoic acid | 0.453 | 2.4E+05[c] | 2E-06 |
| Chromium | 34.22 | 2.19E+02[d] | 2E-01 |
| Cobalt | 2.866 | 2.3E+01[c] | 1E-01 |
| Copper | 114 | 3.13E+03 | 4E-02 |
| Cyanide (total) | 0.455 | 1.56E+03 | 3E-04 |
| Di-n-butylphthalate | 0.214 | 6.11E+03 | 4E-05 |
| Fluoranthene | 0.149 | 2.29E+03 | 7E-05 |
| Fluorene | 0.0206 | 2.29E+03 | 9E-06 |
| Isopropyltoluene[4-] | 0.000495 | 3.21E+03[e] | 2E-07 |
| Lead | 36.34 | 4.00E+02 | 9E-02 |
| Manganese | 252.9 | 1.07E+04 | 2E-02 |
| Mercury | 0.404 | 2.3E+01[c] | 2E-02 |
| Nickel | 13.14 | 1.56E+03 | 8E-03 |
| Nitrate | 26.88 | 1.25E+05 | 2E-04 |
| Perchlorate | 0.0022 | 5.48E+01 | 4E-05 |
| Phenanthrene | 0.215 | 1.83E+03 | 1E-04 |
| Pyrene | 0.142 | 1.72E+03 | 8E-05 |
| Selenium | 1.807 | 3.91E+02 | 5E-03 |
| Silver | 8.982 | 3.91E+02 | 2E-02 |
| Toluene | 0.00243 | 5.57E+03 | 4E-07 |
| Uranium | 4.57 | 2.35E+02 | 2E-02 |
| Zinc | 80.24 | 2.35E+04 | 3E-03 |
| | | **Hazard Index** | **0.8** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-104**
**Residential Carcinogenic Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1242 | 0.256 | 2.22E+00 | 1E-06 |
| Aroclor-1260 | 0.13 | 2.22E+00 | 6E-07 |
| Arsenic | 3.556 | 3.90E+00 | 9E-06 |
| Benzo(a)anthracene | 0.149 | 6.21E+00 | 2E-07 |
| Benzo(a)pyrene | 0.159 | 6.21E-01 | 3E-06 |
| Benzo(b)fluoranthene | 0.176 | 6.21E+00 | 3E-07 |
| Benzo(k)fluoranthene | 0.33 | 6.21E+01 | 5E-08 |
| Bis(2-ethylhexyl)phthalate | 0.194 | 3.47E+02 | 6E-09 |
| Butylbenzylphthalate | 0.248 | 2.6E+03[b] | 1E-09 |
| Carbazole | 0.1 | 2.4E+02[c] | 4E-09 |
| Chrysene | 0.219 | 6.21E+02 | 4E-09 |
| Dibenz(a,h)anthracene | 0.085 | 6.21E-01 | 1E-06 |
| Dichlorobenzene[1,4-] | 0.097 | 3.22E+01 | 3E-08 |
| Indeno(1,2,3-cd)pyrene | 0.0484 | 6.21E+00 | 8E-08 |
| Methylene chloride | 0.019 | 1.99E+02 | 1E-09 |
| 2,3,7,8-TCDD equivalent | 3.7E-05 | 4.50E-05 | 8E-06 |
| Trichloroethene | 0.0023 | 4.57E+01 | 5E-10 |
| | | **Total Excess Cancer Risk** | **2E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] EPA Region 6 SSL (EPA 2007, 099314).

**Table H-4.2-105**
**Residential Radionuclide Screening Evaluation for SWMU 21-024(d)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.388 | 30 | 0.2 |
| Cesium-137 | 0.364 | 5.6 | 1 |
| Europium-152 | 0.393 | 2.9 | 2 |
| Plutonium-238 | 0.0714 | 37 | 0.03 |
| Plutonium-239/240 | 5.892 | 33 | 3 |
| Strontium-90 | 0.375 | 5.7 | 1 |
| Tritium | 0.036 | 750 | 0.0007 |
| Uranium-234 | 2.553 | 170 | 0.2 |
| Uranium-235/236 | 0.128 | 17 | 0.1 |
| Uranium-238 | 1.6 | 87 | 0.3 |
| | | **Total Dose** | **8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-106**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0843 | 3.67E+04 | 2E-06 |
| Acetone | 0.00437 | 8.51E+05 | 5E-09 |
| Anthracene | 0.158 | 1.83E+05 | 9E-07 |
| Antimony | 0.674 | 4.54E+02 | 2E-03 |
| Barium | 98.64 | 2.24E+05 | 4E-04 |
| Cadmium | 0.921 | 1.12E+03 | 8E-04 |
| Chromium | 9.287 | 2.92E+03[b] | 3E-03 |
| Copper | 10.03 | 4.54E+04 | 2E-04 |
| Cyanide (total) | 0.218 | 2.27E+04 | 1E-05 |
| Di-n-butylphthalate | 0.0622 | 6.84E+04 | 9E-07 |
| Fluoranthene | 0.3 | 2.44E+04 | 1E-05 |
| Fluorene | 0.127 | 2.44E+04 | 5E-06 |
| Lead | 35.07 | 8.00E+02 | 4E-02 |
| Mercury | 0.207 | 3.1E+02[c] | 7E-04 |
| Methylnaphthalene[2-] | 0.052 | 4.1E+03[c] | 1E-05 |
| Molybdenum | 0.811 | 5.68E+03 | 1E-04 |
| Nitrate | 6.334 | 1.82E+06 | 4E-06 |
| Perchlorate | 0.00124 | 7.95E+02 | 2E-06 |
| Phenanthrene | 0.682 | 2.05E+04 | 3E-05 |
| Pyrene | 0.322 | 1.83E+04 | 2E-05 |
| Selenium | 1.29 | 5.68E+03 | 2E-04 |
| Silver | 0.384 | 5.68E+03 | 7E-05 |
| Toluene | 0.0154 | 5.79E+04 | 3E-07 |
| Uranium | 8.677 | 3.41E+03 | 3E-03 |
| Zinc | 63.52 | 3.41E+05 | 2E-04 |
| | | **Hazard Index** | **0.05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-107**
**Industrial Carcinogenic**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.32 | 2.34E+01 | 1.4E-07 |
| Benzo(a)pyrene | 0.273 | 2.34E+00 | 1.2E-06 |
| Benzo(b)fluoranthene | 0.582 | 2.34E+01 | 2.5E-07 |
| Benzo(k)fluoranthene | 0.0786 | 2.34E+02 | 3.4E-09 |
| Chrysene | 0.293 | 2.34E+03 | 1.3E-09 |
| Naphthalene | 0.104 | 2.52E+02 | 4.1E-09 |
| Trichloroethene | 0.00748 | 2.53E+02 | 3.0E-10 |
| **Total Excess Cancer Risk** | | | **2E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-108**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 1.182 | 180 | 0.1 |
| Cesium-137 | 0.63 | 23 | 0.4 |
| Plutonium-238 | 0.329 | 240 | 0.02 |
| Plutonium-239/240 | 35.34 | 210 | 2.5 |
| Strontium-90 | 0.907 | 1900 | 0.007 |
| Tritium | 0.0199 | 4.4E+05 | 7E-07 |
| Uranium-234 | 4.777 | 1500 | 0.05 |
| Uranium-235/236 | 0.177 | 87 | 0.03 |
| Uranium-238 | 2.724 | 430 | 0.1 |
| **Total Dose** | | | **3** |

* SALs from LANL (2009, 107655).

**Table H-4.2-109**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(e)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 4.89E-06 | 0.01 | 4.9E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.17E-06 | 0.01 | 1.2E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1.96E-07 | 0.1 | 2.0E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1.79E-07 | 0.1 | 1.8E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 4.31E-05 | 0.0003 | 1.3E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 2.67E-06 | 0.0003 | 8.0E-10 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 3.33E-07 | 0.3 | 1.0E-07 |
| **2,3,7,8-TCDD Equivalent** | | | **2.1E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-110**
**Construction Worker Noncarcinogenic**
**Screening Evaluationfor SWMU 21-024(e)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0843 | 1.86E+04 | 5E-06 |
| Acenaphthylene | 0.0261 | 6.68E+03[b] | 4E-06 |
| Acetone | 0.00904 | 2.63E+05 | 3E-08 |
| Anthracene | 0.0251 | 6.68E+04 | 4E-07 |
| Antimony | 0.39 | 1.24E+02 | 3E-03 |
| Barium | 73.8 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.125 | 6.68E+03[b] | 2E-05 |
| Bis(2-ethylhexyl)phthalate | 0.383 | 4.76E+03 | 8E-05 |
| Cadmium | 1.269 | 3.09E+02 | 4E-03 |
| Chromium | 8.602 | 4.49E+02[c] | 2E-02 |
| Copper | 18.46 | 1.24E+04 | 1E-03 |
| Cyanide (total) | 1.709 | 6.19E+03 | 3E-04 |
| Di-n-butylphthalate | 0.137 | 2.38E+04 | 6E-06 |
| Fluoranthene | 0.0934 | 8.91E+03 | 1E-05 |
| Fluorene | 0.127 | 8.91E+03 | 1E-05 |
| Isopropyltoluene[4-] | 0.00667 | 1.03E+04[d] | 6E-07 |
| Lead | 22.25 | 8.00E+02 | 3E-02 |
| Mercury | 0.453 | 9.29E+01[e] | 5E-03 |
| Methylene chloride | 0.00251 | 1.06E+04 | 2E-07 |
| Methylnaphthalene[2-] | 0.052 | 1.24E+03[e] | 4E-05 |
| Molybdenum | 1.101 | 1.55E+03 | 7E-04 |
| Naphthalene | 0.104 | 7.02E+02 | 1E-04 |
| Nitrate | 3.426 | 4.96E+05 | 7E-06 |
| Perchlorate | 0.00115 | 2.17E+02 | 5E-06 |
| Phenanthrene | 0.0637 | 7.15E+03 | 9E-06 |
| Pyrene | 0.0997 | 6.68E+03 | 1E-05 |
| Selenium | 1.066 | 1.55E+03 | 7E-04 |
| Silver | 0.305 | 1.55E+03 | 2E-04 |
| 2,3,7,8-TCDD equivalent | 2.10E-07 | 2.84E-04 | 7E-04 |
| Toluene | 0.00402 | 2.11E+04 | 2E-07 |
| Trimethylbenzene[1,2,4-] | 0.00034 | 6.88E+02[e] | 5E-07 |
| Uranium | 7.792 | 9.29E+02 | 8E-03 |
| Xylene[1,2-] | 0.00157 | 2.75E+04 | 6E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.00411 | 3.13E+03[f] | 1E-06 |
| Zinc | 55.3 | 9.29E+04 | 6E-04 |
| | | **Hazard Index** | **0.09** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-111**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.128 | 2.13E+02 | 6E-09 |
| Benzo(a)pyrene | 0.406 | 2.13E+01 | 2E-07 |
| Benzo(b)fluoranthene | 0.202 | 2.13E+02 | 1E-08 |
| Benzo(k)fluoranthene | 0.0786 | 2.06E+03 | 4E-10 |
| Chloroaniline[4-] | 0.407 | 1.08E+03[b] | 4E-09 |
| Chrysene | 0.0601 | 2.06E+04 | 3E-11 |
| Dichlorobenzene[1,4-] | 0.000635 | 3.78E+03 | 2E-12 |
| Ethylbenzene | 0.000663 | 6.63E+03 | 1E-12 |
| Indeno(1,2,3-cd)pyrene | 0.168 | 2.13E+02 | 8E-09 |
| Trichloroethene | 0.00486 | 4.60E+03 | 1E-11 |
| | | **Total Excess Cancer Risk** | **2E-07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-112**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.402 | 34 | 0.2 |
| Cesium-137 | 0.525 | 18 | 0.4 |
| Plutonium-238 | 0.329 | 40 | 0.1 |
| Plutonium-239/240 | 11.29 | 36 | 5 |
| Strontium-90 | 0.907 | 800 | 0.02 |
| Tritium | 0.0176 | 3.2E+05 | 8E-07 |
| Uranium-234 | 2.56 | 220 | 0 |
| Uranium-235/236 | 0.137 | 43 | 0.05 |
| Uranium-238 | 1.717 | 160 | 0.2 |
| | | **Total Dose** | **6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-113**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0843 | 3.44E+03 | 3E-05 |
| Acenaphthylene | 0.0261 | 1.72E+03[b] | 2E-05 |
| Acetone | 0.00904 | 6.75E+04 | 1E-07 |
| Anthracene | 0.0251 | 1.72E+04 | 2E-06 |
| Antimony | 0.39 | 3.13E+01 | 1E-02 |
| Barium | 73.8 | 1.56E+04 | 5E-03 |
| Benzo(g,h,i)perylene | 0.125 | 1.72E+03[b] | 7E-05 |
| Cadmium | 1.269 | 7.79E+01 | 2E-02 |
| Chromium | 8.602 | 2.19E+02[c] | 4E-02 |
| Copper | 18.46 | 3.13E+03 | 6E-03 |
| Cyanide (total) | 1.709 | 1.56E+03 | 1E-03 |
| Di-n-butylphthalate | 0.137 | 6.11E+03 | 2E-05 |
| Fluoranthene | 0.0934 | 2.29E+03 | 4E-05 |
| Fluorene | 0.127 | 2.29E+03 | 6E-05 |
| Isopropyltoluene[4-] | 0.00667 | 3.21E+03[d] | 2E-06 |
| Lead | 22.25 | 4.00E+02 | 6E-02 |
| Mercury | 0.453 | 2.3E+01[e] | 2E-02 |
| Methylnaphthalene[2-] | 0.052 | 3.1E+02[e] | 2E-04 |
| Molybdenum | 1.101 | 3.91E+02 | 3E-03 |
| Nitrate | 3.426 | 1.25E+05 | 3E-05 |
| Perchlorate | 0.00115 | 5.48E+01 | 2E-05 |
| Phenanthrene | 0.0637 | 1.83E+03 | 4E-05 |
| Pyrene | 0.0997 | 1.72E+03 | 6E-05 |
| Selenium | 1.066 | 3.91E+02 | 3E-03 |
| Silver | 0.305 | 3.91E+02 | 8E-04 |
| Toluene | 0.00402 | 5.57E+03 | 7E-07 |
| Trimethylbenzene[1,2,4-] | 0.00034 | 6.2E+01[e] | 6E-06 |
| Uranium | 7.792 | 2.35E+02 | 3E-02 |
| Xylene[1,2-] | 0.00157 | 9.55E+03 | 2E-07 |
| Xylene[1,3-]+xylene[1,4-] | 0.00411 | 1.09E+03[f] | 4E-06 |
| Zinc | 55.3 | 2.35E+04 | 2E-03 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-114**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.128 | 6.21E+00 | 2.1E-07 |
| Benzo(a)pyrene | 0.406 | 6.21E-01 | 6.5E-06 |
| Benzo(b)fluoranthene | 0.202 | 6.21E+00 | 3.3E-07 |
| Benzo(k)fluoranthene | 0.0786 | 6.21E+01 | 1.3E-08 |
| Bis(2-ethylhexyl)phthalate | 0.383 | 3.47E+02 | 1.1E-08 |
| Chloroaniline[4-] | 0.407 | 2.4E+01[b] | 1.7E-07 |
| Chrysene | 0.000635 | 6.21E+02 | 1.0E-11 |
| Dichlorobenzene[1,4-] | 0.000663 | 3.22E+01 | 2.1E-10 |
| Ethylbenzene | 0.168 | 6.97E+01 | 2.4E-08 |
| Indeno(1,2,3-cd)pyrene | 0.00251 | 6.21E+00 | 4.0E-09 |
| Methylene chloride | 0.052 | 1.99E+02 | 2.6E-09 |
| Naphthalene | 0.00486 | 4.50E+01 | 1.1E-09 |
| 2,3,7,8-TCDD equivalent | 2.1E-07 | 4.50E-05 | 4.7E-08 |
| Trichloroethene | 0.00486 | 4.57E+01 | 1.1E-09 |
| | | **Total Excess Cancer Risk** | **7E-06** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-115**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(e)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.402 | 30 | 0.2 |
| Cesium-137 | 0.525 | 5.6 | 1.4 |
| Plutonium-238 | 0.329 | 37 | 0.1 |
| Plutonium-239/240 | 11.29 | 33 | 5.1 |
| Strontium-90 | 0.907 | 5.7 | 2.4 |
| Tritium | 0.0176 | 750 | 0.0004 |
| Uranium-234 | 2.56 | 170 | 0.2 |
| Uranium-235/236 | 0.137 | 17 | 0.1 |
| Uranium-238 | 1.717 | 87 | 0.3 |
| | | **Total Dose** | **10** |

* SALs from LANL (2009, 107655).

**Table H-4.2-116**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0369 | 3.67E+04 | 1E-06 |
| Acetone | 0.0846 | 8.51E+05 | 1E-07 |
| Aluminum | 7764 | 1.13E+06 | 7E-03 |
| Anthracene | 0.0551 | 1.83E+05 | 3E-07 |
| Barium | 74.18 | 2.24E+05 | 3E-04 |
| Benzo(g,h,i)perylene | 0.127 | 1.83E+04[b] | 7E-06 |
| Cadmium | 0.333 | 1.12E+03 | 3E-04 |
| Chromium | 9.608 | 2.92E+03[c] | 3E-03 |
| Cobalt | 2.815 | 3.0E+02[d] | 9E-03 |
| Copper | 8.77 | 4.54E+04 | 2E-04 |
| Cyanide (total) | 0.4 | 2.27E+04 | 2E-05 |
| Di-n-butylphthalate | 0.327 | 6.84E+04 | 5E-06 |
| Fluoranthene | 0.0834 | 2.44E+04 | 3E-06 |
| Fluorene | 0.041 | 2.44E+04 | 2E-06 |
| Iron | 9526 | 7.95E+05 | 1E-02 |
| Isopropyltoluene[4-] | 0.00038 | 1.49E+04[e] | 3E-08 |
| Lead | 20.64 | 8.00E+02 | 3E-02 |
| Mercury | 0.383 | 3.1E+02[d] | 1E-03 |
| Methylnaphthalene[2-] | 0.029 | 4.1E+03[d] | 7E-06 |
| Nickel | 5.439 | 2.27E+04 | 2E-04 |
| Nitrate | 1.856 | 1.82E+06 | 1E-06 |
| Perchlorate | 0.000745 | 7.95E+02 | 9E-07 |
| Phenanthrene | 0.0637 | 2.05E+04 | 3E-06 |
| Pyrene | 0.102 | 1.83E+04 | 6E-06 |
| Selenium | 0.976 | 5.68E+03 | 2E-04 |
| Toluene | 0.00101 | 5.79E+04 | 2E-08 |
| Uranium | 3.023 | 3.41E+03 | 9E-04 |
| Zinc | 65.97 | 3.41E+05 | 2E-04 |
| | | **Hazard Index** | **0.06** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-117**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 3.377 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 0.069 | 2.34E+01 | 3E-08 |
| Benzo(a)pyrene | 0.222 | 2.34E+00 | 1E-06 |
| Benzo(b)fluoranthene | 0.105 | 2.34E+01 | 5E-08 |
| Benzo(k)fluoranthene | 0.0446 | 2.34E+02 | 2E-09 |
| Bis(2-ethylhexyl)phthalate | 0.11 | 1.37E+03 | 8E-10 |
| Chrysene | 0.0578 | 2.34E+03 | 3E-10 |
| Indeno(1,2,3-cd)pyrene | 0.104 | 2.34E+01 | 4E-08 |
| Naphthalene | 0.0435 | 2.52E+02 | 2E-09 |
| **Total Excess Cancer Risk** | | | **3E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-118**
**Industrial Radionuclide Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0601 | 180 | 0.005 |
| Cesium-137 | 0.848 | 23 | 0.6 |
| Plutonium-238 | 0.0247 | 240 | 0.002 |
| Plutonium-239/240 | 1.814 | 210 | 0.1 |
| Tritium | 0.0412 | 4.4E+05 | 1E-06 |
| Uranium-234 | 1.538 | 1500 | 0.02 |
| Uranium-235/236 | 0.0939 | 87 | 0.02 |
| Uranium-238 | 1.497 | 430 | 0.05 |
| **Total Dose** | | | **0.8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-119**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.3E-06 | 0.01 | 1.3E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 5.46E-07 | 0.01 | 5.5E-09 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 8.79E-06 | 0.0003 | 2.6E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 7.14E-07 | 0.0003 | 2.1E-10 |
| **2,3,7,8-TCDD Equivalent** | | | 2.1E-08 |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-120**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0369 | 1.86E+04 | 2.0E-06 |
| Acenaphthylene | 0.0265 | 6.68E+03[b] | 4.0E-06 |
| Acetone | 0.00997 | 2.63E+05 | 3.8E-08 |
| Aluminum | 5822 | 4.07E+04 | 1.4E-01 |
| Anthracene | 0.0434 | 6.68E+04 | 6.5E-07 |
| Aroclor-1254 | 0.0025 | 4.36E+00 | 5.7E-04 |
| Arsenic | 3.11 | 6.54E+01 | 4.8E-02 |
| Barium | 53.89 | 4.35E+03 | 1.2E-02 |
| Benzo(g,h,i)perylene | 2.49 | 6.68E+03[b] | 3.7E-04 |
| Benzoic acid | 0.224 | 9.52E+05[c] | 2.4E-07 |
| Bis(2-ethylhexyl)phthalate | 0.115 | 4.76E+03 | 2.4E-05 |
| Cadmium | 0.364 | 3.09E+02 | 1.2E-03 |
| Chromium | 12.46 | 4.49E+02[d] | 2.8E-02 |
| Cobalt | 1.928 | 3.49E+01[c] | 5.5E-02 |
| Copper | 5.709 | 1.24E+04 | 4.6E-04 |
| Cyanide (total) | 0.225 | 6.19E+03 | 3.6E-05 |
| Di-n-butylphthalate | 0.327 | 2.38E+04 | 1.4E-05 |
| Fluoranthene | 0.0891 | 8.91E+03 | 1.0E-05 |
| Fluorene | 0.041 | 8.91E+03 | 4.6E-06 |
| Iron | 8653 | 2.17E+05 | 4.0E-02 |
| Isopropyltoluene[4-] | 0.00205 | 1.03E+04[e] | 2.0E-07 |
| Lead | 17.06 | 8.00E+02 | 2.1E-02 |
| Mercury | 0.153 | 9.29E+01[c] | 1.6E-03 |
| Methylnaphthalene[2-] | 0.029 | 1.24E+03[c] | 2.3E-05 |
| Naphthalene | 0.0435 | 7.02E+02 | 6.2E-05 |
| Nickel | 4.754 | 6.19E+03 | 7.7E-04 |
| Nitrate | 1.313 | 4.96E+05 | 2.6E-06 |
| Perchlorate | 0.00248 | 2.17E+02 | 1.1E-05 |
| Phenanthrene | 0.0434 | 7.15E+03 | 6.1E-06 |
| Pyrene | 0.0824 | 6.68E+03 | 1.2E-05 |
| Selenium | 0.967 | 1.55E+03 | 6.2E-04 |
| 2,3,7,8-TCDD equivalent | 2.1E-08 | 2.84E-04 | 7.4E-05 |
| Toluene | 0.00095 | 2.11E+04 | 4.5E-08 |
| Uranium | 2.706 | 9.29E+02 | 2.9E-03 |
| Xylene[1,3-]+xylene[1,4-] | 3.19E-04 | 3.13E+03[f] | 1.0E-07 |
| Zinc | 61.32 | 9.29E+04 | 6.6E-04 |
| | | **Hazard Index** | **0.4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] Chromium VI SSL used.
[e] Isopropylbenzene SSL used as surrogate based on structural similarity.
[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-121**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0022 | 7.58E+01 | 3E-10 |
| Benzo(a)anthracene | 0.0915 | 2.13E+02 | 4E-09 |
| Benzo(a)pyrene | 0.105 | 2.13E+01 | 5E-08 |
| Benzo(b)fluoranthene | 0.163 | 2.13E+02 | 8E-09 |
| Benzo(k)fluoranthene | 0.0446 | 2.06E+03 | 2E-10 |
| Chloroform | 2.33E-04 | 6.71E+02 | 4E-12 |
| Chrysene | 0.0534 | 2.06E+04 | 3E-11 |
| Ethylbenzene | 2.65E-04 | 6.63E+03 | 4E-13 |
| Indeno(1,2,3-cd)pyrene | 1.7 | 2.13E+02 | 8E-08 |
| **Total Excess Cancer Risk** | | | **1E-07** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-122**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0514 | 34 | 0.02 |
| Cesium-137 | 0.327 | 18 | 0.3 |
| Plutonium-238 | 0.0241 | 40 | 0.009 |
| Plutonium-239/240 | 0.867 | 36 | 0.4 |
| Tritium | 0.0331 | 3.2E+05 | 2E-06 |
| Uranium-234 | 1.345 | 220 | 0.09 |
| Uranium-235/236 | 0.0871 | 43 | 0.03 |
| Uranium-238 | 1.342 | 160 | 0.1 |
| **Total Dose** | | | **0.9** |

* SALs from LANL (2009, 107655).

**Table H-4.2-123**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0369 | 3.44E+03 | 1E-05 |
| Acenaphthylene | 0.0265 | 1.72E+03[b] | 2E-05 |
| Acetone | 0.00997 | 6.75E+04 | 2E-07 |
| Aluminum | 5822 | 7.81E+04 | 8E-02 |
| Anthracene | 0.0434 | 1.72E+04 | 3E-06 |
| Aroclor-1254 | 0.0025 | 1.12E+00 | 2E-03 |
| Barium | 53.89 | 1.56E+04 | 4E-03 |
| Benzo(g,h,i)perylene | 2.49 | 1.72E+03[b] | 2E-03 |
| Benzoic acid | 0.224 | 2.4E+05[c] | 9E-07 |
| Cadmium | 0.364 | 7.79E+01 | 5E-03 |
| Chromium | 12.46 | 2.19E+02[d] | 6E-02 |
| Cobalt | 1.928 | 2.3E+01[c] | 8E-02 |
| Copper | 5.709 | 3.13E+03 | 2E-03 |
| Cyanide (total) | 0.225 | 1.56E+03 | 1E-04 |
| Di-n-butylphthalate | 0.327 | 6.11E+03 | 5E-05 |
| Fluoranthene | 0.0891 | 2.29E+03 | 4E-05 |
| Fluorene | 0.041 | 2.29E+03 | 2E-05 |
| Iron | 8653 | 5.48E+04 | 2E-01 |
| Isopropyltoluene[4-] | 0.00205 | 3.21E+03[e] | 6E-07 |
| Lead | 17.06 | 4.00E+02 | 4E-02 |
| Mercury | 0.153 | 2.3E+01[c] | 7E-03 |
| Methylnaphthalene[2-] | 0.029 | 3.1E+02[c] | 1E-04 |
| Nickel | 4.754 | 1.56E+03 | 3E-03 |
| Nitrate | 1.313 | 1.25E+05 | 1E-05 |
| Perchlorate | 0.00248 | 5.48E+01 | 5E-05 |
| Phenanthrene | 0.0434 | 1.83E+03 | 2E-05 |
| Pyrene | 0.0824 | 1.72E+03 | 5E-05 |
| Selenium | 0.967 | 3.91E+02 | 3E-03 |
| Toluene | 0.00094573 | 5.57E+03 | 2E-07 |
| Uranium | 2.706 | 2.35E+02 | 1E-02 |
| Xylene[1,3-]+xylene[1,4-] | 3.19E-04 | 1.09E+03[f] | 3E-07 |
| Zinc | 61.32 | 2.35E+04 | 3E-03 |
| | | **Hazard Index** | **0.5** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-124**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0022 | 2.22E+00 | 1E-08 |
| Arsenic | 3.106 | 3.90E+00 | 8E-06 |
| Benzo(a)anthracene | 0.0915 | 6.21E+00 | 2E-07 |
| Benzo(a)pyrene | 0.105 | 6.21E-01 | 2E-06 |
| Benzo(b)fluoranthene | 0.163 | 6.21E+00 | 3E-07 |
| Benzo(k)fluoranthene | 0.0446 | 6.21E+01 | 7E-09 |
| Bis(2-ethylhexyl)phthalate | 0.115 | 3.47E+02 | 3E-09 |
| Chloroform | 2.33E-04 | 5.72E+00 | 4E-10 |
| Chrysene | 0.0534 | 6.21E+02 | 9E-10 |
| Ethylbenzene | 2.65E-04 | 6.97E+01 | 4E-11 |
| Indeno(1,2,3-cd)pyrene | 1.7 | 6.21E+00 | 3E-06 |
| Naphthalene | 0.0435 | 4.50E+01 | 1E-08 |
| 2,3,7,8-TCDD equivalent | 2.1E-08 | 4.50E-05 | 5E-09 |
| | | **Total Excess Cancer Risk** | **1E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-125**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(g)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0514 | 30 | 0.03 |
| Cesium-137 | 0.327 | 5.6 | 0.9 |
| Plutonium-238 | 0.0241 | 37 | 0.01 |
| Plutonium-239/240 | 0.867 | 33 | 0.4 |
| Tritium | 0.0331 | 750 | 0.0007 |
| Uranium-234 | 1.345 | 170 | 0.1 |
| Uranium-235/236 | 0.0871 | 17 | 0.08 |
| Uranium-238 | 1.342 | 87 | 0.2 |
| | | **Total Dose** | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-126**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Anthracene | 0.0108 | 1.83E+05 | 6E-08 |
| Antimony | 0.15 | 4.54E+02 | 3E-04 |
| Barium | 76.5 | 2.24E+05 | 3E-04 |
| Cadmium | 0.364 | 1.12E+03 | 3E-04 |
| Chromium | 7.824 | 2.92E+03[b] | 3E-03 |
| Copper | 17.7 | 4.54E+04 | 4E-04 |
| Cyanide (total) | 0.4 | 2.27E+04 | 2E-05 |
| Fluoranthene | 0.0308 | 2.44E+04 | 1E-06 |
| Lead | 18.42 | 8.00E+02 | 2E-02 |
| Mercury | 0.166 | 3.1E+02[c] | 5E-04 |
| Molybdenum | 0.72 | 5.68E+03 | 1E-04 |
| Nickel | 5.901 | 2.27E+04 | 3E-04 |
| Nitrate | 1.404 | 1.82E+06 | 8E-07 |
| Perchlorate | 0.00258 | 7.95E+02 | 3E-06 |
| Phenanthrene | 0.0332 | 2.05E+04 | 2E-06 |
| Pyrene | 0.035 | 1.83E+04 | 2E-06 |
| Selenium | 1.64 | 5.68E+03 | 3E-04 |
| Silver | 0.144 | 5.68E+03 | 3E-05 |
| Vanadium | 15.24 | 5.68E+03 | 3E-03 |
| Zinc | 162.8 | 3.41E+05 | 5E-04 |
| | | **Hazard Index** | **0.03** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-127**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 2.855 | 1.77E+01 | 2E-06 |
| Benzo(b)fluoranthene | 0.157 | 2.34E+01 | 7E-08 |
| Benzo(k)fluoranthene | 0.0458 | 2.34E+02 | 2E-09 |
| Bis(2-ethylhexyl)phthalate | 1.4 | 1.37E+03 | 1E-08 |
| Chrysene | 0.0179 | 2.34E+03 | 8E-11 |
| | | **Total Excess Cancer Risk** | **2E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-128**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.156 | 180 | 0.01 |
| Cesium-137 | 0.487 | 23 | 0.3 |
| Plutonium-238 | 0.0404 | 240 | 0.003 |
| Plutonium-239/240 | 2.355 | 210 | 0.2 |
| Tritium | 0.381 | 4.4E+05 | 1E-05 |
| Uranium-234 | 1.396 | 1500 | 0.01 |
| Uranium-235/236 | 0.0926 | 87 | 0.02 |
| Uranium-238 | 1.229 | 430 | 0.04 |
| | | **Total Dose** | **0.6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-129**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(h)**

| COPC | EPC (mg/kg0 | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.8E-06 | 0.01 | 1.8E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 6.54E-07 | 0.01 | 6.5E-09 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 6.33E-08 | 0.1 | 6.3E-09 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 8.77E-08 | 0.1 | 8.8E-09 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 1.23E-05 | 0.0003 | 3.7E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 9.73E-07 | 0.0003 | 2.9E-10 |
| | | **2,3,7,8-TCDD Equivalent** | **4.4E-08** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-130**
**Construction Worker Noncarcinogenic Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0247 | 1.86E+04 | 1E-06 |
| Acenaphthylene | 0.0135 | 6.68E+03[b] | 2E-06 |
| Acetone | 0.00497 | 2.63E+05 | 2E-08 |
| Anthracene | 0.0282 | 6.68E+04 | 4E-07 |
| Antimony | 0.915 | 1.24E+02 | 7E-03 |
| Arsenic | 3.212 | 6.54E+01 | 5E-02 |
| Barium | 51.79 | 4.35E+03 | 1E-02 |
| Benzo(g,h,i)perylene | 0.135 | 6.68E+03[b] | 2E-05 |
| Benzoic acid | 0.613 | 9.52E+05[c] | 6E-07 |
| Bis(2-ethylhexyl)phthalate | 0.179 | 4.76E+03 | 4E-05 |
| Cadmium | 0.535 | 3.09E+02 | 2E-03 |
| Chromium | 14.71 | 4.49E+02[d] | 3E-02 |
| Copper | 94.26 | 1.24E+04 | 8E-03 |
| Cyanide (total) | 0.39 | 6.19E+03 | 6E-05 |
| Di-n-butylphthalate | 0.222 | 2.38E+04 | 9E-06 |
| Fluoranthene | 0.0437 | 8.91E+03 | 5E-06 |
| Fluorene | 0.0152 | 8.91E+03 | 2E-06 |
| Isopropyltoluene[4-] | 0.000586 | 1.03E+04[e] | 6E-08 |
| Lead | 54.53 | 8.00E+02 | 7E-02 |
| Mercury | 5.065 | 9.29E+01[c] | 5E-02 |
| Molybdenum | 0.72 | 1.55E+03 | 5E-04 |
| Naphthalene | 0.015 | 7.02E+02 | 2E-05 |
| Nickel | 4.458 | 6.19E+03 | 7E-04 |
| Nitrate | 1.463 | 4.96E+05 | 3E-06 |
| Perchlorate | 0.00169 | 2.17E+02 | 8E-06 |
| Phenanthrene | 0.0336 | 7.15E+03 | 5E-06 |
| Pyrene | 0.0459 | 6.68E+03 | 7E-06 |
| Selenium | 1.19 | 1.55E+03 | 8E-04 |
| Silver | 2.133 | 1.55E+03 | 2E-03 |
| 2,3,7,8-TCDD equivalent | 4.4E-08 | 2.84E-04 | 2E-04 |
| Toluene | 0.0007639 | 2.11E+04 | 4E-08 |
| Trimethylbenzene[1,2,4-] | 0.00035 | 6.88E+02[c] | 5E-07 |
| Trimethylbenzene[1,3,5-] | 0.000252 | 3.10E+03[c] | 8E-08 |
| Vanadium | 10.7 | 1.55E+03 | 7E-03 |
| Xylene[1,2-] | 0.000278 | 2.75E+04 | 1E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.000547 | 3.13E+03[f] | 2E-07 |
| Zinc | 98.89 | 9.29E+04 | 1E-03 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] Chromium VI SSL used.
[e] Isopropylbenzene SSL used as surrogate based on structural similarity.
[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-131**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.0353 | 2.13E+02 | 2E-09 |
| Benzo(a)pyrene | 0.125 | 2.13E+01 | 6E-08 |
| Benzo(b)fluoranthene | 0.132 | 2.13E+02 | 6E-09 |
| Benzo(k)fluoranthene | 0.0458 | 2.06E+03 | 2E-10 |
| Chloroform | 0.000246 | 6.71E+02 | 4E-12 |
| Chrysene | 0.0323 | 2.06E+04 | 2E-11 |
| Dichlorobenzene[1,4-] | 0.000396 | 3.78E+03 | 1E-12 |
| Indeno(1,2,3-cd)pyrene | 0.104 | 2.13E+02 | 5E-09 |
| Tetrachloroethene | 0.000249 | 3.38E+02 | 7E-12 |
| **Total Excess Cancer Risk** | | | **7E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-132**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0773 | 34 | 0.03 |
| Cesium-137 | 0.206 | 18 | 0.2 |
| Plutonium-238 | 0.0367 | 40 | 0.01 |
| Plutonium-239/240 | 1.353 | 36 | 0.6 |
| Tritium | 2.299 | 3.2E+05 | 0.0001 |
| Uranium-234 | 1.294 | 220 | 0.09 |
| Uranium-235/236 | 0.0838 | 43 | 0.03 |
| Uranium-238 | 1.219 | 160 | 0.1 |
| **Total Dose** | | | **1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-133**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0247 | 3.44E+03 | 7E-06 |
| Acenaphthylene | 0.0135 | 1.72E+03[b] | 8E-06 |
| Acetone | 0.00497 | 6.75E+04 | 7E-08 |
| Anthracene | 0.0282 | 1.72E+04 | 2E-06 |
| Antimony | 0.915 | 3.13E+01 | 3E-02 |
| Barium | 51.79 | 1.56E+04 | 3E-03 |
| Benzo(g,h,i)perylene | 0.135 | 1.72E+03[b] | 8E-05 |
| Benzoic acid | 0.613 | 2.4E+05[c] | 3E-06 |
| Cadmium | 0.535 | 7.79E+01 | 7E-03 |
| Chromium | 14.71 | 2.19E+02[d] | 7E-02 |
| Copper | 94.26 | 3.13E+03 | 3E-02 |
| Cyanide (total) | 0.39 | 1.56E+03 | 2E-04 |
| Di-n-butylphthalate | 0.222 | 6.11E+03 | 4E-05 |
| Fluoranthene | 0.0437 | 2.29E+03 | 2E-05 |
| Fluorene | 0.0152 | 2.29E+03 | 7E-06 |
| Isopropyltoluene[4-] | 0.000586 | 3.21E+03[e] | 2E-07 |
| Lead | 54.53 | 4.00E+02 | 1E-01 |
| Mercury | 5.065 | 2.3E+01[c] | 2E-01 |
| Molybdenum | 0.72 | 3.91E+02 | 2E-03 |
| Nickel | 4.458 | 1.56E+03 | 3E-03 |
| Nitrate | 1.463 | 1.25E+05 | 1E-05 |
| Perchlorate | 0.00169 | 5.48E+01 | 3E-05 |
| Phenanthrene | 0.0336 | 1.83E+03 | 2E-05 |
| Pyrene | 0.0459 | 1.72E+03 | 3E-05 |
| Selenium | 1.19 | 3.91E+02 | 3E-03 |
| Silver | 2.133 | 3.91E+02 | 5E-03 |
| Toluene | 0.0007639 | 5.57E+03 | 1E-07 |
| Trimethylbenzene[1,2,4-] | 0.00035 | 6.2E+01[c] | 6E-06 |
| Trimethylbenzene[1,3,5-] | 0.000252 | 7.8E+02[c] | 3E-07 |
| Vanadium | 10.7 | 3.91E+02 | 3E-02 |
| Xylene[1,2-] | 0.000278 | 9.55E+03 | 3E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.000547 | 1.09E+03[f] | 5E-07 |
| Zinc | 98.89 | 2.35E+04 | 4E-03 |
| | | **Hazard Index** | **0.5** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-134**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 3.212 | 3.90E+00 | 8E-06 |
| Benzo(a)anthracene | 0.0353 | 6.21E+00 | 6E-08 |
| Benzo(a)pyrene | 0.125 | 6.21E-01 | 2E-06 |
| Benzo(b)fluoranthene | 0.132 | 6.21E+00 | 2E-07 |
| Benzo(k)fluoranthene | 0.0458 | 6.21E+01 | 7E-09 |
| Bis(2-ethylhexyl)phthalate | 0.179 | 3.47E+02 | 5E-09 |
| Chloroform | 0.000246 | 5.72E+00 | 4E-10 |
| Chrysene | 0.0323 | 6.21E+02 | 5E-10 |
| Dichlorobenzene[1,4-] | 0.000396 | 3.22E+01 | 1E-10 |
| Indeno(1,2,3-cd)pyrene | 0.104 | 6.21E+00 | 2E-07 |
| Naphthalene | 0.015 | 4.50E+01 | 3E-09 |
| 2,3,7,8-TCDD equivalent | 4.4E-08 | 4.50E-05 | 1E-08 |
| Tetrachloroethene | 0.000249 | 6.99E+00 | 4E-10 |
| **Total Excess Cancer Risk** | | | **1E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-135**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(h)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0773 | 30 | 0.04 |
| Cesium-137 | 0.206 | 5.6 | 0.6 |
| Plutonium-238 | 0.0367 | 37 | 0.01 |
| Plutonium-239/240 | 1.353 | 33 | 0.6 |
| Tritium | 2.299 | 750 | 0.05 |
| Uranium-234 | 1.294 | 170 | 0.1 |
| Uranium-235/236 | 0.0838 | 17 | 0.07 |
| Uranium-238 | 1.219 | 87 | 0.2 |
| **Total Dose** | | | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-136**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.044 | 3.67E+04 | 1E-06 |
| Acetone | 0.2 | 8.51E+05 | 2E-07 |
| Aluminum | 9581 | 1.13E+06 | 8E-03 |
| Anthracene | 0.045 | 1.83E+05 | 2E-07 |
| Antimony | 2.04 | 4.54E+02 | 4E-03 |
| Barium | 123.7 | 2.24E+05 | 6E-04 |
| Benzoic acid | 0.18 | 2.5E+06[b] | 7E-08 |
| Butanone[2-] | 0.056 | 3.69E+05 | 2E-07 |
| Chromium | 14.64 | 2.92E+03[c] | 5E-03 |
| Copper | 8.629 | 4.54E+04 | 2E-04 |
| Di-n-butylphthalate | 0.0432 | 6.84E+04 | 6E-07 |
| Fluoranthene | 0.57 | 2.44E+04 | 2E-05 |
| Lead | 50.61 | 8.00E+02 | 6E-02 |
| Mercury | 5.156 | 3.1E+02[b] | 2E-02 |
| Perchlorate | 0.0532 | 7.95E+02 | 7E-05 |
| Phenanthrene | 0.66 | 2.05E+04 | 3E-05 |
| Pyrene | 0.52 | 1.83E+04 | 3E-05 |
| Selenium | 0.493 | 5.68E+03 | 9E-05 |
| Toluene | 0.0022 | 5.79E+04 | 4E-08 |
| Trimethylbenzene[1,2,4-] | 0.0024 | 2.6E+02[b] | 9E-06 |
| Zinc | 123.9 | 3.41E+05 | 4E-04 |
| | | **Hazard Index** | **0.1** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

**Table H-4.2-137**
**Industrial Carcinogenic**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1254 | 0.256 | 8.26E+00 | 3E-07 |
| Aroclor-1260 | 0.221 | 8.26E+00 | 3E-07 |
| Arsenic | 4.112 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 0.082 | 2.34E+01 | 4E-08 |
| Benzo(a)pyrene | 0.074 | 2.34E+00 | 3E-07 |
| Benzo(b)fluoranthene | 0.078 | 2.34E+01 | 3E-08 |
| Benzo(k)fluoranthene | 0.078 | 2.34E+02 | 3E-09 |
| Bis(2-ethylhexyl)phthalate | 0.055 | 1.37E+03 | 4E-10 |
| Chrysene | 0.089 | 2.34E+03 | 4E-10 |
| | | **Total Excess Cancer Risk** | **3E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-138**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0616 | 1.80E+02 | 0.01 |
| Cesium-137 | 0.311 | 2.30E+01 | 0.2 |
| Plutonium-239/240 | 1.791 | 2.10E+02 | 0.1 |
| Thorium-228 | 1.475 | 9.00E+00 | 2.5 |
| Thorium-230 | 1.069 | 5.00E+00 | 3.2 |
| Tritium | 0.742 | 4.40E+05 | 3E-05 |
| Uranium-234 | 2.995 | 1.50E+03 | 0.03 |
| Uranium-235/236 | 0.185 | 8.70E+01 | 0.03 |
| Uranium-238 | 1.379 | 4.30E+02 | 0.05 |
| | | **Total Dose** | **6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-139**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.044 | 1.86E+04 | 2E-06 |
| Acetone | 0.0405 | 2.63E+05 | 2E-07 |
| Aluminum | 7493 | 4.07E+04 | 2E-01 |
| Anthracene | 0.045 | 6.68E+04 | 7E-07 |
| Antimony | 1 | 1.24E+02 | 8E-03 |
| Aroclor-1254 | 0.125 | 4.36E+00 | 3E-02 |
| Arsenic | 3.325 | 6.54E+01 | 5E-02 |
| Barium | 92.59 | 4.35E+03 | 2E-02 |
| Benzoic acid | 0.18 | 9.52E+05[b] | 2E-07 |
| Bis(2-ethylhexyl)phthalate | 0.11 | 4.76E+03 | 2E-05 |
| Bromomethane | 0.0034 | 6.71E+01 | 5E-05 |
| Butanone[2-] | 0.0119 | 1.48E+05 | 8E-08 |
| Chromium | 11.93 | 4.49E+02[c] | 3E-02 |
| Copper | 7.711 | 1.24E+04 | 6E-04 |
| DDT[4,4'-] | 0.0028 | 1.42E+02 | 2E-05 |
| Di-n-butylphthalate | 0.0432 | 2.38E+04 | 2E-06 |
| Fluoranthene | 0.57 | 8.91E+03 | 6E-05 |
| Isopropylbenzene | 0.0025 | 1.03E+04 | 2E-07 |
| Lead | 33.45 | 8.00E+02 | 4E-02 |
| Lithium | 14.8 | 6.19E+02[b] | 2E-02 |
| Mercury | 3.068 | 9.29E+01[b] | 3E-02 |
| Nitrate | 2.83 | 4.96E+05 | 6E-06 |
| Perchlorate | 0.0532 | 2.17E+02 | 2E-04 |
| Phenanthrene | 0.66 | 7.15E+03 | 9E-05 |
| Pyrene | 0.52 | 6.68E+03 | 8E-05 |
| Selenium | 1.253 | 1.55E+03 | 8E-04 |
| Strontium | 262 | 1.86E+05 | 1E-03 |
| Toluene | 0.006 | 2.11E+04 | 3E-07 |
| Trichlorofluoromethane | 0.0018 | 5.82E+03 | 3E-07 |
| Trimethylbenzene[1,2,4-] | 0.003 | 6.88E+02[b] | 4E-06 |
| Zinc | 82.15 | 9.29E+04 | 9E-04 |
| | | **Hazard Index** | **0.4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Chromium VI SSL used.

**Table H-4.2-140**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.201 | 7.58E+01 | 3E-08 |
| Benzo(a)anthracene | 0.082 | 2.13E+02 | 4E-09 |
| Benzo(a)pyrene | 0.074 | 2.13E+01 | 3E-08 |
| Benzo(b)fluoranthene | 0.078 | 2.13E+02 | 4E-09 |
| Benzo(k)fluoranthene | 0.078 | 2.06E+03 | 4E-10 |
| Chrysene | 0.089 | 2.06E+04 | 4E-11 |
| **Total Excess Cancer Risk** | | | **7E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-141**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0616 | 3.40E+01 | 0.03 |
| Cesium-137 | 0.197 | 1.80E+01 | 0.2 |
| Plutonium-239/240 | 0.419 | 3.60E+01 | 0.2 |
| Thorium-228 | 1.559 | 6.80E+00 | 3.4 |
| Thorium-230 | 1.168 | 5.00E+00 | 3.5 |
| Tritium | 572.1 | 3.20E+05 | 0.03 |
| Uranium-234 | 1.999 | 2.20E+02 | 0.1 |
| Uranium-235/236 | 0.0751 | 4.30E+01 | 0.03 |
| Uranium-238 | 1.148 | 1.60E+02 | 0.1 |
| **Total Dose** | | | **8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-142**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.044 | 3.44E+03 | 1E-05 |
| Acetone | 0.0405 | 6.75E+04 | 6E-07 |
| Aluminum | 7493 | 7.81E+04 | 1E-01 |
| Anthracene | 0.045 | 1.72E+04 | 3E-06 |
| Antimony | 1 | 3.13E+01 | 3E-02 |
| Aroclor-1254 | 0.125 | 1.12E+00 | 1E-01 |
| Barium | 92.59 | 1.56E+04 | 6E-03 |
| Benzoic acid | 0.18 | 2.4E+05[b] | 8E-07 |
| Bromomethane | 0.0034 | 2.23E+01 | 2E-04 |
| Butanone[2-] | 0.0119 | 3.96E+04 | 3E-07 |
| Chromium | 11.93 | 2.19E+02[c] | 5E-02 |
| Copper | 7.711 | 3.13E+03 | 2E-03 |
| Di-n-butylphthalate | 0.0432 | 6.11E+03 | 7E-06 |
| Fluoranthene | 0.57 | 2.29E+03 | 2E-04 |
| Isopropylbenzene | 0.0025 | 3.21E+03 | 8E-07 |
| Lead | 33.45 | 4.00E+02 | 8E-02 |
| Lithium | 14.8 | 1.6E+02[b] | 9E-02 |
| Mercury | 3.068 | 2.3E+01[b] | 1E-01 |
| Nitrate | 2.83 | 1.25E+05 | 2E-05 |
| Perchlorate | 0.0532 | 5.48E+01 | 1E-03 |
| Phenanthrene | 0.66 | 1.83E+03 | 4E-04 |
| Pyrene | 0.52 | 1.72E+03 | 3E-04 |
| Selenium | 1.253 | 3.91E+02 | 3E-03 |
| Strontium | 262 | 4.69E+04 | 6E-03 |
| Toluene | 0.006 | 5.57E+03 | 1E-06 |
| Trichlorofluoromethane | 0.0018 | 2.01E+03 | 9E-07 |
| Trimethylbenzene[1,2,4-] | 0.003 | 6.20E+01[b] | 5E-05 |
| Zinc | 82.15 | 2.35E+04 | 3E-03 |
| | | **Hazard Index** | **0.6** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

**Table H-4.2-143**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.201 | 2.22E+00 | 9E-07 |
| Arsenic | 3.325 | 3.90E+00 | 9E-06 |
| Benzo(a)anthracene | 0.082 | 6.21E+00 | 1E-07 |
| Benzo(a)pyrene | 0.074 | 6.21E-01 | 1E-06 |
| Benzo(b)fluoranthene | 0.078 | 6.21E+00 | 1E-07 |
| Benzo(k)fluoranthene | 0.078 | 6.21E+01 | 1E-08 |
| Bis(2-ethylhexyl)phthalate | 0.11 | 3.47E+02 | 3E-09 |
| Chrysene | 0.089 | 6.21E+02 | 1E-09 |
| DDT[4,4'-] | 0.0028 | 1.72E+01 | 2E-09 |
| **Total Excess Cancer Risk** | | | **1E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-144**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(i)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0616 | 30 | 0.03 |
| Cesium-137 | 0.197 | 5.6 | 0.5 |
| Plutonium-239/240 | 0.419 | 33 | 0.2 |
| Thorium-228 | 1.559 | 2.3 | 10.2 |
| Thorium-230 | 1.168 | 5 | 3.5 |
| Tritium | 572.1 | 750 | 11.4 |
| Uranium-234 | 1.999 | 170 | 0.2 |
| Uranium-235/236 | 0.0751 | 17 | 0.07 |
| Uranium-238 | 1.148 | 87 | 0.2 |
| **Total Dose** | | | **26** |

* SALs from LANL (2009, 107655).

**Table H-4.2-145**
**Industrial Noncarcinogenic Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0479 | 3.67E+04 | 1.3E-06 |
| Anthracene | 0.0738 | 1.83E+05 | 4.0E-07 |
| Barium | 65.43 | 2.24E+05 | 2.9E-04 |
| Benzo(g,h,i)perylene | 0.109 | 1.83E+04[b] | 6.0E-06 |
| Chromium | 4.571 | 2.92E+03[c] | 1.6E-03 |
| Copper | 7.436 | 4.54E+04 | 1.6E-04 |
| Fluoranthene | 0.328 | 2.44E+04 | 1.3E-05 |
| Fluorene | 0.0363 | 2.44E+04 | 1.5E-06 |
| Lead | 20.23 | 8.00E+02 | 2.5E-02 |
| Manganese | 292.9 | 1.45E+05 | 2.0E-03 |
| Nickel | 4.777 | 2.27E+04 | 2.1E-04 |
| Nitrate | 1.758 | 1.82E+06 | 9.7E-07 |
| Perchlorate | 0.000861 | 7.95E+02 | 1.1E-06 |
| Phenanthrene | 0.246 | 2.05E+04 | 1.2E-05 |
| Pyrene | 0.297 | 1.83E+04 | 1.6E-05 |
| Selenium | 0.831 | 5.68E+03 | 1.5E-04 |
| Zinc | 685 | 3.41E+05 | 2.0E-03 |
| | | **Hazard Index** | **0.03** |

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

**Table H-4.2-146**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1254 | 0.0368 | 8.26E+00 | 4.5E-08 |
| Aroclor-1260 | 0.0238 | 8.26E+00 | 2.9E-08 |
| Arsenic | 2.334 | 1.77E+01 | 1.3E-06 |
| Benzo(a)anthracene | 0.15 | 2.34E+01 | 6.4E-08 |
| Benzo(a)pyrene | 0.0166 | 2.34E+00 | 7.1E-08 |
| Benzo(b)fluoranthene | 0.215 | 2.34E+01 | 9.2E-08 |
| Chrysene | 0.0691 | 2.34E+03 | 3.0E-10 |
| Indeno(1,2,3-cd)pyrene | 0.0867 | 2.34E+01 | 3.7E-08 |
| Naphthalene | 0.0102 | 2.52E+02 | 4.0E-10 |
| | | **Total Excess Cancer Risk** | **2E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-147**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0906 | 180 | 0.008 |
| Cesium-137 | 0.756 | 23 | 0.5 |
| Plutonium-239/240 | 0.222 | 210 | 0.02 |
| Tritium | 0.0333 | 4.4E+05 | 1E-06 |
| Uranium-234 | 3.86 | 1500 | 0.04 |
| Uranium-235/236 | 0.0973 | 87 | 0.02 |
| | | **Total Dose** | **0.6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-148**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.08E-05 | 0.01 | 1.1E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 4.43E-06 | 0.01 | 4.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 6E-07 | 0.1 | 6.0E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 4.26E-07 | 0.1 | 4.3E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 8.86E-07 | 0.1 | 8.9E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.07E-07 | 0.1 | 2.1E-08 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 1.75E-07 | 0.1 | 1.8E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 2.29E-07 | 0.1 | 2.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 8.51E-05 | 0.0003 | 2.6E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 1.03E-05 | 0.0003 | 3.1E-09 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 1.59E-07 | 1 | 1.6E-07 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 4.63E-07 | 0.03 | 1.4E-08 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 3.5E-07 | 0.3 | 1.1E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 4.76E-07 | 0.1 | 4.8E-08 |
| | | **2,3,7,8-TCDD Equivalent** | **7.7E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-149**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0479 | 1.86E+04 | 3E-06 |
| Acetone | 0.0146 | 2.63E+05 | 6E-08 |
| Anthracene | 0.0738 | 6.68E+04 | 1E-06 |
| Aroclor-1254 | 0.562 | 4.36E+00 | 1E-01 |
| Arsenic | 3.262 | 6.54E+01 | 5E-02 |
| Barium | 68.04 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.109 | 6.68E+03[b] | 2E-05 |
| Bis(2-ethylhexyl)phthalate | 0.0878 | 4.76E+03 | 2E-05 |
| Chromium | 6.752 | 4.49E+02[c] | 2E-02 |
| Copper | 5.321 | 1.24E+04 | 4E-04 |
| Fluoranthene | 0.064 | 8.91E+03 | 7E-06 |
| Fluorene | 0.0363 | 8.91E+03 | 4E-06 |
| Isopropyltoluene[4-] | 0.00762 | 1.03E+04[d] | 7E-07 |
| Lead | 16.72 | 8.00E+02 | 2E-02 |
| Manganese | 328.2 | 4.63E+02 | 7E-01 |
| Methylene chloride | 0.00352 | 1.06E+04 | 3E-07 |
| Naphthalene | 0.0122 | 7.02E+02 | 2E-05 |
| Nickel | 5.183 | 6.19E+03 | 8E-04 |
| Nitrate | 1.681 | 4.96E+05 | 3E-06 |
| Perchlorate | 0.00215 | 2.17E+02 | 1E-05 |
| Phenanthrene | 0.0485 | 7.15E+03 | 7E-06 |
| Pyrene | 0.0564 | 6.68E+03 | 8E-06 |
| Selenium | 6.909 | 1.55E+03 | 4E-03 |
| 2,3,7,8-TCDD equivalent | 7.7E-07 | 2.84E-04 | 3E-03 |
| Toluene | 0.00177 | 2.11E+04 | 8E-08 |
| Zinc | 157.7 | 9.29E+04 | 2E-03 |
| | | **Hazard Index** | **0.9** |

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-150**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0755 | 7.58E+01 | 1E-08 |
| Benzo(a)anthracene | 0.15 | 2.13E+02 | 7E-09 |
| Benzo(a)pyrene | 0.102 | 2.13E+01 | 5E-08 |
| Benzo(b)fluoranthene | 0.0461 | 2.13E+02 | 2E-09 |
| Chloroform | 0.000281 | 6.71E+02 | 4E-12 |
| Chrysene | 0.0329 | 2.06E+04 | 2E-11 |
| Indeno(1,2,3-cd)pyrene | 0.0867 | 2.13E+02 | 4E-09 |
| **Total Excess Cancer Risk** | | | **7E-08** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-151**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0637 | 34 | 0.03 |
| Cesium-137 | 0.288 | 18 | 0.24 |
| Plutonium-239/240 | 0.0845 | 36 | 0.04 |
| Tritium | 0.153 | 3.2E+05 | 7E-06 |
| Uranium-234 | 6.239 | 220 | 0.43 |
| Uranium-235/236 | 0.0973 | 43 | 0.03 |
| **Total Dose** | | | **0.8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-152**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0479 | 3.44E+03 | 1E-05 |
| Acetone | 0.0146 | 6.75E+04 | 2E-07 |
| Anthracene | 0.0738 | 1.72E+04 | 4E-06 |
| Aroclor-1254 | 0.562 | 1.12E+00 | 5E-01 |
| Barium | 68.04 | 1.56E+04 | 4E-03 |
| Benzo(g,h,i)perylene | 0.109 | 1.72E+03[b] | 6E-05 |
| Chromium | 6.752 | 2.19E+02[c] | 3E-02 |
| Copper | 5.321 | 3.13E+03 | 2E-03 |
| Fluoranthene | 0.064 | 2.29E+03 | 3E-05 |
| Fluorene | 0.0363 | 2.29E+03 | 2E-05 |
| Isopropyltoluene[4-] | 0.00762 | 3.21E+03[d] | 2E-06 |
| Lead | 16.72 | 4.00E+02 | 4E-02 |
| Manganese | 328.2 | 1.07E+04 | 3E-02 |
| Nickel | 5.183 | 1.56E+03 | 3E-03 |
| Nitrate | 1.681 | 1.25E+05 | 1E-05 |
| Perchlorate | 0.00215 | 5.48E+01 | 4E-05 |
| Phenanthrene | 0.0485 | 1.83E+03 | 3E-05 |
| Pyrene | 0.0564 | 1.72E+03 | 3E-05 |
| Selenium | 6.909 | 3.91E+02 | 2E-02 |
| Toluene | 0.00177 | 5.57E+03 | 3E-07 |
| Zinc | 157.7 | 2.35E+04 | 7E-03 |
| | | **Hazard Index** | **0.6** |

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-153**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0755 | 2.22E+00 | 3E-07 |
| Arsenic | 3.262 | 3.90E+00 | 8E-06 |
| Benzo(a)anthracene | 0.15 | 6.21E+00 | 2E-07 |
| Benzo(a)pyrene | 0.102 | 6.21E-01 | 2E-06 |
| Benzo(b)fluoranthene | 0.0461 | 6.21E+00 | 7E-08 |
| Bis(2-ethylhexyl)phthalate | 0.0878 | 3.47E+02 | 3E-09 |
| Chloroform | 0.000281 | 5.72E+00 | 5E-10 |
| Chrysene | 0.0329 | 6.21E+02 | 5E-10 |
| Indeno(1,2,3-cd)pyrene | 0.0867 | 6.21E+00 | 1E-07 |
| Methylene chloride | 0.00352 | 1.99E+02 | 2E-10 |
| Naphthalene | 0.0122 | 4.50E+01 | 3E-09 |
| 2,3,7,8-TCDD equivalent | 7.7E-07 | 4.50E-05 | 2E-07 |
| **Total Excess Cancer Risk** | | | **1E-05** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-154**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(j)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0637 | 30 | 0.03 |
| Cesium-137 | 0.288 | 5.6 | 0.8 |
| Plutonium-239/240 | 0.0845 | 33 | 0.04 |
| Tritium | 0.153 | 750 | 0.003 |
| Uranium-234 | 6.239 | 170 | 0.6 |
| Uranium-235/236 | 0.0973 | 17 | 0.09 |
| **Total Dose** | | | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-155**
**Industrial Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0488 | 3.67E+04 | 1E-06 |
| Aluminum | 9743 | 1.13E+06 | 9E-03 |
| Anthracene | 0.0783 | 1.83E+05 | 4E-07 |
| Barium | 102.6 | 2.24E+05 | 5E-04 |
| Benzo(g,h,i)perylene | 0.147 | 1.83E+04[b] | 8E-06 |
| Cadmium | 0.449 | 1.12E+03 | 4E-04 |
| Chromium | 9.98 | 2.92E+03[c] | 3E-03 |
| Cobalt | 3.616 | 3.0E+02[d] | 1E-02 |
| Copper | 10.94 | 4.54E+04 | 2E-04 |
| Fluoranthene | 0.833 | 2.44E+04 | 3E-05 |
| Fluorene | 0.0419 | 2.44E+04 | 2E-06 |
| Lead | 22.45 | 8.00E+02 | 3E-02 |
| Lithium | 12.27 | 2.0E+03[d] | 6E-03 |
| Mercury | 0.0487 | 3.1E+02[d] | 2E-04 |
| Nitrate | 1.811 | 1.82E+06 | 1E-06 |
| Perchlorate | 0.00154 | 7.95E+02 | 2E-06 |
| Phenanthrene | 0.504 | 2.05E+04 | 2E-05 |
| Pyrene | 0.714 | 1.83E+04 | 4E-05 |
| Selenium | 1.022 | 5.68E+03 | 2E-04 |
| Zinc | 60.32 | 3.41E+05 | 2E-04 |
| | | **Hazard Index** | **0.06** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-156**
**Industrial Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.234 | 2.34E+01 | 1E-07 |
| Benzo(a)pyrene | 0.199 | 2.34E+00 | 9E-07 |
| Benzo(b)fluoranthene | 0.385 | 2.34E+01 | 2E-07 |
| Benzo(k)fluoranthene | 0.12 | 2.34E+02 | 5E-09 |
| Bis(2-ethylhexyl)phthalate | 0.25 | 1.37E+03 | 2E-09 |
| Chrysene | 0.252 | 2.34E+03 | 1E-09 |
| Indeno(1,2,3-cd)pyrene | 0.143 | 2.34E+01 | 6E-08 |
| Methylene chloride | 0.00411 | 1.09E+03 | 4E-11 |
| **Total Excess Cancer Risk** | | | **1E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-157**
**Industrial Radionuclide**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.197 | 180 | 0.02 |
| Cesium-137 | 0.324 | 23 | 0.21 |
| Plutonium-238 | 2.913 | 240 | 0.2 |
| Plutonium-239/240 | 2.246 | 210 | 0.16 |
| Tritium | 0.0764 | 4.4E+05 | 3E-06 |
| Uranium-234 | 2.403 | 1500 | 0.02 |
| Uranium-235/236 | 0.122 | 87 | 0.02 |
| **Total Dose** | | | **0.6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-158**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.155 | 1.86E+04 | 8.3E-06 |
| Acenaphthylene | 0.0122 | 6.68E+03[b] | 1.8E-06 |
| Acetone | 0.35 | 2.63E+05 | 1.3E-06 |
| Aluminum | 10187 | 4.07E+04 | 2.5E-01 |
| Anthracene | 0.468 | 6.68E+04 | 7.0E-06 |
| Barium | 113.5 | 4.35E+03 | 2.6E-02 |
| Benzo(g,h,i)perylene | 0.287 | 6.68E+03[b] | 4.3E-05 |
| Bis(2-ethylhexyl)phthalate | 0.25 | 4.76E+03 | 5.3E-05 |
| Cadmium | 0.315 | 3.09E+02 | 1.0E-03 |
| Chromium | 10.36 | 4.49E+02[c] | 2.3E-02 |
| Cobalt | 3.674 | 3.49E+01[d] | 1.1E-01 |
| Copper | 9.917 | 1.24E+04 | 8.0E-04 |
| Dibenzofuran | 0.224 | 2.38E+02[d] | 9.4E-04 |
| Fluoranthene | 2.527 | 8.91E+03 | 2.8E-04 |
| Fluorene | 0.135 | 8.91E+03 | 1.5E-05 |
| Isopropyltoluene[4-] | 0.000463 | 1.03E+04[e] | 4.5E-08 |
| Lead | 147.6 | 8.00E+02 | 1.8E-01 |
| Lithium | 11.2 | 6.19E+02[d] | 1.8E-02 |
| Mercury | 0.0797 | 9.29E+01[d] | 8.6E-04 |
| Methylene chloride | 0.00411 | 1.06E+04 | 3.9E-07 |
| Methylnaphthalene[2-] | 0.0444 | 1.24E+03[d] | 3.6E-05 |
| Naphthalene | 0.112 | 7.02E+02 | 1.6E-04 |
| Nitrate | 1.494 | 4.96E+05 | 3.0E-06 |
| Perchlorate | 0.00168 | 2.17E+02 | 7.7E-06 |
| Phenanthrene | 2.023 | 7.15E+03 | 2.8E-04 |
| Pyrene | 2.013 | 6.68E+03 | 3.0E-04 |
| Selenium | 1.094 | 1.55E+03 | 7.1E-04 |
| Toluene | 0.00128 | 2.11E+04 | 6.1E-08 |
| Xylene[1,3-]+xylene[1,4-] | 0.000381 | 3.13E+03[f] | 1.2E-07 |
| Zinc | 150.6 | 9.29E+04 | 1.6E-03 |
| | | **Hazard Index** | **0.6** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-159**
**Construction Worker Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.98 | 2.13E+02 | 5E-08 |
| Benzo(a)pyrene | 0.673 | 2.13E+01 | 3E-07 |
| Benzo(b)fluoranthene | 1.314 | 2.13E+02 | 6E-08 |
| Benzo(k)fluoranthene | 0.234 | 2.06E+03 | 1E-09 |
| Carbazole | 0.12 | 1.08E+04[b] | 1E-10 |
| Chloroform | 0.000215 | 6.71E+02 | 3E-12 |
| Chrysene | 0.802 | 2.06E+04 | 4E-10 |
| Dichlorobenzene[1,4-] | 0.000316 | 3.78E+03 | 8E-13 |
| Indeno(1,2,3-cd)pyrene | 0.399 | 2.13E+02 | 2E-08 |
| **Total Excess Cancer Risk** | | | **4E-07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-160**
**Construction Worker Radionuclide**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.478 | 34 | 0.2 |
| Cesium-137 | 0.165 | 18 | 0.1 |
| Plutonium-238 | 0.543 | 40 | 0.2 |
| Plutonium-239/240 | 14.19 | 36 | 6 |
| Tritium | 0.296 | 3.2E+05 | 1E-05 |
| Uranium-234 | 1.108 | 220 | 0.08 |
| Uranium-235/236 | 0.0905 | 43 | 0.03 |
| **Total Dose** | | | **7** |

* SALs from LANL (2009, 107655).

**Table H-4.2-161**
**Residential Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.155 | 3.44E+03 | 4.5E-05 |
| Acenaphthylene | 0.0122 | 1.72E+03[b] | 7.1E-06 |
| Acetone | 0.35 | 6.75E+04 | 5.2E-06 |
| Aluminum | 10187 | 7.81E+04 | 1.3E-01 |
| Anthracene | 0.468 | 1.72E+04 | 2.7E-05 |
| Barium | 113.5 | 1.56E+04 | 7.3E-03 |
| Benzo(g,h,i)perylene | 0.287 | 1.72E+03[b] | 1.7E-04 |
| Cadmium | 0.315 | 7.79E+01 | 4.0E-03 |
| Chromium | 10.36 | 2.19E+02[c] | 4.7E-02 |
| Cobalt | 3.674 | 2.3E+01[d] | 1.6E-01 |
| Copper | 9.917 | 3.13E+03 | 3.2E-03 |
| Dibenzofuran | 0.224 | 7.8E+01[d] | 2.9E-03 |
| Fluoranthene | 2.527 | 2.29E+03 | 1.1E-03 |
| Fluorene | 0.135 | 2.29E+03 | 5.9E-05 |
| Isopropyltoluene[4-] | 0.000463 | 3.21E+03[e] | 1.4E-07 |
| Lead | 147.6 | 4.00E+02 | 3.7E-01 |
| Lithium | 11.2 | 1.6E+02[d] | 7.0E-02 |
| Mercury | 0.0797 | 2.3E+01[d] | 3.5E-03 |
| Methylnaphthalene[2-] | 0.0444 | 3.1E+02[d] | 1.4E-04 |
| Nitrate | 1.494 | 1.25E+05 | 1.2E-05 |
| Perchlorate | 0.00168 | 5.48E+01 | 3.1E-05 |
| Phenanthrene | 2.023 | 1.83E+03 | 1.1E-03 |
| Pyrene | 2.013 | 1.72E+03 | 1.2E-03 |
| Selenium | 1.094 | 3.91E+02 | 2.8E-03 |
| Toluene | 0.00128 | 5.57E+03 | 2.3E-07 |
| Xylene[1,3-]+xylene[1,4-] | 0.000381 | 1.09E+03[f] | 3.5E-07 |
| Zinc | 150.6 | 2.35E+04 | 6.4E-03 |
| | | **Hazard Index** | **0.8** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-162**
**Residential Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.98 | 6.21E+00 | 1.6E-06 |
| Benzo(a)pyrene | 0.673 | 6.21E-01 | 1.1E-05 |
| Benzo(b)fluoranthene | 1.314 | 6.21E+00 | 2.1E-06 |
| Benzo(k)fluoranthene | 0.234 | 6.21E+01 | 3.8E-08 |
| Bis(2-ethylhexyl)phthalate | 0.25 | 3.47E+02 | 7.2E-09 |
| Carbazole | 0.12 | 2.4E+02[b] | 5.0E-09 |
| Chloroform | 0.000215 | 5.72E+00 | 3.8E-10 |
| Chrysene | 0.802 | 6.21E+02 | 1.3E-08 |
| Dichlorobenzene[1,4-] | 0.000316 | 3.22E+01 | 9.8E-11 |
| Indeno(1,2,3-cd)pyrene | 0.399 | 6.21E+00 | 6.4E-07 |
| Methylene chloride | 0.00411 | 1.99E+02 | 2.1E-10 |
| Naphthalene | 0.112 | 4.50E+01 | 2.5E-08 |
| | | **Total Excess Cancer Risk** | **2E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA Region 6 SSL (EPA 2007, 099314).

**Table H-4.2-163**
**Residential Radionuclide**
**Screening Evaluation for Consolidated Unit 21-024(l)-99**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.478 | 30 | 0.24 |
| Cesium-137 | 0.165 | 5.6 | 0.44 |
| Plutonium-238 | 0.543 | 37 | 0.22 |
| Plutonium-239/240 | 14.19 | 33 | 6.45 |
| Tritium | 0.296 | 750 | 0.006 |
| Uranium-234 | 1.108 | 170 | 0.1 |
| Uranium-235/236 | 0.0905 | 17 | 0.08 |
| | | **Total Dose** | **8** |

* SALs from LANL (2009, 107655).

**Table H-4.2-164**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0877 | 3.67E+04 | 2.4E-06 |
| Aluminum | 11130 | 1.13E+06 | 9.8E-03 |
| Anthracene | 0.0988 | 1.83E+05 | 5.4E-07 |
| Benzo(g,h,i)perylene | 0.237 | 1.83E+04[b] | 1.3E-05 |
| Benzoic acid | 0.589 | 2.5E+06[c] | 2.4E-07 |
| Chromium | 9.287 | 2.92E+03[d] | 3.2E-03 |
| Cyanide (total) | 0.445 | 2.27E+04 | 2.0E-05 |
| Fluoranthene | 0.507 | 2.44E+04 | 2.1E-05 |
| Fluorene | 0.0869 | 2.44E+04 | 3.6E-06 |
| Lead | 32.53 | 8.00E+02 | 4.1E-02 |
| Methylnaphthalene[2-] | 0.052 | 4.1E+03[c] | 1.3E-05 |
| Nitrate | 26.85 | 1.82E+06 | 1.5E-05 |
| Perchlorate | 0.00107 | 7.95E+02 | 1.3E-06 |
| Phenanthrene | 0.424 | 2.05E+04 | 2.1E-05 |
| Pyrene | 0.529 | 1.83E+04 | 2.9E-05 |
| Uranium | 3.08 | 3.41E+03 | 9.0E-04 |
| Zinc | 107.9 | 3.41E+05 | 3.2E-04 |
| | | **Hazard Index** | **0.06** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

**Table H-4.2-165**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.269 | 2.34E+01 | 1E-07 |
| Benzo(a)pyrene | 0.281 | 2.34E+00 | 1E-06 |
| Benzo(b)fluoranthene | 0.601 | 2.34E+01 | 3E-07 |
| Benzo(k)fluoranthene | 0.775 | 2.34E+02 | 3E-08 |
| Bis(2-ethylhexyl)phthalate | 0.119 | 1.37E+03 | 9E-10 |
| Chrysene | 0.274 | 2.34E+03 | 1E-09 |
| Hexachlorobenzene | 0.0892 | 1.20E+01 | 7E-08 |
| Naphthalene | 0.104 | 2.52E+02 | 4E-09 |
| | | **Total Excess Cancer Risk** | **2E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-166**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (pCi/g) | Industrial SAL*(pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0552 | 180 | 5E-03 |
| Cesium-137 | 0.602 | 23 | 4E-01 |
| Plutonium-238 | 0.0846 | 240 | 5E-03 |
| Plutonium-239/240 | 2.321 | 210 | 2E-01 |
| Tritium | 0.0214 | 4.4E+05 | 7E-07 |
| | | **Total Dose** | **0.6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-167**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 4.89E-06 | 0.01 | 4.9E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.17E-06 | 0.01 | 1.2E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 1.96E-07 | 0.1 | 2.0E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 1.79E-07 | 0.1 | 1.8E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 4.31E-05 | 0.0003 | 1.3E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 2.67E-06 | 0.0003 | 8.0E-10 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 3.33E-07 | 0.3 | 1.0E-07 |
| | | **2,3,7,8-TCDD Equivalent** | **2.1E-07** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-168**
**Construction Worker**
**Noncarcinogenic Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0613 | 1.86E+04 | 3E-06 |
| Acetone | 0.00268 | 2.63E+05 | 1E-08 |
| Aluminum | 8786 | 4.07E+04 | 2E-01 |
| Anthracene | 0.0658 | 6.68E+04 | 1E-06 |
| Benzo(g,h,i)perylene | 0.237 | 6.68E+03[b] | 4E-05 |
| Benzoic acid | 0.589 | 9.52E+06[c] | 6E-07 |
| Bis(2-ethylhexyl)phthalate | 0.119 | 4.76E+03 | 3E-05 |
| Chromium | 9.946 | 4.49E+02[d] | 2E-02 |
| Cyanide (total) | 0.274 | 6.19E+03 | 4E-05 |
| Fluoranthene | 0.282 | 8.91E+03 | 3E-05 |
| Fluorene | 0.0819 | 8.91E+03 | 9E-06 |
| Lead | 23.75 | 8.00E+02 | 3E-02 |
| Methylnaphthalene[2-] | 0.052 | 1.24E+03[c] | 4E-05 |
| Naphthalene | 0.104 | 7.02E+02 | 1E-04 |
| Nitrate | 16.24 | 4.96E+05 | 3E-05 |
| Perchlorate | 0.00104 | 2.17E+02 | 5E-06 |
| Phenanthrene | 0.227 | 7.15E+03 | 3E-05 |
| Pyrene | 0.285 | 6.68E+03 | 4E-05 |
| Selenium | 0.599 | 1.55E+03 | 4E-04 |
| 2,3,7,8-TCDD equivalent | 2.1E-07 | 2.84E-04 | 7E-04 |
| Toluene | 0.0034 | 2.11E+04 | 2E-07 |
| Uranium | 2.487 | 9.29E+02 | 3E-03 |
| Zinc | 96.77 | 9.29E+04 | 1E-03 |
| | | **Hazard Index** | **0.3** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

**Table H-4.2-169**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.166 | 2.13E+02 | 8E-09 |
| Benzo(a)pyrene | 0.264 | 2.13E+01 | 1E-07 |
| Benzo(b)fluoranthene | 0.579 | 2.13E+02 | 3E-08 |
| Benzo(k)fluoranthene | 0.775 | 2.06E+03 | 4E-09 |
| Chrysene | 0.16 | 2.06E+04 | 8E-11 |
| Hexachlorobenzene | 0.0892 | 1.03E+02 | 9E-09 |
| **Total Excess Cancer Risk** | | | **2E-07** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-170**
**Construction Worker**
**Radionuclide Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0465 | 34 | 0.02 |
| Cesium-137 | 0.427 | 18 | 0.4 |
| Plutonium-238 | 0.0846 | 40 | 0.03 |
| Plutonium-239/240 | 1.819 | 36 | 0.8 |
| Tritium | 0.0138 | 3.2E+05 | 7E-07 |
| **Total Dose** | | | **1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-171**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0613 | 3.44E+03 | 2E-05 |
| Acetone | 0.00268 | 6.75E+04 | 4E-08 |
| Aluminum | 8786 | 7.81E+04 | 1E-01 |
| Anthracene | 0.0658 | 1.72E+04 | 4E-06 |
| Benzo(g,h,i)perylene | 0.237 | 1.72E+03[b] | 1E-04 |
| Benzoic acid | 0.589 | 2.4E+05[c] | 2E-06 |
| Chromium | 9.946 | 2.19E+02[d] | 5E-02 |
| Cyanide (total) | 0.274 | 1.56E+03 | 2E-04 |
| Fluoranthene | 0.282 | 2.29E+03 | 1E-04 |
| Fluorene | 0.0819 | 2.29E+03 | 4E-05 |
| Lead | 23.75 | 4.00E+02 | 6E-02 |
| Methylnaphthalene[2-] | 0.052 | 3.1E+02[c] | 2E-04 |
| Nitrate | 16.24 | 1.25E+05 | 1E-04 |
| Perchlorate | 0.00104 | 5.48E+01 | 2E-05 |
| Phenanthrene | 0.227 | 1.83E+03 | 1E-04 |
| Pyrene | 0.285 | 1.72E+03 | 2E-04 |
| Selenium | 0.599 | 3.91E+02 | 2E-03 |
| Toluene | 0.0034 | 5.57E+03 | 6E-07 |
| Uranium | 2.487 | 2.35E+02 | 1E-02 |
| Zinc | 96.77 | 2.35E+04 | 4E-03 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

**Table H-4.2-172**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Benzo(a)anthracene | 0.166 | 6.21E+00 | 3E-07 |
| Benzo(a)pyrene | 0.264 | 6.21E-01 | 4E-06 |
| Benzo(b)fluoranthene | 0.579 | 6.21E+00 | 9E-07 |
| Benzo(k)fluoranthene | 0.775 | 6.21E+01 | 1E-07 |
| Bis(2-ethylhexyl)phthalate | 0.119 | 3.47E+02 | 3E-09 |
| Chrysene | 0.16 | 6.21E+02 | 3E-09 |
| Hexachlorobenzene | 0.0892 | 3.04E+00 | 3E-07 |
| Naphthalene | 0.104 | 4.50E+01 | 2E-08 |
| 2,3,7,8-TCDD equivalent | 2.1E-07 | 4.50E-05 | 5E-08 |
| | | **Total Excess Cancer Risk** | **6E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-173**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-024(o)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.0465 | 30 | 0.02 |
| Cesium-137 | 0.427 | 5.6 | 1 |
| Plutonium-238 | 0.0846 | 37 | 0.03 |
| Plutonium-239/240 | 1.819 | 33 | 0.8 |
| Tritium | 0.0138 | 750 | 3E-04 |
| | | **Total Dose** | **2** |

* SALs from LANL (2009, 107655).

**Table H-4.2-174**
**Industrial Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.24 | 3.67E+04 | 7E-06 |
| Aluminum | 4264 | 1.13E+06 | 4E-03 |
| Anthracene | 0.65 | 1.83E+05 | 4E-06 |
| Antimony | 0.317 | 4.54E+02 | 7E-04 |
| Barium | 290.9 | 2.24E+05 | 1E-03 |
| Benzo(g,h,i)perylene | 2.1 | 1.83E+04[b] | 1E-04 |
| Benzoic acid | 0.501 | 2.5E+06[c] | 2E-07 |
| Cadmium | 6.117 | 1.12E+03 | 5E-03 |
| Chromium | 90.62 | 2.92E+03[d] | 3E-02 |
| Copper | 199.3 | 4.54E+04 | 4E-03 |
| Cyanide (total) | 2.7 | 2.27E+04 | 1E-04 |
| Dibenzofuran | 0.055 | 1.0E+03[c] | 6E-05 |
| Dimethylphenol[2,4-] | 0.063 | 1.37E+04 | 5E-06 |
| Di-n-butylphthalate | 0.85 | 6.84E+04 | 1E-05 |
| Di-n-octylphthalate | 0.1 | 2.7E+04[e] | 4E-06 |
| Fluoranthene | 4.279 | 2.44E+04 | 2E-04 |
| Fluorene | 0.17 | 2.44E+04 | 7E-06 |
| Lead | 90.61 | 8.00E+02 | 1E-01 |
| Mercury | 9.002 | 3.1E+02[c] | 3E-02 |
| Nickel | 34.93 | 2.27E+04 | 2E-03 |
| Nitrate | 4.079 | 1.82E+06 | 2E-06 |
| Perchlorate | 0.000991 | 7.95E+02 | 1E-06 |
| Phenanthrene | 2.2 | 2.05E+04 | 1E-04 |
| Pyrene | 1.055 | 1.83E+04 | 6E-05 |
| Selenium | 0.677 | 5.68E+03 | 1E-04 |
| Silver | 26.19 | 5.68E+03 | 5E-03 |
| Uranium | 7.35 | 3.41E+03 | 2E-03 |
| Zinc | 555.4 | 3.41E+05 | 2E-03 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] EPA Region 6 SSL (EPA 2005, 091002).

**Table H-4.2-175**
**Industrial Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 4.395 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 5.9 | 2.34E+01 | 3E-06 |
| Benzo(a)pyrene | 4.4 | 2.34E+00 | 2E-05 |
| Benzo(b)fluoranthene | 1.078 | 2.34E+01 | 5E-07 |
| Benzo(k)fluoranthene | 4.6 | 2.34E+02 | 2E-07 |
| Bis(2-ethylhexyl)phthalate | 1.114 | 1.37E+03 | 8E-09 |
| Butylbenzylphthalate | 1.2 | 9.1E+03[b] | 1E-09 |
| Chrysene | 1.14 | 2.34E+03 | 5E-09 |
| Dibenz(a,h)anthracene | 0.84 | 2.34E+00 | 4E-06 |
| Dichlorobenzene[1,4-] | 0.064 | 1.80E+02 | 4E-09 |
| Indeno(1,2,3-cd)pyrene | 2.2 | 2.34E+01 | 9E-07 |
| | | **Total Excess Cancer Risk** | **3E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-176**
**Industrial Radionuclide**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 27.73 | 180 | 2 |
| Cesium-137 | 0.356 | 23 | 0.2 |
| Plutonium-238 | 0.555 | 240 | 0.03 |
| Plutonium-239/240 | 40.04 | 210 | 3 |
| Tritium | 2.878 | 4.4E+05 | 1E-04 |
| Uranium-234 | 20.25 | 1500 | 0.2 |
| Uranium-235/236 | 0.605 | 87 | 0.1 |
| Uranium-238 | 1.906 | 430 | 0.07 |
| | | **Total Dose** | **6** |

* SALs from LANL (2009, 107655).

**Table H-4.2-177**
**Dioxin/Furan TEF Calculations for the Construction Worker and Residential Scenarios for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 1.58E-06 | 0.01 | 1.6E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 9.95E-06 | 0.0003 | 3.0E-09 |
| **2,3,7,8-TCDD Equivalent** | | | **1.9E-08** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-178**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.281 | 1.86E+04 | 2E-05 |
| Aluminum | 4696 | 4.07E+04 | 1E-01 |
| Anthracene | 0.65 | 6.68E+04 | 1E-05 |
| Arsenic | 2.744 | 6.54E+01 | 4E-02 |
| Antimony | 0.2 | 1.24E+02 | 2E-03 |
| Aroclor-1254 | 0.0044 | 4.36E+00 | 1E-03 |
| Barium | 120.2 | 4.35E+03 | 3E-02 |
| Benzo(g,h,i)perylene | 0.2 | 6.68E+03[b] | 3E-05 |
| Benzoic acid | 0.501 | 9.52E+05[c] | 5E-07 |
| Bis(2-ethylhexyl)phthalate | 0.605 | 4.76E+03 | 1E-04 |
| Cadmium | 1.381 | 3.09E+02 | 4E-03 |
| Chromium | 34.34 | 4.49E+02[d] | 8E-02 |
| Copper | 66.56 | 1.24E+04 | 5E-03 |
| Cyanide (total) | 2.7 | 6.19E+03 | 4E-04 |
| Dibenzofuran | 0.055 | 2.38E+02[c] | 2E-04 |
| Dimethylphenol[2,4-] | 0.063 | 4.76E+03 | 1E-05 |
| Di-n-butylphthalate | 0.236 | 2.38E+04 | 1E-05 |
| Di-n-octylphthalate | 0.1 | 4.76E+03[e] | 2E-05 |
| Fluoranthene | 0.518 | 8.91E+03 | 6E-05 |
| Fluorene | 0.17 | 8.91E+03 | 2E-05 |
| Lead | 50.7 | 8.00E+02 | 6E-02 |
| Mercury | 2.603 | 9.29E+01[c] | 3E-02 |
| Nickel | 10.3 | 6.19E+03 | 2E-03 |
| Nitrate | 1.883 | 4.96E+05 | 4E-06 |
| Perchlorate | 0.00132 | 2.17E+02 | 6E-06 |
| Phenanthrene | 0.393 | 7.15E+03 | 6E-05 |
| Pyrene | 0.467 | 6.68E+03 | 7E-05 |
| Selenium | 0.557 | 1.55E+03 | 4E-04 |
| Silver | 7.698 | 1.55E+03 | 5E-03 |
| 2,3,7,8-TCDD equivalent | 1.9E-08 | 2.84E-04 | 7E-05 |
| Trimethylbenzene[1,2,4-] | 0.00049 | 6.88E+02[c] | 7E-07 |
| Uranium | 2.882 | 9.29E+02 | 3E-03 |
| Xylene[1,3-]+xylene[1,4-] | 0.000283 | 3.13E+03[f] | 9E-08 |
| Zinc | 199.6 | 9.29E+04 | 2E-03 |
| | | **Hazard Index** | **0.4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] Chromium VI SSL used.
[e] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2005, 091002) and equation and parameters from NMED (2009, 108070).
[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-179**
**Construction Worker Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0031 | 2.22E+00 | 1E-08 |
| Benzo(a)anthracene | 0.471 | 6.21E+00 | 8E-07 |
| Benzo(a)pyrene | 0.363 | 6.21E-01 | 6E-06 |
| Benzo(b)fluoranthene | 1.662 | 6.21E+00 | 3E-06 |
| Benzo(k)fluoranthene | 0.4 | 6.21E+01 | 6E-08 |
| Butylbenzylphthalate | 0.206 | 4.76E+04[b] | 4E-11 |
| Chloroform | 0.000254 | 5.72E+00 | 4E-10 |
| Chrysene | 0.497 | 6.21E+02 | 8E-09 |
| Dibenz(a,h)anthracene | 0.84 | 6.21E-01 | 1E-05 |
| Dichlorobenzene[1,4-] | 0.064 | 3.22E+01 | 2E-08 |
| Ethylbenzene | 0.00043 | 6.97E+01 | 6E-11 |
| Indeno(1,2,3-cd)pyrene | 0.208 | 6.21E+00 | 3E-07 |
| | | **Total Excess Cancer Risk** | **2E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-180**
**Construction Worker Radionuclide**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 11.25 | 34 | 5 |
| Cesium-137 | 0.192 | 18 | 0.2 |
| Plutonium-238 | 0.817 | 40 | 0.3 |
| Plutonium-239/240 | 16.52 | 36 | 7 |
| Tritium | 0.624 | 3.2E+05 | 3E-05 |
| Uranium-234 | 4.987 | 220 | 0.3 |
| Uranium-235/236 | 0.15 | 43 | 0.05 |
| Uranium-238 | 1.027 | 160 | 0.1 |
| | | **Total Dose** | **13** |

* SALs from LANL (2009, 107655).

**Table H-4.2-181**
**Residential Noncarcinogenic**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.281 | 3.44E+03 | 8E-05 |
| Aluminum | 4696 | 7.81E+04 | 6E-02 |
| Anthracene | 0.65 | 1.72E+04 | 4E-05 |
| Antimony | 0.2 | 3.13E+01 | 6E-03 |
| Aroclor-1254 | 0.0044 | 1.12E+00 | 4E-03 |
| Barium | 120.2 | 1.56E+04 | 8E-03 |
| Benzo(g,h,i)perylene | 0.2 | 1.72E+03[b] | 1E-04 |
| Benzoic acid | 0.501 | 2.4E+05[c] | 2E-06 |
| Cadmium | 1.381 | 7.79E+01 | 2E-02 |
| Chromium | 34.34 | 2.19E+02[d] | 2E-01 |
| Copper | 66.56 | 3.13E+03 | 2E-02 |
| Cyanide (total) | 2.7 | 1.56E+03 | 2E-03 |
| Dibenzofuran | 0.055 | 7.8E+01[c] | 7E-04 |
| Dimethylphenol[2,4-] | 0.063 | 1.22E+03 | 5E-05 |
| Di-n-butylphthalate | 0.236 | 6.11E+03 | 4E-05 |
| Di-n-octylphthalate | 0.1 | 2.4E+03[e] | 4E-05 |
| Fluoranthene | 0.518 | 2.29E+03 | 2E-04 |
| Fluorene | 0.17 | 2.29E+03 | 7E-05 |
| Lead | 50.7 | 4.00E+02 | 1E-01 |
| Mercury | 2.603 | 2.3E+01[c] | 1E-01 |
| Nickel | 10.3 | 1.56E+03 | 7E-03 |
| Nitrate | 1.883 | 1.25E+05 | 2E-05 |
| Perchlorate | 0.00132 | 5.48E+01 | 2E-05 |
| Phenanthrene | 0.393 | 1.83E+03 | 2E-04 |
| Pyrene | 0.467 | 1.72E+03 | 3E-04 |
| Selenium | 0.557 | 3.91E+02 | 1E-03 |
| Silver | 7.698 | 3.91E+02 | 2E-02 |
| Trimethylbenzene[1,2,4-] | 0.00049 | 6.2E+01[c] | 8E-06 |
| Uranium | 2.882 | 2.35E+02 | 1E-02 |
| Xylene[1,3-]+xylene[1,4-] | 0.000283 | 1.09E+03[f] | 3E-07 |
| Zinc | 199.6 | 2.35E+04 | 8E-03 |
| | | **Hazard Index** | **0.6** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] EPA Region 6 SSL (EPA 2005, 091002).

[f] Xylenes SSL used as surrogate based on structural similarity.

**Table H-4.2-182**
**Residential Carcinogenic**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0031 | 2.22E+00 | 1E-08 |
| Arsenic | 2.744 | 3.90E+00 | 7E-06 |
| Benzo(a)anthracene | 0.471 | 6.21E+00 | 8E-07 |
| Benzo(a)pyrene | 0.363 | 6.21E-01 | 6E-06 |
| Benzo(b)fluoranthene | 1.662 | 6.21E+00 | 3E-06 |
| Benzo(k)fluoranthene | 0.4 | 6.21E+01 | 6E-08 |
| Bis(2-ethylhexyl)phthalate | 0.605 | 3.47E+02 | 2E-08 |
| Butylbenzylphthalate | 0.206 | 2.6E+03[b] | 8E-10 |
| Chloroform | 0.000254 | 5.72E+00 | 4E-10 |
| Chrysene | 0.497 | 6.21E+02 | 8E-09 |
| Dibenz(a,h)anthracene | 0.84 | 6.21E-01 | 1E-05 |
| Dichlorobenzene[1,4-] | 0.064 | 3.22E+01 | 2E-08 |
| Ethylbenzene | 0.00043 | 6.97E+01 | 6E-11 |
| Indeno(1,2,3-cd)pyrene | 0.208 | 6.21E+00 | 3E-07 |
| 2,3,7,8-TCDD equivalent | 1.9E-08 | 4.50E-05 | 4E-09 |
| | | **Total Excess Cancer Risk** | **3E-05** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-183**
**Residential Radionuclide**
**Screening Evaluation for Consolidated Unit 21-026(a)-99**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 11.25 | 30 | 5.6 |
| Cesium-137 | 0.192 | 5.6 | 0.5 |
| Plutonium-238 | 0.817 | 37 | 0.3 |
| Plutonium-239/240 | 16.52 | 33 | 7.5 |
| Tritium | 0.624 | 750 | 0.01 |
| Uranium-234 | 4.987 | 170 | 0.4 |
| Uranium-235/236 | 0.15 | 17 | 0.1 |
| Uranium-238 | 1.027 | 87 | 0.2 |
| | | **Total Dose** | **15** |

* SALs from LANL (2009, 107655).

**Table H-4.2-184**
**Dioxin/Furan TEF Calculations for the**
**Industrial Scenario for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 8.37E-02 | 0.01 | 8.4E-04 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 4.99E-04 | 0.1 | 5.0E-05 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 3.04E-03 | 0.1 | 3.0E-04 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1.29E-03 | 0.1 | 1.3E-04 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 3.5E-01 | 0.0003 | 1.1E-04 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 2.47E-04 | 1 | 2.5E-04 |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 2.59E-05 | 1 | 2.6E-05 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.09E-02 | 0.01 | 1.1E-04 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 7.99E-04 | 0.01 | 8.0E-06 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 2.79E-04 | 0.1 | 2.8E-05 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.96E-04 | 0.1 | 3.0E-05 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 7.85E-05 | 0.1 | 7.9E-06 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 6.19E-04 | 0.1 | 6.2E-05 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 3.51E-02 | 0.0003 | 1.1E-05 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 3.03E-05 | 0.03 | 9.1E-07 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 8.49E-05 | 0.3 | 2.5E-05 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 9.24E-06 | 0.1 | 9.2E-07 |
| | **2,3,7,8-TCDD Equivalent** | | **2.0E-03** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-185**
**Industrial Noncarcinogenic**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0557 | 3.67E+04 | 2E-06 |
| Anthracene | 0.0543 | 1.83E+05 | 3E-07 |
| Antimony | 0.299 | 4.54E+02 | 7E-04 |
| Barium | 72.73 | 2.24E+05 | 3E-04 |
| Benzo(g,h,i)perylene | 0.209 | 1.83E+04[b] | 1E-05 |
| Cadmium | 1.891 | 1.12E+03 | 2E-03 |
| Chromium | 248.5 | 2.92E+03[c] | 9E-02 |
| Copper | 78.07 | 4.54E+04 | 2E-03 |
| Fluoranthene | 1.197 | 2.44E+04 | 5E-05 |
| Fluorene | 0.0344 | 2.44E+04 | 1E-06 |
| Lead | 37.5 | 8.00E+02 | 5E-02 |
| Lithium | 11.01 | 2.0E+03[d] | 6E-03 |
| Mercury | 0.26 | 3.1E+02[d] | 8E-04 |
| Nickel | 4.844 | 2.27E+04 | 2E-04 |
| Nitrate | 10.07 | 1.82E+06 | 6E-06 |
| Perchlorate | 0.00364 | 7.95E+02 | 5E-06 |
| Phenanthrene | 0.441 | 2.05E+04 | 2E-05 |
| Pyrene | 1.1 | 1.83E+04 | 6E-05 |
| Selenium | 1.051 | 5.68E+03 | 2E-04 |
| Strontium | 28.68 | 6.81E+05 | 4E-05 |
| Vanadium | 11.96 | 5.68E+03 | 2E-03 |
| Zinc | 224.7 | 3.41E+05 | 7E-04 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-186**
**Industrial Carcinogenic**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1254 | 0.0518 | 8.26E+00 | 6E-08 |
| Aroclor-1260 | 0.0284 | 8.26E+00 | 3E-08 |
| Arsenic | 3.44 | 1.77E+01 | 2E-06 |
| Benzo(a)anthracene | 0.355 | 2.34E+01 | 2E-07 |
| Benzo(a)pyrene | 0.819 | 2.34E+00 | 4E-06 |
| Benzo(b)fluoranthene | 0.64 | 2.34E+01 | 3E-07 |
| Bis(2-ethylhexyl)phthalate | 0.287 | 1.37E+03 | 2E-09 |
| Chrysene | 0.549 | 2.34E+03 | 2E-09 |
| Indeno(1,2,3-cd)pyrene | 0.318 | 2.34E+01 | 1E-07 |
| 2,3,7,8-TCDD equivalent | 0.002 | 2.04E-04 | 1E-04 |
| | | **Total Excess Cancer Risk** | **1E-04** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-187**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 36.18 | 180 | 3 |
| Cesium-137 | 0.952 | 23 | 0.6 |
| Plutonium-238 | 19.02 | 240 | 1 |
| Plutonium-239/240 | 92.22 | 210 | 7 |
| Tritium | 0.109 | 4.4E+05 | 4E-06 |
| Uranium-234 | 32.57 | 1500 | 0.3 |
| Uranium-235/236 | 1.66 | 87 | 0.3 |
| Uranium-238 | 2.01 | 430 | 0.07 |
| | | **Total Dose** | **12** |

* SALs from LANL (2009, 107655).

**Table H-4.2-188**
**Dioxin/Furan TEF Calculations for the**
**Construction Worker and Residential Scenarios for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 4.14E-02 | 0.01 | 4.1E-04 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 4.99E-04 | 0.1 | 5.0E-05 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 3.04E-03 | 0.1 | 3.0E-04 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1.29E-03 | 0.1 | 1.3E-04 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 3.01E-01 | 0.0003 | 9.0E-05 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 2.47E-04 | 1 | 2.5E-04 |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 1.82E-05 | 1 | 1.8E-05 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.09E-02 | 0.01 | 1.1E-04 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 7.99E-04 | 0.01 | 8.0E-06 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 2.79E-04 | 0.1 | 2.8E-05 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 2.96E-04 | 0.1 | 3.0E-05 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 7.85E-05 | 0.1 | 7.9E-06 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 6.19E-04 | 0.1 | 6.2E-05 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 3.51E-02 | 0.0003 | 1.1E-05 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 3.03E-05 | 0.03 | 9.1E-07 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 8.49E-05 | 0.3 | 2.5E-05 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 2.64E-06 | 0.1 | 2.6E-07 |
| | **2,3,7,8-TCDD Equivalent** | | **1.5E-03** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-189**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0469 | 1.86E+04 | 3E-06 |
| Acetone | 0.0269 | 2.63E+05 | 1E-07 |
| Anthracene | 0.0345 | 6.68E+04 | 5E-07 |
| Antimony | 0.524 | 1.24E+02 | 4E-03 |
| Arsenic | 4.398 | 6.54E+01 | 7E-02 |
| Aroclor-1254 | 0.0518 | 4.36E+00 | 1E-02 |
| Barium | 70.51 | 4.35E+03 | 2E-02 |
| Benzo(g,h,i)perylene | 0.136 | 6.68E+03[b] | 2E-05 |
| Butanone[2-] | 0.00581 | 1.48E+05 | 4E-08 |
| Bis(2-ethylhexyl)phthalate | 0.287 | 4.76E+03 | 6E-05 |
| Cadmium | 1.383 | 3.09E+02 | 4E-03 |
| Chromium | 200.8 | 4.49E+02[c] | 4E-01 |
| Copper | 29.85 | 1.24E+04 | 2E-03 |
| Di-n-butylphthalate | 0.12 | 2.38E+04 | 5E-06 |
| Fluoranthene | 0.316 | 8.91E+03 | 4E-05 |
| Fluorene | 0.0344 | 8.91E+03 | 4E-06 |
| Lead | 23.42 | 8.00E+02 | 3E-02 |
| Lithium | 9.411 | 6.19E+02[d] | 2E-02 |
| Mercury | 0.279 | 9.29E+01[d] | 3E-03 |
| Naphthalene | 0.0143 | 7.02E+02 | 2E-05 |
| Nickel | 6.021 | 6.19E+03 | 1E-03 |
| Nitrate | 3.692 | 4.96E+05 | 7E-06 |
| Perchlorate | 0.00176 | 2.17E+02 | 8E-06 |
| Phenanthrene | 0.135 | 7.15E+03 | 2E-05 |
| Pyrene | 0.307 | 6.68E+03 | 5E-05 |
| Selenium | 1.581 | 1.55E+03 | 1E-03 |
| Strontium | 20.29 | 1.86E+05 | 1E-04 |
| 2,3,7,8-TCDD equivalent | 0.0015 | 2.84E-04 | 5E+00 |
| Toluene | 0.000648 | 2.11E+04 | 3E-08 |
| Vanadium | 13.67 | 1.55E+03 | 9E-03 |
| Zinc | 177.9 | 9.29E+04 | 2E-03 |
| | | **Hazard Index** | **6** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

**Table H-4.2-190**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0284 | 7.58E+01 | 4E-09 |
| Benzo(a)anthracene | 0.129 | 2.13E+02 | 6E-09 |
| Benzo(a)pyrene | 0.392 | 2.13E+01 | 2E-07 |
| Benzo(b)fluoranthene | 0.248 | 2.13E+02 | 1E-08 |
| Benzo(k)fluoranthene | 0.244 | 2.06E+03 | 1E-09 |
| Chrysene | 0.15 | 2.06E+04 | 7E-11 |
| Indeno(1,2,3-cd)pyrene | 0.111 | 2.13E+02 | 5E-09 |
| Tetrachloroethene | 0.00559 | 3.38E+02 | 2E-10 |
| **Total Excess Cancer Risk** | | | **2E-07** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-191**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 10.25 | 34 | 5 |
| Cesium-137 | 0.438 | 18 | 0.4 |
| Plutonium-238 | 35.62 | 40 | 13 |
| Plutonium-239/240 | 61.27 | 36 | 26 |
| Tritium | 0.384 | 3.2E+05 | 2E-05 |
| Uranium-234 | 19.24 | 220 | 1 |
| Uranium-235/236 | 0.843 | 43 | 0.3 |
| Uranium-238 | 1.597 | 160 | 0.1 |
| **Total Dose** | | | **46** |

* SALs from LANL (2009, 107655).

**Table H-4.2-192**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0469 | 3.44E+03 | 1E-05 |
| Acetone | 0.0269 | 6.75E+04 | 4E-07 |
| Anthracene | 0.0345 | 1.72E+04 | 2E-06 |
| Antimony | 0.524 | 3.13E+01 | 2E-02 |
| Aroclor-1254 | 0.0518 | 1.12E+00 | 5E-02 |
| Barium | 70.51 | 1.56E+04 | 5E-03 |
| Benzo(g,h,i)perylene | 0.136 | 1.72E+03[b] | 8E-05 |
| Butanone[2-] | 0.00581 | 3.96E+04 | 1E-07 |
| Cadmium | 1.383 | 7.79E+01 | 2E-02 |
| Chromium | 200.8 | 2.19E+02[c] | 9E-01 |
| Copper | 29.85 | 3.13E+03 | 1E-02 |
| Di-n-butylphthalate | 0.12 | 6.11E+03 | 2E-05 |
| Fluoranthene | 0.316 | 2.29E+03 | 1E-04 |
| Fluorene | 0.0344 | 2.29E+03 | 2E-05 |
| Lead | 23.42 | 4.00E+02 | 6E-02 |
| Lithium | 9.411 | 1.6E+02[d] | 6E-02 |
| Mercury | 0.279 | 2.3E+01[d] | 1E-02 |
| Nickel | 6.021 | 1.56E+03 | 4E-03 |
| Nitrate | 3.692 | 1.25E+05 | 3E-05 |
| Perchlorate | 0.00176 | 5.48E+01 | 3E-05 |
| Phenanthrene | 0.135 | 1.83E+03 | 7E-05 |
| Pyrene | 0.307 | 1.72E+03 | 2E-04 |
| Selenium | 1.581 | 3.91E+02 | 4E-03 |
| Strontium | 20.29 | 4.69E+04 | 4E-04 |
| Toluene | 0.000648 | 5.57E+03 | 1E-07 |
| Vanadium | 13.67 | 3.91E+02 | 4E-02 |
| Zinc | 177.9 | 2.35E+04 | 8E-03 |
| | | **Hazard Index** | **1** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table H-4.2-193**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 4.398 | 3.90E+00 | 1.13E-05 |
| Aroclor-1260 | 0.0284 | 2.22E+00 | 1.28E-07 |
| Benzo(a)anthracene | 0.129 | 6.21E+00 | 2.08E-07 |
| Benzo(a)pyrene | 0.392 | 6.21E-01 | 6.31E-06 |
| Benzo(b)fluoranthene | 0.248 | 6.21E+00 | 3.99E-07 |
| Benzo(k)fluoranthene | 0.244 | 6.21E+01 | 3.93E-08 |
| Bis(2-ethylhexyl)phthalate | 0.287 | 3.47E+02 | 8.27E-09 |
| Chrysene | 0.15 | 6.21E+02 | 2.42E-09 |
| Indeno(1,2,3-cd)pyrene | 0.111 | 6.21E+00 | 1.79E-07 |
| Naphthalene | 0.0143 | 4.50E+01 | 3.18E-09 |
| Tetrachloroethene | 0.00559 | 6.99E+00 | 8.00E-09 |
| 2,3,7,8-TCDD equivalent | 0.0015 | 4.50E-05 | 3.33E-04 |
| | | **Total Excess Cancer Risk** | **4E-04** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-194**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-027(a)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 10.25 | 30 | 5 |
| Cesium-137 | 0.438 | 5.6 | 1 |
| Plutonium-238 | 35.62 | 37 | 14 |
| Plutonium-239/240 | 61.27 | 33 | 28 |
| Tritium | 0.384 | 750 | 0.008 |
| Uranium-234 | 19.24 | 170 | 2 |
| Uranium-235/236 | 0.843 | 17 | 0.7 |
| Uranium-238 | 1.597 | 87 | 0.3 |
| | | **Total Dose** | **51** |

* SALs from LANL (2009, 107655).

**Table H-4.2-195**
**Dioxin/Furan TEF Calculations for the Industrial, Construction Worker, and Residential Scenarios for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | TEF* | Toxic Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 5.16E-06 | 0.01 | 5.2E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 1.2E-06 | 0.01 | 1.2E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 1.91E-07 | 0.1 | 1.9E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 4.96E-05 | 0.0003 | 1.5E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 2.18E-06 | 0.0003 | 6.5E-10 |
| **2,3,7,8-TCDD Equivalent** | | | **9.9E-08** |

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

**Table H-4.2-196**
**Industrial Noncarcinogenic Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | Industrial SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.565 | 3.67E+04 | 2E-05 |
| Anthracene | 0.949 | 1.83E+05 | 5E-06 |
| Barium | 78.59 | 2.24E+05 | 4E-04 |
| Benzo(g,h,i)perylene | 1.12 | 1.83E+04[b] | 6E-05 |
| Benzoic acid | 0.306 | 2.5E+06[c] | 1E-07 |
| Chromium | 8.767 | 2.92E+03[d] | 3E-03 |
| Cobalt | 2.701 | 3.0E+02[c] | 9E-03 |
| Copper | 8.866 | 4.54E+04 | 2E-04 |
| Dibenzofuran | 0.25 | 1.0E+03[c] | 3E-04 |
| Di-n-butylphthalate | 0.506 | 6.84E+04 | 7E-06 |
| Fluoranthene | 2.385 | 2.44E+04 | 1E-04 |
| Fluorene | 0.48 | 2.44E+04 | 2E-05 |
| Lead | 46.26 | 8.00E+02 | 6E-02 |
| Mercury | 0.0529 | 3.1E+02[c] | 2E-04 |
| Methylnaphthalene[2-] | 0.0794 | 4.1E+03[c] | 2E-05 |
| Nitrate | 1.376 | 1.82E+06 | 8E-07 |
| Perchlorate | 0.00155 | 7.95E+02 | 2E-06 |
| Phenanthrene | 1.165 | 2.05E+04 | 6E-05 |
| Pyrene | 4.081 | 1.83E+04 | 2E-04 |
| Selenium | 0.819 | 5.68E+03 | 1E-04 |
| Uranium | 1.167 | 3.41E+03 | 3E-04 |
| Zinc | 61.03 | 3.41E+05 | 2E-04 |
| **Hazard Index** | | | **0.07** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Chromium VI SSL used.

**Table H-4.2-197**
**Industrial Carcinogenic Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0016 | 8.26E+00 | 1.9E-09 |
| Benzo(a)anthracene | 3.08 | 2.34E+01 | 1.3E-06 |
| Benzo(a)pyrene | 0.584 | 2.34E+00 | 2.5E-06 |
| Benzo(b)fluoranthene | 2.365 | 2.34E+01 | 1.0E-06 |
| Benzo(k)fluoranthene | 0.0212 | 2.34E+02 | 9.1E-10 |
| Bis(2-ethylhexyl)phthalate | 48.8 | 1.37E+03 | 3.6E-07 |
| Chrysene | 0.781 | 2.34E+03 | 3.3E-09 |
| Indeno(1,2,3-cd)pyrene | 1.11 | 2.34E+01 | 4.7E-07 |
| Naphthalene | 0.223 | 2.52E+02 | 8.8E-09 |
| 2,3,7,8-TCDD equivalent | 9.9E-08 | 2.04E-04 | 4.9E-09 |
| **Total Excess Cancer Risk** | | | **6E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-198**
**Industrial Radionuclide**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (pCi/g) | Industrial SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 1.158 | 180 | 0.1 |
| Cesium-134 | 0.141 | 9.7 | 0.2 |
| Cesium-137 | 0.394 | 23 | 0.3 |
| Plutonium-238 | 0.113 | 240 | 0.01 |
| Plutonium-239/240 | 9.59 | 210 | 0.7 |
| Strontium-90 | 2.97 | 1900 | 0.02 |
| Tritium | 0.0325 | 4.4E+05 | 0.000001 |
| Uranium-234 | 1.617 | 1500 | 0.02 |
| **Total Dose** | | | **1** |

* SALs from LANL (2009, 107655).

**Table H-4.2-199**
**Construction Worker Noncarcinogenic**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | Construction Worker SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0791 | 1.86E+04 | 4E-06 |
| Acenaphthylene | 0.0206 | 6.68E+03[b] | 3E-06 |
| Acetone | 0.0112 | 2.63E+05 | 4E-08 |
| Anthracene | 0.103 | 6.68E+04 | 2E-06 |
| Barium | 138 | 4.35E+03 | 3E-02 |
| Benzo(g,h,i)perylene | 1.12 | 6.68E+03[b] | 2E-04 |
| Benzoic acid | 0.306 | 9.52E+05[c] | 3E-07 |
| Bis(2-ethylhexyl)phthalate | 15.81 | 4.76E+03 | 3E-03 |
| Chromium | 11.56 | 4.49E+02[d] | 3E-02 |
| Cobalt | 3.656 | 3.49E+01[c] | 1E-01 |
| Copper | 10.97 | 1.24E+04 | 9E-04 |
| Dibenzofuran | 0.25 | 2.38E+02[c] | 1E-03 |
| Di-n-butylphthalate | 0.124 | 2.38E+04 | 5E-06 |
| Fluoranthene | 0.631 | 8.91E+03 | 7E-05 |
| Fluorene | 0.0734 | 8.91E+03 | 8E-06 |
| Isopropyltoluene[4-] | 0.00162 | 1.03E+04[e] | 2E-07 |
| Lead | 42.92 | 8.00E+02 | 5E-02 |
| Mercury | 0.233 | 9.29E+01[c] | 3E-03 |
| Methylene chloride | 0.00699 | 1.06E+04 | 7E-07 |
| Methylnaphthalene[2-] | 0.0794 | 1.24E+03[c] | 6E-05 |
| Naphthalene | 0.223 | 7.02E+02 | 3E-04 |
| Nitrate | 1.077 | 4.96E+05 | 2E-06 |
| Perchlorate | 0.00155 | 2.17E+02 | 7E-06 |
| Phenanthrene | 0.473 | 7.15E+03 | 7E-05 |
| Pyrene | 1.075 | 6.68E+03 | 2E-04 |
| Selenium | 0.914 | 1.55E+03 | 6E-04 |
| 2,3,7,8-TCDD equivalent | 9.9E-08 | 2.84E-04 | 3E-04 |
| Toluene | 0.00158 | 2.11E+04 | 7E-08 |
| Uranium | 1.221 | 9.29E+02 | 1E-03 |
| Zinc | 62.03 | 9.29E+04 | 7E-04 |
| | | **Hazard Index** | **0.2** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-200**
**Construction Worker Carcinogenic**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | Construction Worker SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0016 | 7.58E+01 | 2E-10 |
| Benzo(a)anthracene | 0.532 | 2.13E+02 | 2E-08 |
| Benzo(a)pyrene | 0.3 | 2.13E+01 | 1E-07 |
| Benzo(b)fluoranthene | 0.631 | 2.13E+02 | 3E-08 |
| Benzo(k)fluoranthene | 0.228 | 2.06E+03 | 1E-09 |
| Chrysene | 0.344 | 2.06E+04 | 2E-10 |
| Dichlorobenzene[1,4-] | 0.000461 | 3.78E+03 | 1E-12 |
| Indeno(1,2,3-cd)pyrene | 0.17 | 2.13E+02 | 8E-09 |
| Trichloroethene | 0.00188 | 4.60E+03 | 4E-12 |
| **Total Excess Cancer Risk** | | | **2E-07** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-201**
**Construction Worker Radionuclide**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (pCi/g) | Construction Worker SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.648 | 34 | 0.3 |
| Cesium-134 | 0.141 | 7.7 | 0.3 |
| Cesium-137 | 0.248 | 18 | 0.2 |
| Plutonium-238 | 0.0772 | 40 | 0.03 |
| Plutonium-239/240 | 8.567 | 36 | 4 |
| Strontium-90 | 2.97 | 800 | 0.1 |
| Tritium | 0.0244 | 3.2E+05 | 0.000001 |
| Uranium-234 | 1.373 | 220 | 0.1 |
| **Total Dose** | | | **5** |

* SALs from LANL (2009, 107655).

**Table H-4.2-202**
**Residential Noncarcinogenic**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Hazard Quotient |
|---|---|---|---|
| Acenaphthene | 0.0791 | 3.44E+03 | 2E-05 |
| Acenaphthylene | 0.0206 | 1.72E+03[b] | 1E-05 |
| Acetone | 0.0112 | 6.75E+04 | 2E-07 |
| Anthracene | 0.103 | 1.72E+04 | 6E-06 |
| Barium | 138 | 1.56E+04 | 9E-03 |
| Benzo(g,h,i)perylene | 1.12 | 1.72E+03[b] | 7E-04 |
| Benzoic acid | 0.306 | 2.4E+05[c] | 1E-06 |
| Chromium | 11.56 | 2.19E+02[d] | 5E-02 |
| Cobalt | 3.656 | 2.3E+01[c] | 2E-01 |
| Copper | 10.97 | 3.13E+03 | 4E-03 |
| Dibenzofuran | 0.25 | 7.8E+01[c] | 3E-03 |
| Di-n-butylphthalate | 0.124 | 6.11E+03 | 2E-05 |
| Fluoranthene | 0.631 | 2.29E+03 | 3E-04 |
| Fluorene | 0.0734 | 2.29E+03 | 3E-05 |
| Isopropyltoluene[4-] | 0.00162 | 3.21E+03[e] | 5E-07 |
| Lead | 42.92 | 4.00E+02 | 1E-01 |
| Mercury | 0.233 | 2.3E+01[c] | 1E-02 |
| Methylnaphthalene[2-] | 0.0794 | 3.1E+02[c] | 3E-04 |
| Nitrate | 1.077 | 1.25E+05 | 9E-06 |
| Perchlorate | 0.00155 | 5.48E+01 | 3E-05 |
| Phenanthrene | 0.473 | 1.83E+03 | 3E-04 |
| Pyrene | 1.075 | 1.72E+03 | 6E-04 |
| Selenium | 0.914 | 3.91E+02 | 2E-03 |
| Toluene | 0.00158 | 5.57E+03 | 3E-07 |
| Uranium | 1.221 | 2.35E+02 | 5E-03 |
| Zinc | 62.03 | 2.35E+04 | 3E-03 |
| | | **Hazard Index** | **0.4** |

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

**Table H-4.2-203**
**Residential Carcinogenic**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Aroclor-1260 | 0.0016 | 2.22E+00 | 7E-09 |
| Benzo(a)anthracene | 0.532 | 6.21E+00 | 9E-07 |
| Benzo(a)pyrene | 0.3 | 6.21E-01 | 5E-06 |
| Benzo(b)fluoranthene | 0.631 | 6.21E+00 | 1E-06 |
| Benzo(k)fluoranthene | 0.228 | 6.21E+01 | 4E-08 |
| Bis(2-ethylhexyl)phthalate | 15.81 | 3.47E+02 | 5E-07 |
| Chrysene | 0.344 | 6.21E+02 | 6E-09 |
| Dichlorobenzene[1,4-] | 0.000461 | 3.22E+01 | 1E-10 |
| Indeno(1,2,3-cd)pyrene | 0.17 | 6.21E+00 | 3E-07 |
| Methylene chloride | 0.00699 | 1.99E+02 | 4E-10 |
| Naphthalene | 0.223 | 4.50E+01 | 5E-08 |
| 2,3,7,8-TCDD equivalent | 9.9E-08 | 4.50E-05 | 2E-08 |
| Trichloroethene | 0.00188 | 4.57E+01 | 4E-10 |
| | | **Total Excess Cancer Risk** | **8E-06** |

* SSLs from NMED (2009, 108070).

**Table H-4.2-204**
**Residential Radionuclide**
**Screening Evaluation for SWMU 21-027(c)**

| COPC | EPC (pCi/g) | Residential SAL* (pCi/g) | Dose (mrem/yr) |
|---|---|---|---|
| Americium-241 | 0.648 | 30 | 0.3 |
| Cesium-134 | 0.141 | 2.4 | 0.9 |
| Cesium-137 | 0.248 | 5.6 | 0.7 |
| Plutonium-238 | 0.0772 | 37 | 0.03 |
| Plutonium-239/240 | 8.567 | 33 | 4 |
| Strontium-90 | 2.97 | 5.7 | 8 |
| Tritium | 0.0244 | 750 | 0.0005 |
| Uranium-234 | 1.373 | 170 | 0.1 |
| | | **Total Dose** | **14** |

* SALs from LANL (2009, 107655).

**Table H-5.3-1**
**Ecological Screening Levels for Terrestrial Receptors**

| COPCs | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil-dwelling invertebrate) | Plant (terrestrial autotroph - producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | |
| Aluminum | na | na | na | na | na | na | na | na | na | na | na |
| Antimony | na | na | na | na | na | 0.48 | 2.9 | 78 | 0.05 | 0.26 | 45 |
| Arsenic | 160 | 1100 | 42 | 18 | 26 | 32 | 160 | 6.8 | 18 | 15 | 810 |
| Barium | 11000 | 37000 | 820 | 1000 | 930 | 1800 | 3300 | 330 | 110 | 1300 | 41000 |
| Beryllium | na | na | na | na | na | 56 | 170 | 40 | 2.5 | 18 | 420 |
| Cadmium | 2 | 580 | 4.4 | 0.29 | 0.54 | 0.51 | 9.9 | 140 | 32 | 0.27 | 510 |
| Calcium | na | na | na | na | na | na | na | na | na | na | na |
| Chromium | 2200 | 5400 | 280 | 190 | 220 | 860 | 3200 | 0.34 | 0.35 | 280 | 7200 |
| Cobalt | 930 | 3500 | 170 | 96 | 120 | 400 | 1800 | na | 13 | 160 | 5400 |
| Copper | 110 | 1600 | 38 | 15 | 22 | 64 | 270 | 80 | 70 | 38 | 3800 |
| Cyanide (total) | 0.47 | 0.58 | 0.1 | 0.1 | 0.1 | 340 | 740 | na | na | 310 | 2200 |
| Iron | na | na | na | na | na | na | na | na | na | na | na |
| Lead | 120 | 810 | 21 | 14 | 16 | 120 | 370 | 1700 | 120 | 72 | 3700 |
| Lithium | na | na | na | na | na | 100 | 250 | na | 2 | 38 | 880 |
| Manganese | 35000 | 90000 | 1400 | 3100 | 1900 | 1400 | 2000 | 450 | 220 | 1500 | 41000 |
| Mercury | 0.082 | 0.28 | 0.07 | 0.013 | 0.022 | 3 | 22 | 0.05 | 34 | 1.7 | 46 |
| Molybdenum | 130 | 1700 | 19 | 17 | 18 | na | na | na | 2 | na | na |
| Nickel | 160 | 2900 | 160 | 21 | 38 | 20 | 500 | 280 | 38 | 9.7 | 1200 |

**Table H-5.3-1 (continued)**

| COPCs | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil-dwelling invertebrate) | Plant (terrestrial autotroph - producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrate | na | na | na | na | na | na | na | na | na | na | na |
| Perchlorate | na | na | na | na | na | na | na | na | na | na | na |
| Selenium | 5.6 | 97 | 1 | 0.75 | 0.87 | 0.83 | 2.1 | 4.1 | 0.52 | 0.66 | 84 |
| Silver | 19 | 840 | 11 | 2.6 | 4.3 | 24 | 150 | na | 560 | 14 | 4100 |
| Strontium | na | na | na | na | na | 96 | 110 | na | na | 660 | 19000 |
| Thallium | 6.6 | 75 | 9.2 | 0.9 | 1.6 | 0.068 | 2.8 | na | 0.1 | 0.032 | 2.8 |
| Uranium | 21000 | 39000 | 1900 | 1600 | 1700 | 750 | 2000 | na | 25 | 220 | 4800 |
| Vanadium | 84 | 170 | 8.9 | 6.7 | 7.6 | 480 | 1500 | na | 0.025 | 140 | 3300 |
| Zinc | 320 | 2400 | 350 | 48 | 85 | 170 | 1800 | 120 | 160 | 98 | 6000 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | na | na | na | na | na | 160 | 490 | na | 0.25 | 120 | 6200 |
| Acenaphthylene | na | na | na | na | na | 160 | 500 | na | na | 120 | 5200 |
| Acetone | 1200 | 30000 | 7.5 | 170 | 14 | 1.2 | 1.4 | na | na | 15 | 2900 |
| Anthracene | na | na | na | na | na | 310 | 1100 | na | 6.8 | 210 | 5800 |
| Aroclor-1242 | 0.26 | 1.4 | 1 | 0.041 | 0.079 | 0.76 | 30 | na | na | 0.38 | 16 |
| Aroclor-1254 | 0.17 | 0.22 | 1.3 | 0.041 | 0.08 | 0.88 | 52 | na | 160 | 0.44 | 0.15 |
| Aroclor-1260 | 3.7 | 4.6 | 46 | 0.88 | 1.7 | 20 | 3000 | na | na | 10 | 0.14 |
| Benzo(a)anthracene | na | na | na | na | na | 3.4 | 6.2 | na | 18 | 3 | 32 |
| Benzo(a)pyrene | na | na | na | na | na | 85 | 280 | na | na | 53 | 380 |
| Benzo(b)fluoranthene | na | na | na | na | na | 52 | 130 | na | 18 | 38 | 250 |
| Benzo(g,h,i)perylene | na | na | na | na | na | 47 | 540 | na | na | 24 | 94 |

**Table H-5.3-1 (continued)**

| COPCs | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil-dwelling invertebrate) | Plant (terrestrial autotroph - producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | na | na | na | na | na | 100 | 350 | na | na | 62 | 400 |
| Benzoic acid | na | na | na | na | na | 1.3 | 4.2 | na | na | 1 | 350 |
| Bis(2-ethylhexyl)phthalate | 0.045 | 0.033 | 20 | 0.02 | 0.04 | 1.1 | 2700 | na | na | 0.59 | 1.2 |
| Bromomethane | na | na | na | na | na | na | na | na | na | na | na |
| Butanone[2-] | na | na | na | na | na | 360 | 420 | na | na | 2600 | 420000 |
| Butylbenzylphthalate | na | na | na | na | na | 160 | 2300 | na | na | 90 | 1900 |
| Carbazole | na | na | na | na | na | na | na | na | na | na | na |
| Chloroaniline[4-] | na | na | na | na | na | na | na | 1.8 | 1 | na | na |
| Chloroform | na | na | na | na | na | 8 | 17 | na | na | 8.2 | 2300 |
| Chrysene | na | na | na | na | na | 3.1 | 6.5 | na | na | 2.4 | 25 |
| DDT[4,4'-] | 1.2 | 1.2 | 28 | 0.36 | 0.72 | 0.089 | 12 | na | 4.1 | 0.044 | 0.19 |
| Dibenzo(a,h)anthracene | na | na | na | na | na | 22 | 95 | na | na | 12 | 54 |
| Dibenzofuran | na | na | na | na | na | na | na | na | 6.1 | na | na |
| Dichlorobenzene[1,2-] | na | na | na | na | na | 1.5 | 11 | na | na | 0.92 | 73 |
| Dichlorobenzene[1,3-] | na | na | na | na | na | 1.3 | 12 | na | na | 0.73 | 54 |
| Dichlorobenzene[1,4-] | na | na | na | na | na | 1.5 | 11 | 1.2 | na | 0.88 | 72 |
| Dichloroethene[1,1-] | na | na | na | na | na | 14 | 40 | na | na | 11 | 2900 |
| Dimethyl phthalate | na | na | na | na | na | 46 | 67 | 10 | na | 97 | 24000 |
| Dimethylphenol[2,4-] | na | na | na | na | na | 38 | 43 | 1.8 | 0.79 | 550 | 17000 |
| Di-n-butylphthalate | 0.068 | 0.24 | 0.39 | 0.011 | 0.021 | 370 | 16000 | na | 160 | 180 | 5000 |
| Dinitrotoluene[2,4-] | na | na | na | na | na | 0.52 | 0.62 | na | na | 2.7 | 150 |

**Table H-5.3-1 (continued)**

| COPCs | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil-dwelling invertebrate) | Plant (terrestrial autotroph - producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Di-n-octylphthalate | na | na | na | na | na | 2.2 | 16000 | na | na | 1.1 | 16 |
| Ethylbenzene | na | na | na | na | na | 24 | 35 | na | na | 47 | 7600 |
| Fluoranthene | na | na | na | na | na | 38 | 260 | 10 | na | 22 | 360 |
| Fluorene | na | na | na | na | na | 340 | 1100 | 3.7 | na | 250 | 9300 |
| Hexachlorobenzene | 0.56 | 82 | 100 | 0.079 | 0.15 | 0.4 | 1400 | 10 | 10 | 0.2 | 250 |
| Indeno(1,2,3-cd)pyrene | na | na | na | na | na | 110 | 590 | na | na | 62 | 270 |
| Isopropylbenzene | na | na | na | na | na | 24 | 35 | na | na | 47 | 7600 |
| Isopropyltoluene[4-] | na | na | na | na | na | 25 | 61 | na | 200 | 23 | 3100 |
| Methyl-2-pentanone[4-] | na | na | na | na | na | 9.8 | 15 | na | na | 15 | 6600 |
| Methylene chloride | na | na | na | na | na | 2.6 | 3.4 | na | 1600 | 9 | 1700 |
| Methylnaphthalene[2-] | na | na | na | na | na | 3.8 | 16 | na | na | 2.5 | 130 |
| Naphthalene | 100 | 590 | 3.4 | 16 | 5.7 | 9.7 | 12 | na | 1 | 27 | 1200 |
| Pentachlorophenol | 2 | 5 | 31 | 0.36 | 0.72 | 1.6 | 170 | 31 | 5 | 0.81 | 13 |
| Phenanthrene | na | na | na | na | na | 15 | 59 | 5.5 | na | 10 | 290 |
| Pyrene | na | na | na | na | na | 32 | 110 | 10 | na | 22 | 360 |
| Styrene | na | na | na | na | na | na | na | 1.2 | 300 | na | na |
| TCDD[2,3,7,8-] | na | na | na | na | na | 0.00000058 | 0.000048 | 5 | na | 0.00000029 | 0.0000012 |
| Tetrachloroethene | na | na | na | na | na | 0.36 | 8.8 | na | 10 | 0.18 | 31 |
| Toluene | na | na | na | na | na | 25 | 61 | na | 200 | 23 | 3100 |
| Trichloro-1,2,2-trifluoroethane[1,1,2-] | na | na | na | na | na | na | na | na | na | na | na |
| Trichloroethene | na | na | na | na | na | 55 | 170 | na | na | 42 | 6400 |

**Table H-5.3-1 (continued)**

| COPCs | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil-dwelling invertebrate) | Plant (terrestrial autotroph - producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichlorofluoromethane | na | na | na | na | na | na | na | na | na | na | na |
| Trimethylbenzene[1,2,4-] | na | na | na | na | na | 24 | 35 | na | na | 47 | 7600 |
| Trimethylbenzene[1,3,5-] | na | na | na | na | na | 24 | 35 | na | na | 47 | 7600 |
| Xylene (total) | 280 | 3200 | 90 | 41 | 56 | 2 | 7 | na | 100 | 1.4 | 130 |
| Xylene[1,2-] | 280 | 3200 | 90 | 41 | 56 | 2 | 7 | na | 100 | 1.4 | 130 |
| Xylene[1,3-]+Xylene[1,4-] | 280 | 3200 | 90 | 41 | 56 | 2 | 7 | na | 100 | 1.4 | 130 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | |
| Americium-241 | 35000 | 62000 | 13000 | 4000 | 4000 | 32000 | 32000 | 44 | 21000 | 31000 | 26000 |
| Cesium-137 | 3700 | 2900 | 4200 | 3800 | 3700 | 2400 | 2300 | 1700 | 2300 | 2400 | 680 |
| Plutonium-238 | 32000 | 130000 | 8300 | 2000 | 2100 | 110000 | 120000 | 44 | 110000 | 92000 | 30000 |
| Plutonium-239/240 | 34000 | 160000 | 8600 | 2100 | 2100 | 150000 | 170000 | 47 | 160000 | 110000 | 33000 |
| Strontium-90 | 2400 | 1900 | 600 | 1500 | 930 | 1700 | 1300 | 1200 | 1300 | 1700 | 560 |
| Tritium | 630000 | 580000 | 300000 | 600000 | 440000 | 330000 | 230000 | 48000 | 36000 | 340000 | 190000 |
| Uranium 235/236 | 10000 | 10000 | 9000 | 6400 | 6400 | 5100 | 5100 | 55 | 4000 | 5100 | 4800 |
| Uranium-234 | 120000 | 190000 | 48000 | 14000 | 14000 | 91000 | 96000 | 51 | 14000 | 94000 | 45000 |
| Uranium-235/236 | 10000 | 10000 | 9000 | 6400 | 6400 | 5100 | 5100 | 55 | 4000 | 5100 | 4800 |

Note: Units are mg/kg, except for radionuclides, which are pCi/g.

* na = Not available.

**Table H-5.3-2**
**Dioxin/Furan TEF Calculations for Ecological Receptors for AOC 21-002(b)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0000026 | 0.01 | 2.6E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000011 | 0.01 | 1.1E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000020 | 0.1 | 2.0E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000012 | 0.1 | 1.2E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.000000094 | 0.1 | 9.4E-09 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000025 | 0.0003 | 7.5E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000028 | 0.0003 | 8.4E-10 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.000000085 | 1 | 8.5E-08 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000020 | 0.3 | 6.0E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000047 | 0.1 | 4.7E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **2.8E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-3**
**Minimum ESL Comparison for AOC 21-002(b)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Arsenic | 3.8 | 6.8 | Earthworm | **0.56** |
| Barium | 93 | 110 | Plant | **0.85** |
| Cadmium | 0.40 | 0.27 | Montane shrew | **1.5** |
| Chromium | 15 | 2.3 | Earthworm | **6.5** |
| Cyanide (total) | 0.40 | 0.1 | American robin (herbivore) | **4.0** |
| Lead | 132 | 14 | American robin (insectivore) | **9.4** |
| Selenium | 4.7 | 0.52 | Plant | **9.0** |
| Silver | 0.35 | 2.6 | American robin (insectivore) | 0.13 |
| Zinc | 102 | 48 | American robin (insectivore) | **2.1** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acetone | 0.012 | 1.2 | Deer mouse | 0.010 |
| Anthracene | 0.015 | 6.8 | Plant | 0.0022 |
| Aroclor-1254 | 0.042 | 0.041 | American robin (insectivore) | **1.0** |
| Aroclor-1260 | 0.017 | 0.14 | Red fox | 0.12 |
| Benzo(a)anthracene | 0.065 | 3 | Montane shrew | 0.022 |
| Benzo(a)pyrene | 0.081 | 53 | Montane shrew | 0.0015 |
| Benzo(b)fluoranthene | 0.17 | 18 | Plant | 0.0094 |
| Benzo(g,h,i)perylene | 0.17 | 24 | Montane shrew | 0.0071 |
| Benzo(k)fluoranthene | 0.41 | 62 | Montane shrew | 0.0066 |
| Bis(2-ethylhexyl)phthalate | 2.0 | 0.02 | American robin (insectivore) | **100** |
| Chrysene | 0.060 | 2.4 | Montane shrew | 0.025 |
| Dimethyl phthalate | 0.12 | 10 | Earthworm | 0.012 |
| Di-n-butylphthalate | 0.47 | 0.011 | American robin (insectivore) | **43** |
| Fluoranthene | 0.051 | 10 | Earthworm | 0.0051 |
| Indeno(1,2,3-cd)pyrene | 0.17 | 62 | Montane shrew | 0.0027 |
| Methyl-2-pentanone[4-] | 0.0017 | 9.8 | Deer mouse | 0.00017 |
| Methylene chloride | 0.0055 | 2.6 | Deer mouse | 0.0021 |
| Phenanthrene | 0.037 | 5.5 | Earthworm | 0.0067 |
| Pyrene | 0.049 | 10 | Earthworm | 0.0049 |
| 2,3,7,8-TCDD | 0.00000028 | 0.00000029 | Montane shrew | **0.97** |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.055 | 44 | Earthworm | 0.0013 |
| Plutonium-238 | 0.038 | 44 | Earthworm | 0.00086 |
| Plutonium-239/240 | 0.85 | 47 | Earthworm | 0.018 |
| Tritium | 0.020 | 36000 | Plant | 0.00000056 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-4**
**Hazard Index Analysis for AOC 21-002(b)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 3.8 | 0.024 | 0.0035 | 0.091 | 0.21 | 0.15 | 0.12 | 0.024 | **0.56** | 0.21 | 0.25 | 0.0047 |
| Barium | 93 | 0.0084 | 0.0025 | 0.11 | 0.093 | 0.099 | 0.051 | 0.028 | 0.28 | **0.85** | 0.071 | 0.0023 |
| Cadmium | 0.40 | 0.20 | 0.00069 | 0.092 | **1.4** | **0.75** | **0.79** | 0.041 | 0.0029 | 0.013 | **1.5** | 0.00079 |
| Chromium | 15 | 0.0019 | 0.00040 | 0.0078 | 0.018 | 0.014 | 0.0078 | 0.0011 | **6.5** | **6.2** | 0.020 | 0.00050 |
| Cyanide (total) | 0.40 | **0.85** | **0.69** | **4.0** | **4.0** | **4.0** | 0.0012 | 0.00054 | na* | na | 0.0013 | 0.00018 |
| Lead | 132 | **1.1** | 0.16 | **6.3** | **9.4** | **8.3** | **1.1** | **0.36** | 0.078 | **1.1** | **1.8** | 0.036 |
| Selenium | 4.7 | **0.84** | 0.048 | **4.7** | **6.3** | **5.4** | **5.7** | **2.2** | **1.1** | **9.0** | **7.1** | 0.056 |
| Zinc | 102 | **0.32** | 0.043 | 0.29 | **2.1** | **1.2** | **0.60** | 0.057 | **0.85** | **0.64** | **1.0** | 0.017 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.042 | 0.25 | 0.19 | 0.032 | **1.0** | **0.52** | 0.048 | 0.00080 | na | 0.00026 | 0.095 | 0.28 |
| Bis(2-ethylhexyl)phthalate | 2.0 | **44** | **60** | 0.100 | **100** | **50** | **1.8** | 0.00074 | na | na | **3.4** | **1.7** |
| Di-n-butylphthalate | 0.47 | **6.9** | **2.0** | **1.2** | **43** | **22** | 0.0013 | 0.000029 | na | 0.0029 | 0.0026 | 0.000094 |
| 2,3,7,8-TCDD equivalent | 0.00000028 | na | na | na | na | na | **0.48** | 0.0058 | 0.000000056 | na | **0.97** | 0.23 |
| **HI** | | **54** | **63** | **17** | **168** | **92** | **11** | **3** | **9** | **18** | **16** | **2** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-5**
**Dioxin/Furan TEF Calculations for**
**Ecological Receptors for Consolidated Unit 21-006(c)-99**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.000022 | 0.01 | 2.2E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000052 | 0.01 | 5.2E-08 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 0.00000029 | 0.01 | 2.9E-09 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 0.00000030 | 0.1 | 3.0E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.00000086 | 0.1 | 8.6E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.00000089 | 0.1 | 8.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000025 | 0.1 | 2.5E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000025 | 0.1 | 2.5E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.00000027 | 0.1 | 2.7E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.00024 | 0.0003 | 7.2E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.000016 | 0.0003 | 4.8E-09 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 0.00000010 | 0.03 | 3.0E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000019 | 0.3 | 5.7E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000021 | 0.1 | 2.1E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **7.1E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-6**
**Minimum ESL Comparison for Consolidated Unit 21-006(c)-99**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 1.3 | 0.05 | Plant | **26** |
| Barium | 71 | 110 | Plant | **0.65** |
| Chromium | 6.2 | 2.3 | Earthworm | **2.7** |
| Copper | 8.8 | 15 | American robin (insectivore) | **0.59** |
| Cyanide (total) | 0.11 | 0.1 | American robin (herbivore) | **1.1** |
| Lead | 16 | 14 | American robin (insectivore) | **1.1** |
| Mercury | 0.062 | 0.013 | American robin (insectivore) | **4.8** |
| Nickel | 5.6 | 9.7 | Montane shrew | **0.58** |
| Selenium | 1.7 | 0.52 | Plant | **3.3** |
| Zinc | 380 | 48 | American robin (insectivore) | **7.9** |
| **Organic Chemicals (mg/kg)** | | | | |
| Benzo(a)anthracene | 0.98 | 3 | Montane shrew | **0.33** |
| Benzo(a)pyrene | 0.95 | 53 | Montane shrew | 0.018 |
| Benzo(b)fluoranthene | 1.8 | 18 | Plant | 0.10 |
| Benzo(g,h,i)perylene | 2.8 | 24 | Montane shrew | 0.12 |
| Benzo(k)fluoranthene | 0.64 | 62 | Montane shrew | 0.010 |
| Bis(2-ethylhexyl)phthalate | 8.7 | 0.02 | American robin (insectivore) | **435** |
| Chrysene | 1.5 | 2.4 | Montane shrew | **0.63** |
| Fluoranthene | 0.48 | 10 | Earthworm | 0.048 |
| Indeno(1,2,3-cd)pyrene | 2.3 | 62 | Montane shrew | 0.037 |
| Methylene chloride | 0.0022 | 2.6 | Deer mouse | 0.00085 |
| Phenanthrene | 1.4 | 5.5 | Earthworm | 0.25 |
| Pyrene | 0.38 | 10 | Earthworm | 0.038 |
| 2,3,7,8-TCDD equivalent | 0.00000071 | 0.00000029 | Montane shrew | **2.4** |
| Tetrachloroethene | 0.0063 | 0.18 | Montane shrew | 0.035 |
| Toluene | 0.00053 | 23 | Montane shrew | 0.000023 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.84 | 44 | Earthworm | 0.019 |
| Cesium-137 | 0.83 | 680 | Red fox | 0.0012 |
| Plutonium-238 | 0.12 | 44 | Earthworm | 0.0027 |
| Plutonium-239/240 | 19 | 47 | Earthworm | **0.40** |
| Strontium-90 | 0.49 | 560 | Red fox | 0.00088 |
| Tritium | 0.25 | 36000 | Plant | 0.0000069 |
| Uranium-234 | 5.6 | 51 | Earthworm | 0.11 |
| Uranium-235/236 | 0.18 | 55 | Earthworm | 0.0033 |
| Uranium-238 | 1.2 | 55 | Earthworm | 0.022 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-7**
**Hazard Index Analysis for Consolidated Unit 21-006(c)-99**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 1.3 | na* | na | na | na | na | **2.8** | **0.46** | 0.017 | **26** | **5.1** | 0.030 |
| Barium | 71 | 0.0065 | 0.0019 | 0.087 | 0.071 | 0.076 | 0.039 | 0.022 | 0.22 | **0.65** | 0.055 | 0.0017 |
| Chromium | 6.2 | 0.00080 | 0.00017 | 0.0032 | 0.0074 | 0.0056 | 0.0032 | 0.00047 | **2.7** | **2.6** | 0.0082 | 0.00021 |
| Copper | 8.8 | 0.080 | 0.0055 | 0.23 | **0.59** | **0.40** | 0.14 | 0.033 | 0.11 | 0.13 | 0.23 | 0.0023 |
| Cyanide (total) | 0.11 | 0.23 | 0.18 | **1.1** | **1.1** | **1.1** | 0.00031 | 0.00014 | na | na | 0.00034 | 0.000048 |
| Lead | 16 | 0.13 | 0.020 | **0.75** | **1.1** | **0.99** | 0.13 | 0.043 | 0.0093 | 0.13 | 0.22 | 0.0043 |
| Mercury | 0.062 | **0.76** | 0.22 | **0.89** | **4.8** | **2.8** | 0.021 | 0.0028 | **1.2** | 0.0018 | 0.037 | 0.0014 |
| Nickel | 5.6 | 0.035 | 0.0019 | 0.035 | 0.27 | 0.15 | 0.28 | 0.011 | 0.020 | 0.15 | **0.58** | 0.0047 |
| Selenium | 1.7 | **0.31** | 0.018 | **1.7** | **2.3** | **2.0** | **2.1** | **0.83** | **0.43** | **3.3** | **2.6** | 0.021 |
| Zinc | 380 | **1.2** | 0.16 | **1.1** | **7.9** | **4.5** | **2.2** | 0.21 | **3.2** | **2.4** | **3.9** | 0.063 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzo(a)anthracene | 0.98 | na | na | na | na | na | 0.29 | 0.16 | na | 0.054 | **0.33** | 0.031 |
| Bis(2-ethylhexyl)phthalate | 8.7 | **190** | **260** | **0.44** | **435** | **220** | **7.9** | 0.0032 | na | na | **15** | **7.3** |
| Chrysene | 1.5 | na | na | na | na | na | **0.48** | 0.23 | na | na | **0.63** | **0.060** |
| 2,3,7,8-TCDD equivalent | 0.00000071 | na | na | na | na | na | **1.2** | 0.015 | 0.00000014 | na | **2.5** | **0.59** |
| Radionuclides (pCi/g) | | | | | | | | | | | | |
| Plutonium-239/240 | 19 | 0.00055 | 0.00012 | 0.0022 | 0.0090 | 0.0090 | 0.00013 | 0.00011 | **0.40** | 0.00012 | 0.00017 | 0.00057 |
| **HI** | | **193** | **261** | **6** | **453** | **232** | **18** | **2** | **8** | **35** | **31** | **8** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-8**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-009**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equvalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.000011 | 0.01 | 1.1E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000016 | 0.01 | 1.6E-08 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 0.00000035 | 0.1 | 3.5E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.00000067 | 0.1 | 6.7E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.00000055 | 0.1 | 5.5E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000011 | 0.1 | 1.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.00000015 | 0.1 | 1.5E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000087 | 0.0003 | 2.6E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000037 | 0.0003 | 1.1E-09 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.00000018 | 1 | 1.8E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000015 | 0.1 | 1.5E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **5.3E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-9**
**Minimum ESL Comparison for SWMU 21-009**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Barium | 153 | 110 | Plant | **1.4** |
| Chromium | 14 | 2.3 | Earthworm | **6.1** |
| Cyanide (total) | 0.32 | 0.10 | American robin (herbivore) | **3.2** |
| Lead | 17 | 14 | American robin (insectivore) | **1.2** |
| Selenium | 11 | 0.52 | Plant | **21** |
| Zinc | 49 | 48 | American robin (insectivore) | **1.0** |
| **Organic Chemicals (mg/kg)** | | | | |
| Anthracene | 0.015 | 6.8 | Plant | 0.0022 |
| Benzo(a)pyrene | 0.069 | 53 | Montane shrew | 0.0013 |
| Benzo(b)fluoranthene | 0.16 | 18 | Plant | 0.0089 |
| Benzo(k)fluoranthene | 0.057 | 62 | Montane shrew | 0.00092 |
| Chloroform | 0.0012 | 8.0 | Deer mouse | 0.00015 |
| Dichloroethene[1,1-] | 0.00089 | 11 | Montane shrew | 0.000081 |
| Fluoranthene | 0.10 | 10 | Earthworm | 0.010 |
| 2,3,7,8-TCDD equivalent | 0.00000053 | 0.00000029 | Montane shrew | **1.8** |
| Pyrene | 0.051 | 10 | Earthworm | 0.0051 |
| Tetrachloroethene | 0.00068 | 0.18 | Montane shrew | 0.0038 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.23 | 44 | Earthworm | 0.0052 |
| Plutonium-239/240 | 0.31 | 47 | Earthworm | 0.0066 |
| Tritium | 0.044 | 36000 | Plant | 0.0000012 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-10**
**Hazard Index Analysis for SWMU 21-009**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Barium | 153 | 0.014 | 0.0041 | 0.19 | 0.15 | 0.16 | 0.085 | 0.046 | **0.46** | **1.4** | 0.12 | 0.0037 |
| Chromium | 14 | 0.0019 | 0.00039 | 0.0076 | 0.017 | 0.013 | 0.0076 | 0.0011 | **6.1** | **6.0** | 0.019 | 0.00048 |
| Cyanide (total) | 0.32 | **0.67** | **0.54** | **3.2** | **3.2** | **3.2** | 0.00093 | 0.00043 | na* | na | 0.0010 | 0.00014 |
| Lead | 17 | 0.14 | 0.021 | **0.80** | **1.2** | **1.0** | 0.14 | 0.045 | 0.0098 | 0.14 | 0.23 | 0.0045 |
| Selenium | 11 | **1.9** | 0.11 | **11** | **14** | **12** | **13** | **5.1** | **2.6** | **21** | **16** | 0.13 |
| Zinc | 49 | 0.15 | 0.021 | 0.14 | **1.0** | **0.58** | 0.29 | 0.027 | **0.41** | **0.31** | **0.50** | 0.0082 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| 2,3,7,8-TCDD equivalent | 0.00000053 | na | na | na | na | na | **0.91** | 0.011 | 0.00000011 | na | **1.8** | **0.44** |
| **HI** | | **3** | 0.7 | **15** | **20** | **17** | **14** | **5** | **10** | **29** | **19** | 0.6 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-11**
**Minimum ESL Comparison for SWMU 21-012(b)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.19 | 0.050 | Plant | **3.8** |
| Arsenic | 2.8 | 6.8 | Earthworm | **0.41** |
| Barium | 78 | 110 | Plant | **0.71** |
| Beryllium | 0.65 | 2.5 | Plant | 0.26 |
| Cadmium | 0.30 | 0.27 | Montane shrew | **1.1** |
| Chromium | 13 | 2.3 | Earthworm | **5.7** |
| Cobalt | 2.0 | 13 | Plant | 0.15 |
| Copper | 136 | 15 | American robin (insectivore) | **9.1** |
| Cyanide (total) | 0.20 | 0.10 | American robin (herbivore) | **2.0** |
| Lead | 18 | 14 | American robin (insectivore) | **1.3** |
| Lithium | 12 | 2.0 | Plant | **6.0** |
| Mercury | 1.4 | 0.013 | American robin (insectivore) | **108** |
| Molybdenum | 1.2 | 2.0 | Plant | **0.60** |
| Nickel | 5.4 | 9.7 | Montane shrew | **0.56** |
| Selenium | 0.97 | 0.52 | Plant | **1.9** |
| Strontium | 27 | 96 | Deer mouse | 0.28 |
| Uranium | 2.2 | 25 | Plant | 0.088 |
| Vanadium | 15 | 0.025 | Plant | **600** |
| Zinc | 97 | 48 | American robin (insectivore) | **2.0** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acetone | 0.0081 | 1.2 | Deer mouse | 0.0068 |
| Aroclor-1260 | 0.0015 | 0.14 | Red fox | 0.011 |
| Benzo(a)anthracene | 0.024 | 3.0 | Montane shrew | 0.0080 |
| Benzo(b)fluoranthene | 0.016 | 18 | Plant | 0.00089 |
| Benzoic acid | 0.63 | 1.0 | Montane shrew | **0.63** |
| Chloroform | 0.00037 | 8.0 | Deer mouse | 0.000046 |
| Chrysene | 0.031 | 2.4 | Montane shrew | 0.013 |
| Fluoranthene | 0.017 | 10 | Earthworm | 0.0017 |
| Methylene chloride | 0.0048 | 2.6 | Deer mouse | 0.0018 |
| Phenanthrene | 0.026 | 5.5 | Earthworm | 0.0047 |
| Pyrene | 0.020 | 10 | Earthworm | 0.0020 |
| Toluene | 0.0048 | 23 | Montane shrew | 0.00021 |
| Trichloroethene | 0.00032 | 42 | Montane shrew | 0.0000076 |

**Table H-5.3-11 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.69 | 44 | Earthworm | 0.016 |
| Cesium-134 | 0.13 | 320 | Red fox | 0.00041 |
| Cesium-137 | 0.39 | 680 | Red fox | 0.00057 |
| Plutonium-238 | 0.11 | 44 | Earthworm | 0.0025 |
| Plutonium-239/240 | 0.44 | 47 | Earthworm | 0.0094 |
| Tritium | 0.075 | 36000 | Plant | 0.0000021 |
| Uranium-234 | 1.4 | 51 | Earthworm | 0.027 |
| Uranium-235/236 | 0.083 | 55 | Earthworm | 0.0015 |
| Uranium-238 | 1.3 | 55 | Earthworm | 0.024 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-12**
**Hazard Index Analysis for SWMU 21-012(b)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 0.19 | na* | na | na | na | na | **0.40** | 0.067 | 0.0025 | **3.8** | **0.74** | 0.0043 |
| Arsenic | 2.8 | 0.018 | 0.0026 | 0.067 | 0.16 | 0.11 | 0.088 | 0.018 | **0.41** | 0.16 | 0.19 | 0.0035 |
| Barium | 78 | 0.0071 | 0.0021 | 0.095 | 0.078 | 0.084 | 0.043 | 0.024 | 0.24 | **0.71** | 0.060 | 0.0019 |
| Cadmium | 0.30 | 0.15 | 0.00051 | 0.067 | **1.0** | **0.55** | **0.58** | 0.030 | 0.0021 | 0.0093 | **1.1** | 0.00058 |
| Chromium | 13 | 0.0017 | 0.00036 | 0.0070 | 0.016 | 0.012 | 0.0070 | 0.0010 | **5.7** | **5.5** | 0.018 | 0.00044 |
| Copper | 136 | **1.2** | 0.085 | **3.6** | **9.1** | **6.2** | **2.1** | **0.50** | **1.7** | **1.9** | **3.6** | 0.036 |
| Cyanide (total) | 0.20 | **0.42** | **0.34** | **2.0** | **2.0** | **2.0** | 0.00059 | 0.00027 | na | na | 0.00064 | 0.000090 |
| Lead | 18 | 0.15 | 0.022 | **0.85** | **1.3** | **1.1** | 0.15 | 0.048 | 0.010 | 0.15 | 0.25 | 0.0048 |
| Lithium | 12 | na | na | na | na | na | 0.12 | 0.046 | na | **6.0** | **0.31** | 0.013 |
| Mercury | 1.4 | **17** | **4.9** | **20** | **108** | **63** | **0.46** | 0.063 | **28** | 0.041 | **0.81** | 0.030 |
| Molybdenum | 1.2 | 0.0089 | 0.00068 | 0.061 | 0.068 | 0.064 | na | na | na | **0.6** | na | na |
| Nickel | 5.4 | 0.034 | 0.0019 | 0.034 | 0.26 | 0.14 | 0.27 | 0.011 | 0.019 | 0.14 | **0.56** | 0.0045 |
| Selenium | 0.97 | 0.17 | 0.010 | **0.97** | **1.3** | **1.1** | **1.2** | **0.46** | 0.24 | **1.9** | **1.5** | 0.012 |
| Vanadium | 15 | 0.18 | 0.088 | **1.7** | **2.2** | **2.0** | 0.031 | 0.0100 | na | **600** | 0.11 | 0.0045 |
| Zinc | 97 | 0.30 | 0.040 | 0.28 | **2.0** | **1.1** | **0.57** | 0.054 | **0.80** | **0.60** | **0.99** | 0.016 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.63 | na | na | na | na | na | **0.48** | 0.15 | na | na | **0.63** | 0.0018 |
| **HI** | | **20** | **5** | **30** | **127** | **77** | **6** | 1 | **37** | **622** | **11** | 0.1 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-13**
**Dioxin/Furan TEF Calculations forEcological Receptors for SWMU 21-013(c)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.000013 | 0.01 | 1.3E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000024 | 0.01 | 2.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.00000054 | 0.1 | 5.4E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.00000049 | 0.1 | 4.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000039 | 0.1 | 3.9E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000021 | 0.1 | 2.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.00000023 | 0.1 | 2.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.00011 | 0.0003 | 3.3E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000052 | 0.0003 | 1.6E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000027 | 0.3 | 8.1E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000026 | 0.1 | 2.6E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **4.8E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-14**
**Minimum ESL Comparison for SWMU 21-013(c)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Arsenic | 3.8 | 6.8 | Earthworm | **0.56** |
| Barium | 109 | 110 | Plant | **0.99** |
| Cadmium | 0.21 | 0.27 | Montane shrew | **0.78** |
| Chromium | 10 | 2.3 | Earthworm | **4.3** |
| Lead | 14 | 14 | American robin (insectivore) | **1.0** |
| Mercury | 0.32 | 0.013 | American robin (insectivore) | **25** |
| Nickel | 6.7 | 9.7 | Montane shrew | **0.69** |
| Selenium | 2.1 | 0.52 | Plant | **4.0** |
| Thallium | 0.19 | 0.032 | Montane shrew | **5.9** |
| Uranium | 1.3 | 25 | Plant | 0.052 |
| Vanadium | 23 | 0.025 | Plant | **920** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.037 | 0.25 | Plant | 0.15 |
| Anthracene | 0.024 | 6.8 | Plant | 0.0035 |
| Aroclor-1254 | 0.0042 | 0.041 | American robin (insectivore) | 0.10 |
| Aroclor-1260 | 0.0023 | 0.14 | Red fox | 0.016 |
| Benzo(a)anthracene | 0.080 | 3.0 | Montane shrew | 0.027 |
| Benzo(a)pyrene | 0.035 | 53 | Montane shrew | 0.00066 |
| Benzo(b)fluoranthene | 0.056 | 18 | Plant | 0.0031 |
| Benzo(g,h,i)perylene | 0.041 | 24 | Montane shrew | 0.0017 |
| Benzo(k)fluoranthene | 0.18 | 62 | Montane shrew | 0.0029 |
| Benzoic acid | 0.46 | 1.0 | Montane shrew | **0.46** |
| Bis(2-ethylhexyl)phthalate | 0.36 | 0.02 | American robin (insectivore) | **18** |
| Chloroform | 0.00029 | 8.0 | Deer mouse | 0.000036 |
| Chrysene | 0.046 | 2.4 | Montane shrew | 0.019 |
| Fluoranthene | 0.065 | 10 | Earthworm | 0.0065 |
| Fluorene | 0.021 | 3.7 | Earthworm | 0.0057 |
| Indeno(1,2,3-cd)pyrene | 0.038 | 62 | Montane shrew | 0.00061 |
| Phenanthrene | 0.045 | 5.5 | Earthworm | 0.0082 |
| Pyrene | 0.068 | 10 | Earthworm | 0.0068 |
| 2,3,7,8-TCDD equivalent | 0.00000048 | 0.00000029 | Montane shrew | **1.7** |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.042 | 44 | Earthworm | 0.00095 |
| Cesium-137 | 0.25 | 680 | Red fox | 0.00037 |
| Plutonium-239/240 | 0.11 | 560 | Earthworm | 0.00020 |
| Strontium-90 | 0.12 | 36000 | Red fox | 0.0000033 |
| Tritium | 0.95 | 51 | Plant | 0.019 |
| Uranium-235/236 | 1.0 | 55 | Earthworm | 0.018 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-15**
**Hazard Index Analysis for SWMU 21-013(c)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 3.8 | 0.024 | 0.0035 | 0.091 | 0.21 | 0.15 | 0.12 | 0.024 | **0.56** | 0.21 | 0.25 | 0.0047 |
| Barium | 108.7 | 0.0099 | 0.0029 | 0.13 | 0.11 | 0.12 | 0.060 | 0.033 | **0.33** | **0.99** | 0.084 | 0.0027 |
| Cadmium | 0.21 | 0.11 | 0.00037 | 0.049 | **0.74** | **0.40** | **0.42** | 0.022 | 0.0015 | 0.0067 | **0.78** | 0.00042 |
| Chromium | 10.4 | 0.0014 | 0.00028 | 0.0055 | 0.013 | 0.0095 | 0.0055 | 0.00080 | **4.3** | **4.3** | 0.014 | 0.00035 |
| Lead | 14.1 | 0.12 | 0.017 | **0.67** | **1.0** | **0.88** | 0.12 | 0.038 | 0.0083 | 0.12 | 0.20 | 0.0038 |
| Mercury | 0.32 | **3.9** | **1.1** | **4.6** | **25** | **15** | 0.11 | 0.015 | **6.4** | 0.0094 | 0.19 | 0.0069 |
| Nickel | 6.7 | 0.042 | 0.0023 | 0.042 | **0.32** | 0.18 | **0.33** | 0.013 | 0.024 | 0.18 | **0.69** | 0.0056 |
| Selenium | 2.1 | **0.37** | 0.022 | **2.1** | **2.8** | **2.4** | **2.5** | **0.99** | **0.51** | **4.0** | **3.2** | 0.025 |
| Thallium | 0.19 | 0.029 | 0.0025 | 0.021 | 0.21 | 0.12 | **2.8** | 0.068 | na* | **1.9** | **5.9** | 0.068 |
| Vanadium | 23.1 | 0.27 | 0.14 | **2.6** | **3.4** | **3.0** | 0.048 | 0.015 | na | **920** | 0.16 | 0.0070 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.46 | na | na | na | na | na | **0.35** | 0.11 | na | na | **0.46** | 0.0013 |
| Bis(2-ethylhexyl)phthalate | 0.36 | **7.9** | **11** | 0.06 | **18** | **8.9** | **0.32** | 0.00013 | na | na | **0.6** | 0.30 |
| 2,3,7,8-TCDD equivalent | 0.00000048 | na | na | na | na | na | **0.83** | 0.010 | 0.000000097 | na | **1.7** | **0.40** |
| **HI** | | **13** | **12** | **10** | **52** | **31** | **8** | 1 | **12** | **932** | **14** | 0.8 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

**Table H-5.3-16**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-022(h)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.000018 | 0.01 | 1.8E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000029 | 0.01 | 2.9E-08 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 0.00000025 | 0.01 | 2.5E-09 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 0.00000021 | 0.1 | 2.1E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.00000092 | 0.1 | 9.2E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.00000049 | 0.1 | 4.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000041 | 0.1 | 4.1E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000025 | 0.1 | 2.5E-08 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 0.00000011 | 0.1 | 1.1E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.00000027 | 0.1 | 2.7E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.00013 | 0.0003 | 3.9E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000066 | 0.0003 | 2.0E-09 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.00000014 | 1 | 1.4E-07 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 0.00000011 | 0.03 | 3.3E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000034 | 0.3 | 1.0E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000035 | 0.1 | 3.5E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **8.0E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-17**
**Minimum ESL Comparison for SWMU 21-022(h)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.18 | 0.05 | Plant | **3.6** |
| Barium | 78 | 110 | Plant | **0.71** |
| Cadmium | 3.0 | 0.27 | Montane shrew | **11** |
| Chromium | 105 | 2.3 | Earthworm | **46** |
| Copper | 181 | 15 | American robin (insectivore) | **12** |
| Cyanide (total) | 0.23 | 0.1 | American robin (herbivore) | **2.3** |
| Lead | 1675 | 14 | American robin (insectivore) | **120** |
| Mercury | 0.78 | 0.013 | American robin (insectivore) | **60** |
| Molybdenum | 10 | 2 | Plant | **5.0** |
| Nickel | 7.2 | 9.7 | Montane shrew | **0.74** |
| Selenium | 0.41 | 0.52 | Plant | **0.79** |
| Silver | 20 | 2.6 | American robin (insectivore) | **7.7** |
| Zinc | 561 | 48 | American robin (insectivore) | **12** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.43 | 0.25 | Plant | **1.7** |
| Anthracene | 0.62 | 6.8 | Plant | 0.091 |
| Aroclor-1254 | 0.048 | 0.041 | American robin (insectivore) | **1.2** |
| Aroclor-1260 | 0.021 | 0.14 | Red fox | 0.15 |
| Benzo(a)anthracene | 0.96 | 3 | Montane shrew | **0.32** |
| Benzo(a)pyrene | 0.93 | 53 | Montane shrew | 0.018 |
| Benzo(b)fluoranthene | 1.3 | 18 | Plant | 0.072 |
| Benzo(g,h,i)perylene | 2.0 | 24 | Montane shrew | 0.083 |
| Benzo(k)fluoranthene | 1.5 | 62 | Montane shrew | 0.024 |
| Bis(2-ethylhexyl)phthalate | 1.2 | 0.02 | American robin (insectivore) | **60** |
| Butylbenzylphthalate | 0.51 | 90 | Montane shrew | 0.0057 |
| Chrysene | 1.1 | 2.4 | Montane shrew | **0.46** |
| Dibenzo(a,h)anthracene | 0.43 | 12 | Montane shrew | 0.036 |
| Dibenzofuran | 1.1 | 6.1 | Plant | 0.18 |
| Di-n-butylphthalate | 0.35 | 0.011 | American robin (insectivore) | **32** |
| Fluoranthene | 5.6 | 10 | Earthworm | **0.56** |
| Fluorene | 0.37 | 3.7 | Earthworm | 0.10 |
| Indeno(1,2,3-cd)pyrene | 5.0 | 62 | Montane shrew | 0.081 |
| Methylene chloride | 0.0033 | 2.6 | Deer mouse | 0.0013 |
| Methylnaphthalene[2-] | 0.51 | 2.5 | Montane shrew | 0.20 |
| Naphthalene | 1.7 | 1 | Plant | **1.7** |
| Phenanthrene | 1.8 | 5.5 | Earthworm | **0.33** |

**Table H-5.3-17 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Pyrene | 9.9 | 10 | Earthworm | **0.99** |
| 2,3,7,8-TCDD equivalent | 0.00000080 | 0.00000029 | Montane shrew | **2.8** |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 1.1 | 44 | Earthworm | 0.025 |
| Cesium-137 | 0.39 | 680 | Red fox | 0.00057 |
| Plutonium-238 | 21 | 44 | Earthworm | **0.48** |
| Plutonium-239/240 | 20 | 47 | Earthworm | **0.43** |
| Strontium-90 | 0.38 | 560 | Red fox | 0.00068 |
| Tritium | 0.034 | 36000 | Plant | 0.00000094 |
| Uranium-235/236 | 0.081 | 55 | Earthworm | 0.0015 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-18**
**Hazard Index Analysis for SWMU 21-022(h)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 0.18 | na* | na | na | na | na | **0.38** | 0.063 | 0.0024 | **3.6** | **0.71** | 0.0041 |
| Barium | 78 | 0.0071 | 0.0021 | 0.095 | 0.078 | 0.084 | 0.043 | 0.024 | 0.24 | **0.71** | 0.060 | 0.0019 |
| Cadmium | 3.0 | **1.5** | 0.0051 | **0.67** | **10** | **5.5** | **5.8** | **0.30** | 0.021 | 0.092 | **11** | 0.0058 |
| Chromium | 100 | 0.014 | 0.0028 | 0.055 | 0.13 | 0.095 | 0.055 | 0.0080 | **46** | **44** | 0.14 | 0.0035 |
| Copper | 180 | **1.6** | 0.11 | **4.8** | **12** | **8.2** | **2.8** | **0.67** | **2.3** | **2.6** | **4.8** | 0.048 |
| Cyanide (total) | 0.23 | **0.49** | **0.40** | **2.3** | **2.3** | **2.3** | 0.00068 | 0.00031 | na | na | 0.00075 | 0.00011 |
| Lead | 1700 | **14** | **2.1** | **80** | **120** | **105** | **14** | **4.5** | **0.99** | **14** | **23** | **0.45** |
| Mercury | 0.78 | **9.5** | **2.8** | **11** | **60** | **35** | 0.26 | 0.035 | **16** | 0.023 | **0.46** | 0.017 |
| Molybdenum | 9.8 | 0.075 | 0.0058 | **0.52** | **0.58** | **0.54** | na | na | na | **5.0** | na | na |
| Nickel | 7.2 | 0.045 | 0.0025 | 0.045 | **0.34** | 0.19 | **0.36** | 0.014 | 0.026 | 0.19 | **0.74** | 0.0060 |
| Selenium | 0.41 | 0.073 | 0.0042 | **0.41** | **0.54** | **0.47** | **0.49** | 0.19 | 0.099 | **0.79** | **0.62** | 0.0048 |
| Silver | 20 | **1.1** | 0.024 | **1.8** | **7.7** | **4.7** | **0.84** | 0.13 | na | 0.036 | **1.4** | 0.0049 |
| Zinc | 560 | **1.8** | 0.23 | **1.6** | **12** | **6.6** | **3.3** | **0.31** | **4.7** | **3.5** | **5.7** | 0.094 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.43 | na | na | na | na | na | 0.0027 | 0.00089 | na | **1.7** | 0.0036 | 0.000070 |
| Aroclor-1254 | 0.048 | 0.28 | 0.22 | 0.037 | **1.2** | **0.60** | 0.054 | 0.00092 | na | 0.00030 | 0.11 | **0.32** |
| Benzo(a)anthracene | 0.96 | na | na | na | na | na | 0.28 | 0.15 | na | 0.053 | **0.32** | 0.030 |
| Bis(2-ethylhexyl)phthalate | 1.2 | **28** | **38** | 0.062 | **60** | **31** | **1.1** | 0.00046 | na | na | **2.1** | **1.0** |

**Table H-5.3-18 (continued)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chrysene | 1.1 | na | na | na | na | na | **0.34** | 0.16 | na | na | **0.46** | 0.042 |
| Di-n-butylphthalate | 0.35 | **5.1** | **1.5** | **0.90** | **32** | **17** | 0.00095 | 0.000022 | na | 0.0022 | 0.0019 | 0.000070 |
| Fluoranthene | 5.6 | na | na | na | na | na | 0.15 | 0.021 | **0.56** | na | 0.25 | 0.015 |
| Naphthalene | 1.7 | 0.017 | 0.0029 | **0.50** | 0.11 | 0.30 | 0.18 | 0.14 | na | **1.7** | 0.063 | 0.0014 |
| Phenanthrene | 1.8 | na | na | na | na | na | 0.12 | 0.030 | **0.33** | na | 0.18 | 0.0061 |
| Pyrene | 9.9 | na | na | na | na | na | **0.31** | 0.090 | **0.99** | na | **0.45** | 0.028 |
| 2,3,7,8-TCDD equivalent | 0.00000080 | na | na | na | na | na | **1.4** | 0.017 | 0.00000016 | na | **2.8** | **0.66** |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-238 | 21 | 0.00065 | 0.00016 | 0.0025 | 0.010 | 0.0100 | 0.00019 | 0.00017 | **0.48** | 0.00019 | 0.00023 | 0.00070 |
| Plutonium-239/240 | 20 | 0.00058 | 0.00012 | 0.0023 | 0.0094 | 0.0094 | 0.00013 | 0.00012 | **0.43** | 0.00012 | 0.00018 | 0.00060 |
| **HI** | | **64** | **45** | **105** | **319** | **218** | **32** | **7** | **73** | **78** | **55** | **3** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-19**
**Dioxin/Furan TEF Calculations for**
**Ecological Receptors for Consolidated Unit 21-023(a)-99**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0000096 | 0.01 | 9.6E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.000056 | 0.01 | 5.6E-07 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.00000061 | 0.1 | 6.1E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.00000019 | 0.1 | 1.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000031 | 0.1 | 3.1E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000019 | 0.1 | 1.9E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000097 | 0.0003 | 2.9E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.000018 | 0.0003 | 5.4E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000013 | 0.3 | 3.9E-08 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.0000000951 | 0.1 | 9.5E-09 |
| | | **2,3,7,8-TCDD Equivalent** | **8.7E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-20**
**Minimum ESL Comparison for Consolidated Unit 21-023(a)-99**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.31 | 0.050 | Plant | **6.2** |
| Arsenic | 3.7 | 6.8 | Earthworm | **0.54** |
| Barium | 90 | 110 | Plant | **0.82** |
| Chromium | 12 | 2.3 | Earthworm | **5.2** |
| Cobalt | 2.3 | 13 | Plant | 0.18 |
| Copper | 5.2 | 15 | American robin (insectivore) | **0.35** |
| Lead | 395 | 14 | American robin (insectivore) | **28** |
| Manganese | 239 | 220 | Plant | **1.1** |
| Mercury | 0.49 | 0.013 | American robin (insectivore) | **38** |
| Selenium | 5.8 | 0.52 | Plant | **11** |
| Vanadium | 11 | 0.025 | Plant | **440** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 1.4 | 0.25 | Plant | **5.6** |
| Acetone | 0.011 | 1.2 | Deer mouse | 0.0092 |
| Anthracene | 0.78 | 6.8 | Plant | 0.11 |
| Aroclor-1254 | 0.0069 | 0.041 | American robin (insectivore) | 0.17 |
| Benzo(a)anthracene | 15 | 3 | Montane shrew | **5.0** |
| Benzo(a)pyrene | 3.9 | 53 | Montane shrew | 0.074 |
| Benzo(b)fluoranthene | 4.7 | 18 | Plant | 0.26 |
| Benzo(g,h,i)perylene | 3.9 | 24 | Montane shrew | 0.16 |
| Benzo(k)fluoranthene | 0.032 | 62 | Montane shrew | 0.00052 |
| Bis(2-ethylhexyl)phthalate | 2.1 | 0.020 | American robin (insectivore) | **105** |
| Chrysene | 4.8 | 2.4 | Montane shrew | **2.0** |
| Di-n-butylphthalate | 0.094 | 0.011 | American robin (insectivore) | **8.5** |
| Fluoranthene | 6.4 | 10 | Earthworm | **0.64** |
| Fluorene | 0.42 | 3.7 | Earthworm | 0.11 |
| Indeno(1,2,3-cd)pyrene | 4.1 | 62 | Montane shrew | 0.066 |
| Methylnaphthalene[2-] | 0.40 | 2.5 | Montane shrew | 0.16 |
| Naphthalene | 1.17 | 1.0 | Plant | **1.2** |
| Phenanthrene | 1.4 | 5.5 | Earthworm | 0.25 |
| Pyrene | 5.8 | 10 | Earthworm | **0.58** |
| 2,3,7,8-TCDD equivalent | 0.00000087 | 0.00000029 | Montane shrew | **3.0** |
| Tetrachloroethene | 0.0017 | 0.18 | Montane shrew | 0.0094 |
| Toluene | 0.00040 | 23 | Montane shrew | 0.000017 |

**Table H-5.3-20 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.60 | 44 | Earthworm | 0.014 |
| Cesium-137 | 0.13 | 680 | Red fox | 0.00019 |
| Plutonium-238 | 0.072 | 44 | Earthworm | 0.0016 |
| Plutonium-239/240 | 1.5 | 47 | Earthworm | 0.032 |
| Strontium-90 | 2.0 | 560 | Red fox | 0.0036 |
| Tritium | 1.2 | 36000 | Plant | 0.000033 |
| Uranium-234 | 1.6 | 51 | Earthworm | 0.031 |
| Uranium-235/236 | 0.10 | 55 | Earthworm | 0.0018 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-21**
**Hazard Index Analysis for Consolidated Unit 21-023(a)-99**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 0.31 | na* | na | na | na | na | **0.65** | 0.11 | 0.0040 | **6.2** | **1.2** | 0.0069 |
| Arsenic | 3.7 | 0.023 | 0.0033 | 0.087 | 0.20 | 0.14 | 0.11 | 0.023 | **0.54** | 0.20 | 0.24 | 0.0045 |
| Barium | 90 | 0.0082 | 0.0024 | 0.11 | 0.090 | 0.097 | 0.050 | 0.027 | 0.27 | **0.82** | 0.069 | 0.0022 |
| Chromium | 12 | 0.0015 | 0.00031 | 0.0061 | 0.014 | 0.010 | 0.0061 | 0.00089 | **5.2** | **4.8** | 0.015 | 0.00038 |
| Copper | 5.2 | 0.047 | 0.0033 | 0.14 | **0.35** | 0.24 | 0.081 | 0.019 | 0.065 | 0.074 | 0.14 | 0.0014 |
| Lead | 395 | **3.3** | **0.49** | **19** | **28** | **25** | **3.3** | **1.1** | 0.23 | **3.3** | **5.5** | 0.11 |
| Manganese | 239 | 0.0068 | 0.0027 | 0.17 | 0.077 | 0.13 | 0.17 | 0.12 | **0.53** | **1.1** | 0.16 | 0.0058 |
| Mercury | 0.49 | **6.0** | **1.8** | **7.0** | **38** | **22** | 0.16 | 0.022 | **9.8** | 0.014 | 0.29 | 0.011 |
| Selenium | 5.8 | **1.0** | 0.060 | **5.8** | **7.7** | **6.7** | **7.0** | **2.8** | **1.4** | **11** | **8.8** | 0.069 |
| Vanadium | 11 | 0.14 | 0.067 | **1.3** | **1.7** | **1.5** | 0.024 | 0.0076 | na | **440** | 0.081 | 0.0035 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 1.4 | na | na | na | na | na | 0.0086 | 0.0028 | na | **5.6** | 0.012 | 0.00022 |
| Benzo(a)anthracene | 15 | na | na | na | na | na | **4.5** | **2.5** | na | **0.86** | **5.0** | **0.48** |
| Bis(2-ethylhexyl)phthalate | 2.1 | **47** | **64** | 0.11 | **105** | **53** | **1.9** | 0.00079 | na | na | **3.6** | **1.8** |
| Chrysene | 4.8 | na | na | na | na | na | **1.5** | **0.73** | na | na | **2.0** | 0.19 |
| Di-n-butylphthalate | 0.094 | **1.4** | **0.39** | 0.24 | **8.5** | **4.5** | 0.00025 | 0.0000059 | na | 0.00059 | 0.00052 | 0.000019 |
| Fluoranthene | 6.4 | na | na | na | na | na | 0.17 | 0.025 | **0.64** | na | 0.29 | 0.018 |
| Naphthalene | 1.17 | 0.012 | 0.0020 | **0.34** | 0.073 | 0.21 | 0.12 | 0.098 | na | **1.2** | 0.043 | 0.00098 |
| Pyrene | 5.8 | na | na | na | na | na | 0.18 | 0.053 | **0.58** | na | 0.26 | 0.016 |
| 2,3,7,8-TCDD Equivalent | 0.00000087 | na | na | na | na | na | **1.5** | 0.018 | 0.00000017 | na | **3.0** | **0.72** |
| **HI** | | **59** | **67** | **34** | **190** | **114** | **21** | **8** | **19** | **475** | **31** | **3** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* n/a = Not applicable.

**Table H-5.3-22**
**Minimum ESL Comparison for SWMU 21-024(a)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Barium | 71 | 110 | Plant | **0.65** |
| Chromium | 9.5 | 2.3 | Earthworm | **4.1** |
| Cobalt | 2.1 | 13 | Plant | 0.16 |
| Copper | 32 | 15 | American robin (insectivore) | **2.1** |
| Lead | 19 | 14 | American robin (insectivore) | **1.4** |
| Mercury | 0.26 | 0.013 | American robin (insectivore) | **20** |
| Nickel | 4.2 | 9.7 | Montane shrew | **0.43** |
| Selenium | 1.2 | 0.52 | Plant | **2.3** |
| Uranium | 1.4 | 25 | Plant | 0.056 |
| Vanadium | 11 | 0.025 | Plant | **440** |
| Zinc | 49 | 48 | American robin (insectivore) | **1.0** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acetone | 0.26 | 1.2 | Deer mouse | 0.22 |
| Anthracene | 0.0092 | 6.8 | Plant | 0.0014 |
| Benzo(a)anthracene | 0.015 | 3 | Montane shrew | 0.0050 |
| Benzo(b)fluoranthene | 0.016 | 18 | Plant | 0.00089 |
| Benzoic acid | 0.62 | 1 | Montane shrew | **0.62** |
| Bis(2-ethylhexyl)phthalate | 0.12 | 0.02 | American robin (insectivore) | **6.0** |
| Chloroaniline[4-] | 0.46 | 1 | Plant | **0.46** |
| Chloroform | 0.00025 | 8 | Deer mouse | 0.000031 |
| Chrysene | 0.015 | 2.4 | Montane shrew | 0.0063 |
| Fluoranthene | 0.021 | 10 | Earthworm | 0.0021 |
| Methylene chloride | 0.0055 | 2.6 | Deer mouse | 0.0021 |
| Phenanthrene | 0.012 | 5.5 | Earthworm | 0.0022 |
| Pyrene | 0.021 | 10 | Earthworm | 0.0021 |
| Toluene | 0.0026 | 23 | Montane shrew | 0.00011 |
| Trichloroethene | 0.0029 | 42 | Montane shrew | 0.000069 |
| Radionuclides (pCi/g) | | | | |
| Americium-241 | 0.10 | 44 | Earthworm | 0.0023 |
| Cesium-137 | 0.29 | 680 | Red fox | 0.00043 |
| Plutonium-238 | 0.027 | 44 | Earthworm | 0.00061 |
| Plutonium-239/240 | 0.77 | 47 | Earthworm | 0.016 |
| Strontium-90 | 0.16 | 560 | Red fox | 0.00029 |
| Tritium | 0.035 | 36000 | Plant | 0.00000097 |
| Uranium-234 | 1.3 | 51 | Earthworm | 0.025 |
| Uranium-235/236 | 0.067 | 55 | Earthworm | 0.0012 |
| Uranium-238 | 1.2 | 55 | Earthworm | 0.022 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-23**
**Hazard Index Analysis for SWMU 21-024(a)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Barium | 71 | 0.0065 | 0.0019 | 0.087 | 0.071 | 0.077 | 0.040 | 0.022 | 0.22 | **0.65** | 0.055 | 0.0017 |
| Chromium | 9.5 | 0.0012 | 0.00026 | 0.0050 | 0.011 | 0.0087 | 0.0050 | 0.00073 | **4.1** | **4.0** | 0.013 | 0.00032 |
| Copper | 32 | 0.29 | 0.020 | **0.85** | **2.1** | **1.5** | **0.50** | 0.12 | **0.40** | **0.46** | **0.85** | 0.0085 |
| Lead | 19 | 0.15 | 0.023 | **0.88** | **1.4** | **1.2** | 0.15 | 0.050 | 0.011 | 0.15 | 0.26 | 0.0050 |
| Mercury | 0.26 | **3.2** | **0.93** | **3.7** | **20** | **12** | 0.087 | 0.012 | **5.2** | 0.0076 | 0.15 | 0.0057 |
| Nickel | 4.2 | 0.027 | 0.0015 | 0.027 | 0.20 | 0.11 | 0.21 | 0.0085 | 0.015 | 0.11 | **0.43** | 0.0035 |
| Selenium | 1.2 | 0.21 | 0.012 | **1.2** | **1.6** | **1.3** | **1.4** | **0.55** | 0.28 | **2.3** | **1.8** | 0.014 |
| Vanadium | 11 | 0.14 | 0.067 | **1.3** | **1.7** | **1.5** | 0.024 | 0.0076 | na | **440** | 0.082 | 0.0035 |
| Zinc | 49 | 0.15 | 0.020 | 0.14 | **1.0** | **0.58** | 0.29 | 0.027 | **0.41** | **0.31** | **0.50** | 0.0082 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.62 | na* | na | na | na | na | **0.48** | 0.15 | na | na | **0.62** | 0.0018 |
| Bis(2-ethylhexyl)phthalate | 0.12 | **2.6** | **3.5** | 0.0058 | **6.0** | **2.9** | 0.11 | 0.000043 | na | na | 0.20 | 0.097 |
| Chloroaniline[4-] | 0.46 | na | na | na | na | na | na | na | 0.26 | **0.46** | na | na |
| **HI** | | **7** | **5** | **8** | **34** | **21** | **3** | 0.9 | **11** | **448** | **5** | 0.1 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-24**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(b)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.00001 | 0.01 | 1.0E-07 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000021 | 0.01 | 2.1E-08 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.00000059 | 0.1 | 5.9E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000060 | 0.1 | 6.0E-08 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.00000032 | 0.1 | 3.2E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.00000023 | 0.1 | 2.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.00007 | 0.0003 | 2.1E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000035 | 0.0003 | 1.1E-09 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000038 | 0.3 | 1.1E-07 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000052 | 0.1 | 5.2E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **4.8E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-25**
**Minimum ESL Comparison for SWMU 21-024(b)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Arsenic | 2.7 | 6.8 | Earthworm | **0.40** |
| Barium | 93 | 110 | Plant | **0.85** |
| Chromium | 18 | 2.3 | Earthworm | **7.8** |
| Cobalt | 2.1 | 13 | Plant | 0.16 |
| Copper | 22 | 15 | American robin (insectivore) | **1.5** |
| Cyanide (total) | 0.37 | 0.1 | American robin (herbivore) | **3.7** |
| Lead | 19 | 14 | American robin (insectivore) | **1.4** |
| Mercury | 2.3 | 0.013 | American robin (insectivore) | **180** |
| Nickel | 7.3 | 9.7 | Montane shrew | **0.75** |
| Selenium | 1.04 | 0.52 | Plant | **2.0** |
| Silver | 8.0 | 2.6 | American robin (insectivore) | **3.1** |
| Strontium | 24 | 96 | Deer mouse | 0.25 |
| Zinc | 59 | 48 | American robin (insectivore) | **1.2** |
| **Organic Chemicals (mg/kg)** | | | | |
| Anthracene | 0.058 | 6.8 | Plant | 0.0085 |
| Aroclor-1254 | 0.091 | 0.041 | American robin (insectivore) | **2.2** |
| Aroclor-1260 | 0.052 | 0.14 | Red fox | **0.37** |
| Benzo(a)anthracene | 0.11 | 3 | Montane shrew | 0.037 |
| Benzo(a)pyrene | 0.15 | 53 | Montane shrew | 0.0028 |
| Benzo(b)fluoranthene | 0.054 | 18 | Plant | 0.0030 |
| Benzo(g,h,i)perylene | 0.10 | 24 | Montane shrew | 0.0042 |
| Benzo(k)fluoranthene | 0.074 | 62 | Montane shrew | 0.0012 |
| Bis(2-ethylhexyl)phthalate | 0.46 | 0.02 | American robin (insectivore) | **23** |
| Chrysene | 0.044 | 2.4 | Montane shrew | 0.018 |
| Di-n-butylphthalate | 0.50 | 0.011 | American robin (insectivore) | **45** |
| Fluoranthene | 0.088 | 10 | Earthworm | 0.0088 |
| Indeno(1,2,3-cd)pyrene | 0.048 | 62 | Montane shrew | 0.00077 |
| Phenanthrene | 0.25 | 5.5 | Earthworm | 0.045 |
| Pyrene | 0.075 | 10 | Earthworm | 0.0075 |
| 2,3,7,8-TCDD equivalent | 0.00000048 | 0.00000029 | Montane shrew | **1.7** |
| Toluene | 0.0014 | 23 | Montane shrew | 0.000061 |
| Radionuclides (pCi/g) | | | | |
| Americium-241 | 39 | 44 | Earthworm | **0.89** |
| Cesium-137 | 0.45 | 680 | Red fox | 0.00066 |
| Plutonium-238 | 0.43 | 44 | Earthworm | 0.0098 |
| Plutonium-239/240 | 60 | 47 | Earthworm | **1.3** |

**Table H-5.3-25 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Tritium | 0.021 | 36000 | Plant | 0.00000058 |
| Uranium-234 | 1.7 | 51 | Earthworm | 0.033 |
| Uranium-235/236 | 0.11 | 55 | Earthworm | 0.0020 |
| Uranium-238 | 1.7 | 55 | Earthworm | 0.031 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-26**
**Hazard Index Analysis for SWMU 21-024(b)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 2.7 | 0.017 | 0.0025 | 0.065 | 0.15 | 0.10 | 0.085 | 0.017 | **0.40** | 0.15 | 0.18 | 0.0033 |
| Barium | 93 | 0.0085 | 0.0025 | 0.11 | 0.093 | 0.10 | 0.052 | 0.028 | 0.28 | **0.85** | 0.072 | 0.0023 |
| Chromium | 18 | 0.0024 | 0.00049 | 0.0095 | 0.022 | 0.016 | 0.0095 | 0.0014 | **7.8** | **7.6** | 0.024 | 0.00060 |
| Copper | 22 | 0.20 | 0.014 | **0.57** | **1.5** | **0.99** | **0.34** | 0.080 | 0.27 | **0.31** | **0.57** | 0.0057 |
| Cyanide (total) | 0.37 | **0.79** | **0.64** | **3.7** | **3.7** | **3.7** | 0.0011 | 0.00050 | na* | na | 0.0012 | 0.00017 |
| Lead | 19 | 0.16 | 0.024 | **0.91** | **1.4** | **1.2** | 0.16 | 0.052 | 0.011 | 0.16 | 0.27 | 0.0052 |
| Mercury | 2.3 | **29** | **8.4** | **34** | **180** | **107** | **0.78** | 0.11 | **47** | 0.069 | **1.4** | 0.051 |
| Nickel | 7.3 | 0.046 | 0.0025 | 0.046 | **0.35** | 0.19 | **0.37** | 0.015 | 0.026 | 0.19 | **0.75** | 0.0061 |
| Selenium | 1.04 | 0.19 | 0.011 | **1.0** | **1.4** | **1.2** | **1.3** | **0.49** | 0.25 | **2.0** | **1.6** | 0.012 |
| Silver | 8.0 | **0.42** | 0.0095 | **0.73** | **3.1** | **1.9** | **0.33** | 0.053 | na | 0.014 | **0.57** | 0.0019 |
| Zinc | 59 | 0.18 | 0.025 | 0.17 | **1.2** | **0.69** | **0.35** | 0.033 | **0.49** | **0.37** | **0.60** | 0.0098 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.091 | **0.53** | **0.41** | 0.070 | **2.2** | **1.1** | 0.10 | 0.0017 | na | 0.00057 | 0.21 | **0.61** |
| Aroclor-1260 | 0.052 | 0.014 | 0.011 | 0.0011 | 0.059 | 0.031 | 0.0026 | 0.000017 | na | na | 0.0052 | **0.37** |
| Bis(2-ethylhexyl)phthalate | 0.46 | **10** | **14** | 0.023 | **23** | **11** | **0.41** | 0.00017 | na | na | **0.77** | **0.38** |
| Di-n-butylphthalate | 0.50 | **7.3** | **2.1** | **1.3** | **45** | **24** | 0.0013 | 0.000031 | na | 0.0031 | 0.0028 | 0.000099 |
| 2,3,7,8-TCDD equivalent | 0.00000048 | na | na | na | na | na | **0.81** | 0.0097 | 0.000000093 | na | **1.7** | **0.39** |

**Table H-5.3-26 (continued)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Americium-241 | 39 | 0.0011 | 0.00063 | 0.0030 | 0.0098 | 0.0098 | 0.0012 | 0.0012 | **0.89** | 0.0019 | 0.0013 | 0.0015 |
| Plutonium-239/240 | 60 | 0.0018 | 0.00038 | 0.0070 | 0.029 | 0.029 | 0.00040 | 0.00035 | **1.3** | 0.00038 | 0.00055 | 0.0018 |
| **HI** | | **49** | **26** | **43** | **263** | **153** | **5** | 0.9 | **59** | **12** | **9** | **2** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-27**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(d)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.00047 | 0.01 | 4.7E-06 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 0.000022 | 0.1 | 2.2E-06 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.000026 | 0.1 | 2.6E-06 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.000023 | 0.1 | 2.3E-06 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.0029 | 0.0003 | 8.7E-07 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.000015 | 1 | 1.5E-05 |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 0.0000022 | 1 | 2.2E-06 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.00013 | 0.01 | 1.3E-06 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 0.0000073 | 0.01 | 7.3E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.000011 | 0.1 | 1.1E-06 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.0000048 | 0.1 | 4.8E-07 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 0.0000027 | 0.1 | 2.7E-07 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.0000070 | 0.1 | 7.0E-07 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.00029 | 0.0003 | 8.7E-08 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 0.0000027 | 0.03 | 8.1E-08 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.0000064 | 0.3 | 1.9E-06 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.0000048 | 0.1 | 4.8E-07 |
| **2,3,7,8-TCDD Equivalent** | | | **3.6E-05** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-28**
**Minimum ESL Comparison for SWMU 21-024(d)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Arsenic | 3.5 | 6.8 | Earthworm | **0.51** |
| Barium | 78 | 110 | Plant | **0.71** |
| Chromium | 34 | 2.3 | Earthworm | **15** |
| Cobalt | 2.9 | 13 | Plant | 0.22 |
| Copper | 114 | 15 | American robin (insectivore) | **7.6** |
| Cyanide (total) | 0.46 | 0.10 | American robin (herbivore) | **4.6** |
| Lead | 36 | 14 | American robin (insectivore) | **2.6** |
| Manganese | 323 | 220 | Plant | **1.5** |
| Mercury | 0.40 | 0.013 | American robin (insectivore) | **31** |
| Nickel | 13 | 9.7 | Montane shrew | **1.3** |
| Selenium | 1.8 | 0.52 | Plant | **3.5** |
| Silver | 9.0 | 2.6 | American robin (insectivore) | **3.5** |
| Uranium | 6.5 | 25 | Plant | 0.26 |
| Zinc | 80 | 48 | American robin (insectivore) | **1.7** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.076 | 0.25 | Plant | 0.30 |
| Acenaphthylene | 0.016 | 120 | Montane shrew | 0.00013 |
| Anthracene | 0.17 | 6.8 | Plant | 0.025 |
| Aroclor-1242 | 0.26 | 0.041 | American robin (insectivore) | **6.3** |
| Aroclor-1254 | 0.33 | 0.041 | American robin (insectivore) | **8.0** |
| Aroclor-1260 | 0.13 | 0.14 | Red fox | **0.93** |
| Benzo(a)anthracene | 0.14 | 3.0 | Montane shrew | 0.047 |
| Benzo(a)pyrene | 0.27 | 53 | Montane shrew | 0.0051 |
| Benzo(b)fluoranthene | 0.11 | 18 | Plant | 0.0061 |
| Benzo(g,h,i)perylene | 0.039 | 24 | Montane shrew | 0.0016 |
| Benzo(k)fluoranthene | 0.30 | 62 | Montane shrew | 0.0048 |
| Benzoic acid | 0.45 | 1.0 | Montane shrew | **0.45** |
| Bis(2-ethylhexyl)phthalate | 0.20 | 0.020 | American robin (insectivore) | **10** |
| Butylbenzylphthalate | 0.25 | 90 | Montane shrew | 0.0028 |
| Chrysene | 0.21 | 2.4 | Montane shrew | 0.088 |
| Dibenzo(a,h)anthracene | 0.040 | 12 | Montane shrew | 0.0033 |
| Dichlorobenzene[1,4-] | 0.37 | 0.88 | Montane shrew | **0.42** |
| Di-n-butylphthalate | 0.21 | 0.011 | American robin (insectivore) | **19** |
| Fluoranthene | 0.12 | 10 | Earthworm | 0.012 |
| Fluorene | 0.021 | 3.7 | Earthworm | 0.0057 |
| Indeno(1,2,3-cd)pyrene | 0.042 | 62 | Montane shrew | 0.00068 |

**Table H-5.3-28 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Methylene chloride | 0.019 | 2.6 | Deer mouse | 0.0073 |
| Phenanthrene | 0.18 | 5.5 | Earthworm | 0.033 |
| Pyrene | 0.12 | 10 | Earthworm | 0.012 |
| 2,3,7,8-TCDD equivalent | 0.000036 | 0.00000029 | Montane shrew | **124** |
| Toluene | 0.0025 | 23 | Montane shrew | 0.00011 |
| Trichloroethene | 0.0023 | 42 | Montane shrew | 0.000055 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.39 | 44 | Earthworm | 0.0089 |
| Cesium-137 | 0.36 | 680 | Red fox | 0.00053 |
| Europium-152 | 0.39 | 380 | Earthworm | 0.0010 |
| Plutonium-238 | 0.072 | 44 | Earthworm | 0.0016 |
| Plutonium-239/240 | 5.9 | 47 | Earthworm | 0.13 |
| Strontium-90 | 0.38 | 560 | Red fox | 0.00068 |
| Tritium | 0.036 | 36000 | Plant | 0.0000010 |
| Uranium-234 | 2.6 | 51 | Earthworm | 0.051 |
| Uranium-235/236 | 0.13 | 55 | Earthworm | 0.0024 |
| Uranium-238 | 1.9 | 55 | Earthworm | 0.035 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-29**
**Hazard Index Analysis for SWMU 21-024(d)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 3.5 | 0.022 | 0.0032 | 0.084 | 0.20 | 0.14 | 0.11 | 0.022 | **0.51** | 0.20 | 0.24 | 0.0044 |
| Barium | 78 | 0.0071 | 0.0021 | 0.095 | 0.078 | 0.084 | 0.043 | 0.024 | 0.24 | **0.71** | 0.060 | 0.0019 |
| Chromium | 34 | 0.0044 | 0.00092 | 0.018 | 0.041 | 0.031 | 0.018 | 0.0026 | **15** | **14** | 0.046 | 0.0011 |
| Copper | 114 | **1.0** | 0.071 | **3.0** | **7.6** | **5.2** | **1.8** | **0.42** | **1.4** | **1.6** | **3.0** | 0.030 |
| Cyanide (total) | 0.46 | **0.97** | **0.79** | **4.6** | **4.6** | **4.6** | 0.0013 | 0.00062 | na* | na | 0.0015 | 0.00021 |
| Lead | 36 | 0.30 | 0.044 | **1.7** | **2.6** | **2.2** | 0.30 | 0.097 | 0.021 | 0.30 | **0.50** | 0.0097 |
| Manganese | 323 | 0.0092 | 0.0036 | 0.23 | 0.10 | 0.17 | 0.23 | 0.16 | **0.72** | **1.5** | 0.22 | 0.0079 |
| Mercury | 0.40 | **4.9** | **1.4** | **5.8** | **31** | **18** | 0.13 | 0.018 | **8.1** | 0.012 | 0.24 | 0.0088 |
| Nickel | 13 | 0.082 | 0.0045 | 0.082 | **0.63** | **0.35** | **0.66** | 0.026 | 0.047 | **0.35** | **1.3** | 0.011 |
| Selenium | 1.8 | **0.32** | 0.019 | **1.8** | **2.4** | **2.1** | **2.2** | **0.86** | **0.44** | **3.5** | **2.7** | 0.021 |
| Silver | 9.0 | **0.47** | 0.011 | **0.82** | **3.5** | **2.1** | **0.37** | 0.060 | na | 0.016 | **0.64** | 0.0022 |
| Zinc | 80 | 0.25 | 0.033 | 0.23 | **1.7** | **0.94** | **0.47** | 0.045 | **0.67** | **0.50** | **0.82** | 0.013 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1242 | 0.26 | **0.98** | 0.18 | 0.26 | **6.3** | **3.2** | **0.34** | 0.0085 | na | na | **0.67** | 0.016 |
| Aroclor-1254 | 0.33 | **2.0** | **1.5** | 0.26 | **8.0** | **4.2** | **0.38** | 0.0064 | na | 0.0021 | **0.75** | **2.2** |
| Aroclor-1260 | 0.13 | 0.035 | 0.028 | 0.0028 | 0.15 | 0.076 | 0.0065 | 0.000043 | na | na | 0.013 | **0.93** |
| Benzoic acid | 0.45 | na | na | na | na | na | **0.35** | 0.11 | na | na | **0.45** | 0.0013 |
| Bis(2-ethylhexyl)phthalate | 0.20 | **4.4** | **6.0** | 0.0099 | **10** | **4.9** | 0.18 | 0.000073 | na | na | **0.33** | 0.16 |

**Table H-5.3-29 (continued)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Di-n-butylphthalate | 0.21 | **3.1** | **0.89** | **0.55** | **19** | **10** | 0.00058 | 0.000013 | na | 0.0013 | 0.0012 | 0.000043 |
| 2,3,7,8-TCDD equivalent | 0.000037 | na | na | na | na | na | **63** | **0.76** | 0.0000073 | na | **124** | **31** |
| **HI** | | **19** | **11** | **20** | **98** | **58** | **71** | **3** | **27** | **23** | **136** | **34** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-30**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(e)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.0000048 | 0.0003 | 1.4E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.00000041 | 0.0003 | 1.2E-10 |
| | | **2,3,7,8-TCDD Equivalent** | **1.5E-09** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-31**
**Minimum ESL Comparison for SWMU 21-024(e)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.50 | 0.05 | Plant | **10** |
| Barium | 99 | 110 | Plant | **0.90** |
| Cadmium | 2.7 | 0.27 | Montane shrew | **10** |
| Chromium | 9.0 | 2.3 | Earthworm | **3.9** |
| Copper | 25 | 15 | American robin (insectivore) | **1.7** |
| Cyanide (total) | 4.4 | 0.1 | American robin (herbivore) | **44** |
| Lead | 39 | 14 | American robin (insectivore) | **2.8** |
| Mercury | 0.51 | 0.013 | American robin (insectivore) | **39** |
| Molybdenum | 0.87 | 2 | Plant | **0.44** |
| Selenium | 1.2 | 0.52 | Plant | **2.3** |
| Silver | 0.41 | 2.6 | American robin (insectivore) | 0.16 |
| Uranium | 11 | 25 | Plant | **0.44** |
| Zinc | 61 | 48 | American robin (insectivore) | **1.3** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.019 | 0.25 | Plant | 0.076 |
| Acenaphthylene | 0.026 | 120 | Montane shrew | 0.00022 |
| Acetone | 0.0090 | 1.2 | Deer mouse | 0.0075 |
| Anthracene | 0.074 | 6.8 | Plant | 0.011 |
| Benzo(a)anthracene | 0.24 | 3 | Montane shrew | 0.080 |
| Benzo(a)pyrene | 0.20 | 53 | Montane shrew | 0.0038 |
| Benzo(b)fluoranthene | 0.32 | 18 | Plant | 0.018 |
| Benzo(g,h,i)perylene | 0.13 | 24 | Montane shrew | 0.0054 |
| Benzo(k)fluoranthene | 0.079 | 62 | Montane shrew | 0.0013 |
| Bis(2-ethylhexyl)phthalate | 0.38 | 0.02 | American robin (insectivore) | **19** |
| Chloroaniline[4-] | 0.41 | 1 | Plant | **0.41** |
| Chrysene | 0.24 | 2.4 | Montane shrew | 0.10 |
| Di-n-butylphthalate | 0.14 | 0.011 | American robin (insectivore) | **13** |
| Fluoranthene | 0.064 | 10 | Earthworm | 0.0064 |
| Fluorene | 0.031 | 3.7 | Earthworm | 0.0084 |
| Indeno(1,2,3-cd)pyrene | 0.17 | 62 | Montane shrew | 0.0027 |
| Methylene chloride | 0.0025 | 2.6 | Deer mouse | 0.00096 |
| Methylnaphthalene[2-] | 0.011 | 2.5 | Montane shrew | 0.0044 |
| Naphthalene | 0.021 | 1 | Plant | 0.021 |
| Phenanthrene | 0.044 | 5.5 | Earthworm | 0.0080 |

**Table H-5.3-31 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Pyrene | 0.067 | 10 | Earthworm | 0.0067 |
| 2,3,7,8-TCDD equivalent | 0.0000000015 | 0.00000029 | Montane shrew | 0.0055 |
| Toluene | 0.0079 | 23 | Montane shrew | 0.00034 |
| Trichloroethene | 0.005 | 42 | Montane shrew | 0.00012 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.58 | 44 | Earthworm | 0.013 |
| Cesium-137 | 0.64 | 680 | Red fox | 0.00094 |
| Plutonium-238 | 0.33 | 44 | Earthworm | 0.0075 |
| Plutonium-239/240 | 16 | 47 | Earthworm | **0.34** |
| Strontium-90 | 0.91 | 560 | Red fox | 0.0016 |
| Tritium | 0.020 | 36000 | Plant | 0.00000056 |
| Uranium-234 | 3.2 | 51 | Earthworm | 0.063 |
| Uranium-235/236 | 0.17 | 55 | Earthworm | 0.0031 |
| Uranium-238 | 2.6 | 55 | Earthworm | 0.047 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-32**
**Hazard Index Analysis for SWMU 21-024(e)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 0.50 | na* | na | na | na | na | **1.0** | 0.17 | 0.0064 | **10** | **1.9** | 0.011 |
| Barium | 99 | 0.0090 | 0.0027 | 0.12 | 0.099 | 0.11 | 0.055 | 0.030 | 0.30 | **0.90** | 0.076 | 0.0024 |
| Cadmium | 2.7 | **1.4** | 0.0047 | **0.62** | **9.5** | **5.1** | **5.4** | 0.28 | 0.020 | 0.086 | **10** | 0.0054 |
| Chromium | 9.0 | 0.0012 | 0.00024 | 0.0047 | 0.011 | 0.0082 | 0.0047 | 0.00069 | **3.9** | **3.8** | 0.012 | 0.00030 |
| Copper | 25 | 0.23 | 0.016 | **0.66** | **1.7** | **1.1** | **0.39** | 0.093 | **0.31** | **0.36** | **0.66** | 0.0066 |
| Cyanide (total) | 4.4 | **9.3** | **7.5** | **44** | **44** | **44** | 0.013 | 0.0059 | na | na | 0.014 | 0.0020 |
| Lead | 39 | **0.32** | 0.048 | **1.8** | **2.8** | **2.4** | **0.32** | 0.10 | 0.023 | **0.32** | **0.54** | 0.010 |
| Mercury | 0.51 | **6.2** | **1.8** | **7.2** | **39** | **23** | 0.17 | 0.023 | **10** | 0.015 | 0.30 | 0.011 |
| Molybdenum | 0.87 | 0.0067 | 0.00051 | 0.046 | 0.051 | 0.048 | na | na | na | **0.44** | na | na |
| Selenium | 1.2 | 0.21 | 0.012 | **1.2** | **1.6** | **1.3** | **1.4** | **0.56** | 0.28 | **2.3** | **1.8** | 0.014 |
| Uranium | 11 | 0.00052 | 0.00028 | 0.0058 | 0.0069 | 0.0065 | 0.015 | 0.0055 | na | **0.44** | 0.050 | 0.0023 |
| Zinc | 61 | 0.19 | 0.025 | 0.17 | **1.3** | **0.72** | **0.36** | 0.034 | **0.51** | **0.38** | **0.62** | 0.010 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 0.38 | **8.5** | **12** | 0.019 | **19** | **9.6** | **0.35** | 0.00014 | na | na | **0.65** | **0.32** |
| Chloroaniline[4-] | 0.41 | na | na | na | na | na | na | na | 0.23 | **0.41** | na | na |
| Di-n-butylphthalate | 0.14 | **2.0** | **0.57** | **0.35** | **13** | **6.5** | 0.00037 | 0.0000086 | na | 0.00086 | 0.00076 | 0.000027 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 16 | 0.00049 | 0.00010 | 0.0019 | 0.0079 | 0.0079 | 0.00011 | 0.000097 | **0.34** | 0.00010 | 0.00015 | 0.00050 |
| **HI** | | **28** | **22** | **56** | **132** | **94** | **9** | 1 | **16** | **19** | **17** | 0.4 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-33**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(g)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0000013 | 0.01 | 1.3E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.0000088 | 0.0003 | 2.6E-09 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.00000055 | 0.01 | 5.5E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.00000071 | 0.0003 | 2.1E-10 |
| **TCDD[2,3,7,8-] Equivalent** | | | **2.1E-08** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-34**
**Minimum ESL Comparison for SWMU 21-024(g)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Arsenic | 3.1 | 6.8 | Earthworm | **0.46** |
| Barium | 58 | 110 | Plant | **0.53** |
| Cadmium | 0.37 | 0.27 | Montane shrew | **1.4** |
| Chromium | 12 | 2.3 | Earthworm | **5.2** |
| Cobalt | 2.1 | 13 | Plant | 0.16 |
| Copper | 6.3 | 15 | American robin (insectivore) | **0.42** |
| Cyanide (total) | 0.25 | 0.10 | American robin (herbivore) | **2.5** |
| Lead | 24 | 14 | American robin (insectivore) | **1.7** |
| Mercury | 0.18 | 0.013 | American robin (insectivore) | **14** |
| Nickel | 5.0 | 9.7 | Montane shrew | **0.52** |
| Selenium | 1.0 | 0.52 | Plant | **1.9** |
| Uranium | 3.1 | 25 | Plant | 0.12 |
| Zinc | 67 | 48 | American robin (insectivore) | **1.4** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.04 | 0.25 | Plant | 0.16 |
| Acetone | 0.085 | 1.2 | Deer mouse | 0.071 |
| Anthracene | 0.11 | 6.8 | Plant | 0.016 |
| Aroclor-1254 | 0.0025 | 0.041 | American robin (insectivore) | 0.061 |
| Aroclor-1260 | 0.0022 | 0.14 | Red fox | 0.016 |
| Benzo(a)anthracene | 0.06 | 3.0 | Montane shrew | 0.020 |
| Benzo(a)pyrene | 0.36 | 53 | Montane shrew | 0.0068 |
| Benzo(b)fluoranthene | 0.0736 | 18 | Plant | 0.0041 |
| Benzo(g,h,i)perylene | 0.22 | 24 | Montane shrew | 0.092 |
| Benzo(k)fluoranthene | 0.04 | 62 | Montane shrew | 0.00065 |
| Benzoic acid | 0.22 | 1.0 | Montane shrew | 0.22 |
| Bis(2-ethylhexyl)phthalate | 0.11 | 0.020 | American robin (insectivore) | **5.5** |
| Chrysene | 0.06 | 2.4 | Montane shrew | 0.025 |
| Di-n-butylphthalate | 0.3 | 0.011 | American robin (insectivore) | **27** |
| Fluoranthene | 0.10 | 10 | Earthworm | 0.0010 |
| Fluorene | 0.04 | 3.7 | Earthworm | 0.011 |
| Indeno(1,2,3-cd)pyrene | 0.20 | 62 | Montane shrew | 0.032 |
| Methylnaphthalene[2-] | 0.03 | 2.5 | Montane shrew | 0.012 |
| Naphthalene | 0.04 | 1.0 | Plant | 0.040 |
| Phenanthrene | 0.049 | 5.5 | Earthworm | 0.089 |
| Pyrene | 0.09 | 10 | Earthworm | 0.0090 |
| 2,3,7,8-TCDD equivalent | 0.000000021 | 0.00000029 | Montane shrew | 0.072 |

**Table H-5.3-34 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Toluene | 0.0011 | 23 | Montane shrew | 0.000048 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.051 | 44 | Earthworm | 0.0012 |
| Cesium-137 | 0.38 | 680 | Red fox | 0.00056 |
| Plutonium-238 | 0.033 | 44 | Earthworm | 0.00075 |
| Plutonium-239/240 | 1.0 | 47 | Earthworm | 0.021 |
| Tritium | 0.037 | 36000 | Plant | 0.0000010 |
| Uranium-234 | 1.7 | 51 | Earthworm | 0.033 |
| Uranium-235/236 | 0.090 | 55 | Earthworm | 0.0016 |
| Uranium-238 | 1.6 | 55 | Earthworm | 0.029 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-35**
**Hazard Index Analysis for SWMU 21-024(g)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 3.1 | 0.020 | 0.0029 | 0.075 | 0.17 | 0.12 | 0.098 | 0.020 | **0.46** | 0.17 | 0.21 | 0.0039 |
| Barium | 58 | 0.0053 | 0.0016 | 0.071 | 0.058 | 0.063 | 0.032 | 0.018 | 0.18 | **0.53** | 0.045 | 0.0014 |
| Cadmium | 0.37 | 0.18 | 0.00063 | 0.084 | **1.3** | **0.68** | **0.72** | 0.037 | 0.0026 | 0.012 | **1.4** | 0.00072 |
| Chromium | 12 | 0.0015 | 0.00031 | 0.0061 | 0.014 | 0.011 | 0.0061 | 0.00089 | **5.2** | **4.8** | 0.015 | 0.00039 |
| Copper | 6.3 | 0.057 | 0.0039 | 0.17 | **0.42** | 0.29 | 0.098 | 0.023 | 0.079 | 0.090 | 0.17 | 0.0017 |
| Cyanide (total) | 0.25 | **0.53** | **0.43** | **2.5** | **2.5** | **2.5** | 0.00073 | 0.00033 | na* | na | 0.00080 | 0.00011 |
| Lead | 24 | 0.20 | 0.030 | **1.2** | **1.7** | **1.5** | 0.20 | 0.066 | 0.014 | 0.20 | **0.34** | 0.0066 |
| Mercury | 0.18 | **2.2** | **0.64** | **2.6** | **14** | **8.2** | 0.060 | 0.0082 | **3.6** | 0.0053 | 0.11 | 0.0039 |
| Nickel | 5.0 | 0.031 | 0.0017 | 0.031 | 0.24 | 0.13 | 0.25 | 0.0099 | 0.018 | 0.13 | **0.52** | 0.0041 |
| Selenium | 0.98 | 0.18 | 0.010 | **0.98** | **1.3** | **1.1** | **1.2** | **0.47** | 0.24 | **1.9** | **1.5** | 0.012 |
| Zinc | 67 | 0.21 | 0.028 | 0.19 | **1.4** | **0.79** | **0.39** | 0.037 | **0.56** | **0.42** | **0.68** | 0.011 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 0.11 | **2.4** | **3.3** | 0.0055 | **5.5** | **2.8** | 0.10 | 0.000041 | na | na | 0.19 | 0.092 |
| Di-n-butylphthalate | 0.33 | **4.8** | **1.4** | **0.84** | **27** | **16** | 0.00088 | 0.000020 | na | 0.0020 | 0.0018 | 0.000065 |
| **HI** | | **11** | **6** | **9** | **56** | **34** | **3** | 0.7 | **10** | **8** | **5** | 0.1 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

**Table H-5.3-36**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(h)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0000018 | 0.01 | 1.8E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000012 | 0.0003 | 3.6E-09 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.00000065 | 0.01 | 6.5E-09 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.000000063 | 0.1 | 6.3E-09 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.000000088 | 0.1 | 8.8E-09 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.00000097 | 0.0003 | 2.9E-10 |
| **2,3,7,8-TCDD Equivalent** | | | **4.3E-08** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-37**
**Minimum ESL Comparison for SWMU 21-024(h)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 1.1 | 0.050 | Plant | **22** |
| Arsenic | 4.1 | 6.8 | Earthworm | **0.60** |
| Barium | 73 | 110 | Plant | **0.66** |
| Cadmium | 0.63 | 0.27 | Montane shrew | **2.3** |
| Chromium | 15 | 2.3 | Earthworm | **6.5** |
| Copper | 82 | 15 | American robin (insectivore) | **5.5** |
| Cyanide (total) | 0.43 | 0.10 | American robin (herbivore) | **4.3** |
| Lead | 62 | 14 | American robin (insectivore) | **4.4** |
| Mercury | 6.5 | 0.013 | American robin (insectivore) | **500** |
| Molybdenum | 0.72 | 2.0 | Plant | **0.36** |
| Nickel | 4.6 | 9.7 | Montane shrew | **0.47** |
| Selenium | 0.98 | 0.52 | Plant | **1.9** |
| Silver | 3.5 | 2.6 | American robin (insectivore) | **1.3** |
| Vanadium | 12 | 0.025 | Plant | **480** |
| Zinc | 113.4 | 48 | American robin (insectivore) | **2.4** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.025 | 0.25 | Plant | 0.10 |
| Acenaphthylene | 0.014 | 120 | Montane shrew | 0.00012 |
| Acetone | 0.0050 | 1.2 | Deer mouse | 0.0042 |
| Anthracene | 0.029 | 6.8 | Plant | 0.0043 |
| Benzo(a)anthracene | 0.039 | 3.0 | Montane shrew | 0.013 |
| Benzo(a)pyrene | 0.18 | 53 | Montane shrew | 0.0034 |
| Benzo(b)fluoranthene | 0.16 | 18 | Plant | 0.0089 |
| Benzo(g,h,i)perylene | 0.14 | 24 | Montane shrew | 0.0058 |
| Benzo(k)fluoranthene | 0.046 | 62 | Montane shrew | 0.00074 |
| Benzoic acid | 0.61 | 1.0 | Montane shrew | **0.61** |
| Bis(2-ethylhexyl)phthalate | 0.20 | 0.020 | American robin (insectivore) | **10** |
| Chloroform | 0.00025 | 8.0 | Deer mouse | 0.000031 |
| Chrysene | 0.036 | 2.4 | Montane shrew | 0.015 |
| Di-n-butylphthalate | 0.25 | 0.011 | American robin (insectivore) | **23** |
| Fluoranthene | 0.050 | 10 | Earthworm | 0.0050 |
| Fluorene | 0.015 | 3.7 | Earthworm | 0.0041 |
| Indeno(1,2,3-cd)pyrene | 0.10 | 62 | Montane shrew | 0.0016 |
| Naphthalene | 0.015 | 1.0 | Plant | 0.015 |
| Phenanthrene | 0.037 | 5.5 | Earthworm | 0.0067 |

**Table H-5.3-37 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Pyrene | 0.053 | 10 | Earthworm | 0.0053 |
| 2,3,7,8-TCDD equivalent | 0.000000043 | 0.00000029 | Montane shrew | 0.15 |
| Tetrachloroethene | 0.00025 | 0.18 | Montane shrew | 0.0014 |
| Toluene | 0.00085 | 23 | Montane shrew | 0.000037 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.086 | 44 | Earthworm | 0.0020 |
| Cesium-137 | 0.24 | 680 | Red fox | 0.00035 |
| Plutonium-238 | 0.036 | 44 | Earthworm | 0.00082 |
| Plutonium-239/240 | 1.6 | 47 | Earthworm | 0.034 |
| Tritium | 3.8 | 36000 | Plant | 0.00011 |
| Uranium-234 | 1.6 | 51 | Earthworm | 0.031 |
| Uranium-235/236 | 0.087 | 55 | Earthworm | 0.0016 |
| Uranium-238 | 1.5 | 55 | Earthworm | 0.027 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-38**
**Hazard Index Analysis for SWMU 21-024(h)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 1.1 | na* | na | na | na | na | **2.3** | **0.39** | 0.014 | **22** | **4.3** | 0.025 |
| Arsenic | 4.1 | 0.026 | 0.0037 | 0.098 | 0.23 | 0.16 | 0.13 | 0.026 | **0.60** | 0.23 | 0.27 | 0.0051 |
| Barium | 73 | 0.0066 | 0.0020 | 0.089 | 0.073 | 0.078 | 0.040 | 0.022 | 0.22 | **0.66** | 0.056 | 0.0018 |
| Cadmium | 0.63 | **0.31** | 0.0011 | 0.14 | **2.2** | **1.2** | **1.2** | 0.063 | 0.0045 | 0.020 | **2.3** | 0.0012 |
| Chromium | 15 | 0.0020 | 0.00042 | 0.0081 | 0.019 | 0.014 | 0.0081 | 0.0012 | **6.5** | **6.4** | 0.020 | 0.00051 |
| Copper | 82 | **0.75** | 0.051 | **2.2** | **5.5** | **3.7** | **1.3** | 0.30 | **1.0** | **1.2** | **2.2** | 0.022 |
| Cyanide (total) | 0.43 | **0.91** | **0.74** | **4.3** | **4.3** | **4.3** | 0.0013 | 0.00058 | na | na | 0.0014 | 0.00019 |
| Lead | 62 | **0.52** | 0.077 | **3.0** | **4.4** | **3.9** | **0.52** | 0.17 | 0.037 | **0.52** | **0.86** | 0.017 |
| Mercury | 6.5 | **79** | **23** | **93** | **500** | **296** | **2.2** | 0.30 | **130** | 0.19 | **3.8** | 0.14 |
| Molybdenum | 0.72 | 0.0055 | 0.00042 | 0.038 | 0.042 | 0.040 | na | na | na | **0.36** | na | na |
| Nickel | 4.6 | 0.029 | 0.0016 | 0.029 | 0.22 | 0.12 | 0.23 | 0.0091 | 0.016 | 0.12 | **0.47** | 0.0038 |
| Selenium | 0.98 | 0.18 | 0.010 | **0.98** | **1.3** | **1.1** | **1.2** | **0.47** | 0.24 | **1.9** | **1.5** | 0.012 |
| Silver | 3.5 | 0.19 | 0.0042 | **0.32** | **1.3** | **0.82** | 0.15 | 0.024 | na | 0.0063 | 0.25 | 0.00086 |
| Vanadium | 12 | 0.14 | 0.068 | **1.3** | **1.7** | **1.5** | 0.024 | 0.0077 | na | **480** | 0.083 | 0.0035 |
| Zinc | 113.4 | **0.35** | 0.047 | **0.32** | **2.4** | **1.3** | **0.67** | 0.063 | **0.95** | **0.71** | **1.2** | 0.019 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.61 | na | na | na | na | na | **0.47** | 0.15 | na | na | **0.61** | 0.0018 |

**Table H-5.3-38 (continued)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bis(2-ethylhexyl)phthalate | 0.20 | **4.5** | **6.1** | 0.010 | **10** | **5.1** | 0.18 | 0.000075 | na | na | **0.34** | 0.17 |
| Di-n-butylphthalate | 0.25 | **3.6** | **1.0** | **0.64** | **23** | **12** | 0.00067 | 0.000016 | na | 0.0016 | 0.0014 | 0.000050 |
| **HI** | | **91** | **31** | **106** | **557** | **331** | **11** | **2** | **140** | **514** | **18** | 0.4 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-39**
**Minimum ESL Comparison for SWMU 21-024(i)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 1.6 | 0.05 | Plant | **32** |
| Arsenic | 3.6 | 6.8 | Earthworm | **0.53** |
| Barium | 107 | 110 | Plant | **0.97** |
| Chromium | 13 | 2.3 | Earthworm | **5.7** |
| Copper | 8.9 | 15 | American robin (insectivore) | **0.59** |
| Lead | 40 | 14 | American robin (insectivore) | **2.9** |
| Lithium | 15 | 2 | Plant | **7.5** |
| Mercury | 3.8 | 0.013 | American robin (insectivore) | **292** |
| Selenium | 0.51 | 0.52 | Plant | **0.98** |
| Strontium | 223 | 96 | Deer mouse | **2.3** |
| Zinc | 97 | 48 | American robin (insectivore) | **2.0** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.044 | 0.25 | Plant | 0.18 |
| Acetone | 0.065 | 1.2 | Deer mouse | 0.054 |
| Anthracene | 0.045 | 6.8 | Plant | 0.0066 |
| Aroclor-1254 | 0.16 | 0.041 | American robin (insectivore) | **3.9** |
| Aroclor-1260 | 0.20 | 0.14 | Red fox | **1.4** |
| Benzo(a)anthracene | 0.082 | 3 | Montane shrew | 0.027 |
| Benzo(a)pyrene | 0.074 | 53 | Montane shrew | 0.0014 |
| Benzo(b)fluoranthene | 0.078 | 18 | Plant | 0.0043 |
| Benzo(k)fluoranthene | 0.078 | 62 | Montane shrew | 0.0013 |
| Benzoic acid | 0.18 | 1 | Montane shrew | 0.18 |
| Bis(2-ethylhexyl)phthalate | 0.055 | 0.02 | American robin (insectivore) | **2.8** |
| Butanone[2-] | 0.018 | 360 | Deer mouse | 0.000050 |
| Chrysene | 0.089 | 2.4 | Montane shrew | 0.037 |
| DDT[4,4'-] | 0.0028 | 0.044 | Montane shrew | 0.064 |
| Di-n-butylphthalate | 0.043 | 0.011 | American robin (insectivore) | **3.9** |
| Fluoranthene | 0.57 | 10 | Earthworm | 0.057 |
| Phenanthrene | 0.66 | 5.5 | Earthworm | 0.12 |
| Pyrene | 0.52 | 10 | Earthworm | 0.052 |
| Toluene | 0.0060 | 23 | Montane shrew | 0.00026 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.062 | 44 | Earthworm | 0.0014 |
| Cesium-137 | 0.23 | 680 | Red fox | 0.00034 |
| Plutonium-239/240 | 0.69 | 47 | Earthworm | 0.015 |
| Tritium | 48 | 36000 | | 0.0013 |

**Table H-5.3-39 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Uranium-234 | 2.4 | 51 | Earthworm | 0.047 |
| Uranium-235/236 | 0.12 | 55 | Earthworm | 0.0022 |
| Uranium-238 | 1.5 | 55 | Earthworm | 0.027 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-40**
**Hazard Index Analysis for SWMU 21-024(i)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 1.6 | na* | na | na | na | na | **3.2** | **0.54** | 0.020 | **32** | **6.0** | 0.035 |
| Arsenic | 3.6 | 0.023 | 0.0033 | 0.086 | 0.20 | 0.14 | 0.11 | 0.023 | **0.53** | 0.20 | 0.24 | 0.0045 |
| Barium | 107 | 0.0097 | 0.0029 | 0.13 | 0.11 | 0.12 | 0.059 | 0.032 | **0.32** | **0.97** | 0.082 | 0.0026 |
| Chromium | 13 | 0.0017 | 0.00035 | 0.0068 | 0.015 | 0.012 | 0.0068 | 0.00099 | **5.7** | **5.3** | 0.017 | 0.00043 |
| Copper | 8.9 | 0.081 | 0.0056 | 0.24 | **0.59** | **0.41** | 0.14 | 0.033 | 0.11 | 0.13 | 0.24 | 0.0024 |
| Lead | 40 | **0.33** | 0.049 | **1.9** | **2.9** | **2.5** | **0.33** | 0.11 | 0.023 | **0.33** | **0.55** | 0.011 |
| Lithium | 15 | na | na | na | na | na | 0.15 | 0.059 | na | **7.5** | **0.39** | 0.017 |
| Mercury | 3.8 | **47** | **14** | **55** | **292** | **174** | **1.3** | 0.17 | **76** | 0.11 | **2.2** | 0.083 |
| Selenium | 0.51 | 0.091 | 0.0052 | **0.51** | **0.68** | **0.58** | **0.61** | 0.24 | 0.12 | **0.98** | **0.77** | 0.0060 |
| Strontium | 223 | na | na | na | na | na | **2.3** | **2.0** | na | na | **0.34** | 0.012 |
| Zinc | 97 | 0.30 | 0.040 | 0.28 | **2.0** | **1.1** | **0.57** | 0.054 | **0.81** | **0.61** | **0.99** | 0.016 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.16 | **0.93** | **0.72** | 0.12 | **3.9** | **2.0** | 0.18 | 0.0030 | na | 0.00099 | **0.36** | **1.1** |
| Aroclor-1260 | 0.20 | 0.055 | 0.044 | 0.0044 | 0.23 | 0.12 | 0.010 | 0.000068 | na | na | 0.020 | **1.4** |
| Bis(2-ethylhexyl)phthalate | 0.055 | **1.2** | **1.7** | 0.0028 | **2.8** | **1.4** | 0.050 | 0.000020 | na | na | 0.093 | 0.046 |
| Di-n-butylphthalate | 0.043 | **0.64** | 0.18 | 0.11 | **3.9** | **2.1** | 0.00012 | 0.0000027 | na | 0.00027 | 0.00024 | 0.0000086 |
| **HI** | | **51** | **17** | **58** | **309** | **184** | **9** | **3** | **84** | **48** | **12** | **3** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available

.

**Table H-5.3-41**
**Minimum ESL Comparison for SWMU 21-024(j)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Arsenic | 3.2 | 6.8 | Earthworm | **0.47** |
| Barium | 74 | 110 | Plant | **0.67** |
| Chromium | 7.4 | 2.3 | Earthworm | **3.2** |
| Copper | 5.4 | 15 | American robin (insectivore) | **0.36** |
| Lead | 14 | 14 | American robin (insectivore) | **1.0** |
| Manganese | 330 | 220 | Plant | **1.5** |
| Nickel | 5.2 | 9.7 | Montane shrew | **0.54** |
| Selenium | 7.1 | 0.52 | Plant | **14** |
| Zinc | 197.9 | 48 | American robin (insectivore) | **4.1** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.048 | 0.25 | Plant | 0.19 |
| Anthracene | 0.074 | 6.8 | Plant | 0.011 |
| Aroclor-1254 | 0.080 | 0.041 | American robin (insectivore) | **2.0** |
| Aroclor-1260 | 0.065 | 0.14 | Red fox | **0.46** |
| Benzo(a)anthracene | 0.15 | 3 | Montane shrew | 0.050 |
| Benzo(a)pyrene | 0.10 | 53 | Montane shrew | 0.0019 |
| Benzo(b)fluoranthene | 0.063 | 18 | Plant | 0.0035 |
| Benzo(g,h,i)perylene | 0.11 | 24 | Montane shrew | 0.0046 |
| Bis(2-ethylhexyl)phthalate | 0.088 | 0.02 | American robin (insectivore) | **4.4** |
| Chloroform | 0.00028 | 8 | Deer mouse | 0.000035 |
| Chrysene | 0.066 | 2.4 | Montane shrew | 0.028 |
| Fluoranthene | 0.077 | 10 | Earthworm | 0.0077 |
| Fluorene | 0.036 | 3.7 | Earthworm | 0.010 |
| Indeno(1,2,3-cd)pyrene | 0.087 | 62 | Montane shrew | 0.0014 |
| Methylene Chloride | 0.0036 | 2.6 | Deer mouse | 0.0014 |
| Naphthalene | 0.012 | 1 | Plant | 0.012 |
| Phenanthrene | 0.059 | 5.5 | Earthworm | 0.011 |
| Pyrene | 0.074 | 10 | Earthworm | 0.0074 |
| Toluene | 0.0018 | 23 | Montane shrew | 0.000078 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.15 | 44 | Earthworm | 0.0034 |
| Cesium-137 | 0.33 | 680 | Red fox | 0.00049 |
| Plutonium-239/240 | 0.096 | 47 | Earthworm | 0.0020 |
| Tritium | 0.24 | 36000 | Plant | 0.0000067 |
| Uranium 235/236 | 0.43 | 55 | Earthworm | 0.0078 |
| Uranium-234 | 7.7 | 51 | Earthworm | 0.15 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-42**
**Hazard Index Analysis for SWMU 21-024(j)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 3.2 | 0.020 | 0.0029 | 0.076 | 0.18 | 0.12 | 0.100 | 0.020 | **0.47** | 0.18 | 0.21 | 0.0039 |
| Barium | 74 | 0.0067 | 0.0020 | 0.090 | 0.074 | 0.079 | 0.041 | 0.022 | 0.22 | **0.67** | 0.057 | 0.0018 |
| Chromium | 7.4 | 0.00097 | 0.00020 | 0.0039 | 0.0090 | 0.0068 | 0.0039 | 0.00057 | **3.2** | **3.1** | 0.0099 | 0.00025 |
| Copper | 5.4 | 0.049 | 0.0034 | 0.14 | **0.36** | 0.25 | 0.085 | 0.020 | 0.068 | 0.077 | 0.14 | 0.0014 |
| Lead | 14 | 0.12 | 0.017 | **0.67** | **1.0** | **0.88** | 0.12 | 0.038 | 0.0083 | 0.12 | 0.20 | 0.0038 |
| Manganese | 330 | 0.0095 | 0.0037 | 0.24 | 0.11 | 0.18 | 0.24 | 0.17 | **0.74** | **1.5** | 0.22 | 0.0081 |
| Nickel | 5.2 | 0.032 | 0.0018 | 0.032 | 0.25 | 0.14 | 0.26 | 0.010 | 0.018 | 0.14 | **0.54** | 0.0043 |
| Selenium | 7.1 | **1.3** | 0.073 | **7.1** | **9.4** | **8.1** | **8.5** | **3.4** | **1.7** | **14** | **11** | 0.084 |
| Zinc | 197.9 | **0.62** | 0.082 | **0.57** | **4.1** | **2.3** | **1.2** | 0.11 | **1.6** | **1.2** | **2.0** | 0.033 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.080 | **0.47** | **0.36** | 0.061 | **2.0** | **1.0** | 0.090 | 0.0015 | na* | 0.00050 | 0.18 | **0.53** |
| Aroclor-1260 | 0.065 | 0.018 | 0.014 | 0.0014 | 0.074 | 0.038 | 0.0033 | 0.000022 | na | na | 0.0065 | **0.46** |
| Bis(2-ethylhexyl)phthalate | 0.088 | **2.0** | **2.7** | 0.0044 | **4.4** | **2.2** | 0.080 | 0.000033 | na | na | 0.15 | 0.073 |
| **HI** | | **5** | **3** | **9** | **22** | **15** | **11** | **4** | **8** | **21** | **15** | 1 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-43**
**Minimum ESL Comparison for Consolidated Unit 21-024(l)-99**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Barium | 115 | 110 | Plant | **1.0** |
| Cadmium | 0.34 | 0.27 | Montane shrew | **1.3** |
| Chromium | 10 | 2.3 | Earthworm | **4.3** |
| Cobalt | 4.5 | 13 | Plant | **0.35** |
| Copper | 11 | 15 | American robin (insectivore) | **0.73** |
| Lead | 149 | 14 | American robin (insectivore) | **11** |
| Lithium | 13 | 2.0 | Plant | **6.5** |
| Mercury | 0.10 | 0.013 | American robin (insectivore) | **7.7** |
| Selenium | 1.1 | 0.52 | Plant | **2.1** |
| Zinc | 123 | 48 | American robin (insectivore) | **2.6** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthylene | 0.012 | 120 | Montane shrew | 0.00010 |
| Acenaphthene | 0.15 | 0.25 | Plant | **0.60** |
| Acetone | 0.35 | 1.2 | Deer mouse | 0.29 |
| Anthracene | 0.44 | 6.8 | Plant | 0.065 |
| Benzo(a)anthracene | 1.0 | 3.0 | Montane shrew | **0.33** |
| Benzo(a)pyrene | 0.66 | 53 | Montane shrew | 0.012 |
| Benzo(b)fluoranthene | 1.4 | 18 | Plant | 0.078 |
| Benzo(g,h,i)perylene | 0.28 | 24 | Montane shrew | 0.012 |
| Benzo(k)fluoranthene | 0.24 | 62 | Montane shrew | 0.0039 |
| Bis(2-ethylhexyl)phthalate | 0.25 | 0.020 | American robin (insectivore) | **13** |
| Chloroform | 0.00022 | 8.0 | Deer mouse | 0.000028 |
| Chrysene | 1.04 | 2.4 | Montane shrew | **0.43** |
| Dibenzofuran | 0.22 | 6.1 | Plant | 0.036 |
| Fluoranthene | 2.6 | 10 | Earthworm | 0.26 |
| Fluorene | 0.13 | 3.7 | Earthworm | 0.035 |
| Indeno(1,2,3-cd)pyrene | 0.28 | 62 | Montane shrew | 0.0045 |
| Methylene chloride | 0.0041 | 2.6 | Deer mouse | 0.0016 |
| Methylnaphthalene[2-] | 0.04 | 2.5 | Montane shrew | 0.016 |
| Naphthalene | 0.17 | 1.0 | Plant | 0.17 |
| Phenanthrene | 2.0 | 5.5 | Earthworm | **0.36** |
| Pyrene | 2.2 | 10 | Earthworm | 0.22 |
| Toluene | 0.0014 | 23 | Montane shrew | 0.000061 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.86 | 44 | Earthworm | 0.020 |
| Cesium-137 | 0.19 | 680 | Red fox | 0.00028 |

**Table H-5.3-43 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Plutonium-238 | 1.0 | 44 | Earthworm | 0.023 |
| Plutonium-239/240 | 18 | 47 | Earthworm | **0.38** |
| Tritium | 0.16 | 36000 | Plant | 0.0000044 |
| Uranium-234 | 1.4 | 51 | Earthworm | 0.027 |
| Uranium-235/236 | 0.077 | 55 | Earthworm | 0.0014 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-44**
**Hazard Index Analysis for Consolidated Unit 21-024(l)-99**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Barium | 115 | 0.010 | 0.0031 | 0.14 | 0.12 | 0.12 | 0.064 | 0.035 | **0.35** | **1.0** | 0.089 | 0.0028 |
| Cadmium | 0.34 | 0.17 | 0.00059 | 0.078 | **1.2** | **0.64** | **0.67** | 0.035 | 0.0025 | 0.011 | **1.3** | 0.00067 |
| Chromium | 10.26 | 0.0013 | 0.00028 | 0.0054 | 0.012 | 0.0093 | 0.0054 | 0.00079 | **4.3** | **4.3** | 0.014 | 0.00034 |
| Cobalt | 4.52 | 0.0049 | 0.0013 | 0.027 | 0.047 | 0.038 | 0.011 | 0.0025 | na* | **0.35** | 0.028 | 0.00084 |
| Copper | 11.24 | 0.10 | 0.0070 | 0.30 | **0.73** | **0.51** | 0.18 | 0.042 | 0.14 | 0.16 | 0.30 | 0.0030 |
| Lead | 149 | **1.2** | 0.18 | **7.1** | **11** | **9.3** | **1.2** | **0.40** | 0.088 | **1.2** | **2.1** | 0.040 |
| Lithium | 13 | na | na | na | na | na | 0.13 | 0.051 | na | **6.5** | **0.33** | 0.014 |
| Mercury | 0.10 | **1.2** | **0.35** | **1.4** | **7.7** | **4.5** | 0.033 | 0.0045 | **2.0** | 0.0029 | 0.058 | 0.0021 |
| Selenium | 1.10 | 0.20 | 0.011 | **1.1** | **1.5** | **1.3** | **1.3** | **0.52** | 0.27 | **2.1** | **1.7** | 0.013 |
| Zinc | 122.9 | **0.38** | 0.051 | **0.35** | **2.6** | **1.4** | **0.72** | 0.068 | **1.0** | **0.77** | **1.3** | 0.020 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.15 | na | na | na | na | na | 0.00092 | 0.00030 | na | **0.6** | 0.0012 | 0.000024 |
| Benzo(a)anthracene | 1.033 | na | na | na | na | na | 0.30 | 0.17 | na | 0.057 | **0.33** | 0.032 |
| Bis(2-ethylhexyl)phthalate | 0.25 | **5.6** | **7.6** | 0.013 | **13** | **6.3** | 0.23 | 0.000093 | na | na | **0.42** | 0.21 |
| Chrysene | 1.0 | na | na | na | na | na | **0.34** | 0.16 | na | na | **0.43** | 0.042 |
| Phenanthrene | 2.01600000 | na | na | na | na | na | 0.13 | 0.034 | **0.36** | na | 0.20 | 0.0070 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 17.50 | 0.00051 | 0.00011 | 0.0020 | 0.0083 | 0.0083 | 0.00012 | 0.00010 | **0.38** | 0.00011 | 0.00016 | 0.00053 |
| **HI** | | **9** | **8** | **11** | **38** | **24** | **5** | **2** | **9** | **17** | **9** | 0.4 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

**Table H-5.3-45**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(o)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0000049 | 0.01 | 4.9E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000012 | 0.01 | 1.2E-08 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.00000020 | 0.1 | 2.0E-08 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.00000018 | 0.1 | 1.8E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000043 | 0.0003 | 1.3E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000027 | 0.0003 | 8.1E-10 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00000033 | 0.3 | 9.9E-08 |
| **2,3,7,8-TCDD Equivalent** | | | **2.1E-07** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-46**
**Minimum ESL Comparison for SWMU 21-024(o)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Chromium | 10 | 2.3 | Earthworm | **4.3** |
| Cyanide (total) | 0.3 | 0.1 | American robin (herbivore) | **3.0** |
| Lead | 30 | 14 | American robin (insectivore) | **2.1** |
| Selenium | 0.60 | 0.52 | Plant | **1.2** |
| Uranium | 2.4 | 25 | Plant | 0.096 |
| Zinc | 102.2 | 48 | American robin (insectivore) | **2.1** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.061 | 0.25 | Plant | 0.24 |
| Acetone | 0.0027 | 1.2 | Deer mouse | 0.0023 |
| Anthracene | 0.067 | 6.8 | Plant | 0.0099 |
| Aroclor-1260 | 0.020 | 0.14 | Red fox | 0.14 |
| Benzo(a)anthracene | 0.18 | 3 | Montane shrew | 0.060 |
| Benzo(a)pyrene | 0.27 | 53 | Montane shrew | 0.0051 |
| Benzo(b)fluoranthene | 0.56 | 18 | Plant | 0.031 |
| Benzo(g,h,i)perylene | 0.24 | 24 | Montane shrew | 0.010 |
| Benzo(k)fluoranthene | 0.78 | 62 | Montane shrew | 0.013 |
| Benzoic acid | 0.59 | 1 | Montane shrew | **0.59** |
| Bis(2-ethylhexyl)phthalate | 0.12 | 0.02 | American robin (insectivore) | **6.0** |
| Chrysene | 0.17 | 2.4 | Montane shrew | 0.071 |
| Fluoranthene | 0.47 | 10 | Earthworm | 0.047 |
| Fluorene | 0.083 | 3.7 | Earthworm | 0.022 |
| Hexachlorobenzene | 0.089 | 0.079 | American robin (insectivore) | **1.1** |
| Methylnaphthalene[2-] | 0.052 | 2.5 | Montane shrew | 0.021 |
| Naphthalene | 0.10 | 1 | Plant | 0.10 |
| Phenanthrene | 0.26 | 5.5 | Earthworm | 0.047 |
| Pyrene | 0.49 | 10 | Earthworm | 0.049 |
| 2,3,7,8-TCDD equivalent | 0.00000021 | 0.00000029 | Montane shrew | **0.72** |
| Toluene | 0.0057 | 23 | Montane shrew | 0.00025 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.047 | 44 | Earthworm | 0.0011 |
| Cesium-137 | 0.45 | 680 | Red fox | 0.00066 |
| Plutonium-238 | 0.085 | 44 | Earthworm | 0.0019 |
| Plutonium-239/240 | 1.9 | 47 | Earthworm | 0.040 |
| Tritium | 0.014 | 36000 | Plant | 0.00000039 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-47**
**Hazard Index Analysis for SWMU 21-024(o)**

| COPECs | EP (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Chromium | 10 | 0.0013 | 0.00028 | 0.0054 | 0.012 | 0.0093 | 0.0054 | 0.00078 | **4.3** | **4.2** | 0.014 | 0.00034 |
| Cyanide (total) | 1.3 | **0.60** | **0.48** | **3.0** | **2.8** | **2.8** | 0.00082 | 0.00038 | na* | na | 0.00090 | 0.00013 |
| Lead | 30 | 0.25 | 0.038 | **1.4** | **2.1** | **1.9** | 0.25 | 0.082 | 0.018 | 0.25 | **0.42** | 0.0082 |
| Selenium | 0.60 | 0.11 | 0.0062 | **0.60** | **0.80** | **0.69** | **0.72** | 0.29 | 0.15 | **1.2** | **0.91** | 0.0071 |
| Zinc | 102.2 | **0.32** | 0.043 | 0.29 | **2.1** | **1.2** | **0.60** | 0.057 | **0.85** | **0.64** | **1.0** | 0.017 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.59 | na | na | na | na | na | **0.45** | 0.14 | na | na | **0.59** | 0.0017 |
| Bis(2-ethylhexyl)phthalate | 0.12 | **2.6** | **3.6** | 0.0060 | **6.0** | **3.0** | 0.11 | 0.000044 | na | na | 0.20 | 0.099 |
| Hexachlorobenzene | 0.089 | 0.16 | 0.0011 | 0.00089 | **1.1** | **0.59** | 0.22 | 0.000064 | 0.0089 | 0.0089 | **0.45** | 0.00036 |
| 2,3,7,8-TCDD Equivalent | 0.00000021 | na | na | na | na | na | **0.37** | 0.0044 | 0.000000042 | na | **0.72** | 0.18 |
| **HI** | | **4** | **4** | **5** | **15** | **10** | **3** | 0.6 | **5** | **6** | **4** | 0.3 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-48**
**Dioxin/Furan TEF Calculations for**
**Ecological Receptors for Consolidated Unit 21-026(a)-99**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.0000016 | 0.01 | 1.6E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000010 | 0.0003 | 3.0E-09 |
| **2,3,7,8-TCDD Equivalent** | | | **1.9E-08** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-49**
**Minimum ESL Comparison for Consolidated Unit 21-026(a)-99**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.21 | 0.050 | Plant | **4.2** |
| Arsenic | 2.9 | 6.8 | Earthworm | **0.43** |
| Barium | 130.6 | 110 | Plant | **1.2** |
| Cadmium | 1.6 | 0.27 | Montane shrew | **5.9** |
| Chromium | 39 | 2.3 | Earthworm | **17** |
| Copper | 77 | 15 | American robin (insectivore) | **5.1** |
| Cyanide (total) | 2.7 | 0.10 | American robin (herbivore) | **27** |
| Lead | 41 | 14 | American robin (insectivore) | **2.9** |
| Mercury | 3.0 | 0.013 | American robin (insectivore) | **231** |
| Nickel | 11 | 9.7 | Montane shrew | **1.1** |
| Selenium | 0.56 | 0.52 | Plant | **1.1** |
| Silver | 8.8 | 2.6 | American robin (insectivore) | **3.4** |
| Uranium | 3.2 | 25 | Plant | 0.13 |
| Zinc | 224.8 | 48 | American robin (insectivore) | **4.7** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.28 | 0.25 | Plant | **1.1** |
| Anthracene | 0.65 | 6.8 | Plant | 0.096 |
| Aroclor-1254 | 0.0044 | 0.041 | American robin (insectivore) | 0.11 |
| Aroclor-1260 | 0.0031 | 0.14 | Red fox | 0.022 |
| Benzo(a)anthracene | 0.55 | 3.0 | Montane shrew | 0.18 |
| Benzo(a)pyrene | 0.42 | 53 | Montane shrew | 0.0079 |
| Benzo(b)fluoranthene | 0.55 | 18 | Plant | 0.031 |
| Benzo(g,h,i)perylene | 0.23 | 24 | Montane shrew | 0.0096 |
| Benzo(k)fluoranthene | 0.47 | 62 | Montane shrew | 0.0076 |
| Benzoic acid | 0.50 | 1.0 | Montane shrew | **0.50** |
| Bis(2-ethylhexyl)phthalate | 0.69 | 0.020 | American robin (insectivore) | **35** |
| Butylbenzylphthalate | 0.22 | 90 | Montane shrew | 0.0024 |
| Chloroform | 0.00025 | 8.0 | Deer mouse | 0.000031 |
| Chrysene | 0.57 | 2.4 | Montane shrew | 0.24 |
| Dibenzo(a,h)anthracene | 0.84 | 12 | Montane shrew | 0.070 |
| Dibenzofuran | 0.055 | 6.1 | Plant | 0.0090 |
| Dichlorobenzene[1,4-] | 0.064 | 0.88 | Montane shrew | 0.073 |
| Di-n-butylphthalate | 0.24 | 0.011 | American robin (insectivore) | **22** |
| Di-n-octylphthalate | 0.10 | 1.1 | Montane shrew | 0.091 |
| Fluoranthene | 0.60 | 10 | Earthworm | 0.060 |
| Fluorene | 0.17 | 3.7 | Earthworm | 0.046 |

**Table H-5.3-49 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| Indeno(1,2,3-cd)pyrene | 0.24 | 62 | Montane shrew | 0.0039 |
| Phenanthrene | 2.20 | 5.5 | Earthworm | **0.40** |
| Pyrene | 0.54 | 10 | Earthworm | 0.054 |
| 2,3,7,8-TCDD equivalent | 0.000000019 | 0.00000029 | Montane shrew | 0.066 |
| Xylene (total) | 0.0015 | 1.4 | Montane shrew | 0.0011 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 13 | 44 | Earthworm | 0.30 |
| Cesium-137 | 0.23 | 680 | Red fox | 0.00034 |
| Plutonium-238 | 0.96 | 44 | Earthworm | 0.022 |
| Plutonium-239/240 | 19 | 47 | Earthworm | **0.40** |
| Tritium | 0.72 | 36000 | Plant | 0.000020 |
| Uranium-234 | 5.6 | 51 | Earthworm | 0.11 |
| Uranium-235/236 | 0.17 | 55 | Earthworm | 0.0031 |
| Uranium-238 | 1.3 | 55 | Earthworm | 0.024 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-50**
**Hazard Index Analysis for Consolidated Unit 21-026(a)-99**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 0.21 | na* | na | na | na | na | **0.45** | 0.074 | 0.0027 | **4.2** | **0.82** | 0.0048 |
| Arsenic | 2.9 | 0.018 | 0.0026 | 0.069 | 0.16 | 0.11 | 0.090 | 0.018 | **0.43** | 0.16 | 0.19 | 0.0036 |
| Barium | 130.6 | 0.012 | 0.0035 | 0.16 | 0.13 | 0.14 | 0.073 | 0.040 | **0.40** | **1.2** | 0.10 | 0.0032 |
| Cadmium | 1.6 | **0.79** | 0.0027 | **0.36** | **5.5** | **2.9** | **3.1** | 0.16 | 0.011 | 0.050 | **5.9** | 0.0031 |
| Chromium | 39 | 0.0050 | 0.0010 | 0.020 | 0.046 | 0.035 | 0.020 | 0.0030 | **17** | **16** | 0.051 | 0.0013 |
| Copper | 77 | **0.70** | 0.048 | **2.0** | **5.1** | **3.5** | **1.2** | 0.28 | **0.96** | **1.1** | **2.0** | 0.020 |
| Cyanide (total) | 2.7 | **5.7** | **4.7** | **27** | **27** | **27** | 0.0079 | 0.0036 | na | na | 0.0087 | 0.0012 |
| Lead | 41 | **0.34** | 0.051 | **2.0** | **2.9** | **2.6** | **0.34** | 0.11 | 0.024 | **0.34** | **0.57** | 0.011 |
| Mercury | 3.0 | **37** | **11** | **43** | **231** | **137** | **1.0** | 0.14 | **60** | 0.089 | **1.8** | 0.065 |
| Nickel | 11 | 0.072 | 0.0040 | 0.072 | **0.55** | 0.30 | **0.57** | 0.023 | 0.041 | 0.30 | **1.1** | 0.0096 |
| Selenium | 0.56 | 0.100 | 0.0058 | **0.56** | **0.75** | **0.64** | **0.67** | 0.27 | 0.14 | **1.1** | **0.85** | 0.0067 |
| Silver | 8.8 | **0.47** | 0.011 | **0.80** | **3.4** | **2.1** | **0.37** | 0.059 | na | 0.016 | **0.63** | 0.0022 |
| Zinc | 224.8 | **0.70** | 0.094 | **0.64** | **4.7** | **2.6** | **1.3** | 0.12 | **1.9** | **1.4** | **2.3** | 0.037 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.28 | na | na | na | na | na | 0.0018 | 0.00057 | na | **1.1** | 0.0023 | 0.000045 |
| Benzoic Acid | 0.50 | na | na | na | na | na | **0.39** | 0.12 | na | na | **0.50** | 0.0014 |
| Bis(2-ethylhexyl)phthalate | 0.69 | **15** | **21** | 0.034 | **35** | **17** | **0.63** | 0.00026 | na | na | **1.2** | **0.57** |
| Di-n-butylphthalate | 0.24 | **3.5** | **1** | **0.61** | **22** | **11** | 0.00065 | 0.000015 | na | 0.0015 | 0.0013 | 0.000048 |

**Table H-5.3-50 (continued)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | 2.2 | na | na | na | na | na | 0.15 | 0.037 | **0.40** | na | 0.22 | 0.0076 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 19 | 0.00056 | 0.00012 | 0.0022 | 0.0091 | 0.0091 | 0.00013 | 0.00011 | **0.40** | 0.00012 | 0.00017 | 0.00058 |
| **HI** | | **64** | **38** | **77** | **338** | **207** | **10** | **2** | **82** | **27** | **18** | 0.7 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-51**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-027(a)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.05050 | 0.01 | 5.1E-04 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.00367 | 0.01 | 3.7E-05 |
| Heptachlorodibenzofuran[1,2,3,4,7,8,9-] | 0.000355 | 0.01 | 3.6E-06 |
| Hexachlorodibenzodioxin[1,2,3,4,7,8-] | 0.000636 | 0.1 | 6.4E-05 |
| Hexachlorodibenzodioxin[1,2,3,6,7,8-] | 0.001360 | 0.1 | 1.4E-04 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.000438 | 0.1 | 4.4E-05 |
| Hexachlorodibenzofuran[1,2,3,4,7,8-] | 0.000125 | 0.1 | 1.3E-05 |
| Hexachlorodibenzofuran[1,2,3,6,7,8-] | 0.000101 | 0.1 | 1.0E-05 |
| Hexachlorodibenzofuran[1,2,3,7,8,9-] | 0.00008 | 0.1 | 8.0E-06 |
| Hexachlorodibenzofuran[2,3,4,6,7,8-] | 0.000210 | 0.1 | 2.1E-05 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.21200 | 0.0003 | 6.4E-05 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.01180 | 0.0003 | 3.5E-06 |
| Pentachlorodibenzodioxin[1,2,3,7,8-] | 0.000315 | 1 | 3.2E-04 |
| Pentachlorodibenzofuran[1,2,3,7,8-] | 0.00003 | 0.03 | 9.0E-07 |
| Pentachlorodibenzofuran[2,3,4,7,8-] | 0.00008 | 0.3 | 2.4E-05 |
| Tetrachlorodibenzodioxin[2,3,7,8-] | 0.00003 | 1 | 3.0E-05 |
| Tetrachlorodibenzofuran[2,3,7,8-] | 0.00000330 | 0.1 | 3.3E-07 |
| | | **2,3,7,8-TCDD Equivalent** | **1.3E-03** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-52**
**Minimum ESL Comparison for SWMU 21-027(a)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.54 | 0.05 | Plant | **11** |
| Arsenic | 4.6 | 6.8 | Earthworm | **0.68** |
| Barium | 90 | 110 | Plant | **0.82** |
| Cadmium | 1.5 | 0.27 | Montane shrew | **5.6** |
| Chromium | 360 | 2.3 | Earthworm | **157** |
| Copper | 46 | 15 | American robin (insectivore) | **3.1** |
| Lead | 24 | 14 | American robin (insectivore) | **1.7** |
| Lithium | 9.7 | 2 | Plant | **4.9** |
| Mercury | 0.30 | 0.013 | American robin (insectivore) | **23** |
| Nickel | 7.7 | 9.7 | Montane shrew | **0.80** |
| Selenium | 1.6 | 0.52 | Plant | **3.1** |
| Strontium | 20 | 96 | Deer mouse | 0.21 |
| Vanadium | 18 | 0.025 | Plant | **720** |
| Zinc | 235.9 | 48 | American robin (insectivore) | **4.9** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.047 | 0.25 | Plant | 0.19 |
| Acetone | 0.027 | 1.2 | Deer mouse | 0.023 |
| Anthracene | 0.035 | 6.8 | Plant | 0.0051 |
| Aroclor-1254 | 0.052 | 0.041 | American robin (insectivore) | **1.3** |
| Aroclor-1260 | 0.028 | 0.14 | Red fox | 0.20 |
| Benzo(a)anthracene | 0.14 | 3 | Montane shrew | 0.047 |
| Benzo(a)pyrene | 0.39 | 53 | Montane shrew | 0.0074 |
| Benzo(b)fluoranthene | 0.26 | 18 | Plant | 0.014 |
| Benzo(g,h,i)perylene | 0.14 | 24 | Montane shrew | 0.0058 |
| Benzo(k)fluoranthene | 0.24 | 62 | Montane shrew | 0.0039 |
| Bis(2-ethylhexyl)phthalate | 0.29 | 0.02 | American robin (insectivore) | **15** |
| Butanone[2-] | 0.0058 | 360 | Deer mouse | 0.000016 |
| Chrysene | 0.16 | 2.4 | Montane shrew | 0.067 |
| Di-n-butylphthalate | 0.12 | 0.011 | American robin (insectivore) | **11** |
| Fluoranthene | 0.35 | 10 | Earthworm | 0.035 |
| Fluorene | 0.034 | 3.7 | Earthworm | 0.0092 |
| Indeno(1,2,3-cd)pyrene | 0.12 | 62 | Montane shrew | 0.0019 |
| Naphthalene | 0.014 | 1 | Plant | 0.014 |
| Phenanthrene | 0.14 | 5.5 | Earthworm | 0.025 |
| Pyrene | 0.32 | 10 | Earthworm | 0.032 |

**Table H-5.3-52 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| 2,3,7,8-TCDD equivalent | 0.0013 | 0.00000029 | Montane shrew | **4483** |
| Tetrachloroethene | 0.0056 | 0.18 | Montane shrew | 0.031 |
| Toluene | 0.00065 | 23 | Montane shrew | 0.000028 |
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 18 | 44 | Earthworm | **0.41** |
| Cesium-137 | 0.46 | 680 | Red fox | 0.00068 |
| Plutonium-238 | 40 | 44 | Earthworm | **0.91** |
| Plutonium-239/240 | 82 | 47 | Earthworm | **1.7** |
| Tritium | 0.37 | 36000 | Plant | 0.000010 |
| Uranium-234 | 20 | 51 | Earthworm | **0.39** |
| Uranium-235/236 | 1.1 | 55 | Earthworm | 0.020 |
| Uranium-238 | 1.6 | 55 | Earthworm | 0.029 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-53**
**Hazard Index Analysis for SWMU 21-027(a)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 0.54 | na* | na | na | na | na | **1.1** | 0.19 | 0.0069 | **11** | **2.1** | 0.012 |
| Arsenic | 4.6 | 0.029 | 0.0042 | 0.11 | 0.25 | 0.18 | 0.14 | 0.029 | **0.68** | 0.25 | **0.31** | 0.0057 |
| Barium | 90 | 0.0082 | 0.0024 | 0.11 | 0.090 | 0.097 | 0.050 | 0.027 | 0.27 | **0.82** | 0.069 | 0.0022 |
| Cadmium | 1.5 | **0.73** | 0.0025 | **0.33** | **5.0** | **2.7** | **2.8** | 0.15 | 0.010 | 0.045 | **5.6** | 0.0028 |
| Chromium | 360 | 0.047 | 0.0097 | 0.19 | **0.43** | **0.33** | 0.19 | 0.028 | **157** | **150** | **0.48** | 0.012 |
| Copper | 46 | **0.42** | 0.029 | **1.2** | **3.1** | **2.1** | **0.72** | 0.17 | **0.58** | **0.66** | **1.2** | 0.012 |
| Lead | 24 | 0.20 | 0.030 | **1.1** | **1.7** | **1.5** | 0.20 | 0.065 | 0.014 | 0.20 | **0.33** | 0.0065 |
| Lithium | 9.7 | na | na | na | na | na | 0.097 | 0.039 | na | **4.9** | 0.26 | 0.011 |
| Mercury | 0.30 | **3.6** | **1.1** | **4.2** | **23** | **13** | 0.098 | 0.013 | **5.9** | 0.0087 | 0.17 | 0.0064 |
| Nickel | 7.7 | 0.048 | 0.0027 | 0.048 | **0.37** | 0.20 | **0.39** | 0.015 | 0.028 | 0.20 | **0.80** | 0.0065 |
| Selenium | 1.6 | 0.28 | 0.016 | **1.6** | **2.1** | **1.8** | **1.9** | **0.76** | **0.39** | **3.1** | **2.4** | 0.019 |
| Vanadium | 18 | 0.21 | 0.11 | **2.0** | **2.7** | **2.4** | 0.037 | 0.012 | na | **720** | 0.13 | 0.0054 |
| Zinc | 235.9 | **0.74** | 0.098 | **0.67** | **4.9** | **2.8** | **1.4** | 0.13 | **2.0** | **1.5** | **2.4** | 0.039 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.052 | 0.30 | 0.24 | 0.040 | **1.3** | **0.65** | 0.059 | 0.00100 | na | 0.00032 | 0.12 | **0.35** |
| Bis(2-ethylhexyl)phthalate | 0.29 | **6.4** | **8.7** | 0.014 | **15** | **7.2** | 0.26 | 0.00011 | na | na | **0.49** | 0.24 |
| Di-n-butylphthalate | 0.12 | **1.8** | **0.50** | **0.31** | **11** | **5.7** | 0.00032 | 0.0000075 | na | 0.00075 | 0.00067 | 0.000024 |
| 2,3,7,8-TCDD Equivalent | 0.0013 | na | na | na | na | na | **2198** | **27** | 0.00025 | na | **4483** | **1062** |

**Table H-5.3-53 (continued)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Americium-241 | 18 | 0.00051 | 0.00029 | 0.0014 | 0.0044 | 0.0044 | 0.00055 | 0.00055 | **0.41** | 0.00084 | 0.00057 | 0.00068 |
| Plutonium-238 | 40 | 0.0013 | 0.00031 | 0.0048 | 0.020 | 0.019 | 0.00036 | 0.00033 | **0.91** | 0.00036 | 0.00043 | 0.0013 |
| Plutonium-239/240 | 82 | 0.0024 | 0.00051 | 0.0095 | 0.039 | 0.039 | 0.00055 | 0.00048 | **1.7** | 0.00051 | 0.00074 | 0.0025 |
| Uranium-234 | 20 | 0.00017 | 0.00011 | 0.00042 | 0.0015 | 0.0015 | 0.00022 | 0.00021 | **0.39** | 0.0015 | 0.00022 | 0.00045 |
| **HI** | | **15** | **11** | **12** | **71** | **41** | **2207** | **29** | **170** | **893** | **4500** | **1063** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.3-54**
**Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-027(c)**

| COPC | EPC 0–5 ft (mg/kg) | TEFs* | Equivalency Calculation |
|---|---|---|---|
| Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] | 0.000005 | 0.01 | 5.0E-08 |
| Heptachlorodibenzofuran[1,2,3,4,6,7,8-] | 0.0000012 | 0.01 | 1.2E-08 |
| Hexachlorodibenzodioxin[1,2,3,7,8,9-] | 0.00000019 | 0.1 | 1.9E-08 |
| Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] | 0.000050 | 0.0003 | 1.5E-08 |
| Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] | 0.0000022 | 0.0003 | 6.6E-10 |
| **2,3,7,8-TCDD Equivalent** | | | **9.7E-08** |

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

**Table H-5.3-55**
**Minimum ESL Comparison for SWMU 21-027(c)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Barium | 93 | 110 | Plant | **0.85** |
| Chromium | 17 | 2.3 | Earthworm | **7.4** |
| Cobalt | 2.7 | 13 | Plant | 0.21 |
| Copper | 14 | 15 | American robin (insectivore) | **0.93** |
| Lead | 58 | 14 | American robin (insectivore) | **4.1** |
| Mercury | 0.090 | 0.013 | American robin (insectivore) | **6.9** |
| Selenium | 0.91 | 0.52 | Plant | **1.8** |
| Uranium | 1.2 | 25 | Plant | 0.048 |
| Zinc | 84 | 48 | American robin (insectivore) | **1.8** |
| **Organic Chemicals (mg/kg)** | | | | |
| Acenaphthene | 0.081 | 0.25 | Plant | **0.32** |
| Acenaphthylene | 0.021 | 120 | Montane shrew | 0.00018 |
| Acetone | 0.011 | 1.2 | Deer mouse | 0.0092 |
| Anthracene | 0.11 | 6.8 | Plant | 0.016 |
| Aroclor-1260 | 0.0016 | 0.14 | Red fox | 0.011 |
| Benzo(a)anthracene | 0.57 | 3 | Montane shrew | 0.19 |
| Benzo(a)pyrene | 0.33 | 53 | Montane shrew | 0.0062 |
| Benzo(b)fluoranthene | 0.70 | 18 | Plant | 0.039 |
| Benzo(g,h,i)perylene | 1.12 | 24 | Montane shrew | 0.047 |
| Benzo(k)fluoranthene | 0.23 | 62 | Montane shrew | 0.0037 |
| Benzoic acid | 0.31 | 1 | Montane shrew | **0.31** |
| Bis(2-ethylhexyl)phthalate | 18 | 0.02 | American robin (insectivore) | **900** |
| Chrysene | 0.38 | 2.4 | Montane shrew | 0.16 |
| Dibenzofuran | 0.25 | 6.1 | Plant | 0.041 |
| Di-n-butylphthalate | 0.13 | 0.011 | American robin (insectivore) | **12** |
| Fluoranthene | 0.68 | 10 | Earthworm | 0.068 |
| Fluorene | 0.079 | 3.7 | Earthworm | 0.021 |
| Indeno(1,2,3-cd)pyrene | 0.19 | 62 | Montane shrew | 0.0031 |
| Methylene chloride | 0.0070 | 2.6 | Deer mouse | 0.0027 |
| Methylnaphthalene[2-] | 0.079 | 2.5 | Montane shrew | 0.032 |
| Naphthalene | 0.22 | 1 | Plant | 0.22 |
| Phenanthrene | 0.52 | 5.5 | Earthworm | 0.095 |
| Pyrene | 1.2 | 10 | Earthworm | 0.12 |
| 2,3,7,8-TCDD equivalent | 0.000000097 | 0.00000029 | Montane shrew | **0.33** |
| Toluene | 0.0018 | 23 | Montane shrew | 0.000078 |
| Trichloroethene | 0.0019 | 42 | Montane shrew | 0.000045 |

**Table H-5.3-55 (continued)**

| COPC | EPC | ESL | Receptor | HQ |
|---|---|---|---|---|
| **Radionuclides (pCi/g)** | | | | |
| Americium-241 | 0.660 | 44 | Earthworm | 0.015 |
| Cesium-134 | 0.141 | 320 | Red fox | 0.00044 |
| Cesium-137 | 0.263 | 680 | Red fox | 0.00039 |
| Plutonium-238 | 0.092 | 44 | Earthworm | 0.0021 |
| Plutonium-239/240 | 7.841 | 47 | Earthworm | 0.17 |
| Strontium-90 | 2.970 | 560 | Red fox | 0.0053 |
| Tritium | 0.026 | 36000 | Plant | 0.00000072 |
| Uranium-234 | 1.645 | 51 | Earthworm | 0.032 |

Note: Bolded values indicate HQ greater than 0.3.

**Table H-5.3-56**
**Hazard Index Analysis for SWMU 21-027(c)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omniore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Barium | 93 | 0.0084 | 0.0025 | 0.11 | 0.093 | 0.100 | 0.052 | 0.028 | 0.28 | **0.85** | 0.071 | 0.0023 |
| Chromium | 17 | 0.0023 | 0.00047 | 0.0091 | 0.021 | 0.016 | 0.0091 | 0.0013 | **7.4** | **7.2** | 0.023 | 0.00058 |
| Copper | 14 | 0.13 | 0.0087 | **0.36** | **0.93** | **0.63** | 0.22 | 0.051 | 0.17 | 0.20 | **0.36** | 0.0036 |
| Lead | 58 | **0.48** | 0.071 | **2.7** | **4.1** | **3.6** | **0.48** | 0.16 | 0.034 | **0.48** | **0.80** | 0.016 |
| Mercury | 0.090 | **1.1** | **0.32** | **1.3** | **6.9** | **4.1** | 0.030 | 0.0041 | **1.8** | 0.0027 | 0.053 | 0.0020 |
| Selenium | 0.91 | 0.16 | 0.0094 | **0.91** | **1.2** | **1.0** | **1.1** | **0.43** | 0.22 | **1.8** | **1.4** | 0.011 |
| Zinc | 84 | 0.26 | 0.035 | 0.24 | **1.8** | **0.99** | **0.49** | 0.047 | **0.70** | **0.52** | **0.86** | 0.014 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.081 | na* | na | na | na | na | 0.00050 | 0.00016 | na | **0.32** | 0.00067 | 0.000013 |
| Benzoic acid | 0.31 | na | na | na | na | na | 0.24 | 0.073 | na | **na** | **0.31** | 0.00087 |
| Bis(2-ethylhexyl)phthalate | 18 | **394** | **537** | **0.89** | **900** | **444** | **16** | 0.0066 | na | **na** | **30** | **15** |
| Di-n-butylphthalate | 0.13 | **1.8** | **0.52** | **0.32** | **12** | **6.0** | 0.00034 | 0.0000078 | na | 0.00078 | 0.00069 | 0.000025 |
| 2,3,7,8-TCDD Equivalent | 0.000000097 | na | na | na | na | na | 0.17 | 0.0020 | 0.000000020 | **na** | **0.33** | 0.082 |
| **HI** | | **398** | **538** | **7** | **927** | **460** | **19** | 0.8 | **11** | **11** | **34** | **15** |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-1**
**Comparison of EPCs to**
**Background Concentrations for AOC 21-002(b)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Arsenic | 3.805 | 0.3–9.3 | 0.25–5 |
| Barium | 92.5 | 21–410 | 1.4–51.6 |
| Cadmium | 0.403 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 14.85 | 1.9–36.5 | 0.25–13 |
| Cyanide (total) | 0.4 | 0.5* | 0.5* |
| Lead | 132.3 | 2–28 | 1.6–15.5 |
| Selenium | 4.694 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 102.4 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-2**
**Comparison of EPCs to**
**Background Concentrations for Consolidated Unit 21-006(c)-99**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 1.33 | 0.1–1 | 0.05–0.4 |
| Barium | 70.96 | 21–410 | 1.4–51.6 |
| Chromium | 6.163 | 1.9–36.5 | 0.25–13 |
| Copper | 8.834 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.106 | 0.5* | 0.5* |
| Lead | 15.83 | 2–28 | 1.6–15.5 |
| Mercury | 0.0623 | 0.05–0.1 | 0.1* |
| Nickel | 5.629 | 1–29 | 0.5–7 |
| Selenium | 1.744 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 379.8 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-3**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-009**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Barium | 153 | 21–410 | 1.4–51.6 |
| Chromium | 14.37 | 1.9–36.5 | 0.25–13 |
| Cyanide (total) | 0.315 | 0.5* | 0.5* |
| Lead | 16.74 | 2–28 | 1.6–15.5 |
| Selenium | 10.63 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 49.36 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-4**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-012(b)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 0.193 | 0.1–1 | 0.05–0.4 |
| Arsenic | 2.823 | 0.3–9.3 | 0.25–5 |
| Barium | 77.73 | 21–410 | 1.4–51.6 |
| Cadmium | 0.296 | 0.2–2.6 | 0.1–1.5 |
| Calcium | 3571 | 500–14000 | 200–2230 |
| Chromium | 13.29 | 1.9–36.5 | 0.25–13 |
| Copper | 135.7 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.199 | 0.5* | 0.5* |
| Iron | 10365 | 3300–36000 | 190–19500 |
| Lead | 17.8 | 2–28 | 1.6–15.5 |
| Mercury | 1.377 | 0.05–0.1 | 0.1* |
| Nickel | 5.397 | 1–29 | 0.5–7 |
| Selenium | 0.974 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 96.56 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-5**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-013(c)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Arsenic | 3.802 | 0.3–9.3 | 0.25–5 |
| Barium | 108.7 | 21–410 | 1.4–51.6 |
| Cadmium | 0.214 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 10.42 | 1.9–36.5 | 0.25–13 |
| Lead | 14.13 | 2–28 | 1.6–15.5 |
| Mercury | 0.319 | 0.05–0.1 | 0.1* |
| Nickel | 6.66 | 1–29 | 0.5–7 |
| Selenium | 2.089 | 0.1–1.7 | 0.1–0.105 |
| Vanadium | 23.07 | 4–56.5 | 0.25–21 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-6**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-022(h)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 0.184 | 0.1–1 | 0.05–0.4 |
| Barium | 78.15 | 21–410 | 1.4–51.6 |
| Cadmium | 2.951 | 0.2–2.6 | 0.1–1.5 |
| Calcium | 14228 | 500–14000 | 200–2230 |
| Chromium | 104.6 | 1.9–36.5 | 0.25–13 |
| Copper | 181.1 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.231 | 0.5* | 0.5* |
| Lead | 1675 | 2–28 | 1.6–15.5 |
| Mercury | 0.775 | 0.05–0.1 | 0.1* |
| Nickel | 7.178 | 1–29 | 0.5–7 |
| Selenium | 0.407 | 0.1–1.7 | 0.1–0.105 |
| Silver | 20.11 | 1* | 0.2–1.9 |
| Zinc | 561 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-7**
**Comparison of EPCs to**
**Background Concentrations for Consolidated Unit 21-023(a)-99**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 0.311 | 0.1–1 | 0.05–0.4 |
| Arsenic | 3.65 | 0.3–9.3 | 0.25–5 |
| Barium | 89.95 | 21–410 | 1.4–51.6 |
| Calcium | 9480 | 500–14000 | 200–2230 |
| Chromium | 11.54 | 1.9–36.5 | 0.25–13 |
| Copper | 5.204 | 0.25–16 | 0.25–6.2 |
| Lead | 394.8 | 2–28 | 1.6–15.5 |
| Manganese | 238.6 | 76–1100 | 22–752 |
| Mercury | 0.491 | 0.05–0.1 | 0.1* |
| Selenium | 5.802 | 0.1–1.7 | 0.1–0.105 |
| Vanadium | 11.39 | 4–56.5 | 0.25–21 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-8**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(a)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Barium | 71.23 | 21–410 | 1.4–51.6 |
| Chromium | 9.542 | 1.9–36.5 | 0.25–13 |
| Copper | 32.22 | 0.25–16 | 0.25–6.2 |
| Lead | 18.52 | 2–28 | 1.6–15.5 |
| Mercury | 0.26 | 0.05–0.1 | 0.1* |
| Nickel | 4.246 | 1–29 | 0.5–7 |
| Selenium | 1.164 | 0.1–1.7 | 0.1–0.105 |
| Vanadium | 11.44 | 4–56.5 | 0.25–21 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-9**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(b)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Arsenic | 2.713 | 0.3–9.3 | 0.25–5 |
| Barium | 93.42 | 21–410 | 1.4–51.6 |
| Chromium | 18.14 | 1.9–36.5 | 0.25–13 |
| Copper | 21.71 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.373 | 0.5* | 0.5* |
| Lead | 19.16 | 2–28 | 1.6–15.5 |
| Mercury | 2.345 | 0.05–0.1 | 0.1* |
| Nickel | 7.331 | 1–29 | 0.5–7 |
| Selenium | 1.039 | 0.1–1.7 | 0.1–0.105 |
| Silver | 7.978 | 1* | 0.2–1.9 |
| Zinc | 59.02 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-10**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(d)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Arsenic | 3.526 | 0.3–9.3 | 0.25–5 |
| Barium | 77.82 | 21–410 | 1.4–51.6 |
| Chromium | 34.22 | 1.9–36.5 | 0.25–13 |
| Copper | 114 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.456 | 0.5* | 0.5* |
| Lead | 35.93 | 2–28 | 1.6–15.5 |
| Manganese | 322.6 | 76–1100 | 22–752 |
| Mercury | 0.404 | 0.05–0.1 | 0.1* |
| Nickel | 13.14 | 1–29 | 0.5–7 |
| Selenium | 1.796 | 0.1–1.7 | 0.1–0.105 |
| Silver | 8.982 | 1* | 0.2–1.9 |
| Uranium | 6.537 | 0.2–3.6 | 0.2–5 |
| Zinc | 80.24 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-11**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(e)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 0.501 | 0.1–1 | 0.05–0.4 |
| Barium | 99.25 | 21–410 | 1.4–51.6 |
| Cadmium | 2.746 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 9.02 | 1.9–36.5 | 0.25–13 |
| Copper | 25.01 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 4.35 | 0.5* | 0.5* |
| Lead | 38.84 | 2–28 | 1.6–15.5 |
| Mercury | 0.507 | 0.05–0.1 | 0.1* |
| Selenium | 1.166 | 0.1–1.7 | 0.1–0.105 |
| Uranium | 10.98 | 0.2–3.6 | 0.2–5 |
| Zinc | 60.93 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-12**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(g)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Arsenic | 3.14 | 0.3–9.3 | 0.25–5 |
| Barium | 58.32 | 21–410 | 1.4–51.6 |
| Cadmium | 0.368 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 11.56 | 1.9–36.5 | 0.25–13 |
| Copper | 6.296 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.247 | 0.5* | 0.5* |
| Iron | 9037 | 3300–36000 | 190–19500 |
| Lead | 24.37 | 2–28 | 1.6–15.5 |
| Mercury | 0.18 | 0.05–0.1 | 0.1* |
| Nickel | 4.968 | 1–29 | 0.5–7 |
| Selenium | 0.983 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 66.94 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-13**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(h)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 1.123 | 0.1–1 | 0.05–0.4 |
| Arsenic | 4.119 | 0.3–9.3 | 0.25–5 |
| Barium | 72.72 | 21–410 | 1.4–51.6 |
| Cadmium | 0.627 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 15.36 | 1.9–36.5 | 0.25–13 |
| Copper | 82.1 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 0.427 | 0.5* | 0.5* |
| Lead | 62.19 | 2–28 | 1.6–15.5 |
| Mercury | 6.502 | 0.05–0.1 | 0.1* |
| Nickel | 4.574 | 1–29 | 0.5–7 |
| Selenium | 0.984 | 0.1–1.7 | 0.1–0.105 |
| Silver | 3.536 | 1* | 0.2–1.9 |
| Vanadium | 11.56 | 4–56.5 | 0.25–21 |
| Zinc | 113.4 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-14**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(i)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 1.553 | 0.1–1 | 0.05–0.4 |
| Arsenic | 3.62 | 0.3–9.3 | 0.25–5 |
| Barium | 107 | 21–410 | 1.4–51.6 |
| Calcium | 11618 | 500–14000 | 200–2230 |
| Chromium | 12.83 | 1.9–36.5 | 0.25–13 |
| Copper | 8.93 | 0.25–16 | 0.25–6.2 |
| Lead | 39.91 | 2–28 | 1.6–15.5 |
| Mercury | 3.817 | 0.05–0.1 | 0.1* |
| Selenium | 0.507 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 97.1 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-15**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(j)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Arsenic | 3.197 | 0.3–9.3 | 0.25–5 |
| Barium | 73.64 | 21–410 | 1.4–51.6 |
| Chromium | 7.443 | 1.9–36.5 | 0.25–13 |
| Copper | 5.418 | 0.25–16 | 0.25–6.2 |
| Lead | 14.04 | 2–28 | 1.6–15.5 |
| Manganese | 333.1 | 76–1100 | 22–752 |
| Nickel | 5.167 | 1–29 | 0.5–7 |
| Selenium | 7.061 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 197.9 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

**Table H-5.4-16**
**Comparison of EPCs to**
**Background Concentrations for Consolidated Unit 21-024(l)-99**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Barium | 115.3 | 21–410 | 1.4–51.6 |
| Cadmium | 0.343 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 10.26 | 1.9–36.5 | 0.25–13 |
| Cobalt | 4.524 | 1–9.5 | 3.14* |
| Copper | 11.24 | 0.25–16 | 0.25–6.2 |
| Lead | 149.1 | 2–28 | 1.6–15.5 |
| Mercury | 0.0987 | 0.05–0.1 | 0.1* |
| Selenium | 1.096 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 122.9 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

**Table H-5.4-17**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-024(o)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Chromium | 10.19 | 1.9–36.5 | 0.25–13 |
| Cyanide (total) | 1.33 | 0.5* | 0.5* |
| Lead | 30.39 | 2–28 | 1.6–15.5 |
| Selenium | 0.599 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 102.2 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-18**
**Comparison of EPCs to**
**Background Concentrations for Consolidated Unit 21-026(a)-99**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 0.214 | 0.1–1 | 0.05–0.4 |
| Arsenic | 2.884 | 0.3–9.3 | 0.25–5 |
| Barium | 130.6 | 21–410 | 1.4–51.6 |
| Cadmium | 1.585 | 0.2–2.6 | 0.1–1.5 |
| Calcium | 10465 | 500–14000 | 200–2230 |
| Chromium | 38.52 | 1.9–36.5 | 0.25–13 |
| Copper | 76.55 | 0.25–16 | 0.25–6.2 |
| Cyanide (total) | 2.7 | 0.5* | 0.5* |
| Lead | 41 | 2–28 | 1.6–15.5 |
| Mercury | 3.009 | 0.05–0.1 | 0.*[b] |
| Nickel | 11.48 | 1–29 | 0.5–7 |
| Selenium | 0.559 | 0.1–1.7 | 0.1–0.105 |
| Silver | 8.849 | 1* | 0.2–1.9 |
| Vanadium | 13.41 | 4–56.5 | 0.25–21 |
| Zinc | 224.8 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-19**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-027(a)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Antimony | 0.538 | 0.1–1 | 0.05–0.4 |
| Arsenic | 4.587 | 0.3–9.3 | 0.25–5 |
| Barium | 90.33 | 21–410 | 1.4–51.6 |
| Cadmium | 1.451 | 0.2–2.6 | 0.1–1.5 |
| Chromium | 359.7 | 1.9–36.5 | 0.25–13 |
| Copper | 46.36 | 0.25–16 | 0.25–6.2 |
| Lead | 24.03 | 2–28 | 1.6–15.5 |
| Mercury | 0.295 | 0.05–0.1 | 0.1* |
| Nickel | 7.749 | 1–29 | 0.5–7 |
| Selenium | 1.589 | 0.1–1.7 | 0.1–0.105 |
| Vanadium | 17.96 | 4–56.5 | 0.25–21 |
| Zinc | 235.9 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-20**
**Comparison of EPCs to**
**Background Concentrations for SWMU 21-027(c)**

| COPEC | EPC (mg/kg) | Soil Background Concentrations (mg/kg) | Tuff Background Concentrations (mg/kg) |
|---|---|---|---|
| Barium | 92.73 | 21–410 | 1.4–51.6 |
| Calcium | 5434 | 500–14000 | 200–2230 |
| Chromium | 17.34 | 1.9–36.5 | 0.25–13 |
| Copper | 13.86 | 0.25–16 | 0.25–6.2 |
| Lead | 57.62 | 2–28 | 1.6–15.5 |
| Mercury | 0.0903 | 0.05–0.1 | 0.1* |
| Selenium | 0.907 | 0.1–1.7 | 0.1–0.105 |
| Zinc | 83.9 | 14–75.5 | 5.5–65.6 |

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

**Table H-5.4-21**
**PAUFs for Ecological Receptors for AOC 21-002(b)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.0000089 |
| American Robin | 0.42 | 16.8 | 0.0023 |
| Deer Mouse | 0.077 | 3 | 0.013 |
| Desert Cottontail | 3.1 | 124 | 0.00030 |
| Montane Shrew | 0.39 | 15.6 | 0.0024 |
| Red Fox | 1038 | 41,520 | 0.00000091 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.038 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

**Table H-5.4-22**
**PAUFs for Ecological Receptors for Consolidated Unit 21-006(c)-99**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000054 |
| American Robin | 0.42 | 16.8 | 0.014 |
| Deer Mouse | 0.077 | 3 | 0.076 |
| Desert Cottontail | 3.1 | 124 | 0.0018 |
| Montane Shrew | 0.39 | 15.6 | 0.015 |
| Red Fox | 1038 | 41,520 | 0.0000055 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.23 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

**Table H-5.4-23**
**PAUFs for Ecological Receptors for SWMU 21-009**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.0000033 |
| American Robin | 0.42 | 16.8 | 0.00083 |
| Deer Mouse | 0.077 | 3 | 0.0046 |
| Desert Cottontail | 3.1 | 124 | 0.00011 |
| Montane Shrew | 0.39 | 15.6 | 0.00089 |
| Red Fox | 1038 | 41,520 | 0.00000033 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.014 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

**Table H-5.4-24**
**PAUFs for Ecological Receptors for SWMU 21-012(b)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000036 |
| American Robin | 0.42 | 16.8 | 0.0090 |
| Deer Mouse | 0.077 | 3 | 0.051 |
| Desert Cottontail | 3.1 | 124 | 0.0012 |
| Montane Shrew | 0.39 | 15.6 | 0.0097 |
| Red Fox | 1038 | 41,520 | 0.0000037 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.15 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

**Table H-5.4-25**
**PAUFs for Ecological Receptors for SWMU 21-013(c)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.00029 |
| American Robin | 0.42 | 16.8 | 0.072 |
| Deer Mouse | 0.077 | 3 | 0.40 |
| Desert Cottontail | 3.1 | 124 | 0.0098 |
| Montane Shrew | 0.39 | 15.6 | 0.078 |
| Red Fox | 1038 | 41,520 | 0.000029 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (1.2 ha) divided by the population area. If a PAUF greater than 1 no adjustment is made.

**Table H-5.4-26**
**PAUFs for Ecological Receptors for SWMU 21-022(h)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000013 |
| American Robin | 0.42 | 16.8 | 0.0032 |
| Deer Mouse | 0.077 | 3 | 0.018 |
| Desert Cottontail | 3.1 | 124 | 0.00043 |
| Montane Shrew | 0.39 | 15.6 | 0.0034 |
| Red Fox | 1038 | 41,520 | 0.0000013 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.053 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-27**
**PAUFs for Ecological Receptors for Consolidated Unit 21-023(a)-99**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000025 |
| American Robin | 0.42 | 16.8 | 0.0063 |
| Deer Mouse | 0.077 | 3 | 0.035 |
| Desert Cottontail | 3.1 | 124 | 0.00085 |
| Montane Shrew | 0.39 | 15.6 | 0.0067 |
| Red Fox | 1038 | 41,520 | 0.0000025 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.105 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-28**
**PAUFs for Ecological Receptors for SWMU 21-024(a)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000016 |
| American Robin | 0.42 | 16.8 | 0.0041 |
| Deer Mouse | 0.077 | 3 | 0.023 |
| Desert Cottontail | 3.1 | 124 | 0.00055 |
| Montane Shrew | 0.39 | 15.6 | 0.0044 |
| Red Fox | 1038 | 41,520 | 0.0000016 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.069 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-29**
**PAUFs for Ecological Receptors for SWMU 21-024(b)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000019 |
| American Robin | 0.42 | 16.8 | 0.0047 |
| Deer Mouse | 0.077 | 3 | 0.026 |
| Desert Cottontail | 3.1 | 124 | 0.00064 |
| Montane Shrew | 0.39 | 15.6 | 0.0051 |
| Red Fox | 1038 | 41,520 | 0.0000019 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.079 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-30**
**PAUFs for Ecological Receptors for SWMU 21-024(d)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000038 |
| American Robin | 0.42 | 16.8 | 0.0096 |
| Deer Mouse | 0.077 | 3 | 0.054 |
| Desert Cottontail | 3.1 | 124 | 0.0013 |
| Montane Shrew | 0.39 | 15.6 | 0.010 |
| Red Fox | 1038 | 41,520 | 0.0000039 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.16 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-31**
**PAUFs for Ecological Receptors for SWMU 21-024(e)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000048 |
| American Robin | 0.42 | 16.8 | 0.012 |
| Deer Mouse | 0.077 | 3 | 0.068 |
| Desert Cottontail | 3.1 | 124 | 0.0016 |
| Montane Shrew | 0.39 | 15.6 | 0.013 |
| Red Fox | 1038 | 41,520 | 0.0000049 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.204 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-32**
**PAUFs for Ecological Receptors for SWMU 21-024(g)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000046 |
| American Robin | 0.42 | 16.8 | 0.012 |
| Deer Mouse | 0.077 | 3 | 0.065 |
| Desert Cottontai | 3.1 | 124 | 0.0016 |
| Montane Shrew | 0.39 | 15.6 | 0.013 |
| Red Fox | 1038 | 41,520 | 0.0000047 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.196 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-33**
**PAUFs for Ecological Receptors for SWMU 21-024(h)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000015 |
| American Robin | 0.42 | 16.8 | 0.0038 |
| Deer Mouse | 0.077 | 3 | 0.021 |
| Desert Cottontail | 3.1 | 124 | 0.00052 |
| Montane Shrew | 0.39 | 15.6 | 0.0041 |
| Red Fox | 1038 | 41,520 | 0.0000015 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.064 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-34**
**PAUFs for Ecological Receptors for SWMU 21-024(i)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000023 |
| American Robin | 0.42 | 16.8 | 0.0057 |
| Deer Mouse | 0.077 | 3 | 0.032 |
| Desert Cottontail | 3.1 | 124 | 0.00077 |
| Montane Shrew | 0.39 | 15.6 | 0.0062 |
| Red Fox | 1038 | 41,520 | 0.0000023 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.096 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-35**
**PAUFs for Ecological Receptors for SWMU 21-024(j)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000018 |
| American Robin | 0.42 | 16.8 | 0.0047 |
| Deer Mouse | 0.077 | 3 | 0.026 |
| Desert Cottontail | 3.1 | 124 | 0.00063 |
| Montane Shrew | 0.39 | 15.6 | 0.0050 |
| Red Fox | 1038 | 41,520 | 0.0000019 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.078 ha) divided by the population area. If a PAUF is greater than 1no adjustment is made.

**Table H-5.4-36**
**PAUFs for Ecological Receptors for Consolidated Unit 21-024(l)-99**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000045 |
| American Robin | 0.42 | 16.8 | 0.011 |
| Deer Mouse | 0.077 | 3 | 0.064 |
| Desert Cottontail | 3.1 | 124 | 0.0016 |
| Montane Shrew | 0.39 | 15.6 | 0.012 |
| Red Fox | 1038 | 41,520 | 0.0000046 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.19 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-37**
**PAUFs for Ecological Receptors for SWMU 21-024(o)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000017 |
| American Robin | 0.42 | 16.8 | 0.0042 |
| Deer Mouse | 0.077 | 3 | 0.023 |
| Desert Cottontail | 3.1 | 124 | 0.00056 |
| Montane Shrew | 0.39 | 15.6 | 0.0045 |
| Red Fox | 1038 | 41,520 | 0.0000017 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.07 ha) divided by the population area. If a PAUF is greater than 1no adjustment is made.

**Table H-5.4-38**
**PAUFs for Ecological Receptors for Consolidated Unit 21-026(a)-99**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000059 |
| American Robin | 0.42 | 16.8 | 0.015 |
| Deer Mouse | 0.077 | 3 | 0.083 |
| Desert Cottontail | 3.1 | 124 | 0.0020 |
| Montane Shrew | 0.39 | 15.6 | 0.016 |
| Red Fox | 1038 | 41,520 | 0.0000060 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.25 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-39**
**PAUFs for Ecological Receptors for SWMU 21-027(a)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000020 |
| American Robin | 0.42 | 16.8 | 0.0051 |
| Deer Mouse | 0.077 | 3 | 0.029 |
| Desert Cottontail | 3.1 | 124 | 0.00069 |
| Montane Shrew | 0.39 | 15.6 | 0.0055 |
| Red Fox | 1038 | 41,520 | 0.0000021 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.086 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-40**
**PAUFs for Ecological Receptors for SWMU 21-027(c)**

| Receptor | Home Range (ha) | Population Area (ha)[a] | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000039 |
| American Robin | 0.42 | 16.8 | 0.0099 |
| Deer Mouse | 0.077 | 3 | 0.055 |
| Desert Cottontail | 3.1 | 124 | 0.0013 |
| Montane Shrew | 0.39 | 15.6 | 0.011 |
| Red Fox | 1038 | 41,520 | 0.0000040 |

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.17 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

**Table H-5.4-41**
**Adjusted HQs and HIs for AOC 21-002(b)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Lead | 130 | 0.0000098 | 0.0000015 | 0.014 | 0.021 | 0.019 | 0.014 | 0.00011 | 0.078 | **1.1** | 0.0045 | 0.000000033 |
| Selenium | 4.7 | 0.0000075 | 0.00000043 | 0.011 | 0.014 | 0.012 | 0.071 | 0.00068 | **1.1** | **9.0** | 0.017 | 0.000000051 |
| Zinc | 100 | 0.0000029 | 0.00000038 | 0.00066 | 0.0048 | 0.0027 | 0.0076 | 0.000017 | **0.85** | **0.64** | 0.0025 | 0.000000016 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.042 | 0.0000022 | 0.0000017 | 0.000072 | 0.0023 | 0.0012 | 0.00060 | 0.00000025 | na* | 0.00026 | 0.00023 | 0.00000025 |
| Bis(2-ethylhexyl)phthalate | 2.0 | 0.00039 | 0.00054 | 0.00022 | 0.22 | 0.11 | 0.023 | 0.00000022 | na | na | 0.0082 | 0.0000015 |
| Di-n-butylphthalate | 0.47 | 0.000062 | 0.000017 | 0.0027 | 0.096 | 0.050 | 0.000016 | 0.0000000090 | na | 0.0029 | 0.0000063 | 0.000000000086 |
| 2,3,7,8-TCDD equivalent | 0.00000028 | na | na | na | na | na | 0.0061 | 0.0000018 | 0.000000056 | na | 0.0023 | 0.00000021 |
| | **Adjusted HI** | 0.0005 | 0.0006 | 0.03 | 0.4 | 0.2 | 0.1 | 0.0008 | **2** | **11** | 0.03 | 0.000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

## Table H-5.4-42
## Adjusted HQs and HIs for Consolidated Unit 21-006(c)-99

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Zinc | 380 | 0.000064 | 0.0000085 | 0.015 | 0.11 | 0.061 | 0.17 | 0.00039 | **3.2** | **2.4** | 0.057 | 0.00000035 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzo(a)anthracene | 0.98 | na* | na | na | na | na | 0.022 | 0.00029 | na | 0.054 | 0.0048 | 0.00000017 |
| Bis(2-ethylhexyl)phthalate | 8.7 | 0.010 | 0.014 | 0.0059 | **5.9** | **3.0** | **0.60** | 0.0000059 | na | na | 0.22 | 0.000040 |
| Chrysene | 1.5 | na | na | na | na | na | 0.037 | 0.00042 | na | na | 0.0091 | 0.00000033 |
| 2,3,7,8-TCDD equivalent | 0.00000071 | na | na | na | na | na | 0.093 | 0.000027 | 0.00000014 | na | 0.036 | 0.0000033 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 19 | 0.000000030 | 0.0000000063 | 0.000030 | 0.00012 | 0.00012 | 0.0000095 | 0.00000020 | **0.40** | 0.00012 | 0.0000025 | 0.0000000031 |
| **Adjusted HI** | | 0.01 | 0.01 | 0.02 | **6** | **3** | 0.9 | 0.001 | **4** | **2** | 0.3 | 0.00004 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-43**
**Adjusted HQs and HIs for SWMU 21-009**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Selenium | 11 | 0.0000062 | 0.00000036 | 0.0088 | 0.012 | 0.010 | 0.059 | 0.00057 | **2.6** | **20** | 0.014 | 0.000000042 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| 2,3,7,8-TCDD equivalent | 0.00000053 | na* | na | na | na | na | 0.0042 | 0.0000012 | 0.00000011 | na | 0.0016 | 0.00000015 |
| **Adjusted HI** | | 0.000006 | 0.0000004 | 0.009 | 0.01 | 0.01 | 0.06 | 0.0006 | **3** | **20** | 0.02 | 0.0000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-44
## Adjusted HQs and HIs for SWMU 21-012(b)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Copper | 140 | 0.000044 | 0.0000030 | 0.032 | 0.082 | 0.056 | 0.11 | 0.00062 | **1.7** | **1.9** | 0.035 | 0.00000013 |
| Lithium | 12 | na* | na | na | na | na | 0.0059 | 0.000057 | na | **5.8** | 0.0030 | 0.000000048 |
| Mercury | 1.4 | 0.00060 | 0.00018 | 0.18 | **0.96** | **0.57** | 0.023 | 0.000077 | **28** | 0.041 | 0.0079 | 0.00000011 |
| Molybdenum | 1.2 | 0.00000032 | 0.000000024 | 0.00055 | 0.00062 | 0.00058 | na | na | na | **0.58** | na | na |
| Zinc | 97 | 0.000011 | 0.0000014 | 0.0025 | 0.018 | 0.010 | 0.029 | 0.000066 | **0.80** | **0.60** | 0.0096 | 0.000000059 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.63 | na | na | na | na | na | 0.025 | 0.00018 | na | na | 0.0061 | 0.0000000066 |
| **Adjusted HI** | | 0.0007 | 0.0002 | 0.2 | 1 | 0.6 | 0.2 | 0.001 | **31** | **9** | 0.06 | 0.0000004 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-45**
**Adjusted HQs and HIs for SWMU 21-013(c)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Mercury | 0.32 | 0.0011 | 0.00033 | **0.33** | **1.8** | **1.0** | 0.043 | 0.00014 | **6.4** | 0.0094 | 0.015 | 0.00000020 |
| Selenium | 2.1 | 0.00011 | 0.0000062 | 0.15 | 0.2 | 0.17 | **1** | 0.0097 | **0.51** | **4** | 0.25 | 0.00000073 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.46 | na* | na | na | na | na | 0.14 | 0.0011 | na | na | 0.036 | 0.000000038 |
| Bis(2-ethylhexyl)phthalate | 0.36 | 0.0023 | 0.0031 | 0.0013 | **1.3** | **0.64** | 0.13 | 0.0000013 | na | na | 0.047 | 0.0000086 |
| 2,3,7,8-TCDD equivalent | 0.00000048 | na | na | na | na | na | **0.34** | 0.000098 | 0.000000097 | na | 0.13 | 0.000012 |
| **Adjusted HI** | | 0.004 | 0.003 | 0.5 | **3** | **2** | **2** | 0.01 | **7** | **4** | 0.5 | 0.00002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-46
## Adjusted HQs and HIs for SWMU 21-022(h)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Chromium | 100 | 0.00000017 | 0.000000035 | 0.00017 | 0.00040 | 0.00030 | 0.00097 | 0.0000034 | **45** | **44** | 0.00047 | 0.0000000045 |
| Copper | 180 | 0.000021 | 0.0000014 | 0.015 | 0.038 | 0.026 | 0.050 | 0.00029 | **2.3** | **2.6** | 0.016 | 0.000000061 |
| Lead | 1700 | 0.00017 | 0.000026 | 0.25 | **0.38** | **0.33** | 0.25 | 0.0019 | **0.99** | **14** | 0.079 | 0.00000058 |
| Mercury | 0.78 | 0.00012 | 0.000035 | 0.035 | 0.19 | 0.11 | 0.0046 | 0.000015 | **16** | 0.023 | 0.0015 | 0.000000022 |
| Molybdenum | 9.8 | 0.00000094 | 0.000000072 | 0.0016 | 0.0018 | 0.0017 | na* | na | na | **4.9** | na | na |
| Silver | 20 | 0.000013 | 0.00000030 | 0.0058 | 0.024 | 0.015 | 0.015 | 0.000057 | na | 0.036 | 0.0049 | 0.0000000063 |
| Zinc | 560 | 0.000022 | 0.0000029 | 0.0051 | 0.037 | 0.021 | 0.058 | 0.00013 | **4.7** | **3.5** | 0.019 | 0.00000012 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.43 | na | na | na | na | na | 0.000048 | 0.00000038 | na | **1.7** | 0.000012 | 0.000000000089 |
| Aroclor-1254 | 0.048 | 0.0000035 | 0.0000027 | 0.00012 | 0.0037 | 0.0019 | 0.00096 | 0.00000039 | na | 0.00030 | 0.00037 | 0.00000041 |
| Benzo(a)anthracene | 0.96 | na | na | na | na | na | 0.0050 | 0.000066 | na | 0.053 | 0.0011 | 0.000000038 |
| Bis(2-ethylhexyl)phthalate | 1.2 | 0.00035 | 0.00047 | 0.00020 | 0.20 | 0.098 | 0.020 | 0.00000020 | na | na | 0.0072 | 0.0000013 |
| Chrysene | 1.1 | na | na | na | na | na | 0.0060 | 0.000070 | na | na | 0.0015 | 0.000000054 |
| Di-n-butylphthalate | 0.35 | 0.000064 | 0.000018 | 0.0028 | 0.10 | 0.053 | 0.000017 | 0.0000000093 | na | 0.0022 | 0.0000066 | 0.000000000089 |
| Fluoranthene | 5.6 | na | na | na | na | na | 0.0026 | 0.0000091 | **0.56** | na | 0.00086 | 0.000000020 |
| Naphthalene | 1.7 | 0.00000021 | 0.000000036 | 0.0016 | 0.00034 | 0.00094 | 0.0031 | 0.000061 | na | **1.7** | 0.00021 | 0.0000000018 |
| Phenanthrene | 1.8 | na | na | na | na | na | 0.0021 | 0.000013 | **0.32** | na | 0.00060 | 0.0000000078 |
| Pyrene | 9.9 | na | na | na | na | na | 0.0055 | 0.000039 | **0.99** | na | 0.0015 | 0.000000035 |
| 2,3,7,8-TCDD equivalent | 0.00000080 | na | na | na | na | na | 0.024 | 0.0000071 | 0.00000016 | na | 0.0093 | 0.00000084 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-238 | 21 | 0.0000000082 | 0.0000000020 | 0.0000079 | 0.000033 | 0.000031 | 0.0000034 | 0.000000074 | **0.48** | 0.00019 | 0.00000077 | 0.00000000089 |
| Plutonium-239/240 | 20 | 0.0000000072 | 0.0000000015 | 0.0000072 | 0.000030 | 0.000030 | 0.0000023 | 0.000000050 | **0.42** | 0.00012 | 0.00000061 | 0.00000000076 |
| **Adjusted HI** | | 0.0008 | 0.0006 | 0.3 | 1 | 0.7 | 0.4 | 0.003 | **72** | **73** | 0.1 | 0.000004 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-47
## Adjusted HQs and HIs for Consolidated Unit 21-023(a)-99

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Lead | 390 | 0.000081 | 0.000012 | 0.12 | 0.18 | 0.15 | 0.12 | 0.00090 | 0.23 | **3.3** | 0.037 | 0.00000027 |
| Mercury | 0.49 | 0.00015 | 0.000043 | 0.044 | 0.24 | 0.14 | 0.0057 | 0.000019 | **9.8** | 0.014 | 0.0019 | 0.000000027 |
| Selenium | 5.8 | 0.000026 | 0.0000015 | 0.036 | 0.048 | 0.042 | 0.24 | 0.0023 | **1.4** | **11** | 0.059 | 0.00000017 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 1.4 | na* | na | na | na | na | 0.00030 | 0.0000024 | na | **5.5** | 0.000077 | 0.00000000056 |
| Benzo(a)anthracene | 15 | na | na | na | na | na | 0.16 | 0.0021 | na | **0.86** | 0.035 | 0.0000012 |
| Bis(2-ethylhexyl)phthalate | 2.1 | 0.0012 | 0.0016 | 0.00066 | **0.66** | **0.33** | 0.067 | 0.00000066 | na | na | 0.024 | 0.0000045 |
| Chrysene | 4.8 | na | na | na | na | na | 0.054 | 0.00062 | na | na | 0.013 | 0.00000048 |
| Di-n-butylphthalate | 0.094 | 0.000034 | 0.0000097 | 0.0015 | 0.053 | 0.028 | 0.0000089 | 0.0000000050 | na | 0.00059 | 0.0000035 | 0.000000000048 |
| Fluoranthene | 6.4 | na | na | na | na | na | 0.0059 | 0.000021 | **0.64** | na | 0.0020 | 0.000000045 |
| Naphthalene | 1.2 | 0.00000029 | 0.000000049 | 0.0022 | 0.00046 | 0.0013 | 0.0042 | 0.000083 | na | **1.2** | 0.00029 | 0.0000000025 |
| Pyrene | 5.8 | na | na | na | na | na | 0.0064 | 0.000045 | **0.58** | na | 0.0018 | 0.000000041 |
| 2,3,7,8-TCDD equivalent | 0.00000087 | na | na | na | na | na | 0.052 | 0.000015 | 0.00000017 | na | 0.020 | 0.0000018 |
| **Adjusted HI** | | 0.001 | 0.002 | 0.2 | 1 | 0.7 | 0.7 | 0.006 | **13** | **22** | 0.2 | 0.000009 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-48
## Adjusted HQs and HIs for SWMU 21-024(a)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Copper | 32 | 0.0000047 | 0.00000033 | 0.0035 | 0.0088 | 0.0060 | 0.011 | 0.000066 | **0.40** | **0.46** | 0.0037 | 0.000000014 |
| Mercury | 0.26 | 0.000051 | 0.000015 | 0.015 | 0.082 | 0.048 | 0.0020 | 0.0000065 | **5.2** | 0.0076 | 0.00067 | 0.0000000093 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.62 | na* | na | na | na | na | 0.011 | 0.000082 | na | na | 0.0027 | 0.0000000029 |
| Bis(2-ethylhexyl)phthalate | 0.12 | 0.000042 | 0.000057 | 0.000024 | 0.024 | 0.012 | 0.0024 | 0.000000024 | na | na | 0.00086 | 0.00000016 |
| Chloroaniline[4-] | 0.46 | na | na | na | na | na | na | na | 0.26 | **0.46** | na | na |
| **Adjusted HI** | | 0.0001 | 0.00007 | 0.02 | 0.1 | 0.07 | 0.03 | 0.0002 | **6** | 0.9 | 0.01 | 0.0000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-49**
**Adjusted HQs and HIs for SWMU 21-024(b)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Copper | 22 | 0.0000037 | 0.00000025 | 0.0027 | 0.0068 | 0.0046 | 0.0089 | 0.000051 | 0.27 | **0.31** | 0.0029 | 0.000000011 |
| Mercury | 2.3 | 0.00053 | 0.00016 | 0.16 | **0.85** | **0.50** | 0.021 | 0.000068 | **47** | 0.069 | 0.0070 | 0.000000097 |
| Silver | 8.0 | 0.0000078 | 0.00000018 | 0.0034 | 0.014 | 0.0087 | 0.0087 | 0.000034 | na* | 0.014 | 0.0029 | 0.0000000037 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.091 | 0.0000100 | 0.0000077 | 0.00033 | 0.010 | 0.0053 | 0.0027 | 0.0000011 | na | 0.00057 | 0.0010 | 0.0000012 |
| Aroclor-1260 | 0.052 | 0.00000026 | 0.00000021 | 0.0000053 | 0.00028 | 0.00014 | 0.000068 | 0.000000011 | na | na | 0.000026 | 0.00000070 |
| Bis(2-ethylhexyl)phthalate | 0.46 | 0.00019 | 0.00026 | 0.00011 | 0.11 | 0.054 | 0.011 | 0.00000011 | na | na | 0.0039 | 0.00000072 |
| Di-n-butylphthalate | 0.50 | 0.00014 | 0.000039 | 0.0060 | 0.21 | 0.11 | 0.000035 | 0.000000020 | na | 0.0031 | 0.000014 | 0.00000000019 |
| 2,3,7,8-TCDD equivalent | 0.00000048 | na | na | na | na | na | 0.021 | 0.0000062 | 0.000000093 | na | 0.0081 | 0.00000074 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Americium-241 | 39 | 0.000000021 | 0.000000012 | 0.000014 | 0.000046 | 0.000046 | 0.000032 | 0.00000078 | **0.89** | 0.0019 | 0.0000064 | 0.0000000029 |
| Plutonium-239/240 | 60 | 0.000000033 | 0.0000000070 | 0.000033 | 0.00013 | 0.00013 | 0.000011 | 0.00000023 | **1.3** | 0.00038 | 0.0000028 | 0.0000000035 |
| **Adjusted HI** | | 0.0009 | 0.0005 | 0.2 | 1 | 0.7 | 0.07 | 0.0002 | **49** | 0.4 | 0.03 | 0.000003 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-50
## Adjusted HQs and HIs for SWMU 21-024(d)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Copper | 110 | 0.000040 | 0.0000027 | 0.029 | 0.073 | 0.050 | 0.096 | 0.00055 | **1.4** | **1.6** | 0.031 | 0.00000012 |
| Lead | 36 | 0.000011 | 0.0000017 | 0.016 | 0.025 | 0.022 | 0.016 | 0.00013 | 0.021 | 0.30 | 0.0052 | 0.000000038 |
| Mercury | 0.40 | 0.00019 | 0.000055 | 0.056 | 0.30 | 0.18 | 0.0073 | 0.000024 | **8.1** | 0.012 | 0.0025 | 0.000000034 |
| Selenium | 1.8 | 0.000012 | 0.00000071 | 0.017 | 0.023 | 0.020 | 0.12 | 0.0011 | **0.44** | **3.5** | 0.028 | 0.000000083 |
| Silver | 9.0 | 0.000018 | 0.00000041 | 0.0079 | 0.033 | 0.020 | 0.020 | 0.000078 | na* | 0.016 | 0.0067 | 0.0000000085 |
| Uranium | 6.5 | 0.000000012 | 0.0000000064 | 0.000033 | 0.000039 | 0.000037 | 0.00047 | 0.0000043 | na | 0.26 | 0.00031 | 0.0000000053 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.076 | na | na | na | na | na | 0.000026 | 0.00000020 | na | 0.30 | 0.0000066 | 0.000000000048 |
| Aroclor-1242 | 0.26 | 0.000038 | 0.0000070 | 0.0025 | 0.060 | 0.031 | 0.018 | 0.000011 | na | na | 0.0070 | 0.000000062 |
| Aroclor-1254 | 0.33 | 0.000075 | 0.000058 | 0.0025 | 0.078 | 0.040 | 0.020 | 0.0000083 | na | 0.0021 | 0.0078 | 0.0000086 |
| Aroclor-1260 | 0.13 | 0.0000013 | 0.0000011 | 0.000027 | 0.0014 | 0.00074 | 0.00035 | 0.000000057 | na | na | 0.00014 | 0.0000036 |
| Benzoic Acid | 0.45 | na | na | na | na | na | 0.019 | 0.00014 | na | na | 0.0047 | 0.0000000050 |
| Bis(2-ethylhexyl)phthalate | 0.20 | 0.00017 | 0.00023 | 0.000095 | 0.095 | 0.047 | 0.0097 | 0.000000095 | na | na | 0.0035 | 0.00000064 |
| Di-n-butylphthalate | 0.21 | 0.00012 | 0.000034 | 0.0053 | 0.19 | 0.098 | 0.000031 | 0.000000017 | na | 0.0013 | 0.000012 | 0.00000000017 |
| 2,3,7,8-TCDD equivalent | 0.000037 | na | na | na | na | na | **3.4** | 0.0010 | 0.0000073 | na | **1.3** | 0.00012 |
| **Adjusted HI** | | 0.0007 | 0.0004 | 0.1 | 0.9 | 0.5 | **4** | 0.003 | **10** | **6** | 1 | 0.0001 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-51
## Adjusted HQs and HIs for SWMU 21-024(e)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Copper | 25 | 0.000011 | 0.00000075 | 0.0080 | 0.020 | 0.014 | 0.027 | 0.00015 | **0.31** | **0.36** | 0.0086 | 0.000000032 |
| Cyanide (total) | 4.4 | 0.00045 | 0.00036 | **0.53** | **0.53** | **0.53** | 0.00087 | 0.0000097 | na* | na | 0.00018 | 0.0000000097 |
| Lead | 39 | 0.000016 | 0.0000023 | 0.022 | 0.034 | 0.029 | 0.022 | 0.00017 | 0.023 | **0.32** | 0.0071 | 0.000000052 |
| Mercury | 0.51 | 0.00030 | 0.000087 | 0.088 | **0.47** | 0.28 | 0.011 | 0.000038 | **10** | 0.015 | 0.0039 | 0.000000054 |
| Molybdenum | 0.87 | 0.00000032 | 0.000000025 | 0.00056 | 0.00062 | 0.00059 | na | na | na | **0.44** | na | na |
| Uranium | 11 | 0.000000025 | 0.000000014 | 0.000070 | 0.000083 | 0.000078 | 0.00100 | 0.0000090 | na | **0.44** | 0.00065 | 0.000000011 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 0.38 | 0.00041 | 0.00056 | 0.00023 | 0.23 | 0.12 | 0.024 | 0.00000023 | na | na | 0.0085 | 0.0000016 |
| Chloroaniline[4-] | 0.41 | na | na | na | na | na | na | na | 0.23 | **0.41** | na | na |
| Di-n-butylphthalate | 0.14 | 0.000097 | 0.000027 | 0.0043 | 0.15 | 0.079 | 0.000025 | 0.000000014 | na | 0.00086 | 0.0000099 | 0.00000000013 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 16 | 0.000000023 | 0.0000000050 | 0.000023 | 0.000095 | 0.000095 | 0.0000075 | 0.00000016 | **0.35** | 0.00010 | 0.0000020 | 0.0000000025 |
| **Adjusted HI** | | 0.001 | 0.001 | 0.7 | 1 | 1 | 0.09 | 0.0004 | **11** | **2** | 0.03 | 0.000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-52
## Adjusted HQs and HIs for SWMU 21-024(g)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Mercury | 0.18 | 0.00010 | 0.000030 | 0.030 | 0.16 | 0.096 | 0.0039 | 0.000013 | **3.6** | 0.0053 | 0.0013 | 0.000000018 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 0.11 | 0.00011 | 0.00015 | 0.000064 | 0.064 | 0.032 | 0.0065 | 0.000000064 | na* | na | 0.0023 | 0.00000043 |
| Di-n-butylphthalate | 0.327 | 0.00022 | 0.000063 | 0.0098 | **0.35** | 0.18 | 0.000058 | 0.000000032 | na | 0.0020 | 0.000023 | 0.00000000031 |
| **Adjusted HI** | | 0.0004 | 0.0002 | 0.04 | 0.6 | 0.3 | 0.01 | 0.00001 | **4** | 0.007 | 0.004 | 0.0000004 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-53**
**Adjusted HQs and HIs for SWMU 21-024(h)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Copper | 82 | 0.000011 | 0.00000077 | 0.0082 | 0.021 | 0.014 | 0.027 | 0.00016 | **1.0** | **1.2** | 0.0089 | 0.000000033 |
| Lead | 62 | 0.0000078 | 0.0000012 | 0.011 | 0.017 | 0.015 | 0.011 | 0.000087 | 0.037 | **0.52** | 0.0035 | 0.000000026 |
| Mercury | 6.5 | 0.0012 | 0.00035 | **0.35** | **1.9** | **1.1** | 0.046 | 0.00015 | **130** | 0.19 | 0.016 | 0.00000022 |
| Molybdenum | 0.72 | 0.000000084 | 0.0000000064 | 0.00014 | 0.00016 | 0.00015 | na* | na | na | **0.36** | na | na |
| Silver | 3.5 | 0.0000028 | 0.000000064 | 0.0012 | 0.0052 | 0.0031 | 0.0031 | 0.000012 | na | 0.0063 | 0.0010 | 0.0000000013 |
| Zinc | 110 | 0.0000053 | 0.00000071 | 0.0012 | 0.0090 | 0.0051 | 0.014 | 0.000033 | **0.95** | **0.71** | 0.0047 | 0.000000029 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.61 | na | na | na | na | na | 0.010 | 0.000075 | na | na | 0.0025 | 0.0000000027 |
| Bis(2-ethylhexyl)phthalate | 1.4 | 0.00047 | 0.00064 | 0.00027 | 0.27 | 0.13 | 0.027 | 0.00000027 | na | na | 0.0097 | 0.0000018 |
| Di-n-butylphthalate | 0.248 | 0.000055 | 0.000016 | 0.0024 | 0.086 | 0.045 | 0.000014 | 0.0000000080 | na | 0.0016 | 0.0000057 | 0.000000000076 |
| **Adjusted HI** | | 0.002 | 0.001 | 0.4 | **2** | 1 | 0.1 | 0.0005 | **132** | **3** | 0.05 | 0.000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-54
## Adjusted HQs and HIs for SWMU 21-024(i)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Antimony | 1.6 | na* | na | na | na | na | 0.10 | 0.00041 | 0.020 | **31** | 0.037 | 0.000000080 |
| Lead | 40 | 0.0000075 | 0.0000011 | 0.011 | 0.016 | 0.014 | 0.011 | 0.000084 | 0.023 | **0.33** | 0.0034 | 0.000000025 |
| Lithium | 15 | na | na | na | na | na | 0.0047 | 0.000046 | na | **7.4** | 0.0024 | 0.000000039 |
| Mercury | 3.8 | 0.0011 | 0.00031 | **0.31** | **1.7** | **0.99** | 0.041 | 0.00013 | **76** | 0.11 | 0.014 | 0.00000019 |
| Strontium | 220 | na | na | na | na | na | 0.074 | 0.0016 | na | na | 0.0021 | 0.000000027 |
| Zinc | 97 | 0.0000069 | 0.00000092 | 0.0016 | 0.012 | 0.0065 | 0.018 | 0.000042 | **0.81** | **0.61** | 0.0061 | 0.000000037 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.16 | 0.000021 | 0.000016 | 0.00069 | 0.022 | 0.011 | 0.0057 | 0.0000024 | na | 0.00099 | 0.0022 | 0.0000024 |
| Aroclor-1260 | 0.20 | 0.0000012 | 0.0000010 | 0.000025 | 0.0013 | 0.00069 | 0.00033 | 0.000000053 | na | na | 0.00013 | 0.0000034 |
| Bis(2-ethylhexyl)phthalate | 0.055 | 0.000028 | 0.000038 | 0.000016 | 0.016 | 0.0079 | 0.0016 | 0.000000016 | na | na | 0.00057 | 0.00000011 |
| Di-n-butylphthalate | 0.043 | 0.000014 | 0.0000041 | 0.00063 | 0.022 | 0.012 | 0.0000037 | 0.0000000021 | na | 0.00027 | 0.0000015 | 0.000000000020 |
| **Adjusted HI** | | 0.001 | 0.0004 | 0.3 | **2** | 1 | 0.3 | 0.002 | **77** | **39** | 0.07 | 0.000006 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-55**
**Adjusted HQs and HIs for SWMU 21-024(j)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Selenium | 7.1 | 0.000023 | 0.0000013 | 0.033 | 0.044 | 0.038 | 0.22 | 0.0021 | **1.7** | **14** | 0.054 | 0.00000016 |
| Zinc | 200 | 0.000011 | 0.0000015 | 0.0026 | 0.019 | 0.011 | 0.030 | 0.000069 | **1.6** | **1.2** | 0.010 | 0.000000062 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1260 | 0.0652 | 0.00000033 | 0.00000026 | 0.0000066 | 0.00035 | 0.00018 | 0.000085 | 0.000000014 | na* | na | 0.000033 | 0.00000088 |
| Aroclor-1254 | 0.080 | 0.0000086 | 0.0000067 | 0.00029 | 0.0090 | 0.0046 | 0.0024 | 0.00000097 | na | 0.00050 | 0.00091 | 0.0000010 |
| Bis(2-ethylhexyl)phthalate | 0.088 | 0.000036 | 0.000049 | 0.000020 | 0.020 | 0.010 | 0.0021 | 0.000000021 | na | na | 0.00075 | 0.00000014 |
| **Adjusted HI** | | 0.00008 | 0.00006 | 0.04 | 0.09 | 0.06 | 0.3 | 0.002 | **3** | **15** | 0.07 | 0.000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-56
## Adjusted HQs and HIs for Consolidated Unit 21-024(l)-99

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Lead | 150 | 0.000056 | 0.0000084 | 0.081 | 0.12 | 0.11 | 0.080 | 0.00063 | 0.088 | **1.2** | 0.026 | 0.00000019 |
| Lithium | 13 | na* | na | na | na | na | 0.0082 | 0.000079 | na | **6.4** | 0.0041 | 0.000000067 |
| Zinc | 120 | 0.000017 | 0.0000023 | 0.0040 | 0.029 | 0.017 | 0.046 | 0.00011 | **1.0** | **0.77** | 0.015 | 0.000000095 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.15 | na | na | na | na | na | 0.000059 | 0.00000047 | na | **0.59** | 0.000015 | 0.00000000011 |
| Benzo(a)anthracene | 1.0 | na | na | na | na | na | 0.019 | 0.00026 | na | 0.057 | 0.0042 | 0.00000015 |
| Bis(2-ethylhexyl)phthalate | 0.25 | 0.00025 | 0.00034 | 0.00014 | 0.14 | 0.072 | 0.015 | 0.00000014 | na | na | 0.0052 | 0.00000097 |
| Chrysene | 1.0 | na | na | na | na | na | 0.022 | 0.00025 | na | na | 0.0054 | 0.00000019 |
| Phenanthrene | 2.0 | na | na | na | na | na | 0.0086 | 0.000053 | **0.37** | na | 0.0025 | 0.000000032 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 18 | 0.000000023 | 0.0000000050 | 0.000023 | 0.000095 | 0.000095 | 0.0000075 | 0.00000016 | **0.37** | 0.00011 | 0.0000020 | 0.0000000025 |
| **Adjusted HI** | | 0.0003 | 0.0004 | 0.09 | 0.3 | 0.2 | 0.2 | 0.001 | **2** | **9** | 0.06 | 0.000002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-57**
**Adjusted HQs and HIs for SWMU 21-024(o)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Cyanide (total) | 0.28 | 0.000010 | 0.0000080 | 0.012 | 0.012 | 0.012 | 0.000019 | 0.00000021 | na* | na | 0.0000041 | 0.00000000021 |
| Lead | 30 | 0.0000042 | 0.00000062 | 0.0060 | 0.0090 | 0.0079 | 0.0059 | 0.000046 | 0.018 | 0.25 | 0.0019 | 0.000000014 |
| Zinc | 100 | 0.0000053 | 0.00000070 | 0.0012 | 0.0089 | 0.0050 | 0.014 | 0.000032 | **0.85** | **0.64** | 0.0047 | 0.000000029 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Benzoic acid | 0.59 | na | na | na | na | na | 0.011 | 0.000079 | na | na | 0.0026 | 0.0000000028 |
| Bis(2-ethylhexyl)phthalate | 0.12 | 0.000044 | 0.000060 | 0.000025 | 0.025 | 0.012 | 0.0025 | 0.000000025 | na | na | 0.00091 | 0.00000017 |
| Hexachlorobenzene | 0.089 | 0.0000026 | 0.000000018 | 0.0000037 | 0.0047 | 0.0025 | 0.0052 | 0.000000036 | 0.0089 | 0.0089 | 0.0020 | 0.00000000060 |
| 2,3,7,8-TCDD equivalent | 0.00000021 | na | na | na | na | na | 0.0085 | 0.0000025 | 0.000000042 | na | 0.0033 | 0.00000030 |
| | **Adjusted HI** | 0.00007 | 0.00007 | 0.02 | 0.06 | 0.04 | 0.05 | 0.0002 | 0.9 | 0.9 | 0.02 | 0.0000005 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-58
## Adjusted HQs and HIs for Consolidated Unit 21-026(a)-99

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Chromium | 39 | 0.00000029 | 0.000000061 | 0.00030 | 0.00069 | 0.00052 | 0.0017 | 0.0000060 | **17** | **16** | 0.00082 | 0.0000000077 |
| Copper | 77 | 0.000041 | 0.0000028 | 0.030 | 0.076 | 0.052 | 0.099 | 0.00057 | **0.96** | **1.1** | 0.032 | 0.00000012 |
| Cyanide (total) | 2.7 | 0.00034 | 0.00027 | **0.40** | **0.40** | **0.40** | 0.00066 | 0.0000073 | na* | na | 0.00014 | 0.0000000074 |
| Lead | 41 | 0.000020 | 0.0000030 | 0.029 | 0.043 | 0.038 | 0.028 | 0.00022 | 0.024 | **0.34** | 0.0091 | 0.000000066 |
| Mercury | 3.0 | 0.0022 | 0.00063 | **0.64** | **3.4** | **2.0** | 0.083 | 0.00027 | **60** | 0.089 | 0.028 | 0.00000039 |
| Silver | 8.8 | 0.000027 | 0.00000062 | 0.012 | 0.050 | 0.031 | 0.031 | 0.00012 | na | 0.016 | 0.010 | 0.000000013 |
| Zinc | 220 | 0.000041 | 0.0000055 | 0.0095 | 0.069 | 0.039 | 0.11 | 0.00025 | **1.9** | **1.4** | 0.037 | 0.00000022 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.28 | na | na | na | na | na | 0.00015 | 0.0000012 | na | **1.1** | 0.000037 | 0.00000000027 |
| Benzoic acid | 0.50 | na | na | na | na | na | 0.032 | 0.00024 | na | na | 0.0080 | 0.0000000086 |
| Bis(2-ethylhexyl)phthalate | 0.69 | 0.00090 | 0.0012 | 0.00051 | **0.51** | 0.26 | 0.052 | 0.00000051 | na | na | 0.019 | 0.0000034 |
| Di-n-butylphthalate | 0.239 | 0.00021 | 0.000059 | 0.0091 | **0.32** | 0.17 | 0.000054 | 0.000000030 | na | 0.0015 | 0.000021 | 0.00000000029 |
| Phenanthrene | 2.2 | na | na | na | na | na | 0.012 | 0.000075 | **0.40** | na | 0.0035 | 0.000000046 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Plutonium-239/240 | 19 | 0.000000033 | 0.0000000070 | 0.000033 | 0.00013 | 0.00013 | 0.000011 | 0.00000023 | **0.41** | 0.00012 | 0.0000028 | 0.0000000035 |
| **Adjusted HI** | | 0.004 | 0.002 | 1 | **5** | **3** | 0.5 | 0.002 | **81** | **20** | 0.2 | 0.000004 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

**Table H-5.4-59**
**Adjusted HQs and HIs for SWMU 21-027(a)**

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Chromium | 360 | 0.00000095 | 0.00000020 | 0.00097 | 0.0022 | 0.0017 | 0.0054 | 0.000019 | **160** | **150** | 0.0026 | 0.000000025 |
| Copper | 46 | 0.0000085 | 0.00000059 | 0.0062 | 0.016 | 0.011 | 0.021 | 0.00012 | **0.58** | **0.66** | 0.0067 | 0.000000025 |
| Lithium | 9.7 | na* | na | na | na | na | 0.0028 | 0.000027 | na | **4.8** | 0.0014 | 0.000000023 |
| Mercury | 0.30 | 0.000073 | 0.000021 | 0.022 | 0.12 | 0.068 | 0.0028 | 0.0000093 | **5.9** | 0.0087 | 0.00095 | 0.000000013 |
| Zinc | 240 | 0.000015 | 0.0000020 | 0.0034 | 0.025 | 0.014 | 0.040 | 0.000091 | **2.0** | **1.5** | 0.013 | 0.000000081 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Aroclor-1254 | 0.052 | 0.0000062 | 0.0000048 | 0.00020 | 0.0065 | 0.0033 | 0.0017 | 0.00000069 | na | 0.00032 | 0.00065 | 0.00000071 |
| Bis(2-ethylhexyl)phthalate | 0.29 | 0.00013 | 0.00018 | 0.000073 | 0.073 | 0.037 | 0.0075 | 0.000000074 | na | na | 0.0027 | 0.00000049 |
| Di-n-butylphthalate | 0.12 | 0.000036 | 0.000010 | 0.0016 | 0.056 | 0.029 | 0.0000093 | 0.0000000052 | na | 0.00075 | 0.0000037 | 0.000000000050 |
| 2,3,7,8-TCDD Equivalent | 0.0013 | na | na | na | na | na | **63** | 0.018 | 0.00025 | na | **24** | 0.0022 |
| **Radionuclides (pCi/g)** | | | | | | | | | | | | |
| Americium-241 | 18 | 0.000000010 | 0.0000000058 | 0.0000070 | 0.000023 | 0.000023 | 0.000016 | 0.00000038 | **0.40** | 0.00084 | 0.0000031 | 0.0000000014 |
| Plutonium-238 | 40 | 0.000000025 | 0.0000000062 | 0.000025 | 0.00010 | 0.000097 | 0.000010 | 0.00000023 | **0.91** | 0.00036 | 0.0000024 | 0.0000000028 |
| Plutonium-239/240 | 82 | 0.000000049 | 0.000000010 | 0.000049 | 0.00020 | 0.00020 | 0.000016 | 0.00000033 | **1.7** | 0.00051 | 0.0000041 | 0.0000000051 |
| Uranium-234 | 20 | 0.0000000034 | 0.0000000022 | 0.0000022 | 0.0000074 | 0.0000074 | 0.0000064 | 0.00000015 | **0.40** | 0.0015 | 0.0000012 | 0.00000000093 |
| **Adjusted HI** | | 0.0003 | 0.0002 | 0.03 | 0.3 | 0.2 | **63** | 0.02 | **172** | **157** | **24** | 0.002 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

## Table H-5.4-60
## Adjusted HQs and HIs for SWMU 21-027(c)

| COPECs | EPC (mg/kg) | American Kestrel (avian intermediate carnivore) | American Kestrel (avian top carnivore) | American Robin (avian herbivore) | American Robin (avian insectivore) | American Robin (avian omnivore) | Deer Mouse (mammalian omnivore) | Desert Cottontail (mammalian herbivore) | Earthworm (soil dwelling invertebrate | Plant (terrestrial autotroph-producer) | Montane Shrew (mammalian insectivore) | Red Fox (mammalian top carnivore) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Lead | 58 | 0.000019 | 0.0000028 | 0.027 | 0.041 | 0.036 | 0.027 | 0.00021 | 0.034 | **0.48** | 0.0085 | 0.000000062 |
| Zinc | 84 | 0.000010 | 0.0000014 | 0.0024 | 0.017 | 0.0098 | 0.027 | 0.000062 | **0.70** | **0.52** | 0.0091 | 0.000000056 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 0.081 | na* | na | na | na | na | 0.000028 | 0.00000022 | na | **0.32** | 0.0000071 | 0.000000000052 |
| Benzoic acid | 0.31 | na | na | na | na | na | 0.013 | 0.000098 | na | na | 0.0033 | 0.0000000035 |
| Bis(2-ethylhexyl)phthalate | 18 | 0.015 | 0.021 | 0.0088 | **8.8** | **4.4** | **0.89** | 0.0000088 | na | na | **0.32** | 0.000059 |
| Di-n-butylphthalate | 0.125 | 0.000072 | 0.000020 | 0.0032 | 0.11 | 0.059 | 0.000019 | 0.000000010 | na | 0.00078 | 0.0000074 | 0.00000000010 |
| 2,3,7,8-TCDD equivalent | 0.000000097 | na | na | na | na | na | 0.0094 | 0.0000027 | 0.000000020 | na | 0.0036 | 0.00000033 |
| **Adjusted HI** | | 0.02 | 0.02 | 0.04 | **9** | **5** | 1 | 0.0004 | 0.7 | 1 | 0.3 | 0.00006 |

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

# Attachment H-1

*ProUCL Files*
*(on CD included with this document)*

# Attachment H-2

*Ecological Scoping Checklists*

## H2-1.0 ECOLOGICAL SCOPING CHECKLIST FOR MESA TOP SITES

### Part A—Scoping Meeting Documentation

| | |
|---|---|
| **Site ID** | Mesa top sites: AOC 21-002(b),Consolidated Unit 21-003-99, SWMU 21-009, SWMU 21-024(c), SWMU 21-024(m), SWMU 21-012(b), SWMU 21-024(a), SWMU 21-024(e), SWMU 21-024(g), Consolidated Unit 21-024(l)-99, SWMU 21-024(o), SWMU 21-027(c), Consolidated Unit 21-006(c)-99, SWMU 21-022(f), Consolidated Unit 21-022(h)-99, Consolidated Unit 21-023(a)-99, SWMU 21-024(b), SWMU 21-024(d), SWMU 21-024(h), SWMU 21-024(i), SWMU 21-024(j), SWMU 21-024(k), SWMU 21-024(n), SWMU 21-027(a) |
| **Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.** | From 1945 to 1978, TA-21 was used for plutonium research and metal production. The site has been used for various administrative and chemical research activities since 1978.<br><br>The following sections describe each consolidated unit, SWMU, and AOC along with known or suspected mechanisms of release.<br><br>*Consolidated Unit 21-006(c)-99* includes inactive underground seepage pits associated with buildings 21-002 and SWMU 21-003; SWMU 21-006(a), seepage disposal pit; SWMU 21-006(b), seepage disposal pit, drainline, and outfall; SWMU 21-006(c), seepage disposal pit; and SWMU 21-006(d), seepage disposal pit. SWMU 21-006(a), SWMU 21-006(c) and SWMU 21-006(d) are located on the mesa top; seepage disposal pits SWMU 21-006(a, c, and d) are all the same pit based on a reported location in the same area. All pits have been paved over. The form of site releases would be liquids and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines.<br><br>*Consolidated Unit 21-022(h)-99* includes sumps, pipelines and outfalls associated buildings 21-150, 21-022 and 21-003, specifically SWMUs 21-022(h) sump, drainline, and outfall; 21-022(i), sump; and 21-022(j), sump. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines.<br><br>*Consolidated Unit 21-023(a)-99* includes SWMU 21-023(a), a septic tank and drainlines that reportedly serviced a janitor's mop sink in building 21-003; SWMU 21-023(b), a septic tank and drainlines, received wastewater from the shower room in building 21-003; and SWMU 21-023(d), a septic tank and drainlines, received industrial waste and sewage from building 21-003. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-022(f)* is an inactive sump (structure 21-173) and pipeline. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(b)* is a septic tank, pipelines, and associated outfall that formerly routed sewage from building 21-17 (a passageway connecting buildings 21-004 and 21-005). The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(d)* is an inactive septic tank, pipelines, and associated outfall that routed sewage from an office building (building 21-001) to the south rim of the mesa above Los Alamos Canyon; located on mesa top. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(h)* is a septic tank, pipelines, and associated outfall that originally received sewage from building 21-151, an administrative building and |

| | |
|---|---|
| | shop, and then later, building 21-152, a polonium-processing and high-temperature laboratory. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(i)* is a septic tank, pipelines and associated outfall associated with building 21-209. The portion of the inlet line from the fence to the septic tank, the septic tank, the outlet line, and the outfall were removed in 2001 as part of an interim action. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(j)* is an inactive septic tank, pipelines, and associated outfall that received sewage from building 21-155, a warehouse and laboratory. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(k)* is an inactive septic tank, tile leach field, pipelines, and associated outfall that received sewage from building 21-209, a high-temperature chemistry building. SWMU 21-024(k) is located on the mesa top; directly south of building 21-155 and is outside of the fenced area. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks.<br><br>*SWMU 21-024(n)* originally consisted of a corrugated metal pipe, which exited building 21-155, and an outfall. Three additional pipelines and outfalls were identified in the same vicinity during a 2004 geophysical survey and/or from as-built engineering drawings. SWMU 21-024(n) is located on mesa top; east of building 21-213 by approximately 100 feet. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines.<br><br>*SWMU 21-027(a)* consists of a surface drainage and outfall in addition to drain lines that received effluent from floor drains in building 21-003. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance.<br><br>*AOC 21-002(b)* is a former drum storage structure (structure 21-38) and consisted of three tin-siding walls, a roof, and a concrete floor. The area is currently being used for staging material such as, PVC pipe and scrap metal. The release was liquid or solid and likely from spills or leaking drums.<br><br>*Consolidated Unit 21-003-99* consists of SWMU 21-003 and SWMU 21-013(f). SWMU 21-013(f) is contained entirely within SWMU 21-003. SWMU 21-003 was a PCB container storage area inside building 21-061, including the area immediately outside and east of the building. SWMU 21-003 is located on the mesa top and on a bench in the canyon. SWMU 21-013(f) is on the mesa top; south of building 21-61, stretching to the edge of the mesa, but not over the edge to Los Alamos Canyon. It was the site of soil piles and possibly a surface disposal area within the boundaries of building 21-003. The release was liquid or solid and likely from spills, leaking drums or surface disposal of materials.<br><br>*SWMU 21-009* is a former waste treatment laboratory (building 21-33) that was a 16-ft × 48-ft wood-frame structure with a 12-ft ceiling and a wooden floor built on concrete pillars. SWMU 21-009 is located on the mesa top. SWMU 21-009 also includes an abandoned septic tank on the south side of TA-21. The form of release was liquid and the most likely mechanisms are seepage into the subsurface, leaks from conveyance lines and the septic tank, and spills from drum handling during waste treatment.<br><br>*SWMU 21-024(c)* is an inactive septic system that formerly routed sewage from two buildings (buildings 21-54 and 21-61) through a septic tank (structure 21-56). |

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| | *SWMU 21-024(m)* is the original outfall location for a septic system that cannot be located, although the approximate location is south of building 21-209. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank.<br><br>*SWMU 21-012(b)* is a dry well and pipelines associated with the old steam plant building 21-009. This location now serves as a parking lot for the steam plant (building 21-357). SWMU 21-012(b) consists of two concrete steam blow-down pits, a separate drain line that drained each pit toward the southern edge of DP Mesa, a seepage pit, a drywell, an outfall pipe associated with floor drains in building 21-009, and piping conveying effluent between structures. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the dry well.<br><br>*SWMU 21-024(a)* is an inactive septic system formerly routed sewage from the old steam plant (building 21-009) through a septic tank (structure 21-53) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank.<br><br>*SWMU 21-024(e)* is an inactive septic system that routed sewage from the former TA-21 laundry (building 21-020) and a former diesel power plant and shop (building 21-014) through a septic tank (structure 21-123) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank.<br><br>*SWMU 21-024(g)* is an inactive septic system that formerly routed sewage from building 21-031 (cold work shop/electronics) through pipelines and septic tank (structure 21-125) into two drainage ditches. Engineering drawings from the 1950s indicate sewage from building 21-007 (warehouse) being tied into the system. Subsequently, the drainage ditches were no longer used and the septic tank was moved farther north outside of the fenced area to discharge on the surface of the north rim of DP Mesa. Additionally, a cut pipe exits building 21-031, directing flow into the 2-ft × 2-ft × 1-ft concrete storm drain now present in the paved parking area. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank.<br><br>*SWMU 21-024(o)* is a pipeline and outfall that served the old diesel plant (building 21-046) and associated outfall. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank.<br><br>*SWMU 21-027(c)* is a pipeline and outfall that exited former building 21-006 (a cafeteria and machine shop removed in 1966) and discharged to the south on DP Mesa. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank.<br><br>*Consolidated Unit 21-024(l)-99* consists of SWMU 21-022(a), a sump and associated lines; SWMU 21-024(l), an outfall; and AOC 21-004(a), an aboveground storage tank and associated lines. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines, the septic tank and the aboveground storage tank. |

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| **List of Primary Impacted Media**<br>**(Indicate all that apply.)** | **Surface soil** – X<br>**Surface water/sediment** – NA<br>**Subsurface** – X<br>**Groundwater** – NA<br>**Other, explain** – None |
| **Vegetation class based on GIS vegetation coverage**<br>**(Indicate all that apply.)** | **Water** – NA<br>**Bare Ground/Unvegetated** – X<br>**Spruce/fir/aspen/mixed conifer** – NA<br>**Ponderosa pine** – A few immature pine trees can be found at the edge of the parking areas<br>**Piñon juniper/juniper savannah** – NA<br>**Grassland/shrubland** – NA<br>**Developed** – Paved roads, buildings, construction areas and fences. Some forbs are coming through the cracks in the asphalt and concrete.<br>**Burned** – NA |
| **Is T&E Habitat Present?**<br>**If applicable, list species known or suspected of using the site for breeding or foraging.** | The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon and Los Alamos Canyon nor on DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata]. |
| **Provide list, of Neighboring/ Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate.**<br>**(Use this information to evaluate the need to aggregate sites for screening.)** | 21-006(e)-99, 21-028(c), 21-022(i), MDA B, MDA V, MDA T, MDA A, MDA U, 21-013(c)<br>Releases from these sites include hazardous constituents and radionuclides in liquid, vapor, and solid forms through the mechanisms of spills, dumping, drainages, outfalls, and material disposal/storage. The COPCs for the up-gradient sites include but are not limited to VOCs, SVOCs, inorganic chemicals, and radionuclides. |
| **Surface Water Erosion Potential Information**<br>**Summarize information from SOP 2.01, including the total score and the runoff subscore (maximum of 46); terminal point of surface water transport; slope; and surface water run-on sources.** | The terminal point of surface water transport is DP canyon or Los Alamos canyon. The DP mesa ground surface is typically flat (<10% slope) with some areas gradually sloping (10-30%) toward the canyons. There are very few sites on the mesa top with steep slopes (>30%) due to rubble mounds or other disturbances. Surface water run-on sources are not present. |

## Part B—Site Visit Documentation

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| **Site ID** | Mesa top sites: AOC 21-002(b),Consolidated Unit 21-003-99, SWMU 21-009, SWMU 21-024(c), PCBs below SWMU 21-024(m), SWMU 21-012(b), SWMU 21-024(a), SWMU 21-024(e), SWMU 21-024(g), Consolidated Unit 21-024(l)-99, SWMU 21-024(o), SWMU 21-027(c), Consolidated Unit 21-006(c)-99, SWMU 21-022(f), Consolidated Unit 21-022(h)-99, Consolidated Unit 21-023(a)-99, SWMU 21-024(b), SWMU 21-024(d), SWMU 21-024(h), SWMU 21-024(i), SWMU 21-024(j), SWMU 21-024(k), SWMU 21-024(n), SWMU 21-027(a) |
| **Date of Site Visit** | November 4, 2009 |
| **Site Visit Conducted by** | Jennifer Weidhaas, North Wind, Inc.<br>Linda Causey, Weston Solutions<br>Emily Day, Weston Solutions<br>Richard Mirenda, LANL |

## Receptor Information:

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| **Estimate cover** | **Relative vegetative cover (high, medium, low, none)** = low to none<br>**Relative wetland cover (high, medium, low, none)** = none<br>**Relative structures/asphalt, etc., cover (high, medium, low, none)** = high |
| **Field notes on the GIS vegetation class to assist in verifying the Arcview information** | The mesa top sites are highly disturbed with rock, concrete, asphalt, gravel, construction debris, and structures covering the entire area. Some forbs are pushing through cracks in the asphalt in various places and some weeds can be seen at the edge of the parking lots and paved areas. A few isolated, immature Ponderosa pines can be found at the edge of the paved areas. |
| **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.** | See previous page. |
| **Are ecological receptors present at the site?**<br>**(yes/no/uncertain)**<br>**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.** | Yes.<br>The DP Mesa contains terrestrial biota such as reptiles, small mammals, insects, birds, and plants. Deer may use the area, as deer tracks were observed during the visit at the boundary of the parking areas near the edge of the mesa. The quality of the habitat at the sites is not ideal for native plant and animal species. No aquatic community exists on DP Mesa. |

### Contaminant Transport Information:

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| **Surface water transport**<br>**Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).** | The DP Mesa sites have a small potential for surface water transport. The DP Mesa ground surface is typically flat (<10% slope) with some areas gradually sloping (10-30%) toward the canyons. There are very few sites on the mesa top with steep slopes (>30%) due to rubble mounds or other disturbances. Although much of the area is highly developed, there is a large amount of demolition in the area, which contributes to poor stabilization of the surface media. This destabilization of the surface media results in a higher potential for erosion and surface water transport. Runoff is evident in some locations and may infiltrate in areas not paved, but will likely move as sheet flow down into the canyons. The terminal point of surface water transport is DP Canyon and Los Alamos Canyon. |
| **Are there any off-site transport pathways (surface water, air, or groundwater)?**<br>**(yes/no/uncertain)**<br>**Provide explanation** | Yes. There is potential for surface water transport off-site due to disturbance of surface soil during demolition activities. There is a potential for air transport of contamination present in surface soil as fugitive dust. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface. |

### Ecological Effects Information:

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| **Physical Disturbance**<br>**(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)** | There is a high amount of disturbance on DP Mesa. There is a high amount of demolition activities making the physical disturbance of the area quite substantial. |
| **Are there obvious ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).** | No. Only effects are the result of the physical disturbances from demolition. |
| **Interim action needed to limit apparent ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.** | No. |

### No Exposure/Transport Pathways:

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| **If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport.**<br>Not applicable. |

**Adequacy of Site Characterization:**

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| **Do existing or proposed data provide information on the nature and extent of contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if the maximum value was captured by existing sample data.)** | Yes. Ongoing investigations at some SWMUs, AOCs, and consolidated units will define the nature and extent of contamination. |
| **Do existing or proposed data for the site address potential transport pathways of site contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if other sites should be aggregated to characterize potential ecological risk.)** | Yes. Ongoing investigations at some SWMUs, AOCs, and consolidated units will define the nature and extent of contamination. |

**Part C—Ecological Pathways Conceptual Exposure Model**

**Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model**

**Question A:**

**Could soil contaminants reach receptors through vapors?**

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >$10^{-5}$ atm-m^3/mol and molecular weight <200 g/mol).**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Volatile contaminants were detected at low levels in the subsurface.

**Question B:**

**Could the soil contaminants reach receptors through fugitive dust carried in air?**

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

**Answer (likely/unlikely/uncertain):** Likely in some areas, unlikely in paved SWMUs and AOCs

**Provide explanation:** Potential soil contaminants reaching receptors through fugitive dust is likely in areas with demolition disturbance, which could bring contaminants to the surface and in areas where

burrowing is likely. However, it is unlikely that soil contaminants will reach receptors as fugitive dust from SWMUs that are paved.

**Question C:**

**Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?**

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no aquatic ecological communities on or within close proximity to the sites and there is limited runoff from the sites.

**Question D:**

**Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?**

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no seeps, springs or perched groundwater present on or near the sites. The depth of groundwater is greater than 1000 ft below ground surface.

**Question E:**

**Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?**

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**

- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

**Question F:**

**Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?**

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no perched aquifers on or near these sites. While erosion potential is high in some of the outfall areas, there is no evidence of mass wasting events in these areas.

**Question G:**

**Could airborne contaminants interact with receptors through the respiration of vapors?**

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 1

**Terrestrial Animals:** 2

**Provide explanation:** Demolition activities and burrowing in the outfall areas and along conveyance lines may bring receptors in contact with vapors.

**Question H:**

**Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?**

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Demolition activities and burrowing in the outfall areas and along conveyance lines may bring receptors in contact with particulates.

**Question I:**

**Could contaminants interact with plants through root uptake or rain splash from surficial soils?**

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Provide explanation:** Low concentrations of COPCs were detected in surface soil.

**Question J:**

**Could contaminants interact with receptors through food-web transport from surficial soils?**

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

**Question K:**

**Could contaminants interact with receptors through the incidental ingestion of surficial soils?**

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs were found in surface soil.

**Question L:**

**Could contaminants interact with receptors through dermal contact with surficial soils?**

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** Lipophilic chemicals were detected at low concentrations at these sites.

**Question M:**

**Could contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Gamma-emitting radionuclides were detected infrequently.

**Question N:**

**Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?**

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question O:**

**Could contaminants interact with receptors through food-web transport from water and sediment?**

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question P:**

**Could contaminants interact with receptors through the ingestion of water and suspended sediments?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question Q:**

**Could contaminants interact with receptors through dermal contact with water and sediment?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question R:**

**Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question S:**

**Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?**

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question T:**

**Could contaminants bioconcentrate in sedimentary or water-column organisms?**

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question U:**

**Could contaminants bioaccumulate in sedimentary or water column organisms?**

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question V:**

**Could contaminants interact with aquatic plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

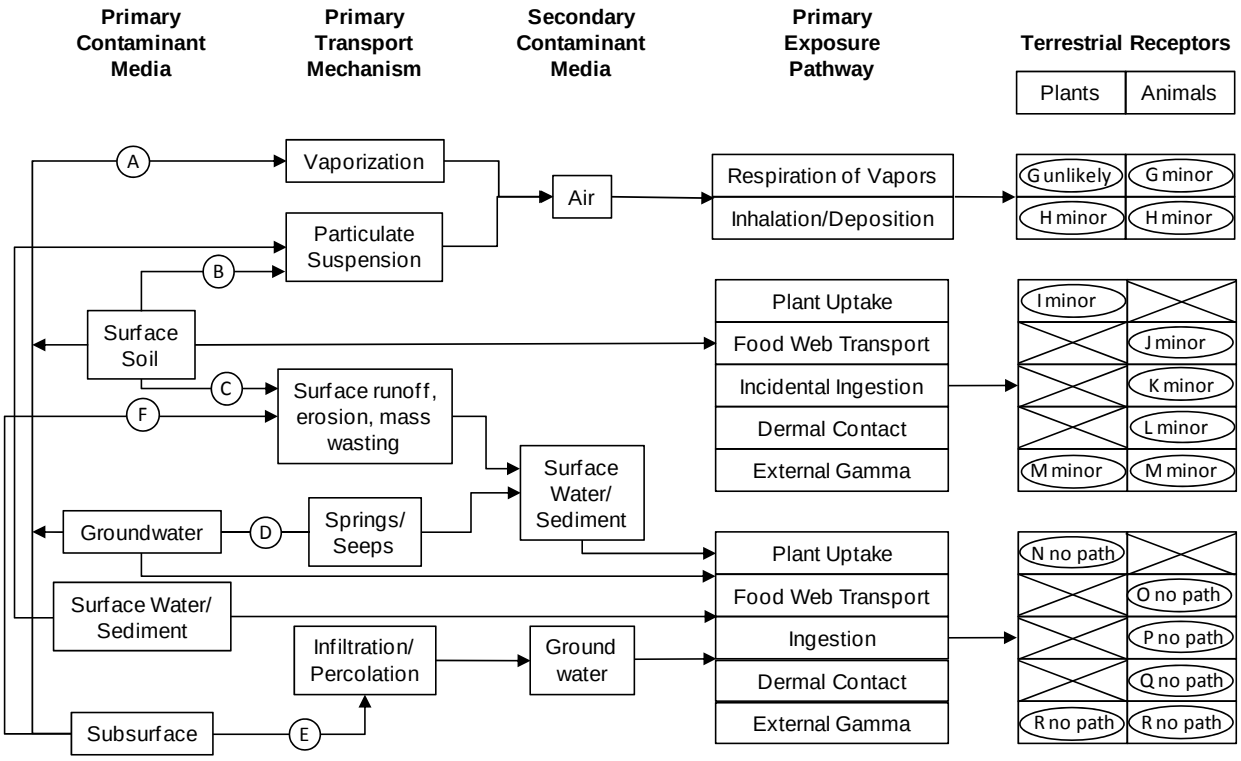
**Aquatic Plants:** 0

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

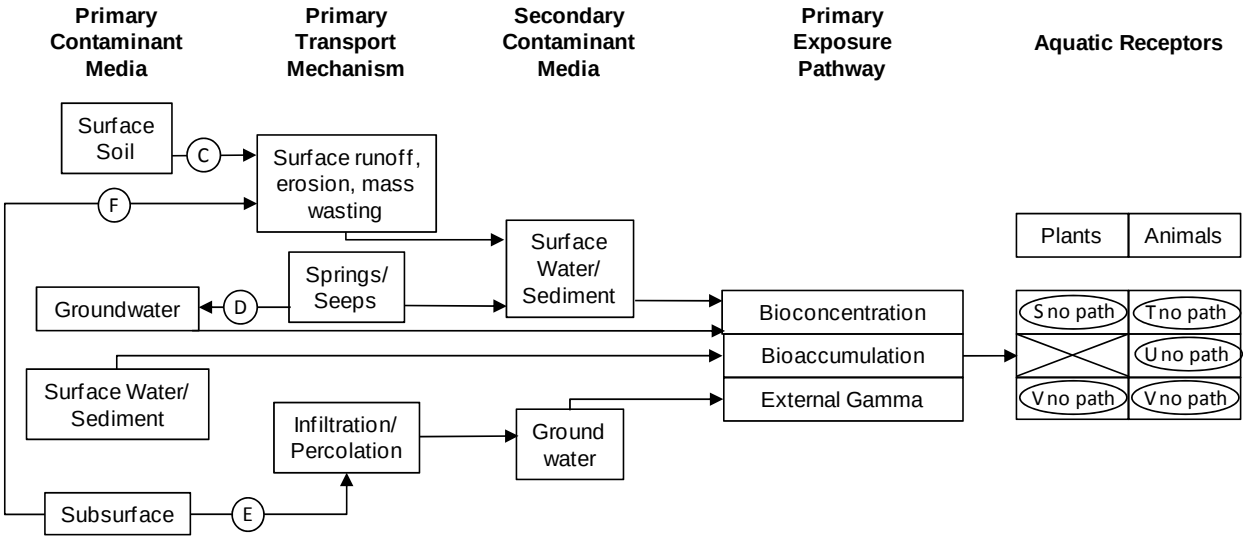
## Ecological Scoping Checklist
Terrestrial Receptors
## Ecological Pathways Conceptual Exposure Model

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist



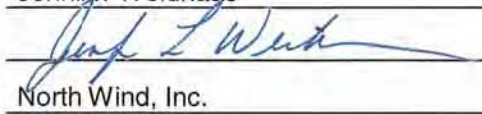
## Ecological Scoping Checklist
Aquatic Receptors
## Ecological Pathways Conceptual Exposure Model

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist

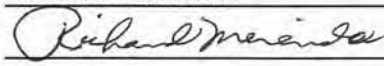


**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Jennifer Weidhaas
**Name (signature):** 
**Organization:** North Wind, Inc.
**Phone number:** 208-528-8718

**Verification by another party (provide name, organization and phone number):**

**Name (printed):** Richard J. Mirenda
**Name (signature):** 
**Organization:** Los Alamos National Laboratory, EP-WES-EDA
**Phone number:** 505-665-6953

## H2-2.0 ECOLOGICAL SCOPING CHECKLIST FOR CANYON OUTFALL SITES

### Part A—Scoping Meeting Documentation

| | |
|---|---|
| **Site ID** | Canyon outfall sites: |
| **Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.** | From 1945 to 1978, TA-21 was used for plutonium research and metal production. The site has been used for various administrative and chemical research activities since 1978.<br>The following sections describe each consolidated units and SWMUs along with known or suspected mechanisms of release. |
| **List of Primary Impacted Media**<br>**(Indicate all that apply.)** | **Surface soil** – X<br>**Surface water/sediment** – NA<br>**Subsurface** – X<br>**Groundwater** – NA<br>**Other, explain** – None |
| **Vegetation class based on GIS vegetation coverage**<br>**(Indicate all that apply.)** | **Water** – NA<br>**Bare Ground/Unvegetated** – NA<br>**Spruce/fir/aspen/mixed conifer** – X<br>**Ponderosa pine** – X<br>**Piñon juniper/juniper savannah** – X<br>**Grassland/shrubland** – NA<br>**Developed** – NA<br>**Burned** – NA |
| **Is T&E Habitat Present?**<br>**If applicable, list species known or suspected of using the site for breeding or foraging.** | The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon and Los Alamos Canyon nor on DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata]. |
| **Provide list, of Neighboring/Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate.**<br>**(Use this information to evaluate the need to aggregate sites for screening.)** | SWMU 21-006(e)-99, SWMU 21-028(c), SWMU 21-022(i), SWMU 21-009, SWMU 21-021(b), Consolidated Unit 21-024(l)-99, SWMU 21-023(a)-99, MDA B, MDA V, MDA T, MDA A, MDA U, 21-013(c)<br>Releases from these sites include hazardous constituents and radionuclides in liquid, vapor, and solid forms through the mechanisms of spills, dumping, drainages, outfalls, and material disposal/storage. The COPCs for the up-gradient sites include, but are not limited to, VOCs, SVOCs, inorganic chemicals, and radionuclides. |
| **Surface Water Erosion Potential Information**<br>**Summarize information from SOP 2.01, including the total score and the runoff subscore (maximum of 46); terminal point of surface water transport; slope; and surface water run-on sources.** | The terminal point of surface water transport is DP canyon or Los Alamos canyon. The canyons are typically steep (>30% slope) with some areas extending into the canyon very steeply (>75% slope). Runoff is evident in some locations. |

### Part B—Site Visit Documentation

| | |
|---|---|
| **Site ID** | Canyon outfall sites |
| **Date of Site Visit** | November 4, 2009 |
| **Site Visit Conducted by** | Jennifer Weidhaas, North Wind, Inc.<br>Linda Causey, Weston Solutions<br>Emily Day, Weston Solutions<br>Richard Mirenda, LANL |

### Receptor Information:

| | |
|---|---|
| **Estimate cover** | **Relative vegetative cover (high, medium, low, none)** = medium to high<br>**Relative wetland cover (high, medium, low, none)** = none<br>**Relative structures/asphalt, etc., cover (high, medium, low, none)** = none to low |
| **Field notes on the GIS vegetation class to assist in verifying the Arcview information** | The canyon sites are relatively undisturbed and the vegetation is typical of the native vegetation and habitats of the canyons. Native vegetation includes piñon-juniper woodlands, and stands of Gambel's oak, Russian Olive Trees, one-seed juniper, elm trees, and ponderosa pine trees. |
| **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.** | See previous page. |
| **Are ecological receptors present at the site?**<br>**(yes/no/uncertain)**<br>**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.** | Yes.<br>The DP Canyon and Los Alamos Canyon contains terrestrial biotia such as reptiles, small mammals, insects, birds, and plants. Deer may use the area, as deer track was observed during the visit at the boundary of the parking areas near the edge of the mesa. Various songbirds were observed in the trees and circling raptors were observed. Evidence of burrowing was observed in the area. Other large mammals, such as deer, elk, coyotes and raccoons, may be in the area. Plant life is abundant and healthy. No aquatic community exists in the SWMUs and consolidated units affected by the canyon sites. |

### Contaminant Transport Information:

| | |
|---|---|
| **Surface water transport**<br>**Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).** | The sites have a potential for surface water transport. The canyons are typically steep (>30% slope) with some areas extending into the canyons very steeply (>75% slope). Runoff is evident in some locations. Runoff may infiltrate in areas not paved, but will likely move as sheet flow down into canyons in most developed areas of the DP mesa. The terminal point of surface water transport is DP and Los Alamos Canyons. |
| **Are there any off-site transport pathways (surface water, air, or groundwater)?**<br>**(yes/no/uncertain)**<br>**Provide explanation** | Yes. There is potential for surface water transport off-site. There is little potential for air transport of contamination present in surface soil as fugitive dust due to vegetation cover. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface. |

### Ecological Effects Information:

| | |
|---|---|
| **Physical Disturbance**<br>**(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)** | There is minimal disturbance in the outfall site areas as the extreme slope precludes accessibility in most cases. There is some erosion evident in various locations. |
| **Are there obvious ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).** | No. |
| **Interim action needed to limit apparent ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.** | No. |

### No Exposure/Transport Pathways:

| |
|---|
| **If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport.**<br>Not applicable. |

### Adequacy of Site Characterization:

| | |
|---|---|
| **Do existing or proposed data provide information on the nature and extent of contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if the maximum value was captured by existing sample data.)** | Yes. Ongoing investigations at some SWMUs and consolidated units will define the nature and extent of contamination. |
| **Do existing or proposed data for the site address potential transport pathways of site contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if other sites should be aggregated to characterize potential ecological risk.)** | Yes. Ongoing investigations at some SWMUs and consolidated units will define the nature and extent of contamination. |

**Part C—Ecological Pathways Conceptual Exposure Model**

**Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model**

**Question A:**

**Could soil contaminants reach receptors through vapors?**

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >$10^{-5}$ atm-m^3/mol and molecular weight <200 g/mol).**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Volatile contaminants were detected at low levels in the subsurface.

**Question B:**

**Could the soil contaminants reach receptors through fugitive dust carried in air?**

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

**Answer (likely/unlikely/uncertain):** Likely in some areas

**Provide explanation:** Potential soil contaminants reaching receptors through fugitive dust is likely in areas where burrowing occurs (e.g., in Los Alamos and DP Canyons).

**Question C:**

**Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?**

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no aquatic ecological communities on or within close proximity to the sites and there is limited runoff from the sites.

**Question D:**

**Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?**

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no seeps, springs or perched groundwater present on or near the sites. The depth of groundwater is greater than 1000 ft below ground surface.

**Question E:**

**Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?**

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

**Question F:**

**Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?**

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no perched aquifers on or near these sites. While erosion potential is high in some of the outfall areas in Los Alamos and DP Canyons, there is no evidence of mass wasting events in these areas.

**Question G:**

**Could airborne contaminants interact with receptors through the respiration of vapors?**

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 1

**Terrestrial Animals:** 2

**Provide explanation:** Burrowing in the outfall areas and along conveyance lines may bring receptors in contact with vapors.

**Question H:**

**Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?**

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Burrowing in the outfall areas and along conveyance lines may bring receptors in contact with particulates.

**Question I:**

**Could contaminants interact with plants through root uptake or rain splash from surficial soils?**

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Provide explanation:** Low concentrations of COPCs were detected in surface soil.

**Question J:**

**Could contaminants interact with receptors through food-web transport from surficial soils?**

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

**Question K:**

**Could contaminants interact with receptors through the incidental ingestion of surficial soils?**

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs were found in surface soil.

**Question L:**

**Could contaminants interact with receptors through dermal contact with surficial soils?**

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** Lipophilic chemicals were detected at low concentrations at these sites.

**Question M:**

**Could contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Gamma-emitting radionuclides were detected infrequently.

**Question N:**

**Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?**

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question O:**

**Could contaminants interact with receptors through food-web transport from water and sediment?**

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question P:**

**Could contaminants interact with receptors through the ingestion of water and suspended sediments?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question Q:**

**Could contaminants interact with receptors through dermal contact with water and sediment?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question R:**

**Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question S:**

**Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?**

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question T:**

**Could contaminants bioconcentrate in sedimentary or water-column organisms?**

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question U:**

**Could contaminants bioaccumulate in sedimentary or water column organisms?**

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question V:**

**Could contaminants interact with aquatic plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

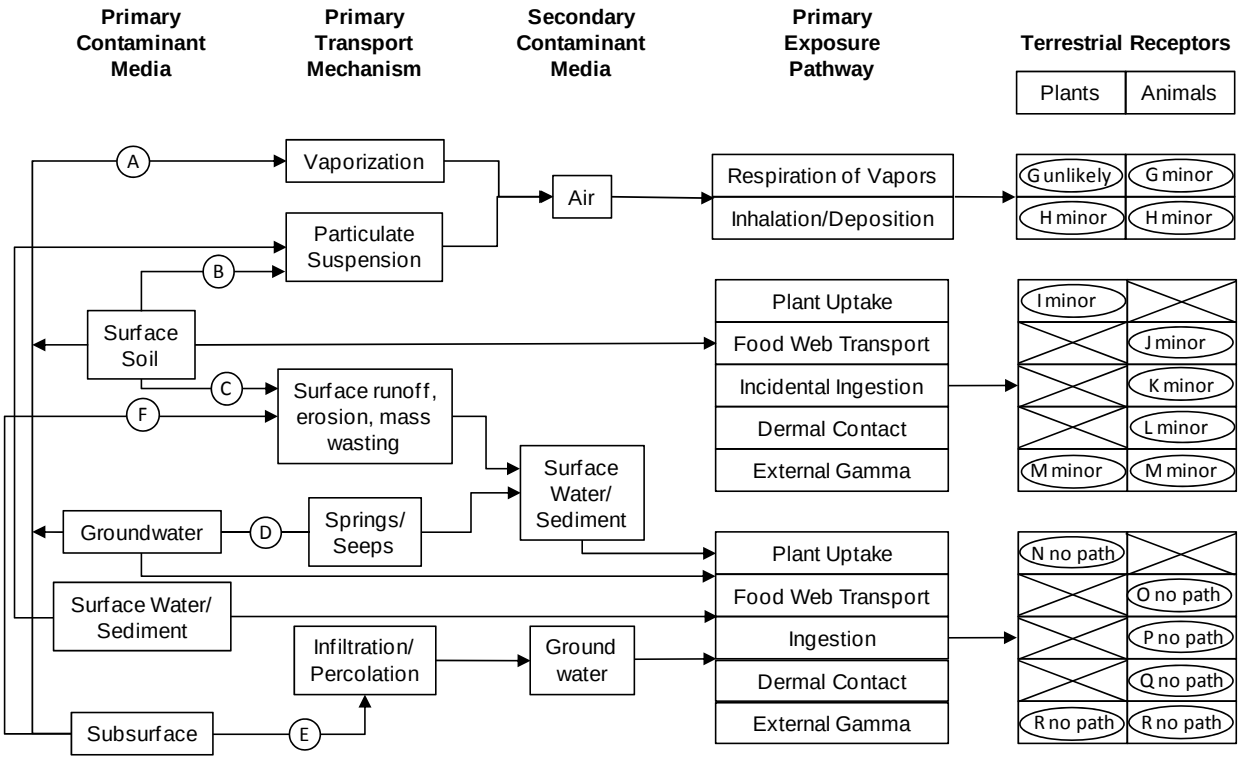
**Aquatic Plants:** 0

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

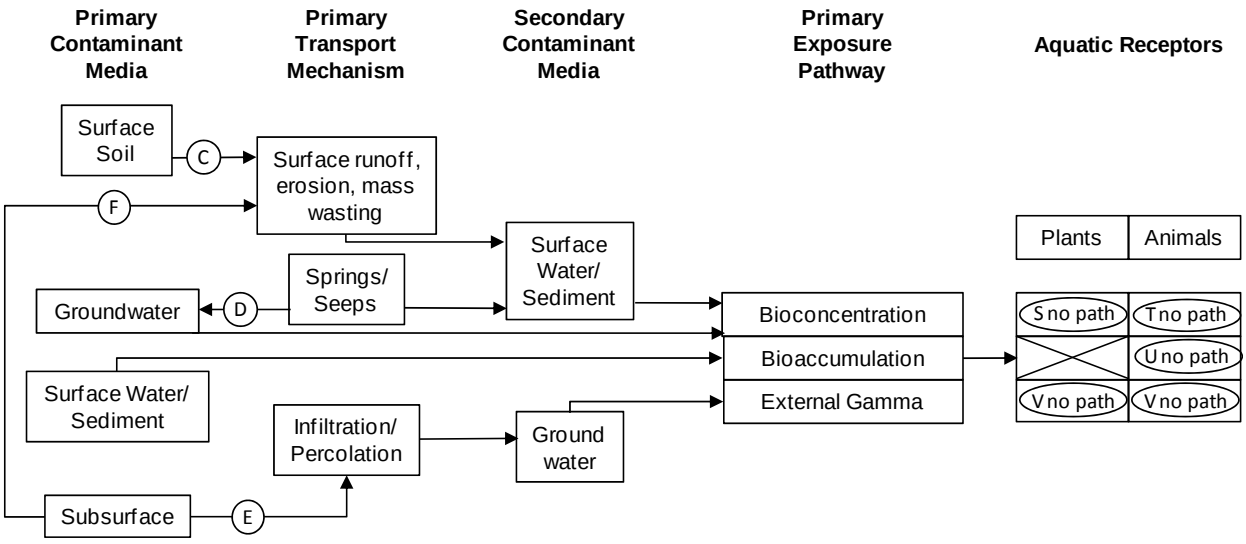
## Ecological Scoping Checklist
Terrestrial Receptors
**Ecological Pathways Conceptual Exposure Model**

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist



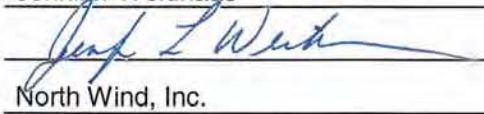
## Ecological Scoping Checklist
Aquatic Receptors
## Ecological Pathways Conceptual Exposure Model

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist

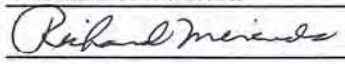


**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Jennifer Weidhaas
**Name (signature):** 
**Organization:** North Wind, Inc.
**Phone number:** 208-528-8718

**Verification by another party (provide name, organization and phone number):**

**Name (printed):** Richard J. Mirenda
**Name (signature):** 
**Organization:** Los Alamos National Laboratory, EP-WES-EDA
**Phone number:** 505-665-6953

## H2-3.0 ECOLOGICAL SCOPING CHECKLIST FOR SWMU 21-013(c)

### Part A—Scoping Meeting Documentation

| | |
|---|---|
| **Site ID** | SWMU 21-013(c) |
| **Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.** | SWMU 21-013(c) is a former disposal area located at the eastern end of DP Mesa. The site consisted of mounds of earth, an excavated trench and an earthen berm that contained scattered concrete, asphalt and metal debris. Four large concrete pylons and several piles of soil, asphalt, and concrete also were located on the site. Other surface debris included glass, scrap metal, wood, cans, paper, and plastic. The SWMU had been disturbed in the past and appeared to contain only building materials. It is not known when the materials were disposed of at the site. |
| **List of Primary Impacted Media**<br>**(Indicate all that apply.)** | **Surface soil** – X<br>**Surface water/sediment** – NA<br>**Subsurface** – X<br>**Groundwater** – NA<br>**Other, explain** – None |
| **Vegetation class based on GIS vegetation coverage**<br>**(Indicate all that apply.)** | **Water** – NA<br>**Bare Ground/Unvegetated** – X; ground/canopy cover=medium (25-75%); mixed vegetation (native trees, shrubs, and weeds) with some barren areas, no gravel was observed<br>**Spruce/fir/aspen/mixed conifer** – X<br>**Ponderosa pine** – X<br>**Piñon juniper/juniper savannah** – X<br>**Grassland/shrubland** – X; shrub vegetation dominated by chamisa (*Chrysothamnus nauseosus*)<br>**Developed** – NA<br>**Burned** – NA |
| **Is T&E Habitat Present?**<br>**If applicable, list species known or suspected of using the site for breeding or foraging.** | The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon, Los Alamos Canyon nor on DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata]. |
| **Provide list, of Neighboring/ Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate.**<br>**(Use this information to evaluate the need to aggregate sites for screening.)** | SWMU 21-022(f), SWMU 21-024(i), SWMU 21-024(m), SWMU 21-024(n), MDA U<br>Releases from these sites and the MDA include hazardous constituents and radionuclides in liquid, vapor, and solid forms through spills, dumping, drainages, outfalls, and material disposal/storage. The COPCs for the up-gradient sites include but are not limited to VOCs, SVOCs, inorganic chemicals, and radionuclides. |
| **Surface Water Erosion Potential Information** | Erosion potential is low and the terminal point of surface water transport is DP Canyon. |

## Part B—Site Visit Documentation

| | |
|---|---|
| **Site ID** | SWMU 21-013(c) |
| **Date of Site Visit** | November 4, 2009 |
| **Site Visit Conducted by** | Jennifer Weidhaas, North Wind, Inc.<br>Linda Causey, Weston Solutions<br>Emily Day, Weston Solutions<br>Richard Mirenda, LANL |

### Receptor Information:

| | |
|---|---|
| **Estimate cover** | **Relative vegetative cover (high, medium, low, none)** = medium to high<br>**Relative wetland cover (high, medium, low, none)** = none<br>**Relative structures/asphalt, etc., cover (high, medium, low, none)** = none to low, a fence bounds the SWMU. |
| **Field notes on the GIS vegetation class to assist in verifying the Arcview information** | The SWMU is disturbed, although native grasses, weeds, and trees have revegetated some areas of the site. |
| **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.** | See previous page. |
| **Are ecological receptors present at the site?**<br>**(yes/no/uncertain)**<br>**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.** | Yes.<br>DP Canyon, Los Alamos Canyon, and the mesa top contain terrestrial biota, such as reptiles, small mammals, insects, birds, and plants. Deer may use the area, as deer track was observed during the visit. Various songbirds were observed in the trees and circling raptors were observed. Evidence of burrowing was observed in this area. Other large mammals, such as elk, coyotes and raccoons, may be in the area. Plant life is abundant. No aquatic community exists in the SWMU and canyon area potentially affected by the SWMU. |

### Contaminant Transport Information:

| | |
|---|---|
| **Surface water transport**<br>**Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).** | Runoff was not evident, although the slope of the site indicates that runoff is possible. Runoff may infiltrate or move as sheet flow down into canyon. The terminal point of surface water transport is DP Canyon. |
| **Are there any off-site transport pathways (surface water, air, or groundwater)?**<br>**(yes/no/uncertain)**<br>**Provide explanation** | Yes. There is potential for surface water transport off-site. There is minimal potential for air transport of contamination present in surface soil as fugitive dust due to vegetation cover. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface. |

### Ecological Effects Information:

| | |
|---|---|
| **Physical Disturbance**<br>**(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)** | The site is disturbed due to surface disposal activities; however native grasses, weeds, and trees have re-vegetated the site. |
| **Are there obvious ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).** | No. |
| **Interim action needed to limit apparent ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.** | No. |

### No Exposure/Transport Pathways:

| |
|---|
| **If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport.**<br>Not applicable. |

### Adequacy of Site Characterization:

| | |
|---|---|
| **Do existing or proposed data provide information on the nature and extent of contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if the maximum value was captured by existing sample data.)** | Yes. Ongoing investigations at the SWMU will define the nature and extent of contamination. |
| **Do existing or proposed data for the site address potential transport pathways of site contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if other sites should be aggregated to characterize potential ecological risk.)** | Yes. Ongoing investigations at the SWMU will define the nature and extent of contamination. |

**Part C—Ecological Pathways Conceptual Exposure Model**

**Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model**

**Question A:**

**Could soil contaminants reach receptors through vapors?**

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >$10^{-5}$ atm-m^3/mol and molecular weight <200 g/mol).**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Volatile contaminants were detected at low levels in the subsurface.

**Question B:**

**Could the soil contaminants reach receptors through fugitive dust carried in air?**

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Potential soil contaminants reaching receptors through fugitive dust is likely in burrowing areas.

**Question C:**

**Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?**

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no aquatic ecological communities on or within close proximity to the site and no erosion was observed.

**Question D:**

**Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?**

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no seeps, springs or perched groundwater present on or near the site. The depth of groundwater is greater than 1000 ft below ground surface.

**Question E:**

**Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?**

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

**Question F:**

**Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?**

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no perched aquifers on or near the site. Erosion potential is low and there is no evidence of mass wasting events at the SWMU.

**Question G:**

**Could airborne contaminants interact with receptors through the respiration of vapors?**

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 1

**Terrestrial Animals:** 2

**Provide explanation:** Burrowing may bring receptors in contact with vapors.

**Question H:**

**Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?**

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Burrowing may bring receptors in contact with particulates.

**Question I:**

**Could contaminants interact with plants through root uptake or rain splash from surficial soils?**

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Provide explanation:** Low concentrations of COPCs were detected in surface soil.

**Question J:**

**Could contaminants interact with receptors through food-web transport from surficial soils?**

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

**Question K:**

**Could contaminants interact with receptors through the incidental ingestion of surficial soils?**

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs were found in surface soil.

**Question L:**

**Could contaminants interact with receptors through dermal contact with surficial soils?**

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** Lipophilic chemicals were detected at low concentrations at the site.

**Question M:**

**Could contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Gamma-emitting radionuclides were detected infrequently.

**Question N:**

**Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?**

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question O:**

**Could contaminants interact with receptors through food-web transport from water and sediment?**

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question P:**

**Could contaminants interact with receptors through the ingestion of water and suspended sediments?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question Q:**

**Could contaminants interact with receptors through dermal contact with water and sediment?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question R:**

**Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question S:**

**Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?**

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question T:**

**Could contaminants bioconcentrate in sedimentary or water-column organisms?**

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question U:**

**Could contaminants bioaccumulate in sedimentary or water column organisms?**

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question V:**

**Could contaminants interact with aquatic plants or animals through external irradiation?**

- External irradiation effects are most relevant for gamma-emitting radionuclides.
- The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

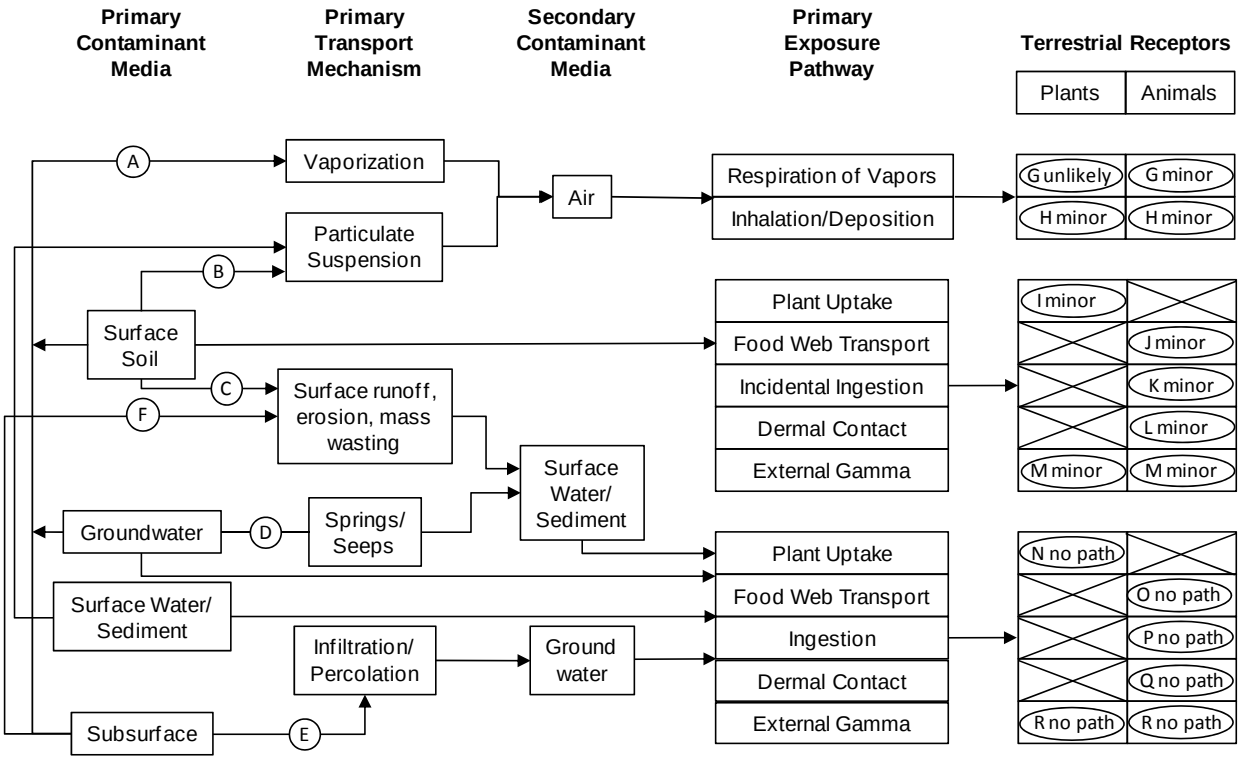
**Aquatic Plants:** 0

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

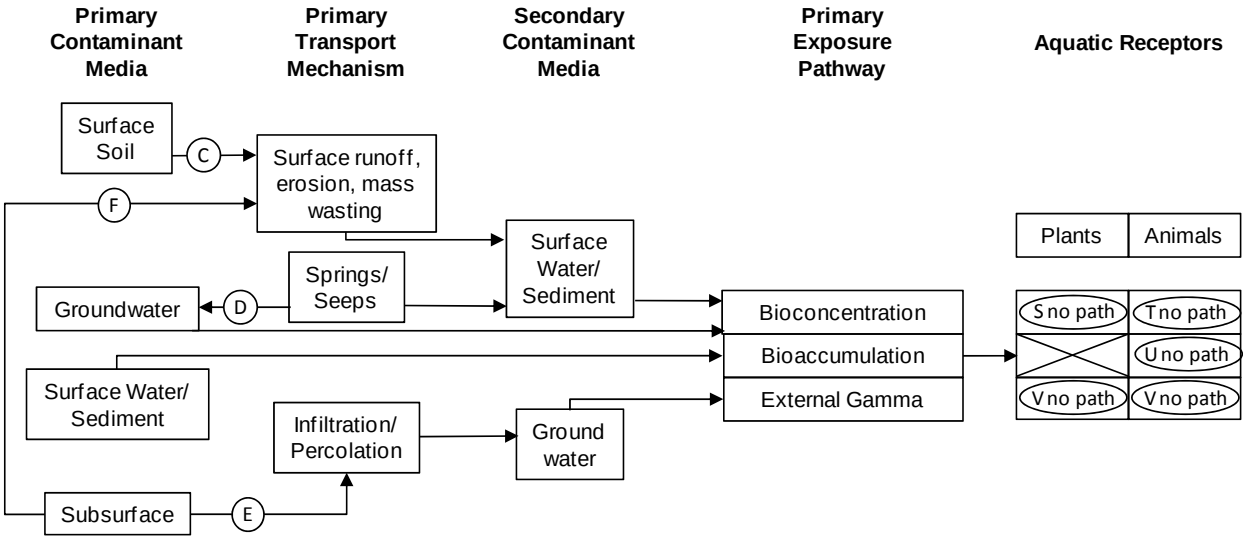
## Ecological Scoping Checklist
Terrestrial Receptors
**Ecological Pathways Conceptual Exposure Model**

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist



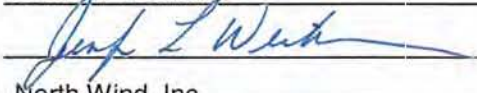
## Ecological Scoping Checklist
Aquatic Receptors
## Ecological Pathways Conceptual Exposure Model

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist

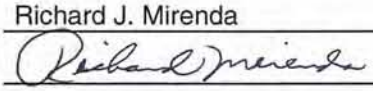


**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Jennifer Weidhaas
**Name (signature):** 
**Organization:** North Wind, Inc.
**Phone number:** 208-528-8718

**Verification by another party (provide name, organization and phone number):**

**Name (printed):** Richard J. Mirenda
**Name (signature):** 
**Organization:** Los Alamos National Laboratory, EP-WES-EDA
**Phone number:** 505-665-6953

## H2-4.0 ECOLOGICAL SCOPING CHECKLIST FOR CONSOLIDATED UNIT 21-026(a)-99

### Part A—Scoping Meeting Documentation

| **Site ID** | Consolidated Unit 21-026(a)-99 |
|---|---|
| **Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.** | Sewage treatment plant consisting of SWMUs 21-013(a), surface disposal area; 21-026(a), sewage treatment plant; 21-026(b), four sludge drying/sand filter beds; and AOCs 21-026(c), a dosing siphon chamber; and 21-026(d), an outfall<br>SWMU 21-026(a) consists of an inactive sewage treatment plant housed in building 21-227. The plant is located at the eastern end of DP Mesa. The treatment plant replaced the original septic tank/filter fields and septic tank/surface discharge systems throughout TA-21. The treatment plant was an extended aeration sanitary waste treatment plant with a grit chamber, comminuter, digester, aeration tank, and clarifier. The plant treated sanitary wastes and cooling water from TA-21 facilities and received water from decontamination activities, janitor's scrub water, and waste from other TA-21 operations. Originally, treated effluent leaving building 21-227 was released at a concrete spill pad located on the southern edge of DP Canyon [AOC 21-026(d)]. Later, effluent was discharged via a dosing siphon chamber to sand filter/sludge drying beds.<br>SWMU 21-026(b) consists of four sludge drying/sand filter beds; each is 14.5-ft by 23-ft with 4-ft deep concrete walls.<br>AOC 21-026(c) consists of a dosing siphon chamber that was a 5-ft wide × 7-ft long × 8-ft-deep concrete tank (structure 21-348). The dosing siphon chamber received effluent until the chamber was full and then was pumped to the two westernmost sand filter beds.<br>AOC 21-026(d) consists of an outfall. Discharge from the sewage treatment plant flowed through an 8-in.-diameter VCP into a concrete channel on the north edge of DP Mesa and ran down a natural drainage to a tributary of DP Canyon.<br>SWMU 21-013(a) consists of a surface disposal area, approximately 45 $ft^2$. |
| **List of Primary Impacted Media**<br>**(Indicate all that apply.)** | **Surface soil** – X<br>**Surface water/sediment** – NA<br>**Subsurface** – X<br>**Groundwater** – NA<br>**Other, explain** – None |
| **Vegetation class based on GIS vegetation coverage**<br>**(Indicate all that apply.)** | **Water** – NA<br>**Bare Ground/Unvegetated** –<br>21-013(a) Ground/Canopy Cover = medium (25-75%)<br>21-026(a) Ground/Canopy Cover = thick (>75%)<br>21-026(b) Ground/Canopy Cover = medium (25-75%)<br>21-026(d) Ground/Canopy Cover = medium (25-75%)<br>**Spruce/fir/aspen/mixed conifer** – NA<br>**Ponderosa pine** – NA |

| | |
|---|---|
| | **Piñon juniper/juniper savannah** – NA<br>**Grassland/shrubland** –<br>21-026(d) groundcover in the outfall portion consists of thick vegetation of native grasses, forbs and pines<br>21-013(a) some forbs and native grasses<br>21-026(a) vegetation around site consists of native grasses and forbs<br>21-026(b) forbs, native grasses (about 30%)<br>**Developed** –<br>Groundcover on the mesa top portion consists of a base coarse driveway, facility structures, and sparse vegetation.<br>21-013(a) ground cover consists of mostly base coarse<br>21-026(a) built on a concrete foundation, base coarse driveway on north side of facility<br>21-026(b) some base coarse around drying beds<br>**Burned** – NA |
| **Is T&E Habitat Present?**<br>**If applicable, list species known or suspected of using the site for breeding or foraging.** | The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon or Los Alamos Canyon, nor on the DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata]. |
| **Provide list, of Neighboring/ Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate.**<br>**(Use this information to evaluate the need to aggregate sites for screening.)** | None. The nearest site, 21-013(c) is over 300 feet away. |
| **Surface Water Erosion Potential Information** | Erosion is likely and the terminal point of surface water transport is DP canyon or Los Alamos canyon. |

### Part B—Site Visit Documentation

| | |
|---|---|
| **Site ID** | Consolidated Unit 21-026(a)-99 |
| **Date of Site Visit** | November 4, 2009 |
| **Site Visit Conducted by** | Jennifer Weidhaas, North Wind, Inc.<br>Linda Causey, Weston Solutions<br>Emily Day, Weston Solutions<br>Richard Mirenda, LANL |

### Receptor Information:

| | |
|---|---|
| **Estimate cover** | Relative vegetative cover (high, medium, low, none) = medium to high<br>Relative wetland cover (high, medium, low, none) = none<br>Relative structures/asphalt, etc., cover (high, medium, low, none) = none to low, a fence bounds the SWMU. |
| **Field notes on the GIS vegetation class to assist in verifying the Arcview information** | The SWMU on the mesa top is disturbed, although native grasses, weeds and pines have revegetated some areas of the site. The outfall area in the DP Canyon has native vegetation including ponderosa and piñon pine. |
| **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.** | See previous page. |
| **Are ecological receptors present at the site?**<br>**(yes/no/uncertain)**<br>**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.** | Yes.<br>The DP Canyon and the mesa top contain terrestrial biota, such as reptiles, small mammals, insects, birds, and plants. Deer use the area, as deer track was observed during the visit. Various songbirds were observed in the trees and circling raptors were observed. Evidence of burrowing was observed in this area. Other large mammals, such as elk, coyotes and raccoons, may be in the area. Plant life is abundant in the outfall area. No aquatic community exists in the SWMU and canyon area potentially affected by the SWMU. |

### Contaminant Transport Information:

| | |
|---|---|
| **Surface water transport**<br>**Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).** | Minor runoff was evident. Runoff may infiltrate or move as sheet flow down into canyon. The terminal point of surface water transport is DP Canyon. |
| **Are there any off-site transport pathways (surface water, air, or groundwater)?**<br>**(yes/no/uncertain)**<br>**Provide explanation** | Yes. There is potential for surface water transport off-site. There is little potential for air transport of contamination present in surface soil as fugitive dust due to vegetative cover. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface. |

### Ecological Effects Information:

| | |
|---|---|
| **Physical Disturbance**<br>**(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)** | The site on the mesa top is disturbed due to construction and demolition activities; however native grasses, weeds, and trees have re-vegetated the site. |
| **Are there obvious ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).** | There is distressed vegetation (e.g., dead pine trees) in the outfall area. |
| **Interim action needed to limit apparent ecological effects?**<br>**(yes/no/uncertain)**<br>**Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.** | No. The outfall has not received effluent from the treatment plant (building 21-227) since 1992. |

### No Exposure/Transport Pathways:

| |
|---|
| **If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport.**<br>Not applicable. |

### Adequacy of Site Characterization:

| | |
|---|---|
| **Do existing or proposed data provide information on the nature and extent of contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if the maximum value was captured by existing sample data.)** | Yes. Ongoing investigations at the consolidated unit will define the nature and extent of contamination. |
| **Do existing or proposed data for the site address potential transport pathways of site contamination?**<br>**(yes/no/uncertain)**<br>**Provide explanation**<br>**(Consider if other sites should be aggregated to characterize potential ecological risk.)** | Yes. Ongoing investigations at the consolidated unit will define the nature and extent of contamination. |

**Part C—Ecological Pathways Conceptual Exposure Model**

**Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model**

**Question A:**

**Could soil contaminants reach receptors through vapors?**

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >$10^{-5}$ atm-m^3/mol and molecular weight <200 g/mol).**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Volatile contaminants were detected at low levels in the subsurface.

**Question B:**

**Could the soil contaminants reach receptors through fugitive dust carried in air?**

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Potential soil contaminants reaching receptors through fugitive dust is likely in burrowing areas.

**Question C:**

**Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?**

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no aquatic ecological communities on or within close proximity of the sites and no erosion was observed.

**Question D:**

**Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?**

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no seeps, springs or perched groundwater present on or near the sites. The depth of groundwater is greater than 1000 ft below ground surface.

**Question E:**

**Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?**

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

**Question F:**

**Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?**

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There are no perched aquifers on or near these sites. Erosion potential is low and there is no evidence of mass wasting events at the sites.

**Question G:**

**Could airborne contaminants interact with receptors through the respiration of vapors?**

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 1

**Terrestrial Animals:** 2

**Provide explanation:** Burrowing may bring receptors in contact with vapors.

**Question H:**

**Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?**

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Burrowing may bring receptors in contact with particulates.

**Question I:**

**Could contaminants interact with plants through root uptake or rain splash from surficial soils?**

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Provide explanation:** Low concentrations of COPCs were detected in surface soil.

**Question J:**

**Could contaminants interact with receptors through food-web transport from surficial soils?**

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

**Question K:**

**Could contaminants interact with receptors through the incidental ingestion of surficial soils?**

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** COPCs were found in surface soil.

**Question L:**

**Could contaminants interact with receptors through dermal contact with surficial soils?**

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** Lipophilic chemicals were detected at low concentrations at these sites.

**Question M:**

**Could contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 2

**Terrestrial Animals:** 2

**Provide explanation:** Gamma-emitting radionuclides were detected infrequently.

**Question N:**

**Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?**

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question O:**

**Could contaminants interact with receptors through food-web transport from water and sediment?**

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question P:**

**Could contaminants interact with receptors through the ingestion of water and suspended sediments?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question Q:**

**Could contaminants interact with receptors through dermal contact with water and sediment?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question R:**

**Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question S:**

**Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?**

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question T:**

**Could contaminants bioconcentrate in sedimentary or water-column organisms?**

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question U:**

**Could contaminants bioaccumulate in sedimentary or water column organisms?**

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

**Question V:**

**Could contaminants interact with aquatic plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.**

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):**

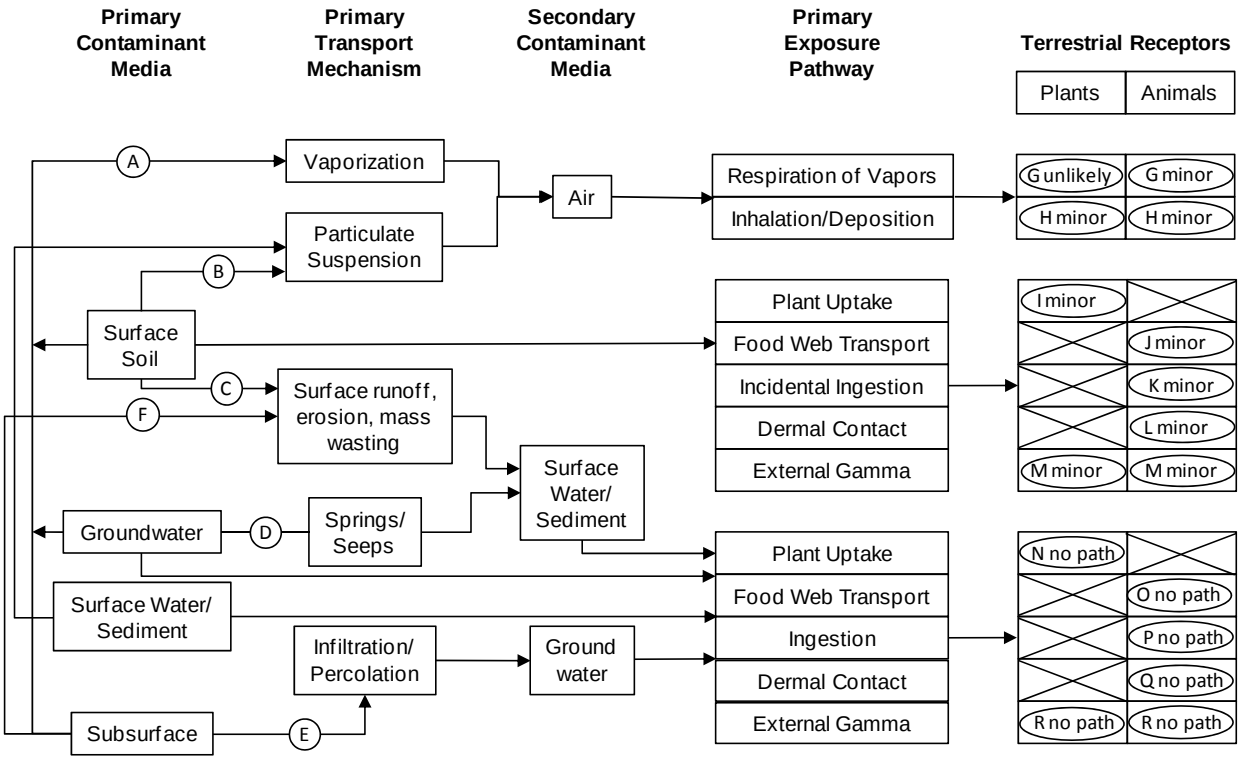
**Aquatic Plants:** 0

**Aquatic Animals:** 0

**Provide explanation:** There are no aquatic environments on-site

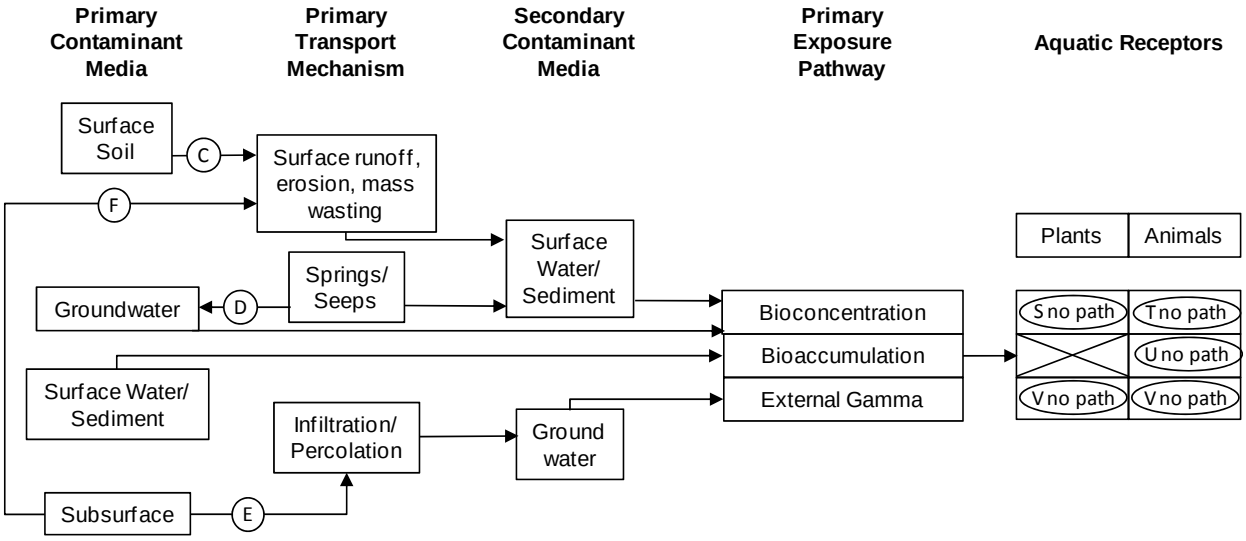
## Ecological Scoping Checklist
Terrestrial Receptors
**Ecological Pathways Conceptual Exposure Model**

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist



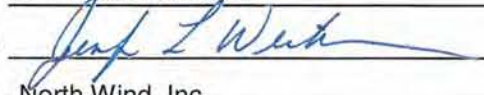
## Ecological Scoping Checklist
Aquatic Receptors
## Ecological Pathways Conceptual Exposure Model

**NOTE:**
Letters in circles refer to questions of the Scoping Checklist

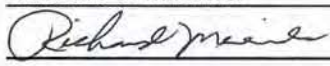


**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Jennifer Weidhaas
**Name (signature):** 
**Organization:** North Wind, Inc.
**Phone number:** 208-528-8718

**Verification by another party (provide name, organization and phone number):**

**Name (printed):** Richard J. Mirenda
**Name (signature):** 
**Organization:** Los Alamos National Laboratory, EP-WES-EDA
**Phone number:** 505-665-6953