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DEPARTMENT OF ENERGY

Environmental Management Los Alamos Field Office (EM-LA)
Los Alamos, New Mexico 87544

RECEIVED
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NMED Hazardous Waste Bureau

EMLA-23-BF271-2-1

August 30, 2023

Mr. Rick Shean
Designated Agency Manager
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

Subject: Submittal of the Phase II Investigation Report for North Ancho Canyon Aggregate Area

Dear Mr. Shean:

Enclosed please find two hard copies with electronic files of the "Phase II Investigation Report for North Ancho Canyon Aggregate Area" (Enclosure 1) Submittal of this report fulfills fiscal year 2023 Milestone 8 of Appendix B of the 2016 Compliance Order on Consent (Consent Order).

Per Section XXIII.D of the Consent Order, the U.S. Department of Energy Environmental Management Los Alamos Field Office (EM-LA) sought to reach agreement with the New Mexico Environment Department (NMED) on a review schedule by when NMED will review and approve or disapprove this submission.[1] Consistent with Section XXIII.D and Appendix D (Document Review/Comment and Revision Schedule) of the Consent Order, EM-LA proposed a 120-day period for NMED to review and approve or disapprove this submission. NMED responded by proposing an initial 120-day review period. However, in its response, NMED sought to impose conditions that directly contradict Section XXIII.D of the Consent Order. Therefore, EM-LA could not agree to NMED's proposed review period. A copy of the correspondence between EM-LA and NMED regarding NMED's review schedule is enclosed (Enclosure 2).

It is crucial that NMED commit to a review schedule of EM-LA's submissions for EM-LA to be able to timely and effectively plan for—and expeditiously execute—legacy waste remediation through the Consent Order corrective action process. Moreover, such commitment from NMED needs to be in accordance with the Consent Order.

[1] Section XXIII.D states, in pertinent part:

> [p]rior to DOE's submission of any work plan or report required by Sections XIII, XVI, XVIII, XIX, or XV (Facility Investigation, Corrective Measures Evaluation, Corrective Measures Implementation, Accelerated Corrective Action, Interim Measures), **the Parties agree to reach agreement on review schedules by when NMED will review and approve or disapprove DOE's submission(s)** . . . If NMED action on a DOE submission is not completed in accordance with an agreed-upon review schedule, the submittal will be **deemed approved.**

Notes: Emphasis added. EM-LA recognizes that NMED "may request a single extension for a specified number of days to an agreed-upon review schedule."

If you have any questions, please contact Brenda Bowlby at (360) 930-4353 (brenda.bowlby@em-la.doe.gov) or Cheryl Rodriguez at (505) 414-0450 (cheryl.rodriguez@em.doe.gov).

Sincerely,

ARTURO DURAN
Digitally signed by ARTURO DURAN
Date: 2023.08.30 07:08:01 -06'00'

Arturo Q. Duran
Compliance and Permitting Manager
U.S. Department of Energy
Environmental Management
Los Alamos Field Office

Enclosure(s): Two hard copies with electronic files:

1. Phase II Investigation Report for North Ancho Canyon Aggregate Area (EM2023-0408)
2. Email correspondence, Request for NMED Review Period of 120 Days for the Upcoming Submittal of the Phase II Investigation Report for North Ancho Canyon Aggregate Area, dated August 24, 2023

cc (letter with CD/DVD enclosure[s]):
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB
Neelam Dhawan, NMED-HWB
Ricardo Maestas, NMED-HWB
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cc (letter only):
William Alexander, N3B
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Kent Rich, EM-LA

August 2023
EM2023-0408

Phase II Investigation Report for North Ancho Canyon Aggregate Area

EM2023-0408

Phase II Investigation Report for North Ancho Canyon Aggregate Area

August 2023

Responsible N3B program director:

Printed Name	Signature	Title	Organization	Date
Brenda Bowlby	[signature]	Program Director	RCRA Remediation Program	8/7/2023

Responsible N3B representative:

Printed Name	Signature	Title	Organization	Date
Troy Thomson	[signature]	Program Manager	N3B Environmental Remediation Program	8/4/2023

Responsible DOE EM-LA representative:

Printed Name	Signature	Title	Organization	Date
Arturo Q. Duran	ARTURO DURAN Digitally signed by ARTURO DURAN Date: 2023.08.30 10:54:47 -06'00'	Compliance and Permitting Manager	Office of Quality and Regulatory Compliance	

EXECUTIVE SUMMARY

This Phase II investigation report evaluates the nature and extent of contamination for five solid waste management units (SWMUs) and one area of concern (AOC) in the North Ancho Canyon Aggregate Area at Los Alamos National Laboratory (LANL or the Laboratory). This Phase II investigation report also evaluates potential human health and ecological risks for those sites for which nature and extent of contamination are defined or no further sampling is warranted. The North Ancho Canyon Aggregate Area is located in Technical Areas 39 and 49 (TA-39 and TA-49) at the Laboratory. TA-49 sites are not evaluated in this report. TA-39 contains 26 SWMUs and AOCs. Of these 26 sites, 20 have been previously investigated and/or remediated, deferred, delayed, or approved for no further action or corrective action complete. The 6 remaining SWMUs required additional sampling to define extent of contamination, and 1 of the 6 sites required soil removal. The scope for this additional sampling and remediation was documented in the approved Phase II investigation work plan (IWP) for North Ancho Canyon Aggregate Area. The Phase II IWP was implemented between 2017 and 2023 and the results are presented in this report.

Based on the results of data evaluations presented in this Phase II investigation report, the U.S. Department of Energy Environmental Management Los Alamos Field Office and Newport News Nuclear BWXT-Los Alamos, LLC, recommend the following:

- Corrective action complete without controls for three sites [SWMU 39-001(a), SWMU 39-006(a), and SWMU 39-007(a)] for which extent is defined and which pose no potential unacceptable human health risk under the residential, industrial, and construction worker scenarios and no unacceptable ecological risk.
- Corrective action complete with controls for three sites [SWMU 39-002(a), AOC 39-002(b), and SWMU 39-010] for which extent is defined and which pose no potential unacceptable human health risk under the industrial and construction worker scenarios and no unacceptable ecological risk, but pose potential unacceptable human health risk under the residential scenario.

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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 Triad 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 approximately 36 mi^2 of the Pajarito Plateau, which consists of a series of fingerlike mesas separated by deep canyons that contain perennial and intermittent streams running west to east. Mesa top elevations from approximately 6200–7800 ft above mean sea level.

The mission of DOE Environmental Management Los Alamos Field Office (EM-LA) is to safely, efficiently, and transparently complete the cleanup of legacy contamination and waste resulting from nuclear weapons development and government-sponsored nuclear research before 1999 at the Laboratory. EM LA's cleanup scope under the 2016 Compliance Order on Consent (Consent Order) with the New Mexico Environment Department (NMED) includes waste, soil, and groundwater remediation. The cleanup sites are designated as either solid waste management units (SWMUs) or areas of concern (AOCs). EM-LA's cleanup contractor, Newport News Nuclear BWXT-Los Alamos, LLC (N3B), implements the Los Alamos Legacy Cleanup Contract. This Phase II investigation report addresses potentially contaminated sites within the North Ancho Canyon Aggregate Area at the Laboratory (Figure 1.1-1). These sites are potentially contaminated with hazardous chemicals and radionuclides. Corrective actions at the Laboratory are subject to a Compliance Order on Consent (the Consent Order). The Consent Order was issued pursuant to the New Mexico Hazardous Waste Act, New Mexico Statutes Annotated (NMSA) 1978 Section 74-4-10, and the New Mexico Solid Waste Act, NMSA 1978, Section 74-9-36(D). The New Mexico Environment Department (NMED), pursuant to the New Mexico Hazardous Waste Act, regulates cleanup of hazardous wastes and hazardous constituents. DOE regulates cleanup of radioactive contamination, pursuant to DOE Order 458.1, Administrative Change 4, "Radiation Protection of the Public and the Environment," and DOE Order 435.1, "Radioactive Waste Management." Information about radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with DOE policy.

1.1 General Site Information

The North Ancho Canyon Aggregate Area is located in the southeast portion of the Laboratory within Technical Area 39 (TA-39) and the Ancho Canyon Watershed (Figure 1.1-1 and Plate 1). The aggregate area extends from the southern boundary of TA-49 to the northern boundaries of TA-33 and TA-70 and includes the alluvial floodplain and hillsides of North Ancho Creek, an intermittent stream. The North Ancho Canyon Aggregate Area consists of 26 SWMUs and AOCs within TA-39. Of these 26 sites, 20 have been previously investigated and/or remediated and have been approved for no further action or have been deferred. Prior investigation results are reported in the investigation report for the North Ancho Canyon Aggregate Area submitted to the New Mexico Environment Department (NMED) in January 2010 (LANL 2010, 108500.11; NMED 2010, 108675). The investigation report recommended additional investigation and remediation at six sites. The scope for this additional sampling and remediation was documented in the Phase II Investigation Work Plan for North Ancho Canyon Aggregate Area approved by NMED on May 13, 2011 (LANL 2011, 201561; NMED 2011, 203447). The Phase II investigation work plan was implemented between 2017 and 2023, and the results are presented in this report. Phase II activities were initiated in 2017 and were documented in the Accelerated Corrective Action (ACA) Report for the North Ancho Canyon Aggregate Area submitted to NMED in January 2018 (LANL 2018, 602861). Samples were also collected during the 2019 Known Cleanup Sites (Above SSLs) Campaign activities at Area 2 of SWMU 39-002(a) (N3B 2019, 700665).

The AOCs and SWMUs investigated are listed in Table 1.1-1, and shown on Plate 2.

1.2 Purpose of Investigation

Five SWMUs and one AOC within the North Ancho Canyon Aggregate Area were addressed by the Phase II investigation conducted by Newport News Nuclear BWXT-Los Alamos, LLC (N3B) because the sites are potentially contaminated with hazardous chemicals and radionuclides, and final assessments of site contamination, associated risks, and recommendations for additional corrective actions remained incomplete. For each site, the objectives of the Phase II investigation were to (1) establish the nature and extent of contamination, (2) determine whether current site conditions pose a potential unacceptable risk/dose to human health or the environment, and (3) assess whether any additional sampling and/or corrective actions are required.

All analytical data collected from the Phase II investigation activities are presented and evaluated in this report, along with decision-level data from previous investigations.

1.3 Document Organization

This report is organized into nine sections, including this introduction, with multiple supporting appendices.

- Section 2.0 provides details on the aggregate area site conditions (surface and subsurface).
- Section 3.0 provides an overview of the scope of the activities performed during implementation of the approved Phase II IWP (LANL 2011, 201561; NMED 2011, 203447).
- Section 4.0 describes the regulatory criteria used to evaluate potential risk/dose to ecological and human health receptors.
- Section 5.0 describes the data review methods.
- Section 6.0 presents an overview of the operational history of each site and historical releases, summaries of previous investigations, results of the field activities performed during the Phase II investigation, site contamination, evaluation of the nature and extent of contamination, and summaries of the results of human health and ecological risk-screening assessments for TA-39.
- Section 7.0 presents conclusions regarding the nature and extent of contamination investigation and risk-screening assessments.
- Section 8.0 discusses recommendations based on applicable data and the risk-screening assessments.
- Section 9.0 includes a list of references cited and the map data sources used in all the figures and plates.

The appendices provide acronyms, abbreviations, a glossary, a metric conversion table, and definitions of data qualifiers used in this report (Appendix A), field methods (Appendix B), a summary of investigation-derived waste (IDW) management (Appendix C), an analytical program description (Appendix D), analytical suites and results and analytical reports (Appendix E, on DVD included with this document), box plots and statistical results (Appendix F), and risk-screening assessments (Appendix G). Because of security restrictions at TA-39, site photographs were not allowed.

2.0 AGGREGATE AREA SITE CONDITIONS

2.1 Surface Conditions

2.1.1 Soils

Soil on the Pajarito Plateau was initially mapped and described by Nyhan et al. (Nyhan et al. 1978, 005702). The soil on the slopes between the mesa tops and canyon floors was mapped as mostly steep rock outcrops consisting of approximately 90% bedrock with patches of shallow, weakly developed colluvial soil. South-facing canyon walls generally are steep and usually have shallow soil in limited, isolated patches between rock outcrops. In contrast, the north-facing canyon walls generally have more extensive areas of shallow, dark-colored soil under thick forest vegetation. The canyon floors generally contain poorly developed, deep, well-drained soil on floodplain terraces or small alluvial fans (Nyhan et al. 1978, 005702).

Surface soils within the TA-39 study area include those associated with mesa tops, canyon walls, and the canyon bottom. Eroded sediments are moved by stream flow and deposit along the stream banks during flooding events in the canyon bottom. The mesa-top soils are represented by the Hackroy and Nyjac series and range from 10 cm thick near the mesa edges to several feet thick near the center of the mesas. Canyon walls may be very steep with no soil accumulation or less steep with colluvium, undeveloped soil material deposits interspersed (trapped) among large blocks of Bandelier Tuff sluffed from the canyon walls. Canyon-bottom soils are poorly developed and are typical of the deep, well-drained Totavi series, having a gravelly-loamy-sand or sandy-loam texture. The canyon and tributaries contain alluvium of varying thickness. The 1997 Resource Conservation and Recovery Act [RCRA] facility investigation (RFI) noted the presence of very old sediments buried beneath part of the canyon bottom and the relatively long-term stability of much of the canyon bottom. There is a tendency for net deposition of sediment and relatively little potential for deep scour.

The soil in the North Ancho Canyon Aggregate Area belongs to the Hackroy, Nyjack, and the Totavi (LANL 1993, 015313, pp.3-17 to 3-21; LANL 1993, 020946). Soil descriptions are summarized below (Nyhan et al. 1978, 005702).

- Hackroy soil consists of very shallow to shallow, well-drained, and moderately developed soil with an A-B horizon sequence. Soil textures range from sandy loams to clay loams derived from tuff.
- Nyjack soil consists of moderately deep, well-drained, and moderately developed soil with an A-B-C horizon sequence. Soil textures range from fine sandy loams to clay loams. The parent material of the soil may range from Bandelier Tuff to sequences of alluvium/colluvium interstratified with moderately developed to well-developed buried soil.
- The Totavi series consists of deep, well-drained soil with an A horizon sequence that formed in alluvium in canyon bottoms. Soil textures are a gravelly, loamy sand or sandy loam.

2.1.2 Surface Water

Most surface water in the Los Alamos area occurs as ephemeral, intermittent, or interrupted streams in canyons cut into the Pajarito Plateau. Springs on the flanks of the Jemez Mountains, west of the Laboratory's western boundary, supply flow to the upper reaches of Cañon de Valle and to Guaje, Los Alamos, Pajarito, and Water Canyons (Purtymun 1975, 011787; Stoker 1993, 056021). These springs discharge water perched in the Bandelier Tuff and Tschicoma Formation at rates from 2 to 135 gal./min (Abeele et al. 1981, 006273). The volume of flow from the springs maintains natural perennial reaches of varying lengths in each canyon. The Rio Grande flows through White Rock Canyon approximately 2 mi to the southeast of TA-39.

The hydrogeology of the canyon systems is thoroughly discussed in section 2.1.3 of the Laboratory's hydrogeologic work plan (LANL 1998, 059599). The surface water infiltration pathways within the aggregate area include native or disturbed soil, unconsolidated alluvium, Bandelier Tuff, Puye Formation, and basalt; faults and fracture systems; and cooling joints (LANL 1999, 064617, p. 3-25).

TA-39 is drained by a number of intermittent streams, which are tributaries of the main stream channel that runs through Ancho Canyon (North Fork), eventually joining Ancho Canyon beyond the boundary of TA-39, and joins the Rio Grande in White Rock Canyon. At TA-39, all stream channels carry intermittent flow. Runoff, when it does occur in these alluvial channels, is produced by intense summer thunderstorms. Other than these intermittently active stream channels, there are no other surface water sources or accumulations at TA-39.

2.2 Subsurface Conditions

2.2.1 Stratigraphic Units

This section summarizes the stratigraphy of the North Ancho Canyon Aggregate Area. Additional information about the geologic setting of the area and the Pajarito Plateau is in the hydrogeologic work plan (LANL 1998, 059599) and the hydrogeologic synthesis report (Collins et al. 2005, 092028).

Principal units at TA-39, from oldest to youngest, are deposits of the Puye Formation including both fanglomerates and river gravels, and lavas, interflow units, and subflow deposits of the Cerros del Rio volcanic field; and sediment beneath the Bandelier Tuff, and the Otowi Member of the Bandelier Tuff including the basal Guaje Pumice Bed and alluvium. The stratigraphy and selected characteristics of these units are summarized below.

2.2.1.1 The Puye Formation

The Puye Formation is principally a Pliocene volcanogenic alluvial fan sequence derived from the Jemez Mountains (Turbeville et al. 1989, 021587), but it includes ancestral Rio Grande gravels and lacustrine deposits, particularly along and west of White Rock Canyon. The Puye Formation is informally divided into a fanglomerate facies and an axial Rio Grande facies (Dethier 1997, 049843). Along White Rock Canyon and tributary canyons south of Otowi Bridge, these facies are interfingered laterally and in vertical sequences. The fanglomerate facies is mainly pinkish-grey to grey, locally cemented, weakly lithified pebble- to boulder-size gravel, boulder-rich debris flows, and sand. Highly weathered dacitic pumice-rich layers also occur, which have weathered to clay. The ancestral Rio Grande facies is mainly grey, poorly to moderately lithified, locally cemented quartzite-rich pebble-to-cobble gravel, but it includes beds of silt and silty sand. In Ancho Canyon, about 400 ft of the Puye Formation was encountered from 710 ft bgs to total depth of R-31 at 1103 ft bgs, including 90 ft of Puye Formation fanglomerate and over 300 ft of Puye Formation "Totavi" river gravels.

2.2.1.2 Cerros del Rio Volcanic Field

Mafic Lavas

Lava flows of basalt, hawaiite, basaltic andesite, andesite, and related intrusive rocks of the Pliocene Cerros del Rio volcanic field form surface exposures along White Rock Canyon and east of the Rio Grande from Otowi Bridge to Cochiti Dam. Volcanic landforms include maars, shields, fissure vents, cinder cones near the Rio Grande, and a cinder cone at TA-33 Area 6. Near Otowi Bridge, mesa-capping flows are about 130 ft thick, whereas south of Water Canyon the flow sequence is greater than 260 ft thick, and near North Ancho Canyon massive flows are greater than 400 ft thick. Over 400 ft of Cerros del Rio lavas were drilled through during the installation of the regional groundwater well, R-31 at TA-39. East of the Rio Grande, the sequence of basaltic flows also thickens to the south. The thickest flows appear to fill paleovalleys or craters greater than 200 ft deep, whereas some of the thinner flows apparently spread out over surfaces of little relief. Flow bases are smooth to rubble-rich; locally a few tens of inches to a few feet of alluvium separate the flows.

Ages of 2.3 to 2.7 mega-annum (millions of years) (Ma) have been obtained from rock dating of the Cerros del Rio volcanic field near northern White Rock Canyon, including argon-40/argon-39 ages of 2.4 to 2.6 Ma from basalt flows and dikes at the TA-33 cinder cone (Laughlin et al. 1993, 054424; Dethier 1997, 049843). A topographically low flow in lower Water Canyon yielded a similar age of about 2.47 Ma, indicating a relatively short period of intense volcanism and over 650 ft of local aggradation occurred at about 2.4 to 2.6 Ma.

2.2.1.3 Otowi Member Bandelier Tuff

The Otowi Member of the Bandelier Tuff at TA-39 consists of nonwelded vitric tuff with abundant phenocrysts of feldspar and bipyramidal euhedral quartz. The ash flows contain a few percent of intermediate composition volcanic lithic clasts. The Guaje Pumice Bed is the basal pumiceous fall unit consisting of a vitric pumice airfall with pumice sizes generally 1–2 cm but ranging up to 5–8 cm. These rocks were erupted from the Jemez Mountains about 1.61 Ma (Izett and Obradovich 1994, 048817). This unit is about 200–250 ft thick at TA-39 as encountered in R-31 well installation.

2.2.1.4 Early Quaternary Alluvium

In Ancho Canyon near NM 4 just below TA-39, about 20 ft of dacite-rich bouldery stream gravels derived from a stream draining the Sierra de los Valles occurs between the Otowi and Tshirege Members. No older alluvium was encountered during the drilling of R-31. In lower Water Canyon and a northeastern tributary to lower Ancho Canyon, alluvial deposits composed largely of quartzite-rich gravels and river-polished basalt boulders occur beneath the Tshirege Member and indicate that the early Quaternary position of the Rio Grande was at an elevation of about 5700–5800 ft above sea level.

2.2.1.5 Tshirege Member Bandelier Tuff

The Tshirege Member of the Bandelier Tuff is the uppermost rock unit at TA-39 and is exposed as cliff-forming units and on mesa-top exposures within the western part of North Ancho Canyon Aggregate Area. These rocks were erupted from the Jemez Mountains about 1.22 Ma (Izett and Obradovich 1994, 048817). This unit can be divided into multiple mappable units that reflect distinct flow units or cooling units and variations in alteration. In the TA-39 area, this unit is about 500 ft thick, but was not encountered during the canyon-bottom R-31 installation.

2.2.2 Hydrogeology

The hydrogeology of the Pajarito Plateau is separable in terms of mesas and canyons forming the plateau. Mesas generally are devoid of water, both on the surface and within the rock forming the mesa. Canyons range from wet to relatively dry; the wettest canyons contain continuous streams and contain perennial groundwater in the canyon-bottom alluvium. Dry canyons have only occasional stream flow and may lack alluvial groundwater. Intermediate perched groundwater has been found at certain locations on the plateau at depths ranging between 100 and 700 ft below ground surface (bgs). The regional aquifer is found at depths of about 600–1200 ft bgs.

Hydrogeologic conceptual site models for each watershed at the Laboratory are presented in the watershed investigation report (e.g., LANL 2009, 106939). These conceptual models show that, under natural conditions, relatively small volumes of water move beneath mesa tops because of low rainfall, high evaporation, and efficient water use by vegetation. Atmospheric evaporation may extend into mesas, further inhibiting downward flow.

2.2.2.1 Groundwater

In the Los Alamos area, groundwater occurs as (1) water in shallow alluvium in some of the larger canyons, (2) intermediate perched groundwater (a perched groundwater body lies above a less permeable layer and is separated from the underlying aquifer by an unsaturated zone), and (3) the regional aquifer.

Six exploratory holes ranging in depth from 25 to 126 ft were drilled in TA-39 in the vicinity of SWMU 39-001(a) and SWMU 39-001(b). No formation water was recorded in the monitoring wells installed in these exploratory holes, suggesting that no perched alluvial groundwater body is present in the landfill areas of Ancho Canyon. However, during the drilling of ASC-15, -16, and -18 underneath the waste burial area at PRS 39-001(b), saturated conditions were observed at 70–80 ft into the angle hole (estimated vertical depth of 50–60 ft). Logging information from two of the borings suggests a buried stream channel sand deposit that could be a perched alluvial groundwater body beneath the buried waste. None of the other angle holes drilled to similar depths indicated saturated conditions so that the presumed alluvial groundwater is not widespread. The main aquifer has been variously stated to be at a depth of at least 300–600 ft below the canyon bottom.

Characterization well R-31 is located within TA-39 in the north fork of Ancho Canyon and extends to a total depth of 1103 ft. This well was installed in the regional aquifer as part of the implementation of the Laboratory's "Hydrogeologic Workplan" (LANL 1998, 059599). R-31 was designed to provide hydrogeologic, water-quality, and water-level data for potential intermediate-depth perched zones and for the regional aquifer at a site downgradient of disposal and explosives-testing sites at TA-39.

The conceptual geologic model for the Laboratory was considerably modified following the completion of R-31. Although the underestimated thickness of the Bandelier Tuff at this site is one of the major differences between the predicted and actual stratigraphy, the more significant impacts with regard to the hydrogeology are (1) the occurrence of the regional water table within Cerros del Rio lavas rather than within Puye Formation fanglomerates and (2) the unexpected thickness of the river-gravel (Totavi) unit of the Puye Formation. The occurrence of regional saturation within basaltic lavas rather than fanglomerates indicates a system in which flow is fracture-controlled rather than porous. At greater depth, the more extensive occurrence of coarse river gravels with well-rounded clasts and little fine matrix provides access to large amounts of highly transmissive material. Extension of this transmissive unit to depths below the present Rio Grande may influence the geometry of flow paths toward the river.

3.0 SCOPE OF ACTIVITIES

The following sections describe the scope of activities conducted during the Phase II investigation of the North Ancho Canyon Aggregate Area. This includes the activities performed during the implementation of the approved Phase II IWP for North Ancho Canyon Aggregate Area (LANL 2011, 201561; NMED 2011, 203447) as well as the activities performed in 2019 at SWMU 39-002(a) as part of the Known Cleanup

Sites Campaign (N3B 2019, 700665). Appendix B describes the methods and procedures used to complete the scope.

This section also presents an overview of field activities performed during the implementation of the approved Phase II IWP for North Ancho Canyon Aggregate Area; the field investigation results and observations are presented in detail in section 6.0 and in the appendices. The scope of activities for the 2019 Known Cleanup Sites Campaign and Phase II North Ancho Canyon Aggregate Area investigation included site access activities, geodetic surveys, field screening, surface and shallow, subsurface soil investigation, subsurface soil investigation, borehole and well abandonment, excavation, equipment decontamination, health and safety measures, and waste management.

3.1 Site Access Activities

The North Ancho Canyon Aggregate Area is closed to the public and is accessible only to Laboratory employees, and most areas are accessible only with a clearance or under supervision of an escort. Before field mobilization, efforts were made to provide a secure and safe work area and to reduce impacts to workers, cultural resources, and the environment.

Other activities included reviewing the permit requirements identification form, completing excavation permits and utility locates, requesting sampling paperwork from the N3B Sample Management Office (SMO), and staging waste containers.

3.2 Field Activities

This section describes the field activities conducted during the Phase II investigation. Additional details regarding the field methods and procedures used to perform these field activities are presented in Appendix B.

3.2.1 Geodetic Surveys

Geodetic surveys were conducted during the Phase II investigation to identify surface and subsurface sampling locations. The planned sampling locations for the Phase II investigation are described in the approved IWP (LANL 2011, 201561; NMED 2011, 203447). A geodetic survey was performed to establish and mark the planned sampling locations in the field and to document excavation boundaries.

Geodetic surveys were conducted using a multiband, real-time, kinematic, global positioning system (GPS) with horizontal accuracy within 0.1 ft. During sampling, if the planned location could not be sampled because of surface or subsurface obstruction or other unanticipated field conditions, the relocated sampling location was resurveyed.

The surveyed coordinates for all Phase II sampling locations are presented in Table 3.2-1. All coordinates are expressed as State Plane Coordinate System 1983, New Mexico Central, U.S. (Stem 1989, 058977). All surveyed coordinates for sampling locations were uploaded to the Environmental Information Management database.

3.2.2 Field Screening

Field screening conducted during the 2017 ACA for the North Ancho Canyon Aggregate Area at SWMU 39-001(a) and 39-007(a) are documented in the ACA report (LANL 2018, 602861).

During the 2022–2023 investigation, surface and subsurface samples and excavated environmental media were screened for gross-alpha and gross-beta radioactivity by an N3B radiological control technician (RCT) using appropriately calibrated instruments. Field response checks of radiological instruments were performed and documented by the RCTs. All calibration checks were performed in accordance with N3B-P330-2, “Control of Measuring and Test Equipment.” Screening was performed using an Eberline E600 portable radiation monitor with either a 380AB probe or ThermoFisher Scientific, Inc., RadEye SX survey meter with dual scintillator probe. 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 levels of gross-alpha and gross-beta radioactivity. After field-screening measurements were established, samples collected from the soil and tuff material were collected and logged. The RCT collected and recorded background level measurements for gross-alpha and gross-beta radioactivity daily. All samples from SWMU 39-010 were screened for gross-alpha, gross-beta, and gross-gamma radioactivity by on-site RCTs before transport to the SMO. Samples from the other units investigated during the 2022–2023 investigation were not screened because prior site knowledge and prior site data indicated elevated activities were not present.

All samples submitted for volatile organic compound (VOC) analysis were field-screened using a photoionization detector (PID). All samples were field screened for high explosives (HE) using EXPRAY explosive detection and identification field test kits (i.e., HE spot test). Results were recorded on each sample collection log (SCL) and chain of custody (COC) form at the time of sample collection. The SCLs/COCs and are provided in Appendix E (on DVD included with this document).

3.2.3 Surface and Shallow-Subsurface Soil Investigation

Surface and subsurface samples were collected according to the approved Phase II IWP (LANL 2011, 201561; NMED 2011, 203447), and additional samples were collected to ensure that the nature and extent of contamination was defined and to evaluate human health and ecological risk. Soil, tuff, and sediment samples were collected in accordance with N3B-SOP-ER-2001, “Soil, Tuff, and Sediment Sampling.” Samples were collected using stainless-steel augers or spoons, placed in stainless-steel bowls, and transferred to sterile sample collection jars or bags for transport to the SMO. Samples for VOC analysis were transferred immediately from the sampler to the sample container to minimize the loss of VOCs during the sample-collection process.

Quality assurance/quality control samples (field duplicates, field trip blanks, and rinsate blanks) were collected in accordance with N3B-SOP-SDM-1100, “Sample Containers, Preservation, and Field Quality Control.” Field duplicate samples were collected at a minimum rate of 1 per 10 investigation samples. Rinsate blanks were collected at a minimum rate of 1 per 10 investigation samples to confirm decontamination of the sampling equipment. When VOC samples were collected, field trip blank samples were maintained with investigation samples at a minimum rate of 1 per day.

All sample collection activities were coordinated with the SMO. Upon collection, samples always remained in the controlled custody of the field team until they were delivered to the SMO. Sample custody was then relinquished to the SMO for delivery to a preapproved off-site contract analytical laboratory for the analyses specified by the approved IWP (LANL 2011, 201561; NMED 2011, 203447). The SCLs/COC forms for all samples are provided in Appendix E (on DVD included with this document).

3.2.4 Subsurface Soil Investigation

3.2.4.1 Borehole Drilling and Subsurface Sampling

At locations where the required sample depths could not be reached by hand augers, a direct push drill rig was used to collect subsurface samples. Samples were collected with a split-barrel sampler in accordance with N3B-SOP-ER-2001, "Soil, Tuff, and Sediment Sampling," at depth intervals based on criteria established in the approved IWP (LANL 2011, 201561; NMED 2011, 203447)).

For the 2022–2023 investigation, 73 boreholes were drilled at SWMUs 39-010 and 39-006(a) to depths of 15 ft bgs, and samples were collected to characterize the sites. The samples were extracted from the core barrels, placed in stainless-steel bowls, and handled the same way as the surface and shallow-subsurface samples, as described in section 3.2.3. Samples were then submitted to the SMO under COC for laboratory analyses as specified by the approved IWP (LANL 2011, 201561; NMED 2011, 203447).

3.2.5 Borehole and Well Abandonment

All sample boreholes were abandoned in accordance with N3B-SOP-ER-6005, "Monitoring Well and Borehole Abandonment." Hand-auger borings 10 ft deep or less were abandoned by filling the boreholes with clean base course. Pavement and concrete cuts were patched as necessary depending on existing site conditions. Borehole abandonment is described in detail in Appendix B.

All sample boreholes more than 10 ft bgs were abandoned in accordance with N3B-SOP-ER-6005, "Monitoring Well and Borehole Abandonment." Hand-auger and direct-push boreholes greater than 10 ft deep were plugged using hydrated bentonite chips. Well abandonment is described in detail in Appendix B.

Monitoring wells and angled boreholes at SWMUs 39-001(a) and 39-001(b) were abandoned in accordance with N3B-SOP-ER-6005, "Monitoring Well and Borehole Abandonment" and the approved New Mexico Office of the State Engineer (NMOSE) Plugging Plan of Operations (NMOSE 2023, 702793; N3B 2022, 702491). At each well/borehole the casing was grouted with cement/bentonite slurry, over-drilled to 20 ft bgs, and grouted from the bottom up using cement slurry with 2% bentonite. The top 2 ft of the wells/boreholes were completed with a concrete plug with a survey pin to ground surface. All cuttings from over-drilling, well materials and well-head debris removed were managed as IDW as described in Appendix C. Well abandonment forms are provided in Appendix B [Attachment B-1].

3.2.6 Excavation

Excavation of contaminated environmental media (soil) was performed at one site during the Phase II investigation: Area 2 of SWMU 39-002(a). Site restoration and waste disposition occurred following excavation. The Area 2 of SWMU 39-002(a) excavation was performed using a backhoe. Information about the excavation is summarized below and details are provided in Appendix B.

Approximately 9 yd^3 of contaminated soil was removed from one location at Area 2 of SWMU 39-002(a) to address potential unacceptable human health risk. Soil with elevated Aroclor-1254 concentrations was removed at location 39-61760. Excavated soil was placed in 3.5-yd^3 type IP-1 bags. The excavation was backfilled with clean fill material and topped with base course from an off-site source to restore the area to the approximate original grade.

3.2.7 Equipment Decontamination

Immediately before collection of each sample interval and also between sampling locations, all field equipment with the potential to contact sample material (e.g., direct-push sample tubes, hand augers, sampling scoops, and bowls) was decontaminated to prevent cross-contamination of samples and locations. Dry decontamination was performed in accordance with N3B-SOP-ER-2002, "Field Decontamination of Equipment." The dry decontamination methods used are described in Appendix B. Rinsate blanks were used to check the effectiveness of decontamination.

At sites where a drill rig was used, the drill rig was radiologically surveyed by RCTs for free release before it was moved from the site. An RCT also surveyed the drill rig before it was brought on-site and before it was released back to the drilling contractor.

3.2.8 Health and Safety Measures

All Phase II investigation activities were conducted in accordance with a site-specific environmental safety and health plan and an integrated work control document that detailed work steps, potential hazards, hazard controls, and required training to conduct work. These health and safety measures generally included the use of modified level-D personal protective equipment (PPE) and field monitoring for noise and dust using portable monitoring systems. As described in section 3.2.2, organic vapor monitoring and explosive residue field tests were performed for health and safety purposes.

3.2.9 Waste Management

All waste generated during the Phase II investigation was managed in accordance with the N3B-approved project waste characterization strategy form (WCSF) (Attachment C-1 [on CD included with this document]). These documents incorporate the requirements of all applicable U.S. Environmental Protection Agency (EPA) and NMED regulations and DOE orders. Characterization and management of waste was performed in accordance with N3B-P409-0, "N3B Waste Management."

The waste streams associated with the investigation included contact IDW, municipal solid waste (MSW), environmental media, purge water, petroleum-contaminated soils, and excavated debris.

IDW included PPE such as gloves, disposable sampling supplies, decontamination towels, and other solid waste that may have come in contact with potentially contaminated environmental media. Contact waste was stored in 5-yd^3 type IP-1 bags or U.S. Department of Transportation (DOT)-rated containers and placed on pallets in the waste staging area pending transport to an approved off-site treatment, storage, and disposal facility (TSDF) for disposal. As described in the WCSF (Attachment C-1 [on CD included with this document]), the contact waste was characterized using samples collected during the investigation. Contact IDW was characterized as low-level waste (LLW), polychlorinated biphenyl (PCB) waste, PCB-LLW, or industrial waste, and it was disposed of at an appropriate off-site TSDF.

Environmental media from surface and subsurface sampling activities and contaminated soil excavated from Area 2 of SWMU 39-002(a) were collected and containerized in 3.5-yd^3 type IP-1 bags or DOT-rated containers and placed on pallets, covered, and stored in a designated area pending characterization. Environmental media were characterized as LLW, PCB-LLW, PCB waste, or industrial waste and were disposed of at an appropriate off-site TSDF.

Purge water from monitoring wells was collected, containerized in 55-gal. poly drums, stored in the waste staging area, and sampled for waste characterization purposes. As described in the WCSF (Attachment C-1 [on CD included with this document]), the contact waste was characterized using samples collected during the investigation, and was subsequently disposed of at an appropriate off-site TSDF.

Petroleum-contaminated soil (PCS) is composed of soils contaminated due to the accidental release of commercial products and may also include adsorbent padding, paper towels, spill pillows, or other adsorbent material used to contain the released material. PCS was collected and containerized in a DOT-rated container. This waste stream was characterized as New Mexico Special Waste prior to transport and disposal at an appropriate off-site TSDF.

Excavated debris was collected and containerized in a 20-yd^3 IP-1 rolloff bin, covered, and stored in a designated area pending characterization. As described in the WCSF (Attachment C-1 [on CD included with this document]), the contact waste was characterized using samples collected during the investigation and was subsequently disposed of at an appropriate off-site TSDF.

Each waste stream was containerized and managed in storage areas appropriate to the type of waste. The management of waste is described in greater detail in Appendix C. All available waste documentation, including WCSFs, WCSF amendments and waste profile forms, are provided in Attachment C-1 (on CD included with this document).

3.3 Sample Analyses

The SMO shipped all investigation samples to off-site contract analytical laboratories for the requested analyses. The analyses requested were specified in the approved Phase II IWP (LANL 2011, 201561; NMED 2011, 203447) and were analyzed for all or a subset of the following: target analyte list (TAL) metals, total cyanide, nitrate, perchlorate, explosive compounds, PCBs, dioxins/furans, polycyclic aromatic hydrocarbons (PAHs), semivolatile organic compounds (SVOCs), VOCs, americium-241, gamma-emitting radionuclides, isotopic plutonium, isotopic uranium, tritium, and pH. Field duplicates of investigation samples were analyzed for the same analytical suites as the corresponding investigation samples. Equipment rinsate blanks were analyzed for the same inorganic suites as the related investigation samples. Field-trip blanks were analyzed only for VOCs.

Analytical results met the N3B minimum data quality objectives as outlined in N3B-PLN-SDM-1000, “Sample and Data Management Plan.” N3B-PLN-SDM-1000 sets the validation frequency criteria at 100% Level 1 examination and Level 2 verification of data, and at 10% minimum Level 3 validation of data. A Level 1 examination assesses the completeness of the data as delivered from the analytical laboratory, identifies any reporting errors, and checks the usability of the data based on the analytical laboratory’s evaluation of the data. A Level 2 verification evaluates the data to determine the extent to which the laboratory met the analytical method and the contract-specific quality control and reporting requirements. A Level 3 validation includes Level 1 and 2 criteria and determines the effect of potential anomalies encountered during analysis and possible effects on data quality and usability. A Level 3 validation is performed manually with method-specific data validation procedures. Laboratory analytical data were validated by N3B personnel (as outlined in N3B-PLN-SDM-1000; N3B-AP-SDM-3000, “General Guidelines for Data Validation”; N3B-AP-SDM-3014, “Examination and Verification of Analytical Laboratory Data”) and additional method-specific analytical data validation procedures. All associated validation procedures were developed, where applicable, from the EPA QA/G-8 “Guidance on Environmental Data Verification and Data Validation”; the Department of Defense/Department of Energy “Consolidated Quality Systems Manual for Environmental Laboratories”; the EPA National Functional Guidelines for Data Validation; and the American National Standards Institute/American Nuclear Society 41.5-2012, “Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation.”

3.4 Deviations

Deviations from the scope of activities defined in the approved Phase II IWP (LANL 2011, 201561; NMED 2011, 203447) occurred during the implementation of the North Ancho Canyon Aggregate Area investigation. Specific deviations are described in greater detail in section B-9.0 of Appendix B.

4.0 REGULATORY CRITERIA

This section describes the criteria used for evaluating potential risk 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.

Human health risk-screening evaluations were conducted for the North Ancho Canyon Aggregate Area using NMED guidance (NMED 2022, 702484). Ecological risk-screening assessments were performed using Laboratory guidance (LANL 2017, 602649).

4.1 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(s). The current and reasonably foreseeable future land use(s) for a site determine the receptors and exposure scenarios used to select screening and cleanup levels. The land use within and surrounding the North Ancho Canyon Aggregate Area is currently industrial and is expected to remain industrial for the reasonably foreseeable future. The residential scenario is evaluated for comparison purposes per the Consent Order and is the decision scenario for sites to be recommended for corrective action complete without controls. Both the residential scenario and construction worker scenario were evaluated in order to identify sites where the residential scenario is not protective of the construction worker.

4.2 Screening Levels

Human health and ecological risk-screening evaluations were conducted for the chemicals of potential concern (COPCs) and radionuclides detected in solid media at sites within the North Ancho Canyon Aggregate Area in accordance with N3B-SOP-ER-2009 R1, “Performing Human and Ecological Risk Screening Assessments.” The human health risk-screening assessments (Appendix G) were performed on inorganic and organic COPCs using NMED soil screening levels (SSLs) for the industrial, construction worker, and residential scenarios (NMED 2022, 702484). When an NMED SSL was not available for a COPC, industrial and residential SSLs were obtained from EPA regional tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables) (adjusted to a risk level of 1×10^{-5} for carcinogens) and construction worker SSLs were calculated using the equations outlined in the NMED soil screening guidance (NMED 2022, 702484), incorporating toxicity and chemical-specific parameters from EPA regional tables. Radionuclides were assessed using the Laboratory screening action levels (SALs) for the same scenarios (LANL 2015, 600929). Surrogate SSLs were used for some COPCs for which no SSLs were available based on structural similarity or breakdown products.

NMED guidance includes total chromium SSLs for the residential and industrial scenarios (NMED 2022, 702484). Because the toxicity of chromium strongly depends on its oxidation state, NMED and EPA have SSLs for trivalent chromium and hexavalent chromium. For screening purposes, the NMED SSLs for total chromium are typically used for comparison with total chromium results unless a known or suspected source of hexavalent chromium at the SWMU or AOC or site conditions could alter the speciation of chromium in the environment. Total chromium screening levels are appropriate for low-level releases to soil from sources not associated with hexavalent chromium.

The Laboratory conducted a chromium background study to determine the prevalence of hexavalent chromium in soil, sediment, and tuff samples where there was no evidence of previous releases of chromium (LANL 2017, 602650). The report concluded that naturally occurring chromium is predominantly in the trivalent form and that the appropriate SSL for comparisons with data for purposes of evaluating extent of contamination at sites with no known chromium releases is the trivalent SSL. The chromium background study was approved by NMED in October 2017 (NMED 2017, 602678).

No known sources of hexavalent chromium use (e.g., cooling towers, electroplating) exist at SWMUs and AOCs in the North Ancho Canyon Aggregate Area. Samples from all sites were analyzed for total chromium. In accordance with the NMED-approved chromium background study (LANL 2017, 602650; NMED 2017, 602678), total chromium results are compared with the trivalent chromium SSLs for the purpose of evaluating extent of contamination. Total chromium results are screened using the NMED SSLs for total chromium for the purpose of evaluating potential human health risk because of exposure to chromium.

4.3 Ecological Screening Levels

The ecological risk-screening assessments (Appendix G) were conducted using ecological screening levels (ESLs) obtained from the ECORISK Database, Version 4.3 (N3B 2022, 702057) in accordance with N3B SOP-ER-2009 R1, "Performing Human and Ecological Risk Screening Assessments." The ESLs are based on similar species and are derived from experimentally determined no observed adverse effect levels, lowest observed adverse effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including equations, bioconcentration factors, transfer factors, and toxicity reference values, is presented in the ECORISK Database, Version 4.3 (N3B 2022, 702057).

4.4 Cleanup Standards

As specified in the Consent Order, SSLs for inorganic and organic chemicals (NMED 2022, 702484) are used as soil cleanup levels unless they are determined to be impracticable or values do not exist for the current and reasonably foreseeable future land uses. SALs are used as soil cleanup levels for radionuclides (LANL 2015, 600929). Screening assessments compare COPC concentrations for each site with industrial, construction worker, and residential SSLs and SALs.

The cleanup goals specified in Section IX of the Consent Order are a target risk of 1×10^{-5} for carcinogens or a hazard index (HI) of 1 for noncarcinogens. For radionuclides, the target dose is 25 mrem/yr as authorized by DOE Order 458.1. The SSLs/SALs used for the risk-screening assessments in Appendix G are based on these cleanup goals.

For ecological risk, remediation of contaminated sites or media requires information on concentrations of chemicals in the environment that are protective of ecological receptors. These concentrations can be considered ecological preliminary remediation goals (EcoPRGs) and differ from ESLs. The EcoPRGs have been developed for use as ecological cleanup levels in soil at the Los Alamos Legacy Cleanup program sites. The methodology for developing the EcoPRGs is documented in "Development of Ecological Preliminary Remediation Goals for Los Alamos National Laboratory" (LANL 2017, 602228). EcoPRGs for sediment are recommended to be calculated on a site-specific basis.

5.0 DATA REVIEW METHODOLOGY

The purpose of the data review is to define the nature and extent of contaminant releases for each SWMU or AOC in the North Ancho Canyon Aggregate Area. The nature of a contaminant release refers to the specific contaminants that are present, the affected media, and associated concentrations. The nature of contamination is defined through identification of COPCs, which is discussed in section 5.1. The identification of a chemical or radionuclide as a COPC does not mean the constituent(s) is (are) related to the site as a result of site operations. A COPC is identified because it is present at a site based on the criteria discussed below, but it might be present because of adjacent and/or upgradient operations and/or infrastructure typical of industrial and metropolitan development. If such origins are evident, the constituents might be excluded from the data analyses and risk assessments. The extent of contamination refers to the spatial distribution of COPCs with an emphasis on the distribution of COPCs that potentially pose a risk or require corrective action. The process for determining the extent of contamination and for concluding no further sampling for extent is warranted is discussed in section 5.2.

5.1 Identification of COPCs

COPCs are chemicals and radionuclides that may be present as a result of releases from SWMUs or AOCs. Inorganic chemicals and some radionuclides occur naturally, and inorganic chemicals and radionuclides detected due to natural background are not considered COPCs. Similarly, some radionuclides may be present as a result of fallout from historic nuclear weapons testing, and these radionuclides also are not considered COPCs. The Laboratory has collected data on background concentrations of many inorganic chemicals, naturally occurring radionuclides, and fallout radionuclides. These data have been used to develop media-specific background values (BVs) and fallout values (FVs) (LANL 1998, 059730). For inorganic chemicals and radionuclides for which BVs or FVs exist, identification of COPCs involves background comparisons, which are described in sections 5.1.1 and 5.1.2. If no BVs or FVs are available or if samples are collected where FVs are not appropriate (i.e., greater than 1-ft depth or in rock), COPCs are identified based on detection status (i.e., if the inorganic chemical or radionuclide is detected, it is identified as a COPC unless there is information indicating it is not present as a result of a release from the SWMU or AOC).

Organic chemicals may also be present as a result of anthropogenic activities unrelated to the SWMU or AOC or, to a lesser extent, from natural sources. Because there are no background data for organic chemicals, background comparisons cannot be performed in the same manner as for inorganic chemicals or radionuclides. Therefore, organic COPCs are identified based on detection status (i.e., the organic chemical is detected). When the nature of contamination is assessed, the history of site operations may be evaluated to determine whether an organic COPC is present because of a release from a SWMU or AOC or is present from a non-site-related source. Organic chemicals that are clearly present from sources other than releases from a SWMU or AOC may be eliminated as COPCs and excluded from further evaluation.

5.1.1 Inorganic Chemical and Radionuclide Background Comparisons

The COPCs are identified for inorganic chemicals and radionuclides in accordance with N3B-SOP-ER-2004 R1, "Background Comparisons for Inorganic Chemicals," and N3B-SOP-ER-2005 R1, "Background Comparisons for Radionuclides." Inorganic COPCs are identified by comparing site data with BVs, statistical comparisons, and other lines of evidence, as applicable (LANL 1998, 059730). The upper end of the background data set may be used for comparison if one or more of the following conditions exist:

- Statistically determined BV is significantly greater than the maximum background concentration.
- Statistical tests cannot be performed because of insufficient data (fewer than eight samples and/or five detections per medium) or a high percentage of nondetections.
- Sufficient numbers of samples have been collected to determine nature and extent, but results are predominantly nondetections.
- Site history does not indicate the constituent is directly related to site activities or to a dominant waste stream.
- Spatial analyses do not show a pattern or trend indicating contamination.
- The maximum detected concentration is statistically determined to be an outlier. (Note: A sufficient number of samples must be collected to show a point is an outlier and is not indicative of a hot spot.)

Radionuclides are identified as COPCs based on background comparisons and statistical methods if BVs or FVs are available, based on detection status if BVs or FVs have not been established, or based on other lines of evidence, as applicable.

Background data generally are available for inorganic chemicals in soil, sediment, and tuff (LANL 1998, 059730). However, some analytes (e.g., nitrate, perchlorate, and hexavalent chromium) have no BVs. A BV may be either a calculated value from the background data set (upper tolerance limit [UTL] or the 95% upper confidence bound on the 95th quantile) or a detection limit (DL). When a BV is based on a DL, there is no corresponding background data set for that analyte/media combination.

For inorganic chemicals, data are evaluated by sample media to facilitate the comparison with media-specific background data. To identify inorganic COPCs, the first step is to compare the sampling results with BVs. If sampling results are above a BV and sufficient data are available (eight or more sampling results and five or more detections), statistical tests are used to compare the site sample data with the background data set for the appropriate media. If statistical tests cannot be performed because of insufficient data or a high percentage of nondetections, the sampling results are compared with the BV and the upper end of background concentration for the appropriate media. If concentrations are above the BV but no results are greater than the upper end of the background data set, lines of evidence are presented to determine whether the inorganic chemical is or is not a COPC. If at least one sampling result is above the BV and the upper end of the background data set, the inorganic chemical is identified as a COPC. The same evaluation is performed using DLs when an inorganic chemical is not detected but has a DL above the BV. If no BV is available, detected inorganic chemicals are identified as COPCs.

Radionuclides are identified as COPCs based on comparisons with BVs for naturally occurring radionuclides or with FVs for fallout radionuclides. Thorium-228, thorium-230, thorium-232, uranium-234, uranium-235/236, and uranium-238 are naturally occurring radionuclides, while Americium-241, cesium-137, plutonium-238, plutonium-239/240, strontium-90, and tritium are fallout radionuclides.

Naturally occurring radionuclides detected at activities above their respective BVs are identified as COPCs. These radionuclides have no background data sets for media other than sediments. If there is no associated BV or FV and the radionuclide is detected, the radionuclide is retained as a COPC.

The FVs for the fallout radionuclides apply to the top 0.0–1.0 ft of soil and fill and to sediment, regardless of depth. If a fallout radionuclide is detected in soil or fill samples collected below 1.0 ft or in tuff samples, the radionuclide is identified as a COPC. For soil and fill samples from 1.0 ft bgs or less, if the activity of a fallout radionuclide is greater than the FV, comparisons of the top 0.0- to 1.0-ft sample data are made with the fallout data set. The radionuclide is eliminated as a COPC if activities are similar to fallout activities or lines of evidence can be presented to establish the radionuclide is not a COPC. Sediment results are evaluated in the same manner, although all data are included, not just the data from 0.0–1.0 ft bgs.

The FV for tritium in surface soil (LANL 1998, 059730) is in units of pCi/mL. This FV requires using sample percent moisture to convert sample tritium data from pCi/g (as provided by analytical laboratories) to the corresponding values in units of pCi/mL. Because sample percent moisture historically has been determined using a variety of methods, often undocumented, the Laboratory adopted the conservative approach of identifying tritium in soil as a COPC based on detection status.

Sample media encountered during investigations at North Ancho Canyon Aggregate Area include soil (all soil horizons, designated by the media code ALLH or SOIL), fill material (media code FILL), alluvial sediment (media code SED), and Bandelier Tuff (media codes Qbt 1v, Qbt 1g, Qbt 2, Qbt 3, and Qbt 4). Because no separate BVs are available for fill material, fill samples are evaluated by comparison with soil BVs (LANL 1998, 059730). In this report, the discussions of site contamination in soil include fill samples along with soil samples in sample counts and comparisons with background. Fill samples are not discussed separately from soil. Likewise, the units of the Upper Bandelier Tuff (Qbt 2, Qbt 3, and Qbt 4) are evaluated together with respect to background, as are the units of the Lower Bandelier Tuff (Qbo, Qct, and Qbt 1g) (LANL 1998, 059730).

5.1.2 Statistical Methods Overview

A variety of statistical methods may be applied to each data set. The use of any of these methods depends on how appropriate the method is for the available data. The results of the statistical tests are presented in Appendix F tables and box plots.

5.1.2.1 Distributional Comparisons

Comparisons between site-specific data and Laboratory background data are performed using a variety of statistical methods. These methods begin with a simple comparison of site data with a UTL estimated from the background data (the 95% upper confidence bound on the 95th quantile). The UTLs are used to represent the upper end of the concentration distribution and are referred to as BVs. The UTL comparisons are then followed, when appropriate, by statistical tests that evaluate potential differences between the distributions. These tests are used for testing hypotheses about data from two potentially different distributions (e.g., a test of the hypothesis that site concentrations are elevated above background levels). Nonparametric tests most commonly performed include the Gehan test (modification of the Wilcoxon Rank Sum test), quantile test (Gehan 1965, 055611; Gilbert and Simpson 1990, 055612) and slippage test (Gilbert and Simpson 1990, 055612).

The Gehan test is recommended when between 10% and 50% of the data sets are nondetections. It handles data sets with nondetections reported at multiple DLs in a statistically robust manner (Gehan 1965, 055611; Millard and Deverel 1988, 054953). The Gehan test is not recommended if either of the two data sets has more than 50% nondetections. If there are no nondetected concentrations in the data, the Gehan test is equivalent to the Wilcoxon Rank Sum test. The Gehan test is the preferred test because of its applicability to most environmental data sets and its recognition and recommendation in EPA-sponsored workshops and publications.

The quantile test is better suited to assessing shifts in a subset of the data. The quantile test determines whether more of the observations in the top chosen quantile of the combined data set come from the site data set than would be expected by chance, given the relative sizes of the site and background data sets. If the relative proportion of the two populations being tested is different in the top chosen quantile of the data from that of the remainder of the data, the distributions may be partially shifted because of a subset of site data. This test can detect a statistical difference when only a small number of concentrations are elevated (Gilbert and Simpson 1992, 054952). The quantile test is the most useful distribution shift test where samples from a release represent a small fraction of the overall data collected. The quantile test is applied at a prespecified quantile or threshold, usually the 80th percentile. The test cannot be performed if more than 80% (or, in general, more than the chosen percentile) of the combined data are nondetected values. It can be used when the frequency of nondetections is approximately the same as the quantile being tested. For example, in a case with 75% nondetections in the combined background and site data set, application of a quantile test comparing 80th percentiles is appropriate. However, the test cannot be performed if nondetections occur in the top chosen quantile. The threshold percentage can be adjusted to accommodate the detection rate of an analyte or to look for differences further into the distribution tails. The quantile test is more powerful than the Gehan test for detecting differences when only a small percentage of the site concentrations are elevated.

If the differences between two distributions appear to occur far into the tails, the slippage test might be performed. This test evaluates the potential for some of the site data to be greater than the maximum concentration in the background data set if, in fact, the site data and background data came from the same distribution. This test is based on the maximum concentration in the background data set and the number (“n”) of site concentrations that exceed the maximum concentration in the background set (Gilbert and Simpson 1990, 055612, pp. 5-8). The result (p-value) of the slippage test is the probability that “n” site samples (or more) exceed the maximum background concentration by chance alone. The test accounts for the number of samples in each data set (number of samples from the site and number of samples from background) and determines the probability of “n” (or more) exceedances if the two data sets came from identical distributions. This test is like the BV comparison in that it evaluates the largest site measurements but is more useful than the BV comparison because it is based on a statistical hypothesis test, not simply on a statistic calculated from the background distribution.

Statistical tests for radionuclides are performed only in limited cases. Although there are BVs for naturally occurring radionuclides in soil or tuff based on elemental analyses and assumed isotopic distributions, there are not background data sets for specific isotopes. Therefore, statistics were not performed if there were any detections of uranium isotopes above BV in soil or tuff. Although there are background data sets for fallout radionuclides in soil, the background data are limited to the depth range of 0.0–1.0 ft bgs for evaluation of fallout radionuclides. Therefore, statistical tests were not performed for fallout radionuclides in soil unless there also were no detections in soil below 1.0 ft bgs and no detections in tuff. Fallout values are not applicable for tuff, so statistical tests cannot be performed. Background data sets are available for naturally occurring and fallout radionuclides in sediment, and background evaluations for sediment are not limited to the depth range of 0.0–1.0 ft bgs. Therefore, statistical tests can be performed for radionuclides in sediment. However, statistical tests for radionuclides in sediment were not performed for a site if there also were detections of naturally occurring radionuclides above BV in soil, detections of fallout radionuclides above FV in soil in the 0.0–1.0-ft-bgs depth range, detections of fallout radionuclides in soil below 1.0 ft bgs, and/or detections of fallout radionuclides in tuff.

For all statistical tests, a p-value less than 0.05 was the criterion for accepting the null hypothesis that site sampling results are different from background.

5.1.2.2 Graphical Presentation

Box plots are provided in Appendix F for a visual representation of the data and to help illustrate the presence of outliers or other anomalous data that might affect statistical results and interpretations. The plots allow a visual comparison among data distributions. The differences of interest may include an overall shift in concentration (shift of central location) or, when the centers are nearly equal, a difference between the upper tails of the two distributions (elevated concentrations in a small fraction of one distribution). The plots may be used in conjunction with the statistical tests (distributional comparisons) described above. Unless otherwise noted, the nondetected concentrations are included in the plots at their reported DL.

The box plots presented in Appendix F of this report consist of a box, a line across the box, whiskers (lines extended beyond the box and terminated with a short perpendicular line), and points outside the whiskers. The box area of the plot is the region between the 25th percentile and the 75th percentile of the data, the interquartile range or middle half of the data. The horizontal line within the box represents the median (50th percentile) of the data. The whiskers extend to the most extreme point that is not considered an outlier, with a maximum whisker length of 1.5 times the interquartile range, outside of which data may be evaluated for their potential to be outliers. The concentrations are plotted as points overlying the box plot. When a data set contains both detected concentrations and nondetected concentrations reported as DLs, the detected concentrations are plotted as Xs and the nondetected concentrations are plotted as Os.

5.2 Extent of Contamination

Spatial concentration trends are initially used to determine whether the extent of contamination is defined. Evaluation of spatial concentration data considers the conceptual site model (CSM) of the release and subsequent migration. Specifically, the CSM should define where the highest concentrations would be expected if a release had occurred and how these concentrations should vary with distance and depth. If the results are different from the CSM, it could indicate that no release has occurred or there are other sources of contamination.

In general, both laterally and vertically decreasing concentrations are used to define extent. If concentrations are increasing or not changing, other factors are considered to determine whether extent is defined or if additional extent sampling is warranted. These factors include:

- the magnitude of concentrations and rate of increase compared with SSLs/SALs,
- the magnitude of concentrations of inorganic chemicals or radionuclides compared with the maximum background concentrations for the medium,
- results from nearby sampling locations.

The primary focus for defining the extent of contamination is characterizing contamination that poses a potential unacceptable risk and might require additional corrective actions. As such, comparison with SSLs/SALs is used as an additional step following a determination of whether extent is defined by decreasing concentrations with depth and distance and whether concentrations are below estimated quantitation limits (EQLs) or DLs. The initial SSL/SAL comparison uses the residential SSL/SAL (regardless of whether the current and reasonably foreseeable future land use is residential) because this value typically is the most protective. If the current and reasonably foreseeable future land use is not residential, and if the residential SSL/SAL is exceeded by or is similar to COPC concentrations, comparison with the relevant SSL/SAL may also be conducted. For all SWMUs and AOCs in the North Ancho Canyon Aggregate Area, the current and reasonably foreseeable future land use is industrial (section 4.1).

The SSL/SAL comparison is not necessary if all COPC concentrations are decreasing with depth and distance. If, however, concentrations increase with depth and distance or do not display any obvious trends, the SSLs/SALs are used to determine whether additional sampling for extent is warranted. If the COPC concentrations are sufficiently below the SSL/SAL (e.g., the residential and/or industrial SSL/SAL is 10 times [an order of magnitude] or more than all concentrations), the COPC does not pose a potential unacceptable risk and no further sampling for extent is warranted. The validity of the assumption that the COPC does not pose a risk is confirmed with the results of the risk-screening assessment. The calculation of risk also assists in determining whether additional sampling is warranted to define the extent of contamination needing additional corrective actions.

Calcium, magnesium, potassium, and sodium may be COPCs for some sites. These constituents are essential nutrients, and their maximum concentrations are compared with NMED's essential nutrient screening levels (NMED 2022, 702484). If the maximum concentration is less than the screening level(s), no additional sampling for extent is warranted and the inorganic chemical is eliminated from further evaluation in the risk assessment.

6.0 TA-39 GENERAL SITE INFORMATION AND OPERATIONAL HISTORY

6.1 Background of TA-39

6.1.1 Operational History

TA-39 was established in 1953 primarily as an area for the open-air testing of high explosives for experiments related to equation-of-state research, shock-wave phenomena, development of implosion systems, development and application of explosively produced pulses of electrical power, and production of high magnetic fields (DOE 1987, 008663). TA-39 was originally constructed with three active-firing sites. A fourth firing site was constructed in 1958 and a fifth firing site was constructed in 1978. Other facilities consisted of office buildings, a laboratory, a shop, explosive storage magazines, an explosives assembly building, and a pulsed-power assembly building (LANL 1993, 015316).

Five SWMUs and one AOC within the North Ancho Canyon Aggregate Area are located at TA-39 (Plate 2) and are addressed in this Phase II investigation report.

- SWMU 39-001(a) is a former landfill that was located north of the light gas-gun facility (building 39-69).
- SWMU 39-002(a) is a storage area that consists of three former satellite accumulation areas (SAAs).
- AOC 39-002(b) is a former SAA that was located on a 5-ft × 5-ft concrete pad adjacent to a firing site support building (structure 39-6) [SWMU 39-004(c)].

- SWMU 39-006(a) is a septic system with inactive and active components located east and south of former building 39-2.
- SWMU 39-007(a) is a former container storage area located on a concrete pad under a covered porch outside the northeast corner of an equipment shelter (structure 39-63).
- SWMU 39-010 is an area that was used for staging soil that was excavated during the 1978 construction of a firing site [SWMU 39-004(e)] located in the central portion of TA-39 along the North Ancho Canyon stream channel.

6.1.2 Summary of Releases

Potential contaminants at TA-39 may have been released into the environment through operational releases at the surface and subsurface firing sites and associated facilities, which include a storage area, surface disposal areas, septic systems, tanks, landfills, and outfalls.

Before 1959, waste from the firing sites generally was transported to the LANL landfill north of the Los Alamos Airport. However, beginning in 1959, material disposal areas (MDAs) were established in Ancho Canyon. At least five large pits were excavated. Each pit was covered when full; the last one was closed in 1989 (LANL 1990, 007513).

The materials disposed of in the MDAs ranged from ordinary office waste to refuse from firing sites that may have contained inorganic chemicals, organic chemicals, and radionuclides (LANL 2007, 098281). Other potentially contaminated sites at TA-39 include an active firing range (gas-gun site), a former incinerator, active and inactive waste storage areas, an inactive seepage pit, one active and one inactive septic system, two inactive landfill areas, an inactive drainline and outfall, a capacitor storage area, and an excavated soil stockpile area.

6.1.3 Current Site Usage and Status

TA-39 is actively used for HE testing operations and is expected to remain active for the foreseeable future. Active facilities at TA-39 include firing sites, storage areas, administrative offices, workshops, sewage disposal facilities, and supporting infrastructure. Inactive facilities include firing sites, storage areas, waste disposal areas, and sewage and chemical disposal facilities.

The sections below provide operational history, summary of previous investigations, identification of COPCs, and evaluation of the nature and extent of contamination and associated human health and ecological risk.

6.2 SWMU 39-001(a) – Landfill

6.2.1 Site Description and Operational History

SWMU 39-001(a) is a former landfill north of the light gas-gun facility (building 39-69) at TA-39. The 1990 SWMU report describes the site as consisting of two 80-ft long × 20-ft wide × 10-ft-deep rectangular trenches. Based on the results of the 1993 geophysical survey, the 1997 RFI concluded this landfill consisted of just a single, amorphous unit. Excavation activities associated with the 2009 Phase I Consent Order field investigation confirmed a solitary, irregularly shaped disposal trench coincident with the anomalies identified by the 1997 RFI geophysical survey. Interviews with site workers indicated the landfill was used for disposal from 1953 to 1979 (LANL 1993, 015316; LANL 1997, 055633). Wastes disposed of in this landfill included firing-site debris consisting of metal, cabling, and wire, empty chemical containers, glass, wood, plastics, Styrofoam, concrete, and office waste. Waste disposed of prior to 1976 may have included heavy metals, PCB-containing oils, HE, thorium isotopes, natural and depleted uranium, and solvents. SWMU 39-001(a) was completely excavated during the 2009 Phase I Consent Order investigation.

As part of the 2008–2009 remediation activities conducted at SWMUs 39-001(a) and 39-001(b), the Laboratory requested approval from NMED for establishing areas of contamination at each site. The purpose of the area of contamination designations was to provide areas where remediation waste and layback and overburden spoils could be staged and segregated on-site without triggering a new point of waste generation or a new area of waste placement subject to RCRA requirements. The request to establish these areas of contamination was approved by NMED. The Laboratory later requested expansion of the two designated areas of contamination, which was subsequently approved by NMED. That approval required that soil not be returned to the point of origin unless contaminant concentrations are less than residential cleanup levels. Two areas located along the eastern boundary of SWMU 39-001(a), within the designated area of contamination, were used to stage electrical capacitors removed from the SWMU 39-001(a) landfill. A release of PCB-contaminated oil from the capacitors was discovered while the capacitors were being staged on-site.

Following the removal of capacitors, waste, and contaminated soil from the stockpile and staging areas at SWMUs 39-001(a) and (b), sampling was performed in 2010 within and around the areas. This sampling characterized residual surface contamination after the completion of waste management activities to determine whether additional cleanup was required. Based on confirmation sampling results, several feet of contaminated soil was excavated from specific locations within the waste stockpile areas and was disposed of off-site. Results from additional confirmation sampling indicated that additional remediation would be required. Proposed sampling and remediation activities for the former waste staging areas are described in the 2011 approved “Phase II Investigation Work Plan (IWP) for North Ancho Canyon Aggregate Area, Revision 1” (LANL 2011, 201561; NMED 2011, 203447).

This sampling was unrelated to the sampling performed during the 2009 Phase I Consent Order investigation to characterize the nature and extent of contamination at the associated SWMUs; the results of the sampling did not affect the conclusions of the 2009 North Ancho Canyon Aggregate Area investigation.

6.2.2 Relationship to Other SWMUs and AOCs

SWMU 39-001(a) is located approximately 125 ft north of AOC 39-009 and AOC 39-002(e) (Figure 6.2-1). SWMU 39-001(a) is not impacted by other SWMUs or AOCs.

6.2.3 Summary of Previous Investigations

In 1993, a series of geophysical and radiation surveys were conducted over the presumed disposal trench locations at SWMU 39-001(a). Survey results indicated the site to be a single amorphous disposal area, and not two specific trenches as previously reported. The area extended approximately 250 ft north of building 39-59 and 50 ft east of Ancho Road. Data collected during the 1993 field activities guided subsequent RFI activities conducted in 1994.

During the 1994 RFI at SWMU 39-001(a), 134 samples were collected from 16 locations including surface locations in the adjacent stream channel and surrounding area, from angled and vertical monitoring wells installed upstream and downstream of the landfill area, and from exploratory trenches excavated within the disposal area. Samples were submitted for analysis of TAL metals, total cyanide, total uranium, VOCs, SVOCs, HE, PCBs/pesticides, isotopic thorium, and by gamma spectroscopy. Data from the 1994 RFI are screening level and showed numerous metals including uranium detected above background levels; detected PCBs, VOCs, SVOCs, and pesticides; and detected uranium and thorium isotope activities above BVs.

During the 1996 RFI conducted at SWMU 39-001(a), seven test pits were excavated in the area north-northeast of building 39-69 to depths between 12 and 15 ft bgs; samples were collected and the pits were backfilled. Waste was observed in four of the test pits. Fourteen samples were collected from eight locations and submitted for analysis of TAL metals, total cyanide, VOCs, SVOCs, PCBs/pesticides, HE, isotopic thorium, isotopic uranium, and isotopic plutonium, and by gamma spectroscopy. Data from the 1996 RFI are decision-level and included in section 6.2.4.3 below.

During the 2009 Phase I Consent Order investigation at SWMU 39-001(a), seven exploratory trenches were excavated at various locations within the site to locate buried waste. Once waste was identified within a trench, excavation continued until waste was no longer present. Each exploratory trench was excavated to an average depth of 12 ft bgs to ensure that no waste was present. Excavation activities continued until analytical results from confirmation samples collected from the walls and the base of the excavation were below industrial SSLs and industrial SALs. Excavated material was segregated for off-site disposal. Overburden meeting cleanup levels was placed in the bottom of the excavation, and the remainder of the excavation was backfilled with clean fill. Forty-nine confirmation samples were collected from 25 locations, from the sides and base of the excavation. Samples were submitted for analysis of TAL metals, nitrate, perchlorate, total cyanide, perchlorate, VOCs, SVOCs, PCBs, explosive compounds, dioxins and furans, americium-241, isotopic plutonium, isotopic uranium, tritium, and by gamma spectroscopy. Data from the 2009 Phase I Consent Order investigation are decision-level and included in section 6.2.4.3. The 2017 ACA implemented at the former North Ancho Canyon waste stockpile areas near SWMUs 39-001(a) and 39-001(b) and the former capacitor staging areas at SWMU 39-001(a) are discussed in sections 6.8 through 6.10.

6.2.4 Site Contamination

6.2.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization was not required to determine vertical and lateral extent at SWMU 39-001(a) as part of the 2022–2023 investigation. The further vertical extent sampling for mercury, PCBs, and uranium-238 proposed in the Phase II Work Plan was not implemented because the existing data were reevaluated using the process developed after the 2012 Framework Agreement between DOE and NMED. The reanalysis indicated that additional vertical extent sampling was not warranted. The results of the reanalysis are in section 6.2.4.4.

6.2.4.2 Soil, Rock, and Sediment Field-Screening Results

No field activities were conducted at SWMU 39-001(a) during the 2022–2023 investigation. Therefore, no field screening results are presented herein for SWMU 39-001(a).

6.2.4.3 Soil, Rock, and Sediment Sampling Analytical Results

Decision-level data at SWMU 39-001(a) consist of results from 8 soil samples collected from 7 locations during the 1996 investigation and 38 soil samples collected from 23 locations during the 2009 investigation. Table 6.2-1 summarizes samples collected and requested analyses for SWMU 39-001(a). Figure 6.2-1 shows the spatial distribution of samples.

Inorganic Chemicals

A total of 36 soil samples were collected and analyzed for metals and cyanide, and 28 samples were analyzed for nitrate and perchlorate. Table 6.2-2 presents the inorganic chemicals above BVs and the detected inorganic chemicals with no BVs. Figure 6.2-2 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was not detected above the soil BV (0.83 mg/kg) but had DLs (6.0 mg/kg to 10.0 mg/kg) above the BV in eight samples (Figure F-1). Antimony is retained as a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in one sample at a concentration of 1.7 mg/kg and was not detected but had DLs (0.54–0.71 mg/kg) above the BV in seven samples. Only one cadmium result exceeded the BV out of 28 detections and that result was less than the maximum background result (2.6 mg/kg). The low frequency of detections exceeding BV suggest cadmium is not site related. Additionally, the quantile and slippage tests indicated site concentrations of cadmium in soil are not statistically different from background (Figure F-2 and Table F-1). Cadmium is not a COPC.

Cyanide was not detected above the soil BV (0.5 mg/kg) but had DLs (0.52–0.62 mg/kg) above the BV in 32 samples. Because the maximum detected concentration (0.12 mg/kg) was below the BV (0.5 mg/kg), and the maximum DL was only 0.12 mg/kg above the soil BV, cyanide is not retained as a COPC.

Mercury was detected above the soil BV (0.1 mg/kg) in two samples with a maximum concentration of 1.3 mg/kg (Figure F-3). Mercury is retained as a COPC.

Nitrate was detected in 28 samples with a maximum concentration of 14.1 mg/kg. Nitrate is retained as a COPC.

Perchlorate was detected in seven samples with a maximum concentration of 0.0049 mg/kg. Perchlorate is retained as a COPC.

Silver was not detected above the soil BV (1.0 mg/kg) but had DLs (1.7–2.0 mg/kg) above the BV in three samples. Silver was not detected above the BV in 28 other samples and had five additional DLs below BV. Silver is not retained as a COPC.

Uranium was detected above the soil BV (1.82 mg/kg) in three samples with a maximum concentration of 3.76 mg/kg. Uranium is retained as a COPC.

Organic Chemicals

A total of 45 samples were collected and analyzed for PCBs; 36 samples were analyzed for VOCs, SVOCs, and explosive compounds; 8 samples were analyzed for pesticides; and 1 sample was analyzed for dioxins/furans. Table 6.2-3 presents the detected organic chemicals. Figure 6.2-3 shows the spatial distribution of detected organic chemicals.

Organic chemicals detected at SWMU 39-001(a) include Aroclor-1242; Aroclor-1254; Aroclor-1260; benzo(g,h,i)perylene; bis(2-ethylhexyl)phthalate; dichlorodiphenyldichloroethylene (DDE); dichloro-diphenyl-trichloroethane (DDT); di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene; Her Majesty's Explosive (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine) (HMX); three dioxin/furans congeners; indeno(1,2,3-cd)pyrene; iodomethane; methoxychlor; methylene chloride; nitroglycerin; and Royal Demolition Explosive (hexahydro-1,3,5-trinitro-1,3,5-triazine) (RDX). The detected organic chemicals are retained as COPCs.

Radionuclides

A total of 36 soil samples were collected and analyzed for gamma-emitting radionuclides; 30 samples were analyzed for isotopic uranium; 29 samples were analyzed for isotopic plutonium; 28 samples were analyzed for tritium and americium-241; and 8 samples were analyzed for isotopic thorium. Table 6.2-4 presents the radionuclides detected or detected above BVs/FVs. Figure 6.2-4 shows the spatial distribution of radionuclides detected or detected above BVs/FVs.

Cesium-134 was detected in one sample with activity of 0.047 pCi/g. Cesium-134 is retained as a COPC.

Uranium-238 was detected above the BV/FV soil BV (2.29 pCi/g) in one sample with activity of 4.67 pCi/g. Uranium-238 is retained as a COPC.

6.2.4.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at SWMU 39-001(a) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.2-2, 6.2-3, and 6.2-4 and Figures 6.2-2, 6.2-3, and 6.2-4.

Inorganic Chemicals

Inorganic COPCs at SWMU 39-001(a) include antimony, mercury, nitrate, perchlorate, and uranium.

Antimony was not detected above the soil BV but had DLs (6.0–10.0 mg/kg) above the BV in eight samples. Antimony was not detected above BV and the residential SSL was approximately 3.0 times and the industrial SSL was approximately 52 times the maximum DL. Further sampling for extent of antimony is not warranted.

Mercury was detected above the soil BV in two samples with a maximum concentration of 1.3 mg/kg. Only one depth was sampled at locations 39-01387 and 39-04362, and concentrations decreased downgradient. The residential SSL was approximately 18 times the maximum concentration. The lateral extent of mercury is defined and further sampling for vertical extent is not warranted.

Nitrate was detected in 28 samples with a maximum concentration of 14.1 mg/kg. Concentrations increased with depth at locations 39-604348, 39-604356, and 39-604360; decreased with depth at locations 39-604345, 39-604346, 39-604347, 39-604349, 39-604350, 39-604359, and 39-604363; and only one depth was sampled at locations 39-604351, 39-604352, 39-604353, 39-604354, 39-604357, 39-604358, 39-604361, and 39-604362; and concentrations decreased downgradient. The residential SSL was approximately 8870 times the maximum concentration. Further sampling for vertical and lateral extent is not warranted.

Perchlorate was detected in seven samples with a maximum concentration of 0.0049 mg/kg. Concentrations increased with depth at locations 39-604345 and 39-604359; decreased with depth at locations 39-604346, 39-604347, and 39-604348; and concentrations decreased laterally. The residential SSL was approximately 11,200 times the maximum concentration. Lateral extent is defined for perchlorate and further sampling for vertical extent is not warranted.

Uranium was detected above the soil BV in three samples with a maximum concentration of 3.76 mg/kg. Concentrations decreased with depth at location 39-01386; only one depth was sampled at locations 39-01384 (14–15 ft) and 39-01387 (12–13 ft); and concentrations increased downgradient. The residential SSL was approximately 62 times the maximum concentration. Further sampling for extent of uranium is not warranted.

Organic Chemicals

Organic chemicals detected at SWMU 39-001(a) include Aroclor-1242; Aroclor-1254; Aroclor-1260; benzo(g,h,i)perylene; bis(2-ethylhexyl)phthalate; 4,4’-DDE; 4,4’-DDT; di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene; HMX; three dioxin/furans congeners; indeno(1,2,3-cd)pyrene; iodomethane; methoxychlor; methylene chloride; nitroglycerin; and RDX.

Aroclor-1242 was detected in eight samples with a maximum concentration of 0.52 mg/kg. Concentrations decreased with depth at locations 39-604347 and 39-604356; increased with depth at locations 39-604349 and 39-604350; only one depth was sampled at locations 39-604361 and AN-607964; and concentrations decreased downgradient. The residential SSL was approximately 4.7 times and the industrial SSL was approximately 21 times the maximum concentration. Aroclor-1242 does not pose an unacceptable risk under the residential scenario (Appendix G, Table G-4.2-4). Further sampling for extent of Aroclor-1242 is not warranted.

Aroclor-1254 was detected in 12 samples with a maximum concentration of 0.79 mg/kg. Concentrations decreased with depth at locations 39-608120 and AN-607963; increased with depth at locations 39-604345, 39-604346, 39-604348, and 39-608121; only one depth was sampled at locations 39-01387, 39-604351, 39-604354, and 39-604362; and concentrations decreased downgradient. The residential SSL was approximately 1.4 times and the industrial SSL was approximately 14 times the maximum concentration. Aroclor-1254 does not pose an unacceptable risk under the residential scenario (Appendix G, Tables G-4.2-4 and G-4.2-5). Further sampling for extent of Aroclor-1254 is not warranted.

Aroclor-1260 was detected in three samples with a maximum concentration of 0.016 mg/kg. Concentrations increased with depth at location 39-604349; only one depth was sampled at location AN-607964; and concentrations decreased laterally. The residential SSL was approximately 150 times and the industrial SSL was approximately 690 times the maximum concentration. Lateral extent is defined for Aroclor-1260 and further sampling for vertical extent is not warranted.

Benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene both were detected in one sample at concentrations of 0.041 mg/kg and 0.037 mg/kg, respectively. Concentrations increased with depth at location 39-604349 and decreased laterally. The residential SSLs for benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene were approximately 42,400 times and 41 times the maximum concentrations, respectively. Lateral extent is defined for benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene and further sampling for vertical extent is not warranted.

Bis(2-ethylhexyl)phthalate was detected in four samples with a maximum concentration of 0.25 mg/kg. Concentrations increased with depth at locations 39-604359, and 39-604363; only one depth was sampled at location 39-604362; and concentrations decreased downgradient. The residential SSL was approximately 1,520 times the maximum concentration. Lateral extent is defined for bis(2-ethylhexyl)phthalate and further sampling for vertical extent is not warranted.

DDE[4,4'-] was detected in one sample at a concentration of 0.312 mg/kg. Only one depth was sampled at location 39-01387, and concentrations decreased laterally. The residential SSL was approximately 50 times the maximum concentration. Lateral extent is defined for 4,4'-DDE and further sampling for vertical extent is not warranted.

DDT[4,4'-] was detected in one sample at a concentration of 0.0053 mg/kg. Only one depth was sampled at location 39-01384, and concentrations increased downgradient. The residential SSL was approximately 3,530 times the maximum concentration. Further sampling for vertical and lateral extent of 4,4'-DDT is not warranted.

Dibenz(a,h)anthracene was detected in one sample with a maximum concentration of 0.037 mg/kg. Concentrations increased with depth at location 39-604349, and concentrations decreased laterally. The residential SSL was approximately 4.1 times and the industrial SSL was approximately 87 times the maximum concentration. Lateral extent is defined for dibenz(a,h)anthracene and further sampling for vertical extent is not warranted.

Di-n-butylphthalate was detected in two samples with a maximum concentration of 0.063 mg/kg. Only one depth was sampled at locations 39-01384 and 39-01385 and concentrations decreased laterally. The residential SSL was approximately 97,800 times the maximum concentration. Lateral extent is defined for di-n-butylphthalate and further sampling for vertical extent is not warranted.

Di-n-octylphthalate was detected in two samples at a maximum concentration of 0.35 mg/kg. Concentrations increased with depth at 39-604349; decreased with depth at location 39-604346; and concentrations decreased laterally. The residential SSL was approximately 1800 times the maximum concentration. Lateral extent is defined for di-n-octylphthalate and further sampling for vertical extent is not warranted.

The dioxin and furan congeners 1,2,3,4,6,7,8-heptachlorodibenzodioxin; 1,2,3,4,6,7,8-heptachlorodibenzofuran; and 1,2,3,4,6,7,8,9-octachlorodibenzodioxin were detected in one sample with maximum concentrations of 0.00000089 mg/kg, 0.00000015 mg/kg, and 0.00000636 mg/kg, respectively. Only one sample was collected at location 39-604356 and no other locations were sampled for dioxin/furan congeners. The toxicity equivalent adjusted residential SSLs were approximately 5510 times; 32,700 times; and 25,700 times the maximum concentrations, respectively. Further sampling for vertical and lateral extent of dioxin and furan congeners is not warranted.

HMX was detected in two samples with a maximum concentration of 0.044 mg/kg. Concentrations increased with depth at location 39-604356; only one depth was collected at location 39-604361; and concentrations increased downgradient. The residential SSL was approximately 87,500 times the maximum concentration. Further sampling for vertical and lateral extent of HMX is not warranted.

Iodomethane was detected in one sample at a concentration of 0.0027 mg/kg. Concentrations increased with depth at location 39-604348 and decreased laterally. The residential SSL was approximately 6560 times the maximum concentration. Lateral extent for iodomethane is defined and further sampling for vertical extent is not warranted.

Methoxychlor[4,4'-] was detected in one sample at a concentration of 0.023 mg/kg. Only one depth was sampled at location 39-01384 and concentrations decreased downgradient. The residential SSL was approximately 13,900 times the maximum concentration. Further sampling for extent of 4,4'-methoxychlor is not warranted.

Methylene chloride was detected in nine samples with a maximum concentration of 0.014 mg/kg. Concentrations decreased with depth at locations 39-604346, 39-604347, and 39-604350 and increased with depth at location 39-604349. Only one depth was sampled at locations 39-604351, 39-604352, and 39-604353 and concentrations decreased laterally. The residential SSL was approximately 29,200 times the maximum concentration. Lateral extent of methylene chloride is defined and further sampling for vertical extent is not warranted.

Nitroglycerin was detected in one sample at a concentration of 0.093 mg/kg. Concentrations increased with depth at location 39-604360 and concentrations decreased laterally. The residential SSL was approximately 66 times the maximum concentration. Lateral extent of nitroglycerin is defined and further sampling for vertical extent is not warranted.

RDX was detected in one sample at a concentration of 0.032 mg/kg. Concentrations increased with depth at location 39-604348 and concentrations decreased downgradient. The residential SSL was approximately 2600 times the maximum concentration. Further extent sampling for RDX is not warranted.

Radionuclides

Radionuclide COPCs at SWMU 39-001(a) include cesium-134 and uranium-238.

Cesium-134 was detected in one sample with an activity of 0.047 pCi/g. Activities increased with depth at location 39-604360 and decreased laterally. The residential SAL was approximately 106 times the maximum activity. The lateral extent of cesium-134 is defined and further sampling for vertical extent is not warranted.

Uranium-238 was detected above the soil BV/FV in one sample with an activity of 4.67 pCi/g. Only one depth was collected at location 39-604362 and activity decreased downgradient. The residential SAL was approximately 32 times the maximum activity. Lateral extent of uranium-238 is defined and further sampling for vertical extent is not warranted.

6.2.5 Summary of Human Health Risk Screening

Industrial Scenario

A risk-screening assessment for the industrial scenario was not calculated because the 0.0–1.0 ft bgs depth interval was excavated.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 3×10^{-8}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.06, which is less than the NMED target HI of 1. Radionuclide exposure point concentrations (EPCs) were less than SALs and the total estimated dose is 0.1 mrem/yr.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 3×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk, noncarcinogenic hazard, or dose for the construction worker or residential scenarios at SWMU 39-001(a).

6.2.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for SWMU 39-001(a).

6.3 SWMU 39-002(a) – Storage Area

6.3.1 Site Description and Operational History

SWMU 39-002(a) consists of three former storage areas that were associated with former Building 39-2.

Area 1 of SWMU 39-002(a) was a former unpaved, outdoor storage area and satellite accumulation area (SAA) next to the northwest corner of former building 39-2 at TA-39 (Figure 6.3-1). The site measured approximately 25 ft × 30 ft and was used for storage for approximately 10 yr before being registered as an SAA. A 30-gal. drum with small quantities of solvents (acetone and ethanol) and adhesives, along with rags and paper wipes contaminated with solvents or adhesives, was stored at the site. The area was also used to store lead-containing materials and damaged capacitors and transformers that may have contained PCBs. This SAA was removed from service in April 1993, and building 39-2 was demolished in 2016.

Area 2 of SWMU 39-002(a) is a former indoor SAA (inside room 18-A of building 39-02) that was used for approximately 10 yr for storing waste chemicals from photographic processing in 5-gal. containers. According to the LANL RCRA storage area database dated July 2017, the SAA was removed in March 1993. No known or documented releases are associated with this SAA. Because the site was located inside a building, there was no potential for environmental releases.

Area 3 of SWMU 39-002(a) is a former outdoor SAA and holding/receiving area located on the asphalt driveway at the north end of the loading dock on the southeast side of building 39-02. Used vacuum pump oil contaminated with solvents, ethanol, acetone, and trichloroethane were stored in the Area 3 SAA. According to the LANL RCRA storage area database dated July 2017, the Area 3 SAA was removed in April 1993 and no known or documented releases are associated with this SAA. The storage area where the SAA was located has not been used since prior to 2007.

6.3.2 Relationship to Other SWMUs and AOCs

SWMU 39-002(a) is located approximately 100 ft west of AOC 39-007(c), 50 ft west of 39-006(a), and 200 ft southwest from 39-002(g). However, this unit is not impacted by other SWMUs or AOCs.

6.3.3 Summary of Previous Investigations

Area 1 of SWMU 39-002(a)

During the 1993 Phase I RFI, five samples were collected from two locations in Storage Area 1 (LANL 1995, 046190). Based on the results of the 1993 sampling, the site was recommended for voluntary corrective action (VCA). As part of preliminary fieldwork for the VCA, the site was resampled in 1995 for inorganic chemicals and total uranium. Twenty-five locations were sampled at multiple depths and field screened for explosives and heavy metals. Two additional surface soil samples also were submitted for laboratory analyses. The results from these samples did not replicate the inorganic chemical and total uranium results from the 1993 investigation. Therefore, the proposed VCA activities included further site characterization to define the nature and extent of potential contamination at the site (LANL 1997, 056758).

In 1997, as part of the VCA, a sampling grid was established over the site and soil samples were collected from the center of each grid at 0.0–0.5 ft bgs. Three additional locations were sampled at 1.0–1.5 ft bgs. A total of 14 samples were collected from 11 locations (LANL 1997, 056758).

During the Phase I field investigation (LANL 2010, 108500.11), a total of 53 samples were collected from 13 locations at depths of 0.0–1.0, 1.0–2.0, and 2.0–3.0 ft bgs.

Area 2 of SWMU 39-002(a)

Initial investigation of Area 2 of SWMU 39-002(a) was completed in 2019 to define the nature and extent of contamination associated with the site. A total of 15 samples were collected at 5 locations in Area 2 at 3 depths (0–1, 2–3, and 4–5 ft bgs). Samples were analyzed for TAL metals, nitrate, perchlorate, cyanide, SVOCs, VOCs, pH, explosive compounds, PCBs, and isotopic uranium (N3B 2019, 700665).

Area 3 of SWMU 39-002(a)

Area 3 of SWMU 39-002(a) was not sampled during the 1993 Phase I RFI because the site was being used for storage. As part of the Phase I field investigation, 17 samples were collected at 8 locations in Area 3 of SWMU 39-002(a) (LANL 2010, 108500.11). Samples were analyzed for inorganics, organics, and radionuclides.

6.3.4 Site Contamination

6.3.4.1 Soil, Rock, and Sediment Sampling

Area 1 of SWMU 39-002(a)

Based on previous investigation results, further characterization was required to assess potential contamination at Area 1 of SWMU 39-002(a). As a result, the following activities were completed as part of the 2022–2023 investigation.

- A total of 111 samples were collected from 37 locations across the former outdoor storage area. At each location, samples were collected at 0.0–1.0, 1.0–2.0, and 2.0–3.0 ft below base course. All samples were analyzed at off-site fixed laboratories for TAL metals, cyanide, perchlorate, nitrate, VOCs, SVOCs, explosive compounds, PCBs, isotopic uranium, gamma-emitting radionuclides, and strontium-90.

- Four additional samples were collected from two locations to determine the lateral extent of SVOCs to the west of location 39-61672. At each location, samples were collected from 0.0 to 1.0 ft and 2.0 to 3.0 ft below base course and were analyzed at off-site fixed laboratories.

The 2022–2023 sampling locations at Area 1 of SWMU 39-002(a) are shown in Figure 6.3-1. Table 6.3-1 presents the samples collected and analyses requested for Area 1 of SWMU 39-002(a). The geodetic coordinates of sample locations are presented in Table 3.2-1.

Area 2 of SWMU 39-002(a)

Based on previous investigation results, further characterization was required to assess potential contamination at Area 2 of SWMU 39-002(a). As a result, the following activities were completed as part of the 2022–2023 investigation.

- A total of 12 samples were collected from four 5-ft step outs from location 39-61659. At each location, samples were collected at the surface (0.0–1.0 ft bgs) and from the subsurface (2.0–3.0 and 4.0–5.0 ft bgs).
- A total of 93 samples were collected from thirty-three 10-ft step outs from location 36-61659. At each location, samples were collected at the surface (0.0–1.0 ft bgs) and from the subsurface (2.0–3.0 and 4.0–5.0 ft bgs).

All samples were analyzed at off-site fixed laboratories for copper and PCBs.

- Four additional samples were collected at locations 39-61743 and 39-61776 to determine vertical extent for PCBs. Samples were collected from the subsurface (6.0–7.0 and 9.0–10.0 ft bgs).
- A total of 27 samples were collected from 9 locations to determine the lateral extent of PCBs at locations 39-61752, 39-61760, and 39-61761. At each location, samples were collected at the surface (0.0–1.0 ft bgs) and from the subsurface (2.0–3.0 and 4.0–5.0 ft bgs).
- A total of 20 samples were collected from 5 locations to confirm the extent of excavation for PCBs at location 39-61760. At each location, samples were collected at the surface (0.0–1.0 ft bgs) and from the subsurface (2.0–3.0, 4.0–5.0, and 6.0–7.0 ft bgs).

All samples were analyzed at an off-site fixed laboratory.

The 2022–2023 sampling locations at Area 2 of SWMU 39-002(a) are shown in Figure 6.3-2. Table 6.3-2 presents the samples collected and analyses requested for Area 2 of SWMU 39-002(a). The geodetic coordinates of sample locations are presented in Table 3.2-1.

Area 3 of SWMU 39-002(a)

Based on previous investigation results, further characterization was not required to determine vertical and lateral extent at Area 3 of SWMU 39-002(a) as part of the 2022–2023 investigation. However, the data are reevaluated here using current process to ensure consistency with conclusions from Areas 1 and 2. The historic sampling locations at Area 3 of SWMU 39-002(a) are shown in Figure 6.3-3. Table 6.3-3 presents the samples collected and analyses requested for Area 3 of SWMU 39-002(a).

6.3.4.2 Soil, Rock, and Sediment Field-Screening Results

Area 1 of SWMU 39-002(a)

During headspace screening for organic vapors at Area 1 of SWMU 39-002(a), a maximum concentration of 16.3 ppm was detected at location 39-61690 from 2.9 to 3.9 ft bgs. No radiological screening was required for this SWMU. No changes were made to sampling or other activities based on field-screening results. Field-screening results are in the sample collection logs (Appendix E).

Area 2 of SWMU 39-002(a)

During headspace screening for organic vapors at Area 2 of SWMU 39-002(a), a maximum concentration of 2.4 ppm was detected at location 39-61855 from 4.0 to 5.0 ft bgs. No radiological screening was required for this SWMU. No changes were made to sampling or other activities based on field-screening results. Field-screening results are in the sample collection logs (Appendix E).

Area 3 of SWMU 39-002(a)

No field activities were conducted at Area 3 of SWMU 39-002(a) during the 2022–2023 investigation. Therefore, no field-screening results are presented herein for Area 3 of SWMU 39-002(a).

6.3.4.3 Soil, Rock, and Sediment Sampling Analytical Results

Area 1 of SWMU 39-002(a)

Decision-level data at Area 1 of SWMU 39-002(a) consist of results from 168 samples collected from 63 locations. Table 6.3-1 summarizes all samples collected and requested analyses for Area 1 of SWMU 39-002(a). Figure 6.3-1 shows the spatial distribution of samples for Area 1 of SWMU 39-002(a).

Area 2 of SWMU 39-002(a)

Decision-level data at Area 2 of SWMU 39-002(a) consist of results from 170 samples collected from 54 locations. Table 6.3-2 summarizes all samples collected and requested analyses for Area 2 of SWMU 39-002(a). Figure 6.3-2 shows the spatial distribution of samples for Area 2 of SWMU 39-002(a).

Area 3 of SWMU 39-002(a)

Decision-level data at Area 3 of SWMU 39-002(a) consist of results from 17 samples collected from 8 locations collected during the 2009 investigation. Table 6.3-3 summarizes all samples collected and requested analyses for Area 3 of SWMU-39-002(a). Figure 6.3-3 shows the spatial distribution of samples for Area 3 of SWMU 39-002(a).

Inorganic Chemicals

Area 1 of SWMU 39-002(a)

A total of 163 soil samples were collected and analyzed for TAL metals and 149 samples were analyzed for cyanide, nitrate, and perchlorate. Table 6.3-4 presents the inorganic chemicals above BVs and the detected inorganic chemicals with no BVs. Plate 3 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was detected above the soil BV (0.83 mg/kg) in 3 samples with a maximum concentration of 2.46 mg/kg and had DLs (0.866–6.1 mg/kg) above BV in 34 samples (Figure F-4). Antimony is retained as a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in 23 samples with a maximum concentration of 2.3 mg/kg and had DLs (0.51–0.61 mg/kg) above the BV in 15 samples. The maximum concentration was less than the maximum detected background (2.6 mg/kg). The quantile and slippage tests indicated that site concentrations of cadmium in soil are not statistically different from background (Figure F-5 and Table F-2). Cadmium is not a COPC.

Calcium was detected above the soil BV (6120 mg/kg) in seven samples with a maximum concentration of 17,100 mg/kg. The quantile and slippage tests indicated that site concentrations of calcium in soil are not statistically different from background (Figure F-6 and Table F-2). Calcium is not a COPC.

Copper was detected above the soil BV (14.7 mg/kg) in 36 samples with a maximum concentration of 508 mg/kg. The quantile and slippage tests indicated that site concentrations of copper in soil are statistically different from background (Figure F-7 and Table F-2). Copper is retained as a COPC.

Cyanide was detected above the soil BV (0.5 mg/kg) in four samples with a maximum concentration of 20.8 mg/kg. Cyanide is retained as a COPC.

Lead was detected above the soil BV (22.3 mg/kg) in 28 samples with a maximum concentration of 977 mg/kg. The Gehan and quantile tests indicated that site concentrations of lead in soil are not statistically different from background (Figure F-8 and Table F-2). However, the maximum concentration was substantially greater than the BV. Lead is retained as a COPC.

Mercury was detected above the soil BV (0.1 mg/kg) in 53 samples with a maximum concentration of 28.1 mg/kg. The quantile test indicated that site concentrations of mercury in soil are statistically different from background (Figure F-9 and Table F-2). Mercury is retained as a COPC.

Nickel was detected above the soil BV (15.4 mg/kg) in one sample at a concentration of 39.8 mg/kg. The Gehan and quantile tests indicated that site concentrations of nickel in soil are not statistically different from background (Figure F-10 and Table F-2). Nickel is not a COPC.

Nitrate was detected in 114 soil samples with a maximum concentration of 10.2 mg/kg. Nitrate is retained as a COPC.

Perchlorate was detected in 16 soil samples with a maximum concentration of 0.00794 mg/kg. Perchlorate is retained as a COPC.

Selenium was detected above the soil BV (1.52 mg/kg) in 10 samples with a maximum concentration of 1.91 mg/kg. The Gehan and quantile tests indicated that site concentrations of selenium in soil are statistically different from background (Figure F-11 and Table F-2). Selenium is retained as a COPC.

Silver was detected above the soil BV (1.0 mg/kg) in one sample at a concentration of 1.1 mg/kg and had a DL (1.2 mg/kg) above BV in one sample. Silver is retained as a COPC.

Sodium was detected above the soil BV (915 mg/kg) in one sample at a concentration of 916 mg/kg. The Gehan and quantile tests indicated that site concentrations of sodium in soil are not statistically different from background (Figure F-12 and Table F-2). Sodium is not a COPC.

Thallium was detected above the soil BV (0.73 mg/kg) in two samples with a maximum concentration of 1.26 mg/kg and was not detected but had a DL (0.78 mg/kg) above the BV in one sample (Figure F-13). Thallium is retained as a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in 42 samples with a maximum concentration of 467 mg/kg. The Gehan and quantile tests indicated site concentrations of zinc in soil are statistically different from background (Figure F-14 and Table F-2). Zinc is retained as a COPC.

Area 2 of SWMU 39-002(a)

A total of 104 soil samples were collected and analyzed for copper and 15 samples were analyzed for TAL metals, cyanide, nitrate and perchlorate. Table 6.3-5 presents the inorganic chemicals above BVs and the detected inorganic chemicals with no BVs. Figure 6.3-4 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was not detected but had a DL (4.05 mg/kg) above the soil BV (0.83 mg/kg) in one sample (Figure F-15). Antimony is retained as a COPC.

Copper was detected above the soil BV (14.7 mg/kg) in four samples with a maximum concentration of 6,870 mg/kg. The Gehan and quantile tests indicated that site concentrations of copper in soil are not statistically different than the background (Figure F-16 and Table F-3); however, the maximum concentration was substantially greater than the BV. Copper is retained as a COPC.

Iron was detected above the soil BV (21500 mg/kg) in one sample with a concentration of 23,900 mg/kg. The quantile and slippage tests indicated that site concentrations of iron in soil are not statistically different than the background (Figure F-17 and Table F-3). Iron is not a COPC.

Nitrate was detected in 14 soil samples with a maximum concentration of 15.2 mg/kg. Nitrate is retained as a COPC.

Perchlorate was detected in 3 soil samples with a maximum concentration of 0.00224 mg/kg. Perchlorate is retained as a COPC.

Vanadium was detected above the soil BV (39.6 mg/kg) in one sample at a concentration of 45.1 mg/kg. The Gehan and quantile tests indicated that site concentrations of vanadium are not statistically different from background (Figure F-18 and Table F-3). Vanadium is not a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in three samples with a maximum concentration of 64.7 mg/kg. The Gehan and quantile tests indicated that site concentrations of zinc are statistically different from background (Figure F-19 and Table F-3). Zinc is retained as a COPC.

Area 3 of SWMU 39-002(a)

A total of 16 soil samples were collected and analyzed for nitrate, cyanide, perchlorate, and TAL metals. Table 6.3-6 presents the inorganic chemicals above BVs and the detected inorganic chemicals with no BVs. Figure 6.3-5 shows the spatial distribution of inorganic chemicals detected or detected above BVs for Area 3 of SWMU 39-002(a).

Antimony was not detected above the soil BV (0.83 mg/kg) but had a DL (0.94 mg/kg) above the BV in one sample. The DL result was only 0.11 mg/kg above the BV, and the site DLs in soil were below the maximum background results (Figure F-20). Antimony is not a COPC.

Copper was detected above the soil BV (14.7 mg/kg) in one sample with a concentration of 78 mg/kg. The Gehan and slippage tests indicated that site concentrations of copper in soil are not statistically different from background (Figure F-21 and Table F-4). Copper is not a COPC.

Cyanide was not detected above the soil BV (0.5 mg/kg) but had DLs (0.53–0.56 mg/kg) above the BV in four samples. The maximum DL result was only 0.06 mg/kg above the soil BV, and all 12 detected results for cyanide were below the soil BV. Cyanide is not a COPC.

Lead was detected above the soil BV (22.3 mg/kg) in one sample at a concentration of 24.6 mg/kg. The Gehan and quantile tests indicated that site concentrations of lead in soil are not statistically different from background (Figure F-22 and Table F-4). Lead is not a COPC.

Nitrate was detected in 14 samples with a maximum concentration of 5.8 mg/kg. Nitrate is retained as a COPC.

Sodium was detected above the soil BV (915 mg/kg) in one sample at a concentration of 1070 mg/kg. The Gehan and quantile tests indicated that site concentrations of sodium in soil are not statistically different from background (Figure F-23 and Table F-4). Sodium is not a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in one sample at a concentration of 64.5 mg/kg. The Gehan and quantile tests indicated that site concentrations of zinc in soil are not statistically different from background (Figure F-24 and Table F-4). Zinc is not a COPC.

Organic Chemicals

Area 1 of SWMU 39-002(a)

A total of 167 soil samples were collected and analyzed for SVOCs; 163 samples were collected and analyzed for PCBs, VOCs, and explosive compounds; 14 samples were analyzed for total petroleum hydrocarbons–diesel range organics (TPHs-DROs), 2 samples were analyzed for pesticides, and 1 sample was analyzed for dioxins/furans only. Table 6.3-7 shows results for all detected organic chemicals at Area 1 of SWMU 39-002(a). Plate 4 shows the spatial distribution of detected organic chemicals for Area 1 of SWMU 39-002(a).

Organic chemicals detected at Area 1 of SWMU 39-002(a) include acenaphthene; acenaphthylene; 4-amino-2,6-dinitrotoluene; anthracene; Aroclor-1242; 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; carbazole; 2-chloronaphthalene; chrysene; di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene; dibenzofuran; 1,2-dichlorobenzene; dimethyl phthalate; dioxin/furans congeners (tetrachlorodibenzo-p-dioxin [TCDD] toxicity equivalents); ethylbenzene; fluoranthene; fluorene; indeno(1,2,3-cd)pyrene; iodomethane; methylene chloride; 1-methylnaphthalene; 2-methylnaphthalene; naphthalene; pentachlorophenol; phenanthrene; pyrene; RDX; tetryl; toluene; TPHs-DROs; trichloroethene; 1,2,4-trimethylbenzene; 2,4,6-trinitrotoluene; 1,2-xylene; and 1,3-xylene+1,4-xylene. The detected organic chemicals are retained as COPCs.

Area 2 of SWMU 39-002(a)

A total of 170 soil samples were collected and analyzed for PCBs, and 15 samples were collected and analyzed for VOCs, SVOCs, and explosive compounds. Table 6.3-8 shows results for all detected organic chemicals at Area 2 of SWMU 39-002(a). Plate 5 shows the spatial distribution of detected organic chemicals for Area 2 of SWMU 39-002(a).

Organic chemicals detected at Area 2 of SWMU 39-002(a) include acenaphthene, anthracene, Aroclor-1248, 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, chrysene, di-n-butylphthalate, dibenz(a,h)anthracene, diethylphthalate, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene. The detected organic chemicals are retained as COPCs.

Area 3 of SWMU 39-002(a)

A total of 16 soil samples were collected and analyzed for PCBs, VOCs, SVOCs, and explosive compounds, and 1 sample was analyzed for dioxins/furans only. Table 6.3-9 shows results for all detected organic chemicals at Area 3 of SWMU 39-002(a). Figure 6.3-6 shows the spatial distribution of detected organic chemicals for Area 3 of SWMU 39-002(a).

Organic chemicals detected at Area 3 of SWMU 39-002(a) include 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; nine dioxin/furans (TCDD toxicity equivalents); fluoranthene; indeno(1,2,3-cd)pyrene; iodomethane; methylene chloride; pentaerythritol tetranitrate (PETN); phenanthrene; pyrene; and trichlorofluoromethane. The detected organic chemicals are retained as COPCs.

Radionuclides

Area 1 of SWMU 39-002(a)

A total of 163 soil samples were analyzed for isotopic uranium, and 149 soil samples were collected and analyzed for gamma-emitting radionuclides, tritium, americium-241, and isotopic plutonium. Table 6.3-10 presents the radionuclides detected or detected above BVs/FVs. Figure 6.3-7 shows the spatial distribution of radionuclides detected or detected above BVs/FVs.

Cesium-137 was detected in six soil samples below 1.0 ft bgs with a maximum activity of 0.167 pCi/g. Cesium-137 is retained as a COPC.

Plutonium 239/240 was detected above the soil BV (0.054 pCi/g) in one sample with an activity of 0.105 pCi/g. Plutonium 239/240 is retained as a COPC.

Tritium was detected in three samples with a maximum activity of 20.7 pCi/g. Tritium is retained as a COPC.

Uranium-238 was detected above the soil BV (2.29 pCi/g) in four samples with a maximum activity of 8.21 pCi/g. Uranium-238 is retained as a COPC.

Area 2 of SWMU 39-002(a)

A total of 15 soil samples were collected and analyzed for isotopic uranium.

Radionuclides were not detected or not detected above BVs/FVs at Area 2 of SWMU 39-002(a).

Area 3 of SWMU 39-002(a)

A total of 16 soil samples were collected and analyzed for gamma-emitting radionuclides, tritium, americium-241, isotopic plutonium, and isotopic uranium.

Radionuclides were not detected or not detected above BVs/FVs at Area 3 of SWMU 39-002(a).

6.3.4.4 Nature and Extent of Contamination

Area 1 of SWMU 39-002(a)

The nature and extent of inorganic, organic, and radionuclide COPCs at Area 1 of SWMU 39-002(a) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.3-4, 6.3-7, and 6.3-10, Plates 3 and 4, and Figure 6.3-7.

Area 2 of SWMU 39-002(a)

The nature and extent of inorganic and organic COPCs at Area 2 of SWMU 39-002(a) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.3-5 and 6.3-8, Figure 6.3-4, and Plate 5. There were no radionuclide COPCs at Area 2 of SWMU 39-002(a).

Area 3 of SWMU 39-002(a)

The nature and extent of inorganic and organic COPCs at Area 3 of SWMU 39-002(a) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.3-6 and 6.3-9 and Figures 6.3-5 and 6.3-6.

Inorganic Chemicals

Area 1 of SWMU 39-002(a)

Inorganic COPCs at Area 1 of SWMU 39-002(a) include antimony, copper, cyanide, lead, mercury, nitrate, perchlorate, selenium, silver, thallium, and zinc.

Antimony was detected above the soil BV in three samples with a maximum concentration of 2.46 mg/kg and had DLs (0.866 mg/kg to 6.1 mg/kg) above BV in 34 samples. Concentrations decreased with depth at locations 39-604812, 39-61677, and 39-61678; and decreased laterally. The vertical and lateral extent of antimony is defined.

Copper was detected above the soil BV in 36 samples with a maximum concentration of 508 mg/kg. Concentrations decreased with depth at locations 39-01491, 39-01496, 39-01498, 39-604806, 39-604810, 39-604811, 39-604812, 39-604813, 39-604814, 39-604817, 39-61661, 39-61662, 39-61663, 39-61666, 39-61668, 39-61671, 39-61674, 39-61677, and 39-61695; only one depth was sampled at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, and 39-01499; and concentrations decreased laterally. Concentrations increased with depth at location 39-604815. Vertical extent at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, and 39-01499 is defined by decreasing concentrations in deeper samples collected at adjacent locations 39-604810, 39-61677, 39-61669, 39-604806, 39-61671, and 39-61677, respectively. The vertical and lateral extent of copper is defined.

Cyanide was detected above the soil BV in four samples with a maximum concentration of 20.8 mg/kg. Concentrations decreased with depth at locations 39-604812 and 39-604814; and decreased laterally. The vertical and lateral extent of cyanide is defined.

Lead was detected above the soil BV in 28 samples with a maximum concentration of 977 mg/kg. Concentrations increased with depth at location 39-604815; only one depth was sampled at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495 and 39-01499; decreased with depth at locations 39-01491, 39-01496, 39-01498, 39-604806, 39-604810, 39-604812, 39-604813, 39-604814, 39-604817, 39-61666, 39-61669, 39-61678; and decreased laterally. Where vertical extent was not defined at locations 39-01492, 39-01494, 39-01495; the residential SSL was approximately 10–16 times the maximum concentrations. Where vertical extent was not defined at locations 39-01051, 39-01493, and 39-604815; the residential SSL was approximately 8.0–10 times and industrial SSL was approximately 16–20 times the maximum concentrations. Vertical extent at locations 39-01053 and 39-01499 is defined by decreasing concentrations in deeper samples at adjacent locations 39-604817 and 39-61677, respectively. Based on those samples, concentrations decreased and further sampling is not warranted. Lateral extent of lead is defined and further sampling for vertical extent is not warranted.

Mercury was detected above the soil BV in 53 samples with a maximum concentration of 28.1 mg/kg. Concentrations increased with depth at locations 39-01496, 39-61681, and 39-61687; did not change substantially (0.01 mg/kg) with depth at location 39-604813; only one depth was sampled at locations 39-01051, 39-01053, 39-01494, 39-01495, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. Where vertical extent is not defined, the residential SSL was approximately 9.4–222 times the maximum concentrations. At location 39-01053, the residential SSL was approximately 9.4 times and the industrial was approximately 45 times the maximum concentration. Lateral extent of mercury is defined and further sampling for vertical extent is not warranted.

Nitrate was detected in 114 soil samples with a maximum concentration of 10.2 mg/kg. Concentrations increased with depth at locations 39-604811, 39-604814, 39-61665, 39-61667, 39-61671, 39-61680, and 39-61696; did not change substantially with depth at locations 39-604807 (0.41 mg/kg), 39-604812 (0.49 mg/kg), and 39-61676 (0.29 mg/kg); decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 12,300 times the maximum concentration. Lateral extent of nitrate is defined and further sampling for vertical extent is not warranted.

Perchlorate was detected in 16 soil samples with a maximum concentration of 0.00794 mg/kg. Concentrations increased with depth at locations 39-61663, 39-61668, 39-61670, and 39-61676; decreased with depth at locations 39-604814, 39-61660, 39-61661, 39-61664, 39-61669, 39-61673, 39-61674, and 39-61675; and decreased laterally. The residential SSL was approximately 6900 times the maximum concentration. Lateral extent of perchlorate is defined and further sampling for vertical extent is not warranted.

Selenium was detected above the soil BV in 10 samples with a maximum concentration of 1.91 mg/kg. Concentrations did not change substantially with depth at location 39-61674 (0.03 mg/kg); decreased with depth at locations 39-61660, 39-61673, 39-61675, 39-61676, and 39-61681; and increased laterally. The residential SSL was approximately 200 times the maximum concentration. Further sampling for vertical and lateral extent of selenium is not warranted.

Silver was detected above the soil BV in one sample at a maximum concentration of 1.1 mg/kg, and was not detected but had a DL (1.2 mg/kg) above the BV in one sample. Concentrations decreased with depth at location 39-01496; and decreased laterally. The vertical and lateral extent of silver is defined.

Thallium was detected above the soil BV in two samples with a maximum concentration of 1.26 mg/kg and was not detected but had a DL (0.78 mg/kg) above the BV in one sample. Only one depth was sampled at location 39-01053; concentrations decreased with depth at location 39-604812; and decreased laterally. Vertical extent at location 39-01053 is defined by decreasing concentrations in deeper samples collected at adjacent location 39-61677. The vertical and lateral extent of thallium is defined.

Zinc was detected above the soil BV in 42 samples with a maximum concentration of 467 mg/kg. Concentrations increased with depth at locations 39-604813 and 39-61678; only one depth was sampled at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 50 times the maximum concentration. Further sampling for vertical and lateral extent of zinc is not warranted.

Area 2 of SWMU 39-002(a)

Inorganic COPCs at Area 2 of SWMU 39-002(a) include antimony, copper, nitrate, perchlorate, and zinc.

Antimony was not detected but had a DL (4.05 mg/kg) above the soil BV in one sample. The residential SSL was approximately 7.7 times and the industrial SSL was approximately 128 times the maximum DL. Further sampling for extent of antimony is not warranted.

Copper was detected above the soil BV in four samples with a maximum concentration of 6870 mg/kg. Concentrations increased with depth at location 39-61776; decreased with depth at locations 39-61659, 39-61747, and 39-61767; and decreased downgradient. At location 39-61776, where vertical extent is not defined, the residential SSL was approximately 206 times the maximum concentration (15.2 mg/kg). Lateral extent of copper is defined and further sampling for vertical extent is not warranted.

Nitrate was detected in 14 soil samples with a maximum concentration of 15.2 mg/kg. Concentrations increased with depth at locations 39-61655, 39-61656, 39-61657, 39-61658, and 39-61659; and decreased laterally. The residential SSL was approximately 8220 times the maximum concentration. Lateral extent of nitrate is defined and further sampling for vertical extent is not warranted.

Perchlorate was detected in three soil samples with a maximum concentration of 0.00224 mg/kg. Concentrations increased with depth at locations 39-61655, 39-61656, and 39-61657; and decreased laterally. The residential SSL was approximately 24,500 times the maximum concentration. Lateral extent of perchlorate is defined and further sampling for vertical extent is not warranted.

Zinc was detected above the soil BV in three samples with a maximum concentration of 64.7 mg/kg. Concentrations decreased with depth at locations 39-61655 and 39-61659; and decreased laterally. The vertical and lateral extent of zinc is defined.

Area 3 of SWMU 39-002(a)

Inorganic COPCs at Area 3 of SWMU 39-002(a) include nitrate.

Nitrate was detected in 14 samples with a maximum concentration of 5.8 mg/kg. Concentrations increased with depth at locations 39-604731, 39-604732, 39-604733, 39-604734, 39-604735, and 39-604737; decreased with depth at locations 39-604736 and 39-604738; and increased downgradient. The residential SSL was approximately 21,600 times the maximum concentration. Further sampling for lateral and vertical extent of nitrate is not warranted.

Organic Chemicals

Area 1 of SWMU 39-002(a)

Organic chemicals detected at Area 1 of SWMU 39-002(a) include acenaphthene; acenaphthylene; 4-amino-2,6-dinitrotoluene; anthracene; Aroclor-1242; 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; carbazole; 2-chloronaphthalene; chrysene; di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene; dibenzofuran; 1,2-dichlorobenzene; dimethyl phthalate; seven dioxin/furans congeners (TCDD toxicity equivalents); ethylbenzene; fluoranthene; fluorene; indeno(1,2,3-cd)pyrene; iodomethane; methylene chloride; 1-methylnaphthalene; 2-methylnaphthalene; naphthalene; pentachlorophenol; phenanthrene; pyrene; RDX; tetryl; toluene; total petroleum hydrocarbons diesel range organics; trichloroethene; 1,2,4-trimethylbenzene; 2,4,6-trinitrotoluene; 1,2-xylene; and 1,3-xylene+1,4-xylene.

Acenaphthene was detected in 110 samples with a maximum concentration of 8.97 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one depth was sampled at locations 39-01053, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 390 times the maximum concentration. Further sampling for vertical and lateral extent of acenaphthene is not warranted.

Acenaphthylene was detected in 81 samples with a maximum concentration of 0.55 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, and 39-61682; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 3160 times the maximum concentration. Further sampling for vertical and lateral extent of acenaphthylene is not warranted.

Amino-2,6-dinitrotoluene[4-] was detected in one sample with a concentration of 0.171 mg/kg. Only one sample depth was collected at location 39-01053; and concentrations decreased laterally. The residential SSL was approximately 45 times the maximum concentration. Lateral extent of 4-amino-2,6-dinitrotoluene is defined and further sampling for vertical extent is not warranted.

Anthracene was detected in 123 samples with a maximum concentration of 10.2 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01053, 39-01493, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 1710 times the maximum concentration. Further sampling for vertical and lateral extent of anthracene is not warranted.

Aroclor-1242 was detected in one sample at a concentration of 0.00169 mg/kg. Concentrations increased with depth at location 39-61689; and decreased laterally. The residential SSL was approximately 1440 times the maximum concentration. Lateral extent of Aroclor-1242 is defined and further sampling for vertical extent is not warranted.

Aroclor-1254 was detected in 97 samples with a maximum concentration of 0.645 mg/kg. Concentrations increased with depth at locations 39-61679, 39-61682, and 39-604815; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 1.8 times and the industrial SSL was approximately 17 times the maximum concentration. There is no residential risk for Aroclor-1254 (Appendix G, Table G-4.2-13). Lateral extent of Aroclor-1254 is defined and further sampling for vertical extent is not warranted.

Aroclor-1260 was detected in 39 samples with a maximum concentration of 0.155 mg/kg. Concentrations increased with depth at location 39-61669; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 16 times the maximum concentration. Lateral extent of Aroclor-1260 is defined and further sampling for vertical extent is not warranted.

Benzo(a)anthracene was detected in 139 samples with a maximum concentration of 13.6 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. Vertical extent of location 39-01497 is defined by concentrations decreasing with depth at nearby locations 39-604811, 39-61676, and 39-604816. Where vertical extent is not defined at the remaining locations, the industrial SSL was approximately 11–1180 times the maximum concentrations. Lateral extent of benzo(a)anthracene is defined and further sampling for vertical extent is not warranted.

Benzo(a)pyrene was detected in 140 samples with a maximum concentration of 13.7 mg/kg. Concentrations increased with depth at locations 39-604813, 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. At locations 39-01053 and 39-01499 where only one depth was collected, vertical extent is defined by results from nearby locations 39-61677 and 39-604817. Likewise, vertical extent at location 39-01497 is defined by results from nearby locations 39-604811, 39-61676, and 39-604816. Based on those samples, concentrations decreased, and further sampling is not warranted. Where vertical extent is not defined at the remaining locations, the industrial SSL was approximately 16 to 28 times the maximum concentrations. Lateral extent of benzo(a)pyrene is defined and further sampling for vertical extent is not warranted.

Benzo(b)fluoranthene was detected in 142 samples with a maximum concentration of 14.9 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. At locations 39-01497 and 39-01499, where only one depth was sampled, vertical extent is defined by decreasing concentrations in deeper samples at adjacent locations (39-604811, 39-61676, 39-604816, and 39-01497; 39-61677, 39-604812, and 39-604817). At the remaining locations, the industrial SSL was approximately 14–54 times the maximum concentrations. Lateral extent of benzo(b)fluoranthene is defined and further sampling for vertical extent is not warranted.

Benzo(g,h,i)perylene was detected in 141 samples with a maximum concentration of 8.7 mg/kg. Concentrations increased with depth at locations 39-604813, 39-61675, 39-61678, 39-61681, and 39-61682; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 200 times the maximum concentration. Further sampling for vertical and lateral extent of benzo(g,h,i)perylene is not warranted.

Benzo(k)fluoranthene was detected in 121 samples with a maximum concentration of 5.87 mg/kg. Concentrations increased with depth at locations 39-604810, 39-604814, 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. Lateral extent of benzo(k)fluoranthene is defined and further sampling for vertical extent is not warranted.

Benzoic acid was detected in one sample at a concentration of 0.346 mg/kg. Concentrations decreased with depth at location 39-61693; and decreased laterally. The vertical and lateral extent of benzoic acid is defined.

Bis(2-ethylhexyl)phthalate was detected in 32 samples with a maximum concentration of 0.908 mg/kg. Concentrations increased with depth at locations 39-61672, 39-61679, 39-61681, and 39-61683; only one sample depth was collected at location 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 420 times the maximum concentration. Lateral extent of bis(2-ethylhexyl)phthalate is defined and further sampling for vertical extent is not warranted.

Butylbenzylphthalate was detected in eight samples with a maximum concentration of 0.0436 mg/kg. Concentrations increased with depth at location 39-61691; decreased with depth at locations 39-61669, 39-61670, 39-61674, 39-61679, and 39-61693; and increased laterally. The residential SSL was approximately 66,500 times the maximum concentration. Further sampling for vertical and lateral extent of butylbenzylphthalate is not warranted.

Carbazole was detected in 59 samples with a maximum concentration of 6.82 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, and 39-61682; decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 11 times the maximum concentration. Further sampling for vertical and lateral extent of carbazole is not warranted.

Chloronaphthalene[2-] was detected in one sample at a concentration of 0.00231 mg/kg. Concentrations decreased with depth at location 39-61668 and increased laterally. The residential SSL was approximately 2,710,000 times the maximum concentration. Vertical extent of 2-chloronaphthalene is defined and further sampling for lateral extent is not warranted.

Chrysene was detected in 140 samples with a maximum concentration of 16.1 mg/kg. Concentrations increased with depth at locations 39-604813, 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 9.5 times and the industrial SSL was approximately 200 times the maximum concentration. Lateral extent of chrysene is defined and further sampling for vertical extent is not warranted.

Di-n-butylphthalate was detected in 55 samples with a maximum concentration of 4.4 mg/kg. Concentrations increased with depth at locations 39-61672 and 39-61681; only one sample depth was collected at locations 39-01053, 39-01495, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 1,400 times the maximum concentration. Lateral extent of di-n-butylphthalate is defined and further sampling for vertical extent is not warranted.

Di-n-octylphthalate was detected in one sample at a concentration of 0.0189 mg/kg. Concentrations increased with depth at location 39-61691; and decreased laterally. The residential SSL was approximately 33,300 times the maximum concentration. Lateral extent of di-n-octylphthalate is defined and further sampling for vertical extent is not warranted.

Dibenz(a,h)anthracene was detected in 94 samples with a maximum concentration of 2.12 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, 39-61687, and 39-61691; only one depth was collected at location 39-01053; concentrations decreased with depth at all other locations; and decreased laterally. For sample location 39-01053, where only one depth was collected, decreasing concentrations in deeper samples from nearby locations (39-61677 and 39-604817) define the vertical extent. Where vertical extent is not defined, the industrial SSL was approximately 38–600 times the maximum concentrations. Lateral extent of dibenz(a,h)anthracene is defined and further sampling for vertical extent is not warranted.

Dibenzofuran was detected in 18 samples with a maximum concentration of 7.16 mg/kg. Concentrations increased with depth at location 39-61675; only one sample depth was collected at locations 39-01497 and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 11 times the maximum concentration. Lateral extent of dibenzofuran is defined and further sampling for vertical extent is not warranted.

Dichlorobenzene[1,2-] was detected in three samples with a maximum concentration of 0.0007 mg/kg. Concentrations decreased with depth at location 39-604805, did not change with depth at 39-604809, and decreased laterally. The vertical and lateral extent of 1,2-dichlorobenzene is defined.

Dimethyl phthalate was detected in one sample at a concentration of 0.0141 mg/kg. Concentrations increased with depth at location 39-61681; and increased laterally. The residential SSL was approximately 4,370,000 times the maximum concentration. Further sampling for vertical and lateral extent of dimethyl phthalate is not warranted.

Ethylbenzene was detected in one sample at a concentration of 0.000718 mg/kg. Concentrations decreased with depth at location 39-604810; and decreased laterally. The vertical and lateral extent of ethylbenzene is defined.

Fluoranthene was detected in 148 samples with a maximum concentration of 52.2 mg/kg. Concentrations increased with depth at locations 39-604813, 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 44 times the maximum concentration. Further sampling for vertical and lateral extent is not warranted.

Fluorene was detected in 107 samples with a maximum concentration of 10.0 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01053, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 230 times the maximum concentration. Further sampling for vertical and lateral extent of fluorene is not warranted.

Heptachlorodibenzodioxin[1,2,3,4,6,7,8-], 1,2,3,4,6,7,8-heptachlorodibenzofuran, 1,2,3,4,7,8-hexachlorodibenzodioxin, 1,2,3,6,7,8-hexachlorodibenzodioxin, 1,2,3,7,8,9-hexachlorodibenzodioxin, 1,2,3,4,6,7,8,9-octachlorodibenzodioxin, and 1,2,3,4,6,7,8,9-octachlorodibenzofuran were detected in one sample with concentrations of 0.00000807 mg/kg, 0.00000178 mg/kg, 0.000000129 mg/kg, 0.00000031 mg/kg, 0.000000191 mg/kg, 0.0000644 mg/kg, and 0.00000574 mg/kg, respectively. Only one sample was collected at location 39-604808 and no other locations were sampled for dioxin/furan congeners. The toxicity equivalent of residential SSLs were approximately 52.3–775,000 times the maximum concentrations. Further sampling for vertical and lateral extent of the dioxin and furan congeners is not warranted.

Indeno(1,2,3-cd)pyrene was detected in 137 samples with a maximum concentration of 9.37 mg/kg. Concentrations increased with depth at locations 39-604813, 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and decreased laterally. For location 39-01497, where only one depth was collected, vertical extent is defined by decreasing concentrations in deeper samples at nearby sampling locations (39-604811, 39-61676, and 39-604816). Where vertical extent is not defined at the remaining locations, the industrial SSL was approximately 18–70 times the maximum concentrations. Lateral extent of indeno(1,2,3-cd)pyrene is defined and further sampling for vertical extent is not warranted.

Iodomethane was detected in one sample at a concentration of 0.00081 mg/kg. Concentrations decreased with depth at location 39-604808; and decreased laterally. The vertical and lateral extent of iodomethane is defined.

Methylene chloride was detected in 10 samples with a maximum concentration of 0.00345 mg/kg. Concentrations increased with depth at location 39-604811, 39-604812, and 39-604813; decreased with depth at locations 39-604810 and 39-604814; and increased laterally. The residential SSL was approximately 119,000 times the maximum concentration. Further sampling for vertical and lateral extent of methylene chloride is not warranted.

Methylnaphthalene[1-] was detected in 51 samples with a maximum concentration of 2.37 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, and 39-61682; decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 73 times the maximum concentration. Further sampling for vertical and lateral extent of 1-methylnaphthalene is not warranted.

Methylnaphthalene[2-] was detected in 58 samples with a maximum concentration of 3.36 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, and 39-61682; only one sample depth was collected at location 39-01497; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 69 times the maximum concentration. Further sampling for vertical and lateral extent of 2-methylnaphthalene is not warranted.

Naphthalene was detected in 75 samples with a maximum concentration of 13.8 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, and 39-61682; only one sample depth was collected at all other locations; and increased laterally. Where lateral extent is not defined downgradient from location 39-61686, the residential SSL was approximately 5.2 times and the industrial SSL was approximately 25 times the maximum concentration. Where vertical extent is not defined at locations 39-01497, 39-01499, and 39-61681, the residential SSL was approximately 15 times, 44 times, and 245 times the maximum concentrations, respectively. Further sampling for vertical and lateral extent of naphthalene is not warranted.

Pentachlorophenol was detected in two samples with a maximum concentration of 1.99 mg/kg. Concentrations decreased with depth at location 39-61661; and increased laterally. The residential SSL was approximately 4.9 times and the industrial SSL was approximately 22 times the maximum concentration. Vertical extent of pentachlorophenol is defined and further sampling for lateral extent is not warranted.

Phenanthrene was detected in 148 samples with a maximum concentration of 66.7 mg/kg. Concentrations increased with depth at locations 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 28 times the maximum concentration. Further sampling for vertical and lateral extent of phenanthrene is not warranted.

Pyrene was detected in samples 148 with a maximum concentration of 43.2 mg/kg. Concentrations increased with depth at locations 39-604813, 39-61675, 39-61678, 39-61681, 39-61682, and 39-61687; only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 40 times the maximum concentration. Lateral extent of pyrene is defined and further sampling for vertical extent is not warranted.

RDX was detected in one sample at a concentration of 0.38 mg/kg. Concentrations decreased with depth at location 39-61660; and increased laterally. The residential SSL was approximately 220 times the maximum concentration. Vertical extent of RDX is defined and further sampling for lateral extent is not warranted.

Tetryl and trinitrotoluene[2,4,6-] were detected in one sample at a concentration of 0.345 mg/kg and 1.02 mg/kg, respectively. Only one depth was collected at location 39-01053; and concentrations decreased laterally. The residential SSL was approximately 450 times and 35 times the maximum concentrations, respectively. Lateral extent of tetryl and 2,4,6-trinitrotoluene is defined and further sampling for vertical extent is not warranted.

Toluene was detected in three samples with a maximum concentration of 0.0233 mg/kg. Concentrations decreased with depth at locations 39-604810, 39-604813, and 39-604814; and decreased laterally. The vertical and lateral extent of toluene is defined.

Total petroleum hydrocarbons–diesel range organics (TPH-DRO) was detected in 13 samples with a maximum concentration of 170 mg/kg. Only one sample depth was collected at locations 39-01051, 39-01053, 39-01492, 39-01493, 39-01494, 39-01495, 39-01497, and 39-01499; concentrations decreased with depth at locations 39-01491, 39-01496, and 39-01498; and decreased laterally. The residential SSL was approximately 12 times the maximum concentration. Lateral extent of TPH-DRO is defined and further sampling for vertical extent is not warranted.

Trichloroethene was detected in three samples with a maximum concentration of 0.00084 mg/kg. Concentrations decreased with depth at locations 39-604806, 39-6048010, and 39-604812; and decreased laterally. The vertical and lateral extent of trichloroethene is defined.

Trimethylbenzene[1,2,4-] was detected in one sample at a concentration of 0.00047 mg/kg. Concentrations decreased with depth at location 39-604815; and decreased downgradient. The vertical and lateral extent of 1,2,4-trimethylbenzene is defined.

Xylene[1,2-] was detected in two samples with a maximum concentration of 0.000624 mg/kg. Concentrations decreased with depth at locations 39-6048010 and 39-604813; and increased laterally. The residential SSL was approximately 1,290,000 times the maximum concentration. Vertical extent of 1,2-xylene is defined and further sampling for lateral extent is not warranted.

Xylene[1,3-]+Xylene[1,4-] was detected in two samples with a maximum concentration of 0.00177 mg/kg. Concentrations decreased with depth at locations 39-6048010 and 39-604813; and decreased laterally. The vertical and lateral extent of 1,3-xylene+1,4-xylene is defined.

Area 2 of SWMU 39-002(a)

Organic chemicals detected at Area 2 of SWMU 39-002(a) include acenaphthene; anthracene; Aroclor-1248; 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; chrysene di-n-butylphthalate; dibenz(a,h)anthracene; diethylphthalate; fluoranthene; fluorene; indeno(1,2,3-cd)pyrene; naphthalene; phenanthrene; and pyrene.

Acenaphthene was detected in two samples with a maximum concentration of 0.0585 mg/kg. Concentrations decreased with depth at locations 39-61656 and 39-61659; and increased laterally. The residential SSL was approximately 59,500 times the maximum concentration. Vertical extent of acenaphthene is defined and further sampling for lateral extent is not warranted.

Anthracene, fluoranthene, and pyrene were detected in three samples, four samples, and four samples with maximum concentrations of 0.0891 mg/kg, 0.84 mg/kg, and 0.641 mg/kg, respectively. Concentrations decreased with depth at locations 39-61656, 39-61657, and 39-61659; and increased laterally. The residential SSL was approximately 195,000 times, 2760 times, and 2710 times the maximum concentrations, respectively. Vertical extent of anthracene, fluoranthene, and pyrene is defined and further sampling for lateral extent is not warranted.

Aroclor-1248 was detected in five samples with a maximum concentration of 0.667 mg/kg. Concentrations increased with depth at location 39-61744; decreased with depth at locations 39-61656 and 39-61768; and decreased laterally. The residential SSL was approximately 3.6 times and the industrial SSL was approximately 16 times the maximum concentration. Residential risk and hazard for Aroclor-1248 were less than NMED benchmarks (Appendix G, Tables G-4.2-20 and G-4.2-21). Lateral extent of Aroclor-1248 is defined and further sampling for vertical extent is not warranted.

Aroclor-1254 was detected in 149 samples with a maximum concentration of 16.5 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. Note that at location 39-61760, concentrations decrease with depth based on the concentration in the surface sample that was excavated. The vertical and lateral extent of Aroclor-1254 is defined.

Aroclor-1260 was detected in 79 samples with a maximum concentration of 4.18 mg/kg. Concentrations increased with depth at location 39-61769; decreased with depth at all other locations; and decreased laterally. Where vertical extent was not defined at location 39-61769, the residential SSL was approximately 47 times the maximum concentration. Lateral extent of Aroclor-1260 is defined and further sampling for vertical extent is not warranted.

Benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; chrysene; indeno(1,2,3-cd)pyrene; and phenanthrene were detected in three samples with maximum concentrations of 0.315 mg/kg, 0.361 mg/kg, 0.448 mg/kg, 0.238 mg/kg, 0.166 mg/kg, 0.365 mg/kg, 0.24 mg/kg, and 0.531 mg/kg, respectively. Concentrations decreased with depth at locations 39-61656, 39-61657, and 39-61659; and decreased laterally. The vertical and lateral extent of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and phenanthrene is defined.

Bis(2-ethylhexyl)phthalate was detected in 12 samples with a maximum concentration of 0.109 mg/kg. Concentrations increased with depth at location 39-61658; decreased with depth at locations 39-61655, 39-61656, 39-61657, and 39-61659; and increased laterally. The residential SSL was approximately 3490 times the maximum concentration. Further sampling for vertical and lateral extent of bis(2-ethylhexyl)phthalate is not warranted.

Butylbenzylphthalate was detected in nine samples with a maximum concentration of 0.0177mg/kg. Concentrations decreased with depth at locations 39-61655, 39-61656, 39-61657, 39-61658, and 39-61659; and increased laterally. The residential SSL was approximately 164,000 times the maximum concentration. Vertical extent of butylbenzylphthalate is defined and further sampling for lateral extent is not warranted.

Di-n-butylphthalate was detected in five samples with a maximum concentration of 0.536 mg/kg. Concentrations increased with depth at location 39-61658; decreased with depth at locations 39-61655 and 39-61656; and increased laterally. The residential SSL was approximately 11,500 times the maximum concentration. Further sampling for vertical and lateral extent of di-n-butylphthalate is not warranted.

Dibenz(a,h)anthracene, fluorene, and naphthalene were detected in two samples with maximum concentrations of 0.0635 mg/kg, 0.0453 mg/kg, and 0.0291 mg/kg, respectively. Concentrations decreased with depth at locations 39-61656 and 39-61659; and decreased laterally. The vertical and lateral extent of dibenz(a,h)anthracene; fluorene; and naphthalene is defined.

Diethylphthalate was detected in seven samples with a maximum concentration of 0.0177 mg/kg. Concentrations increased with depth at location 39-61658; decreased with depth at locations 39-61655, 39-61656, 39-61657, and 39-61659; and increased laterally. The residential SSL was approximately 2,790,000 times the maximum concentration. Further sampling for vertical and lateral extent of diethylphthalate is not warranted.

Area 3 of SWMU 39-002(a)

Organic chemicals detected at Area 3 of SWMU 39-002(a) include 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; nine dioxin/furans (TCDD toxicity equivalents); fluoranthene; indeno(1,2,3-cd)pyrene; iodomethane; methylene chloride; PETN; phenanthrene; pyrene; and trichlorofluoromethane.

Acetone was detected in one sample at a concentration of 0.013 mg/kg. Concentrations increased with depth at location 39-604736; and decreased laterally. The residential SSL was approximately 5,100,000 times the maximum concentration. The lateral extent of acetone is defined and further sampling for vertical extent is not warranted.

Anthracene was detected in two samples with a maximum concentration of 0.053 mg/kg. Concentrations decreased with depth at locations 39-604731 and 39-604735; and decreased laterally. The lateral and vertical extent anthracene are defined.

Aroclor-1254 was detected in four samples with a maximum concentration of 0.013 mg/kg. Concentrations decreased with depth at locations 39-604732, 39-604733, 39-604734, and 39-604738; and increased laterally. The residential SSL was approximately 88 times the maximum concentration. The vertical extent of Aroclor-1254 is defined and further sampling for lateral extent is not warranted.

Aroclor-1260 was detected in one sample at a concentration of 0.0091 mg/kg. Concentrations decreased with depth at location 39-604738; and decreased laterally. The lateral and vertical extent of Aroclor-1260 is defined.

Benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; chrysene; and phenanthrene were detected in six samples, seven samples, six samples, six samples, six samples, eight samples, and eight samples with a maximum concentration of 0.17 mg/kg, 0.18 mg/kg, 0.15 mg/kg, 0.091 mg/kg, 0.18 mg/kg, 0.19 mg/kg, and 0.24 mg/kg, respectively. Concentrations decreased with depth at locations 39-604731, 39-604732, 39-604733, 39-604735, 39-604737, and 39-604738; and decreased laterally. Vertical and lateral extent is defined for benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; chrysene; phenanthrene; and pyrene.

Bis(2-ethylhexyl)phthalate was detected in seven samples with a maximum concentration of 0.61 mg/kg. Concentrations increased with depth at location 39-604731, decreased with depth at all other locations, and increased downgradient. The residential SSL was approximately 620 times the maximum concentration. Further sampling for vertical and lateral extent for is not warranted.

Di-n-butylphthalate was detected in two samples with a maximum concentration of 0.54 mg/kg. Concentrations decreased with depth at locations 39-604733 and 39-604735; and decreased laterally. Vertical and lateral extent is defined for di-n-butylphthalate.

Fluoranthene was detected in 12 samples with a maximum concentration of 0.39 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. Vertical and lateral extent is defined for fluoranthene.

Nine dioxin/furans (TCDD toxicity equivalents) were all collected from a single location at a single depth, with maximum concentrations ranging from 0.00000028 mg/kg to 0.000779 mg/kg. Only one depth was sampled at 39-604732. The toxicity equivalent residential SSL was approximately 190 to 207,000 times the maximum concentration. Further sampling for vertical and lateral extent is not warranted.

Indeno(1,2,3-cd)pyrene was detected in two samples with a maximum concentration of 0.079 mg/kg. Concentrations decreased with depth at locations 39-604731 and 39-604735; and decreased laterally. Vertical and lateral extent is defined for indeno(1,2,3-cd)pyrene.

Iodomethane was detected in one sample at a concentration of 0.00077 mg/kg. Concentrations increased with depth at location 39-604732; and decreased laterally. The residential SSL was approximately 23,000 times the maximum concentration. Lateral extent is defined for iodomethane, and further sampling for vertical extent is not warranted.

Methylene chloride was detected in seven samples with a maximum concentration of 0.0032 mg/kg. Concentrations increased with depth at locations 39-604735, 39-304736, 39-604737, and 39-604738; decreased with depth at locations 39-604731, 39-604733, and 39-604734; and increased downgradient. The residential SSL was approximately 128,000 times the maximum concentration. Further sampling for vertical and lateral extent is not warranted.

PETN was detected in one sample at a concentration of 0.02 mg/kg. Concentrations increased with depth at location 39-604734 and decreased laterally. The residential SSL was approximately 28,500 times the maximum concentration. Lateral extent for PETN is defined and further sampling for vertical extent is not warranted.

Pyrene was detected in 12 samples with a maximum concentration of 0.38 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. Vertical and lateral extent is defined for pyrene.

Trichlorofluoromethane was detected in one sample at a concentration of 0.00037 mg/kg. Concentrations decreased with depth at location 39-604737; and decreased laterally. Vertical and lateral extent is defined for trichlorofluoromethane.

Radionuclides

Area 1 of SWMU 39-002(a)

Radionuclide COPCs at Area 1 of SWMU 39-002(a) include cesium-137, plutonium 239/240, tritium, and uranium-238.

Cesium-137 was detected in six soil samples below 1.0 ft bgs with a maximum activity of 0.167 pCi/g. Activities decreased with depth at locations 39-61663, 39-61668, 39-61670, 39-61672, and 39-61690; and increased laterally. The residential SAL was approximately 72 times the maximum concentration. Vertical extent is defined for cesium-137 and further sampling for lateral extent is not warranted.

Plutonium-239/240 was detected above the soil FV in one sample with an activity of 0.105 pCi/g. Activities decreased with depth at location 39-604807; and decreased laterally. The vertical and lateral extent of plutonium-239/240 is defined.

Tritium was detected in three samples with a maximum activity of 20.7 pCi/g. Activities decreased with depth at locations 39-604812 and 39-61686; and increased laterally. The residential SAL was approximately 82 times the maximum concentration. Vertical extent is defined for tritium and further sampling for lateral extent is not warranted.

Uranium-238 was detected above the soil BV in four samples with a maximum activity of 8.21 pCi/g. Only one depth was sampled at locations 39-01053 and 39-01499; concentrations decreased with depth at location 39-604812; and decreased laterally. The residential SAL was approximately 18 times the maximum concentration. Further sampling for the extent of uranium-238 is not warranted.

Area 2 of SWMU 39-002(a)

No radionuclide COPCs were identified at Area 2 of SWMU 39-002(a).

Area 3 of SWMU 39-002(a)

No radionuclide COPCs were identified at Area 3 of SWMU 39-002(a).

6.3.5 Summary of Human Health Risk Screening

Area 1 of SWMU 39-002(a)

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 5×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.5, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.09 mrem/yr.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 3×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.5, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.2 mrem/yr.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 3×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The residential HI is 2, which is greater than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 1 mrem/yr.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk, noncarcinogenic hazard, or dose for the industrial or construction worker scenarios at Area 1 of SWMU 39-002(a). However, there is a potential unacceptable carcinogenic risk and noncarcinogenic hazard for the residential scenario, but no unacceptable radionuclide dose.

Lead was identified as a COPC for industrial, construction worker, and residential scenarios. The EPA recommended levels for lead were used for the industrial, construction worker, and residential scenarios (NMED 2022, 702484). The industrial lead hazard quotient (HQ) was 0.05, the construction worker lead HQ was 0.04, and the residential lead HQ was 0.08.

TPH was identified as a COPC for industrial, construction worker, and residential scenarios. The NMED recommended SSLs for TPH were used for the industrial, construction worker, and residential scenarios (NMED 2022, 702484). The industrial TPH HQ was 0.03, the construction worker TPH HQ was 0.03, and the residential TPH HQ was 0.08.

Area 2 of SWMU 39-002(a)

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 3×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.1, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 2×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.3, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The residential HI is 1, which is equal to the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk or noncarcinogenic hazard for the industrial or construction worker scenarios at Area 2 of SWMU 39-002(a). However, there is a potential unacceptable carcinogenic risk for the residential scenario, but no unacceptable noncarcinogenic hazard.

Area 3 of SWMU 39-002(a)

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 2×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.003, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 3×10^{-8}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.02, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 4×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.04, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk or noncarcinogenic hazard for the industrial, construction worker, or residential scenarios at Area 3 of SWMU 39-002(a).

6.3.6 Summary of Ecological Risk Screening

Area 1 of SWMU 39-002(a)

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, potential unacceptable ecological risk exists for Area 1 of SWMU 39-002(a) to the soil dwelling invertebrate and the generic plant. The primary contributors for the soil dwelling invertebrate are mercury (HQ = 3) and phenanthrene (HQ = 0.3). The primary contributors for the generic plant are selenium (HQ = 0.3), thallium (HQ = 3), acenaphthene (HQ = 0.2), and TPH (HQ = 0.2). However, the COPECs have only limited results exceeding background and/or soil ecological preliminary remediation goals. The ecoscoping checklist documents that Area 1 of SWMU 39-002(a) consists of bare ground, gravel, and limited grasses immediately adjacent to a building (Attachment G-4). Additionally this area is in an actively used area near the entry to TA-39. Thus, there is minimal ecological habitat at the site. Given the limited number of detections exceeding BV and EcoPRGs and the limited ecological habitat at the site, it is unlikely that the site presents potential risk to the generic plant or soil dwelling invertebrate populations, thus indicating that the HI analysis is likely overestimating risk. Based on these multiple lines of evidence, the analysis shows there is no potential unacceptable risk to the soil-dwelling invertebrates, generic plant, or other biota for Area 1 of SWMU 39-002(a).

Area 2 of SWMU 39-002(a)

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for Area 2 of SWMU 39-002(a).

Area 3 of SWMU 39-002(a)

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for Area 3 of SWMU 39-002(a).

6.4 AOC 39-002(b) – Storage Area

6.4.1 Site Description and Operational History

AOC 39-002(b) consists of a former SAA that was located on a 5-ft × 5-ft concrete pad adjacent to a firing site support building (structure 39-6) [(SWMU) 39-004(c)] at TA-39 (Figure 6.4-1). Beginning in 1953, the area was used to store small quantities of paper contaminated with waste solvents (ethanol, acetone, trichloroethane), copper sulfate, transformer oil, vacuum pump grease, and photographic waste. The date the SAA was established is not known; however, the SAA was removed from service in 1993. The concrete pad is intact; no staining is visible on the pad. AOC 39-002(b) is located within the blast radius of an active firing site [SWMU 39-004(c)].

6.4.2 Relationship to Other SWMUs and AOCs

AOC 39-002(b) is adjacent to a firing site support building (structure 39-6) at SWMU 39-004(c). This unit is not impacted by other SWMUs or AOCs.

6.4.3 Summary of Previous Investigations

There have been no previous investigations specific to this site. However, the investigation of SWMU 39-004(c) included sample locations downgradient from AOC 39-002(b) (LANL 2011, 201561; NMED 2010, 108675). Sample locations 39-01249 and 39-604750 were located approximately 20 ft downgradient from AOC 39-002(b). Additionally, a series of five sample locations extended down the local arroyo flow path (39-01289, 39-604759, 39-01290, 39-01291, 39-01292). The 2009 investigation report concluded that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities and COPCs included inorganic chemicals, organic chemicals, and radionuclides. Results from these sample locations are used in the extent discussion (section 6.4.4.4), as appropriate.

6.4.4 Site Contamination

6.4.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization was required to assess potential contamination at AOC 39-002(b). As a result, the following activities were completed as part of the 2022–2023 investigation.

- A total of 29 samples were collected from 10 locations across the former satellite accumulation area. At each location, samples were collected at the surface (0.0–1.0 ft bgs), and from the subsurface (2.0–3.0 and 6.0–7.0 ft bgs).

All samples listed above were analyzed at off-site fixed laboratories for TAL metals, cyanide, perchlorate, nitrate, VOCs, SVOCs, explosive compounds, PCBs, isotopic uranium, isotopic plutonium, gamma-emitting radionuclides, tritium, and strontium-90.

- Six additional samples were collected from two locations to the northeast of 39-61703 to determine lateral extent of lead and PCBs. At each location, samples were collected at the surface (0.0–1.0 ft bgs) and from the subsurface (2.0–3.0 and 6.0–7.0 ft bgs).
- An additional two samples were collected from location 39-61842 to determine vertical extent for PCBs. Samples were collected from the subsurface (8.0–9.0 and 10.0–11.0 ft bgs).

All samples were analyzed at off-site fixed laboratories.

The 2022–2023 sampling locations at AOC 39-002(b) are shown in Figure 6.4-1. Table 6.4-1 presents the samples collected and analyses requested for AOC 39-002(b). The geodetic coordinates of sample locations are presented in Table 3.2-1.

6.4.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at AOC 39-002(b), a maximum concentration of 1.1 ppm was detected at location 39-61842 at 8.0–9.0 ft bgs. No radiological screening was required for this AOC. No changes were made to sampling or other activities based on field-screening results. Field-screening results are in the sample collection logs (Appendix E).

6.4.4.3 Soil, Rock, and Sediment Sampling Analytical Results

Decision-level data at AOC 39-002(b) consist of results from 37 soil samples collected from 12 locations. Table 6.4-1 summarizes all samples collected and requested analyses for AOC 39-002(b). Figure 6.4-1 shows the spatial distribution of sample locations.

Inorganic Chemicals

A total of 29 soil samples were collected and analyzed for TAL metals, cyanide, nitrate and perchlorate. An additional six soil samples were analyzed for lead. Table 6.4-2 presents the inorganic chemicals above BVs and the detected inorganic chemicals with no BVs. Figure 6.4-2 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was not detected above the soil BV (0.83 mg/kg) but had DLs (0.884 mg/kg to 1.22 mg/kg) above the BV in four samples. The maximum site DL (1.22 mg/kg) was less than the top four DLs in the background data set (1.5, 1.4, 1.35, and 1.3 mg/kg; Figure F-25). Antimony was detected below the soil BV in three site samples. Antimony is not a COPC.

Calcium was detected above the soil BV (6120 mg/kg) in five samples with a maximum concentration of 13,500 mg/kg. The Gehan and quantile tests indicated that site concentrations of calcium in soil were not statistically different than background (Figure F-26 and Table F-5). Calcium is not a COPC.

Copper was detected above the soil BV (14.7 mg/kg) in 10 samples with a maximum concentration of 163 mg/kg. The Gehan and quantile tests indicated that site concentrations of copper in soil were statistically different than background (Figure F-27 and Table F-5) Copper is retained as a COPC.

Lead was detected above the soil BV (22.3 mg/kg) in five samples with a maximum concentration of 83.9 mg/kg. The Gehan and quantile tests indicated that site concentrations of lead in soil were not statistically different than background (Figure F-28 and Table F-5). Lead is not a COPC.

Mercury was detected above the soil BV (0.1 mg/kg) in three samples with a maximum concentration of 1.14 mg/kg. The quantile and slippage tests indicated that site concentrations of mercury in soil were not statistically different than background (Figure F-29 and Table F-5). However, mercury was retained as a COPC because the maximum detection (1.14 mg/kg) was substantially greater than BV.

Nickel was detected above the soil BV (15.4 mg/kg) in one sample at a concentration of 16.5 mg/kg. The Gehan and quantile tests indicated that site concentrations of nickel in soil are not statistically different than background (Figure-30 and Table F-5). Nickel is not a COPC.

Nitrate was detected in 24 soil samples with a maximum concentration of 9.21 mg/kg. Nitrate is retained as a COPC.

Selenium was detected above the soil BV (1.52 mg/kg) in three samples with a maximum concentration of 2.02 mg/kg. The Gehan and quantile tests indicated that site concentrations of selenium are statistically different than background (Figure F-31 and Table F-5). Selenium is retained as a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in two samples with a maximum concentration of 119 mg/kg. The Gehan and quantile tests indicated that site concentrations of zinc are statistically different than background (Figure F-32 and Table F-5). Zinc is retained as a COPC.

Organic Chemicals

A total of 37 samples were collected and analyzed for PCBs, and 29 samples were collected and analyzed for VOCs, SVOCs, explosive compounds, and dioxins/furans. Table 6.4-3 presents the detected organic chemicals. Plate 6 shows the spatial distribution of detected organic chemicals.

Organic chemicals detected at AOC 39-002(b) include Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, benzo(g,h,i)perylene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, chrysene, di-n-butylphthalate, 13 dioxin/furans (TCDD toxicity equivalents), HMX, 4-isopropyltoluene, PETN, RDX, tetrachloroethene, and trichloroethene. The detected organic chemicals are retained as COPCs.

Radionuclides

A total of 29 soil samples were collected and analyzed for gamma-emitting radionuclides, tritium, americium-241, isotopic uranium, and isotopic plutonium. Table 6.4-4 presents the radionuclides detected or detected above BVs/FVs. Figure 6.4-3 shows the spatial distribution of radionuclides detected or detected above BVs/FVs.

Uranium-234 was detected above the soil BV (2.59 pCi/g) in two samples with a maximum activity of 3.69 pCi/g. Uranium-234 is retained as a COPC.

Uranium-235/236 was detected above the soil BV (0.2 pCi/g) in one sample at an activity of 0.309 pCi/g. Uranium-235/236 is retained as a COPC.

Uranium-238 was detected above the soil BV (2.29 pCi/g) in eight samples with a maximum activity of 11.6 pCi/g. Uranium-238 is retained as a COPC.

6.4.4.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at AOC 39-002(b) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.4-2, 6.4-3, and 6.4 4, Plate 6, and Figures 6.4-2 and 6.4-3.

Inorganic Chemicals

Inorganic COPCs at AOC 39-002(b) include copper, mercury, nitrate, selenium, and zinc.

Copper was detected above the soil BV in 10 samples with a maximum concentration of 163 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 19 times the maximum concentration. Further sampling for vertical and lateral extent of copper is not warranted.

Mercury was detected above the soil BV in three samples with a maximum concentration of 1.14 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61702 and 39-61703; and increased downgradient. The residential SSL was approximately 21 times the maximum concentration. Further sampling for vertical and lateral extent of mercury is not warranted.

Nitrate was detected in 24 soil samples with a maximum concentration of 9.21 mg/kg. Concentrations increased with depth at locations 39-61697, 39-61698, 39-61701, 39-61702, and 39-61703; decreased with depth at locations 39-61700, 39-61704, 39-61705, and 39-61706; and increased downgradient. The residential SSL was approximately 13,600 times the maximum concentration. Further sampling for vertical and lateral extent of nitrate is not warranted.

Selenium was detected above the soil BV in three samples with a maximum concentration of 2.02 mg/kg. Concentrations increased with depth at locations 39-61697, 39-61700, and 39-61701; and decreased downgradient. The residential SSL was approximately 190 times the maximum concentration. Lateral extent is defined for selenium and further sampling for vertical extent is not warranted.

Zinc was detected above the soil BV in two samples with a maximum concentration of 119 mg/kg. Concentrations decreased with depth at locations 39-61702 and 39-61703; and increased downgradient. The residential SSL is approximately 200 times the maximum concentration. Vertical extent is defined for zinc and further sampling for lateral extent is not warranted.

Organic Chemicals

Organic COPCs at AOC 39-002(b) include Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, benzo(g,h,i)perylene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, chrysene, di-n-butylphthalate, HMX, 13 dioxins/furans, 4-isopropyltoluene, PETN, RDX, tetrachloroethene, and trichloroethene.

Aroclor-1242 was detected in 13 samples with a maximum concentration of 3.75 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. Vertical and lateral extent of Aroclor-1242 is defined.

Aroclor-1248 was detected in 15 samples with a maximum concentration of 14.6 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. At location 39-61698 where only one depth was sampled, vertical extent is defined by decreasing concentrations in deeper samples at the adjacent location 39-61697. Vertical and lateral extent of Aroclor-1248 is defined.

Aroclor-1254 was detected in 23 samples with a maximum concentration of 3.91 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. At locaton 39-61698 where only one depth was sampled, vertical extent is defined by decreasing concentrations in deeper samples at the adjacent location 39-61697. Vertical and lateral extent of Aroclor-1254 is defined.

Aroclor-1260 was detected in 25 samples with a maximum concentration of 1.08 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. At location 39-61698, where only one depth was sampled, vertical extent is defined by decreasing concentrations in deeper samples at the adjacent location 39-61697. Vertical and lateral extent of Aroclor-1260 is defined.

Benzo(g,h,i)perylene was detected in two samples with a maximum concentration of 0.0237 mg/kg. Concentrations decreased with depth at locations 39-61704 and 39-61706; and decreased laterally. Vertical and lateral extent of benzo(g,h,i)perylene is defined.

Bis(2-ethylhexyl)phthalate was detected in three samples with a maximum concentration of 0.984 mg/kg. Concentrations increased with depth at location 39-61699 and decreased with depth at locations 39-61703 and 39-61705 and was not defined laterally. Where lateral extent is not defined downgradient from location 39-61703, the residential SSL was approximately 390 times the maximum concentration. Further sampling for vertical and lateral extent of bis(2-ethylhexyl)phthalate is not warranted.

Butylbenzylphthalate was detected in two samples with a maximum concentration of 0.51 mg/kg. Concentrations decreased with depth at locations 39-61703 and 39-61705; and increased downgradient. the residential SSL is approximately 5690 times the maximum concentration. The vertical extent of butylbenzylphthalate is defined and further sampling for lateral extent is not warranted.

Chrysene was detected in one sample at a concentration of 0.0305 mg/kg. Concentrations decreased with depth at location 39-61704; and decreased downgradient. Vertical and lateral extent of chrysene is defined.

Di-n-butylphthalate was detected in 17 samples with a maximum concentration of 0.982 mg/kg. Concentrations increased with depth at locations 39-61698, 39-61701, 39-61702, and 39-61703; decreased with depth at locations 39-61697, 39-61699, 39-61700, 39-61704, 39-61705, and 39-61706; and decreased downgradient. The residential SSL was approximately 6270 times the maximum concentration. The lateral extent of di-n-butylphthalate is defined and further sampling for vertical extent is not warranted.

Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] was detected in 21 samples with a maximum concentration of 0.0000788 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at all other locations; and increased laterally. The toxicity equivalent residential SSL was approximately 32 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,4,6,7,8-heptachlorodibenzodioxin is not warranted.

Heptachlorodibenzofuran[1,2,3,4,6,7,8-] was detected in 22 samples with a maximum concentration of 0.00000947 mg/kg. Concentrations increased with depth at location 39-61798; decreased with depth at all other locations; and increased downgradient. The toxicity equivalent residential SSL was approximately 517 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,4,6,7,8-heptachlorodibenzofuran is not warranted.

Hexachlorodibenzodioxin[1,2,3,6,7,8-] was detected in 5 samples with a maximum concentration of 0.00000166 mg/kg. Concentrations increased with depth at location 39-61798; decreased with depth at all other locations; and increased downgradient. The toxicity equivalent residential SSL was approximately 295 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,6,7,8-hexachlorodibenzodioxin is not warranted.

Hexachlorodibenzodioxin[1,2,3,7,8,9-] was detected in one sample at a concentration of 0.000000788 mg/kg. Concentrations decreased with depth at location 39-61704; and decreased downgradient. Vertical and lateral extent of 1,2,3,7,8,9-hexachlorodibenzodioxin is defined.

Hexachlorodibenzofuran[1,2,3,4,7,8-] was detected in 11 samples with a maximum concentration of 0.00000544 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at all other locations; and increased downgradient. The toxicity equivalent residential SSL was approximately 90 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,4,7,8-hexachlorodibenzofuran is not warranted.

Hexachlorodibenzofuran[1,2,3,6,7,8-] was detected in three samples with a maximum concentration of 0.00000129 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61699 and 39-61703; and increased downgradient. The toxicity equivalent residential SSL was approximately 380 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,6,7,8-hexachlorodibenzofuran is not warranted.

Hexachlorodibenzofuran[2,3,4,6,7,8-] was detected in five samples with a maximum concentration of 0.00000162 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61699, 39-61702, 39-61703, and 39-61704; and increased downgradient. The toxicity equivalent residential SSL was approximately 303 times the maximum concentration. Further sampling for vertical and lateral extent of 2,3,4,6,7,8-hexachlorodibenzofuran is not warranted.

HMX was detected in three samples with a maximum concentration of 0.221 mg/kg. Concentrations decreased with depth at locations 39-61699 and 39-61704; and decreased downgradient. Vertical and lateral extent of HMX is defined.

Isopropyltoluene[4-] was detected in one sample at a concentration of 0.00399 mg/kg. Concentrations decreased with depth at location 39-61701; and decreased downgradient. Vertical and lateral extent of 4-isopropyltoluene is defined.

Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] was detected in 25 samples with a maximum concentration of 0.000712 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at all other locations; and increased downgradient. The toxicity equivalent residential SSL was approximately 537 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,4,6,7,8,9-octachlorodibenzodioxin is not warranted.

Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] was detected in 14 samples with a maximum concentration of 0.0000221 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at all other locations; and increased downgradient. The toxicity equivalent residential SSL was approximately 7390 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,4,6,7,8,9-octachlorodibenzofuran is not warranted.

Pentachlorodibenzodioxin[1,2,3,7,8-] was detected in two samples with a maximum concentration of 0.00000267 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at location 39-61703; and decreased downgradient. The toxicity equivalent residential SSL was approximately

17 times the maximum concentration. The lateral extent of 1,2,3,7,8-pentachlorodibenzodioxin is defined and further sampling for vertical extent is not warranted.

Pentachlorodibenzofuran[1,2,3,7,8-] was detected in 12 samples with a maximum concentration of 0.0000179 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61697, 39-61699, 39-61701, 39-61702, 39-61703, and 39-61704; and increased downgradient. The toxicity equivalent residential SSL was approximately 91 times the maximum concentration. Further sampling for vertical and lateral extent of 1,2,3,7,8-pentachlorodibenzofuran is not warranted.

Pentachlorodibenzofuran[2,3,4,7,8-] was detected in 11 samples with a maximum concentration of 0.0000133 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61697, 39-61699, 39-61701, 39-61702, 39-61703, and 39-61704; and increased downgradient. The toxicity equivalent residential SSL was approximately 12 times the maximum concentration. Further sampling for vertical and lateral extent of 2,3,4,7,8-pentachlorodibenzofuran is not warranted.

PETN was detected in one sample at a concentration of 0.246 mg/kg. Concentrations decreased with depth at location 39-61699; and decreased downgradient. Vertical and lateral extent of PETN is defined.

RDX was detected in one sample at a concentration of 0.481 mg/kg. Concentrations increased with depth at location 39-61699; and decreased downgradient. The residential SSL is approximately 170 times the maximum concentration. The lateral extent of RDX is defined and further sampling for vertical extent is not warranted.

Tetrachlorodibenzofuran[2,3,7,8-] was detected in 15 samples with a maximum concentration of 0.0000606 mg/kg. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61697, 39-61699, 39-61700, 39-61701, 39-61702, 39-61703, and 39-61704; and increased downgradient. The toxicity equivalent residential SSL was approximately 8 times the maximum concentration. Tetrachlorodibenzofuran[2,3,7,8-] does not pose an unacceptable risk under the residential scenario (Appendix G, Table G-4.2-34). Further sampling for vertical and lateral extent of 2,3,7,8-tetrachlorodibenzofuran is not warranted.

Tetrachloroethene was detected in two samples with a maximum concentration of 0.000825 mg/kg. Concentrations decreased with depth at locations 39-61699 and 39-61700; and decreased downgradient. Vertical and lateral extent of tetrachloroethene is defined.

Trichloroethene was detected in one sample at a concentration of 0.00247 mg/kg. Concentrations decreased with depth at location 39-61700; and decreased downgradient. Vertical and lateral extent of trichloroethene is defined.

Radionuclides

Radionuclides COPCs at AOC 39-002(b) include uranium-234, uranium-235/236, and uranium-238.

Uranium-234 was detected above the soil BV in two samples with a maximum activity of 3.69 pCi/g. Concentrations increased with depth at location 39-61698; decreased with depth at location 39-61703; and increased downgradient. The residential SAL is approximately 79 times the maximum activity. Further sampling for vertical and lateral extent of uranium-234 is not warranted.

Uranium-235/236 was detected above the soil BV in one sample at an activity of 0.309 pCi/g. Concentrations decreased with depth at location 39-61703; and increased laterally. The residential SAL is approximately 136 times the maximum activity. Vertical extent of uranium-235-236 is defined and further sampling for lateral extent is not warranted.

Uranium-238 was detected above the soil BV in eight samples with a maximum activity of 11.6 pCi/g. Concentrations increased with depth at location 39-61698; decreased with depth at locations 39-61697, 39-61699, 39-61702, 39-61703, and 39-61704; and increased laterally. The residential SAL is approximately 13 times the maximum activity. Further sampling for vertical and lateral extent of uranium-238 is not warranted.

6.4.5 Summary of Human Health Risk Screening

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 2×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.02, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 6×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.2 mrem/yr.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The residential HI is 1, which is equal to the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.7 mrem/yr.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk, noncarcinogenic hazard, or dose for the industrial or construction worker scenarios at AOC 39-002(b). However, there is a potential unacceptable carcinogenic risk for the residential scenario, but no unacceptable noncarcinogenic risk or radionuclide dose.

6.4.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for AOC 39-002(b).

6.5 SWMU 39-006(a) – Septic System

6.5.1 Site Description and Operational History

SWMU 39-006(a) consists of a septic system with inactive and active components located east and south of former building 39-2 at TA-39 (Figures 6.5-1 and 6.5-2). The 1990 SWMU report describes SWMU 39-006(a) as an active septic system consisting of a septic tank (structure 39-104), a former septic tank (former structure 39-12), inlet and outlet drainlines, a siphon box, distribution boxes, a subsurface sand filter, and a former outfall that served as a sanitary waste system for former building 39-2. The original/inactive portion of the septic system was constructed in 1952, consisting of a septic tank (former structure 39-12) measuring approximately 12 ft long × 7 ft wide × 6 ft deep, 4-in. and 6-in.-diameter vitrified clay pipe (VCP) inlet and outlet drainlines, a subsurface sand filter, three manholes (structures 39-85, 39-86, and 39-87), and an outfall located approximately 225 ft south of the original subsurface sand filter. Septic tank 39-12 was located 100 ft east of former building 39-2 and was connected to a sand filter north of New Mexico (NM) State Road 4. The sand filter discharged to an outfall south of NM State Road 4 in North Ancho Canyon. The system received discharges only from building 39-2. Photographic-processing chemicals from former building 39-2 were routinely discharged to septic tank 39-12, eventually causing the septic tank to malfunction. To correct the problem, a chemical seepage pit was installed directly north of former septic tank 39-12 in 1973 to manage the photographic-processing chemicals. The seepage pit handled approximately 75 gal./yr until 1992. The chemical seepage pit consisted of an open pit approximately 12 ft deep and filled with cobble, and a corrugated metal pipe approximately 1 ft in diameter runs vertically through the center of the seepage pit.

In 1973 the entire septic system was upgraded when septic tank 39-12 was enlarged to a capacity of 1860-gal., and a new subsurface sand filter and outfall were installed on the south side of NM State Road 4; use of the original subsurface sand filter and outfall were discontinued at that time. The upgraded septic system consisted of the expanded septic tank 39-12, 4-in.- and 6-in.-diameter VCP inlet and outlet drainlines, a siphon box, two distribution boxes, a new subsurface sand filter, three manholes (structures 39-85, 39-86, and 39-87), and a new outfall located south of NM State Road 4 that continued to serve only former building 39-2.

In 1984, septic tank 39-12 was abandoned in place and a new 2400-gal.-capacity septic tank (structure 39-104) was installed as part of the existing septic system. The new septic tank 39-104 served former buildings 39-2, 39-100, 39-103, 39-107, and 39-101, and buildings 39-62 and 39-98, and discharged to the subsurface sand filter and the outfall located south of NM State Road 4. Septic tank 39-104, the new sand filter south of NM State Road 4, and the still-active drainlines are part of the SWMU 39-006(a) active components. In 1989, the 6-in.-diameter VCP outlet from the new sand filter was plugged, eliminating discharge to the outfall. Buildings 39-2, 39-100, 39-101, 39-103, and 39-107 underwent decontamination and decommissioning (D&D) and were removed at various dates. Buildings 39-62 and 39-98 remain in place. The original/inactive septic tank (former structure 39-12), inactive chemical seepage pit, and the original subsurface sand filter were removed during 2009 Phase I Consent Order investigation field activities.

6.5.2 Relationship to Other SWMUs and AOCs

SWMU 39-006(a) is not impacted by other SWMUs or AOCs. The unit boundary for SWMU 39-006(a) was updated to accurately depict the dimensions, configuration, and location of each component of both the inactive and active portions of the septic system, seepage pit, and outfalls.

6.5.3 Summary of Previous Investigations

During the 1993 RFI, each component of this SWMU was sampled (LANL 1995, 046190). The active sand filter was sampled at three locations at three depths (0–0.5, 4, and 6 ft bgs) along the centerline of the sand filter, resulting in a total of nine samples collected. The active septic tank (structure 39-104) was sampled by drilling a borehole next to and downgradient of the tank. Samples were collected at depths of 0–1.5, 9, and 11 ft bgs. The outfall was sampled in the drainage channel at 6 and 15 ft south of the discharge point. Outfall samples were collected from both the surface soil and from 4 ft bgs in the drainage channel (LANL 2007, 098281).

In the 2009 Phase I investigation, six soil samples were collected near the outfall and analyzed for inorganic chemicals, seven samples were analyzed for organic chemicals, and six samples were analyzed for radionuclides (LANL 2010, 108500.11).

6.5.4 Site Contamination

6.5.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization was required to assess potential contamination at Area 1 of SWMU 39-006(a). As a result, the following activities were completed as part of the 2022–2023 investigation.

- A total of 12 samples were collected from locations 39-604869, 39-604871, 39-604877, 39-604885, 39-604887, and 39-604888 to determine vertical extent of cyanide. Samples were collected from the subsurface (8.0–9.0 ft bgs and 16.0–17.0 ft bgs, 10.0–11.0 ft bgs and 19.0–20.0 ft bgs, or 12.0–13.0 ft bgs and 20.0–21.0 ft bgs).
- All samples listed above were analyzed at off-site fixed laboratories for cyanide.
- A total of 24 samples were collected from 6 step-out locations around the sand filter. At each location, samples were collected from the subsurface (3.0–4.0, 6.0–7.0, 9.0–10.0, and 14.0–15.0 ft bgs).
- A total of 56 samples were collected from 14 locations at the inlet and outlet of the sand filter, inside the sand filter, and step-out locations around the sand filter. At each location, samples were collected from the subsurface (3.0–4.0, 6.0–7.0, 9.0–10.0 ft bgs, and 14.0–15.0 ft bgs).
- Nine samples were collected from three locations along the drainline to the chemical seepage pit. At each location, samples were collected 0.0–1.0, 2.0–3.0, and 4.0–5.0 below the drainline.
- Three samples were collected from one location on the east end of the drainline to the former septic tank. Samples were collected at 0.0–1.0, 2.0–3.0, and 4.0–5.0 ft below the drainline.
- A total of 72 samples were collected from 24 locations at each end of inactive drainlines, and along the drainline every 50 ft. At each location, samples were collected at 0.0–1.0, 2.0–3.0, and 4.0–5.0 ft below the drainline.
- A total of 42 samples were collected from 14 locations at the inactive outfalls with 5-ft step outs in the downslope direction. At each location, samples were collected at the surface (0.0–1.0 ft bgs) and from the subsurface (4.0–5.0 and 9.0–10.0 ft bgs).
- All samples listed above were analyzed at off-site fixed laboratories for TAL metals, cyanide, perchlorate, nitrate, VOCs, SVOCs, explosive compounds, PCBs, americium-241, isotopic uranium, isotopic plutonium, gamma-emitting radionuclides, and tritium.

6.5.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at SWMU 39-006(a) a maximum concentration of 1.6 ppm was detected at locations 39-61829 (9.0–10.0 ft bgs), 39-81232 (4.0–5.0 ft bgs), and 39-81233 (9.0–10.0 ft bgs). No radiological screening was required for this SWMU. No changes were made to sampling or other activities based on field-screening results. Field-screening results are in the sample collection logs (Appendix E).

6.5.4.3 Soil, Rock, and Sediment Sampling Analytical Results

Decision-level data at SWMU 39-006(a) consists of results from 274 samples (273 soil, 1 sediment) collected from 73 locations. Table 6.5-1 summarizes all samples collected and requested analyses for SWMU 39-006(a). Figures 6.5-1 and 6.5-2 show the spatial distribution of sample locations.

Inorganic Chemicals

A total of 260 samples (259 soil, 1 sediment) were collected and analyzed for cyanide. A total of 248 (247 soil, 1 sediment) samples were collected and analyzed for TAL metals, nitrate, and perchlorate. Because fewer than 8 sediment samples were collected, statistical tests could not be performed on results for this medium. Table 6.5-2 presents the inorganic chemicals detected above BVs and detected inorganic chemicals with no BVs. Plates 7 and 8 show the spatial distribution of the same.

Antimony was not detected above the soil BV (0.83 mg/kg) but had DLs (0.874–0.986 mg/kg) above the BV in two samples. The antimony DLs only exceeded BV by 0.034 and 0.156 mg/kg, respectively. The maximum DL (0.986 mg/kg) was less than the top six DLs in the background data set (Figure F-33). Antimony was detected less than BV in six samples. Antimony is not a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in 16 samples with a maximum concentration of 6.7 mg/kg. The quantile and slippage tests indicated that soil concentrations of cadmium are not statistically different than background (Figure F-34 and Table F-6); however, cadmium was retained as a COPC because the maximum detection (6.7 mg/kg) was substantially greater than BV.

Calcium was detected above the soil BV (6120 mg/kg) in one sample at a concentration of 14,400 mg/kg. The Gehan and quantile tests indicated that soil concentrations of calcium are not statistically different than background (Figure F-35 and Table F-6). Calcium is not a COPC.

Chromium was detected above the soil BV (19.3 mg/kg) in four samples with a maximum concentration of 38.3 mg/kg. The Gehan and quantile tests indicated that soil concentrations of chromium are not statistically different than background (Figure F-36 and Table F-6). Chromium is not a COPC.

Copper was detected above the soil BV (14.7 mg/kg) in one sample at a concentration of 15.3 mg/kg. The Gehan and quantile tests indicated that soil concentrations of copper are not statistically different than background (Figure F-37 and Table F-6). Copper is not a COPC.

Cyanide was detected above the soil and sediment BVs (0.5 mg/kg and 0.82 mg/kg, respectively) in 54 soil samples and 1 sediment sample with a maximum concentration of 70 mg/kg, and was not detected but had DLs (0.525 mg/kg to 0.62 mg/kg) above BV in 4 soil samples. Cyanide is retained as a COPC.

Lead was detected above the soil BV (22.3 mg/kg) in four samples with a maximum concentration of 591 mg/kg. The Gehan and quantile tests indicated that soil concentrations of lead were not statistically different than background (Figure F-38 and Table F-6); however, lead was retained as a COPC because the maximum detection (591 mg/kg) was substantially greater than BV.

Mercury was detected above the soil BV (0.1 mg/kg) in seven samples with a maximum concentration of 0.818 mg/kg. The quantile and slippage tests indicated that soil concentrations of mercury were not statistically different than background (Figure F-39 and Table F-6); however, mercury was retained as a COPC because the maximum detection (0.818 mg/kg) was substantially greater than BV.

Nitrate was detected in 224 soil samples and 1 sediment sample with a maximum concentration of 107 mg/kg. Nitrate is retained as a COPC.

Perchlorate was detected in 71 soil samples with a maximum concentration of 0.00499 mg/kg. Perchlorate is retained as a COPC.

Selenium was detected above the soil and sediment BVs (1.52 mg/kg and 0.3 mg/kg, respectively) in five soil samples and one sediment sample with a maximum concentration of 2.65 mg/kg. The quantile and slippage tests indicate that soil concentrations of selenium are not statistically different than background (Figure F-40 and Table F-6); however, selenium is retained as a COPC based on the sediment detection exceeding BV (Figure F-41).

Silver was detected above the soil and sediment BVs (both 1 mg/kg) in 44 soil samples and 1 sediment sample with a maximum concentration of 227 mg/kg. There were too few sediment detections for statistical analyses (Figure F-42). Silver is retained as a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in eight samples with a maximum concentration of 130 mg/kg. The Gehan and quantile tests indicated that soil concentrations of zinc are not statistically different than background (Figure F-43 and Table F-6). Zinc is not a COPC.

Organic Chemicals

A total of 261 samples (260 soil, 1 sediment) were collected and analyzed for PCBs, VOCs, and SVOCs. A total of 260 samples (259 soil, 1 sediment) were collected and analyzed for explosives. One soil sample was collected and analyzed for dioxins/furans. Table 6.5-3 summarizes the organic chemicals detected at SWMU 39-006(a). Plates 9 and 10 show the spatial distribution of organic chemicals detected at SWMU 39-006(a).

Organic chemicals detected at SWMU 39-006(a) include acenaphthene, acenaphthylene, acetone, 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, bis(2-ethylhexyl)phthalate, 2-butanone, butylbenzylphthalate, carbazole, 2-chloronaphthalene, chrysene, di-n-butylphthalate, di-n-octylphthalate, dibenz(a,h)anthracene, diethylphthalate, four dioxin/furans (TCDD toxicity equivalents), fluoranthene, fluorene, 2-hexanone, indeno(1,2,3-cd)pyrene, iodomethane, 4-isopropyltoluene, methylene chloride, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene, phenol, pyrene, toluene, 1,2,4-trimethylbenzene, and 1,3-xylene+1,4-xylene. The detected organic chemicals are retained as COPCs.

Radionuclides

A total of 261 samples (260 soil, 1 sediment) were collected and analyzed for gamma-emitting radionuclides and isotopic uranium. A total of 260 samples (259 soil, 1 sediment) were collected and analyzed for tritium, americium-241, and isotopic plutonium. Table 6.5-4 presents the radionuclides detected or detected above BVs/FVs. Plate 11 shows the spatial distribution of radionuclides detected or detected above BVs/FVs.

Cesium-134 was detected in one soil sample at an activity of 0.117 pCi/g. Cesium-134 is retained as a COPC.

Cesium-137 was detected in 11 soil samples below 1.0 ft bgs with a maximum activity of 0.33 pCi/g. Cesium-137 is retained as a COPC.

Tritium was detected in eight samples with a maximum activity of 56.1 pCi/g. Tritium is retained as a COPC.

Uranium-238 was detected above the soil BV (2.29 pCi/g) in three samples with a maximum activity of 2.84 pCi/g. Uranium-238 is retained as a COPC.

6.5.4.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at SWMU 39-006(a) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.4-2, 6.4-3, and 6.4-4, and Plates 7, 8, 9, 10, and 11.

Inorganic Chemicals

Inorganic COPCs at SWMU 39-006(a) include cadmium, cyanide, lead, mercury, nitrate, perchlorate, selenium, and silver.

Cadmium was detected above the soil BV in 16 samples with a maximum concentration of 6.7 mg/kg. Concentrations increased with depth at locations 39-604868, 39-604871, and 39-604872 [concentrations did not change substantially (0.1 mg/kg) with depth at location 39-604871]; decreased with depth at locations 39-604869, 39-604870, 39-61797, 39-61823, 39-61825, 39-61827, 39-61828, 39-61829, and 39-61837; and decreased downgradient. The residential SSL was approximately 10.5 times and the industrial SSL was approximately 166 times the maximum concentration. Lateral extent of cadmium is defined and further sampling for vertical extent is not warranted.

Cyanide was detected above the soil and sediment BVs in 54 soil samples and 1 sediment sample with a maximum concentration of 70 mg/kg and was not detected but had DLs (0.525 mg/kg to 0.62 mg/kg) above BV in 4 soil samples. Concentrations decreased with depth at locations 39-604868, 39-604869, 39-604870, 39-604871, 39-604874, 39-604877, 39-604878, 39-604880, 39-604881, 39-604885, 39-604886, 39-604887, 39-604888, 39-604891, 39-604893, 39-61789, 39-61791, 39-61797, 39-61802, 39-61804, 39-61813, 39-61823, 39-61824, 39-61825, 39-61826, 39-61827, 39-61828, 39-61829, 39-61835, 39-61837, 39-61839, and 39-61840; and decreased downgradient. The vertical and lateral extent of cyanide is defined.

Lead was detected above the soil BV in four samples with a maximum concentration of 591 mg/kg. Concentrations increased with depth at location 39-61841; decreased with depth at locations 39-604870 and 39-61793; and decreased downgradient. Where vertical extent is not defined at location 39-61841, the residential SSL was approximately 14.7 times the maximum concertation. Lateral extent of lead is defined and further sampling for vertical extent is not warranted.

Mercury was detected above the soil BV in seven samples with a maximum concentration of 0.818 mg/kg. Concentrations decreased with depth at locations 39-61823, 39-61825, 39-61826, 39-61827, 39-61828, 39-61837, and 39-61840; and decreased downgradient. The vertical and lateral extent of mercury is defined.

Nitrate was detected in 224 soil samples and 1 sediment sample with a maximum concentration of 107 mg/kg. Concentrations increased with depth at locations 39-604868, 39-604869, 39-604870, 39-604872, 39-604873, 39-604874, 39-604875, 39-604876, 39-604877, 39-604878, 39-604880, 39-604883, 39-604886, 39-604887, 39-604891, 39-604892, 39-604894, 39-61782, 39-61786, 39-61790, 39-61791, 39-61795, 39-61798, 39-61806, 39-61807, 39-61809, 39-61811, 39-61814, 39-61815, 39-61816, 39-61817, 39-61818, 39-61825, 39-61826, 39-61827, 39-61828, 39-61829, 39-61833, 39-61837, 39-61838, 39-61839, and 39-61840 [concentrations did not change substantially with depth at locations 39-604870 (0.2 mg/kg), 39-604874 (0.2 mg/kg), 39-604878 (0.2 mg/kg), and 39-61795 (0.067 mg/kg)]; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 1170 times the maximum concentration. Lateral extent of nitrate is defined and further sampling for vertical extent is not warranted.

Perchlorate was detected in 71 soil samples with a maximum concentration of 0.00499 mg/kg. Concentrations increased with depth at locations 39-604886, 39-604887, 39-604892, 39-61784, 39-61786, 39-61790, 39-61791, 39-61817, and 39-61840; decreased with depth at all other locations; and increased laterally. The residential SSL was approximately 11,000 times the maximum concentration. Further sampling for vertical and lateral extent of perchlorate is not warranted.

Selenium was detected above the soil and sediment BVs in five soil samples and one sediment sample with a maximum concentration of 2.65 mg/kg. Concentrations increased with depth at locations 39-61784, 39-61785, and 39-61816; decreased with depth at locations 39-61828 and 39-61839; and decreased downgradient. The residential SSL was approximately 150 times the maximum concentration. Lateral extent of selenium is defined and further sampling for vertical extent is not warranted.

Silver was detected above the soil and sediment BVs in 44 soil samples and 1 sediment sample with a maximum concentration of 227 mg/kg. Concentrations increased with depth at locations 39-604868, 39-604872, 39-604887, and 39-604888; decreased with depth at all other locations; and decreased downgradient. The residential SSL was approximately 17 times the maximum concentration where vertical extent is not defined (23 mg/kg at location 39-604868). Lateral extent of silver is defined and further sampling for vertical extent is not warranted.

Organic Chemicals

Organic COPCs at SWMU 39-006(a) include acenaphthene; acenaphthylene; acetone; 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; bis(2-ethylhexyl)phthalate; 2-butanone; butylbenzylphthalate; carbazole; 2-chloronaphthalene; chrysene; di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene; diethylphthalate; fluoranthene; fluorene; 1,2,3,4,6,7,8-heptachlorodibenzodioxin; 1,2,3,4,6,7,8-heptachlorodibenzofuran; 2-hexanone; indeno(1,2,3-cd)pyrene; iodomethane; 4-isopropyltoluene; methylene chloride; 1-methylnaphthalene; 2-methylnaphthalene; naphthalene; 1,2,3,4,6,7,8,9-octachlorodibenzodioxin; 1,2,3,4,6,7,8,9-octachlorodibenzofuran; phenanthrene; phenol; pyrene; toluene; 1,2,4-trimethylbenzene; and 1,3-xylene+1,4-xylene.

Acenaphthene was detected in seven samples with a maximum concentration of 0.199 mg/kg. Concentrations decreased with depth at all locations and increased laterally. The residential SSL was approximately 17,500 times the maximum concentration. Vertical extent of acenaphthene is defined and further sampling for lateral extent is not warranted.

Acenaphthylene was detected in 16 samples with a maximum concentration of 0.0703 mg/kg. Concentrations decreased with depth at all locations and decreased laterally. The vertical and lateral extent of acenaphthylene is defined.

Acetone was detected in 16 samples with a maximum concentration of 0.013 mg/kg. Concentrations increased with depth at locations 39-61782 and 39-61821; did not change substantially with depth at locations 39-604873 (0.002 mg/kg), 39-61790 (0.00372 mg/kg), and 39-61840 (0.00176 mg/kg); decreased with depth at locations 39-604869, 39-604875, 39-61787, and 39-61788; and decreased downgradient. The residential SSL was approximately 5,100,000 times the maximum concentration. Lateral extent of acetone is defined and further sampling for vertical extent is not warranted.

Anthracene was detected in 19 samples with a maximum concentration of 0.0703 mg/kg. Concentrations decreased with depth at locations 39-61789, 39-61791, 39-61796, 39-61802, 39-61803, 39-61804, 39-61805, 39-61808, 39-61813, 39-61824, 39-61835, 39-61839, and 39-61840; and decreased laterally. The vertical and lateral extent of anthracene is defined.

Aroclor-1254 was detected in 54 samples with a maximum concentration of 0.249 mg/kg. Concentrations increased with depth at locations 39-604873, 39-604885, 39-604887, and 39-604888; did not change substantially with depth at location 39-604880 (0.0004 mg/kg); decreased with depth at all other locations; and decreased downgradient. The residential SSL was approximately 4.6 times and the industrial SSL was approximately 44 times the maximum concentration. There is no residential risk for Aroclor-1254 (Appendix G, Table G-4.2-50). Lateral extent of Aroclor-1254 is defined and further sampling for vertical extent is not warranted.

Aroclor-1260 was detected in 31 samples with a maximum concentration of 0.104 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. The vertical and lateral extent of Aroclor-1260 is defined.

Benzene was detected in one sample at a concentration of 0.0088 mg/kg. Only one sample depth was collected at location 39-01502; and concentrations decreased downgradient. The residential SSL was approximately 2020 times the maximum concentration. Lateral extent of benzene is defined and further sampling for vertical extent is not warranted.

Benzo(a)anthracene was detected in 32 samples with a maximum concentration of 0.151 mg/kg. Concentrations increased with depth at location 39-61786; decreased with depth at all other locations; and decreased downgradient. The residential SSL was approximately 126 times the maximum concentration where vertical extent is not defined (0.0121 mg/kg at location 39-61786). Lateral extent of benzo(a)anthracene is defined and further sampling for vertical extent is not warranted.

Benzo(a)pyrene was detected in 32 samples with a maximum concentration of 0.168 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. The vertical and lateral extent of benzo(a)pyrene is defined.

Benzo(b)fluoranthene was detected in 37 samples with a maximum concentration of 0.263 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. The vertical and lateral extent of benzo(b)fluoranthene is defined.

Benzo(g,h,i)perylene was detected in 32 samples with a maximum concentration of 0.128 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. The vertical and lateral extent of benzo(g,h,i)perylene is defined.

Benzo(k)fluoranthene was detected in 24 samples with a maximum concentration of 0.078 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. The vertical and lateral extent of benzo(k)fluoranthene is defined.

Benzoic acid was detected in 19 samples with a maximum concentration of 0.366 mg/kg. Concentrations increased with depth at locations 39-61783 and 39-61786; decreased with depth at locations 39-61780, 39-61785, 39-61800, 39-61826, 39-61827, 39-61828, and 39-61840; and decreased downgradient. The residential SSL was approximately 683,000 times the maximum concentration. Lateral extent of benzoic acid is defined and further sampling for vertical extent is not warranted.

Bis(2-ethylhexyl)phthalate was detected in 20 samples with a maximum concentration of 2.0 mg/kg. Concentrations increased with depth at locations 39-604887, 39-604888, 39-604890, 39-604891, 39-604894, and 39-61815; decreased with depth at locations 39-604868, 39-604870, 39-604873, 39-604889, 39-604892, 39-61783, 39-61791, 39-61792, 39-61813, and 39-61831; and decreased downgradient. The residential SSL was approximately 190 times the maximum concentration. Lateral extent of bis(2-ethylhexyl)phthalate is defined and further sampling for vertical extent is not warranted.

Butanone[2-] was detected in two samples with a maximum concentration of 0.00248 mg/kg. Concentrations increased with depth at location 39-61804; decreased with depth at location 39-61816; and decreased downgradient. The residential SSL was approximately 15,100,000 times the maximum concentration. Lateral extent of 2-butanone is defined and further sampling for vertical extent is not warranted.

Butylbenzylphthalate and di-n-octylphthalate were detected in one sample with concentrations of 0.0112 mg/kg and 0.0218 mg/kg, respectively. Concentrations decreased with depth at location 39-61807; and decreased downgradient. The vertical and lateral extent of butylbenzylphthalate and di-n-octylphthalate is defined.

Carbazole was detected in one sample at a concentration of 0.0157 mg/kg. Concentrations decreased with depth at location 39-61805; and decreased downgradient. The vertical and lateral extent of carbazole is defined.

Chloronaphthalene[2-] was detected in one sample at a concentration of 0.0421 mg/kg. Concentrations decreased with depth at location 39-61825; and decreased downgradient. The vertical and lateral extent of 2-chloronaphthalene is defined.

Chrysene was detected in 31 samples with a maximum concentration of 0.153 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. The vertical and lateral extent of chrysene is defined.

Di-n-butylphthalate was detected in 43 samples with a maximum concentration of 0.21 mg/kg. Concentrations increased with depth at locations 39-604887, 39-61806, 39-61807, 39-61815, 39-61829, 39-61838, and 39-61841; decreased with depth at all other locations; and decreased downgradient. The residential SSL was approximately 29,300 times the maximum concentration. Lateral extent of di-n-butylphthalate is defined and further sampling for vertical extent is not warranted.

Dibenz(a,h)anthracene was detected in 15 samples with a maximum concentration of 0.0323 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. The vertical and lateral extent of dibenz(a,h)anthracene is defined.

Diethylphthalate was detected in 12 samples with a maximum concentration of 0.0378 mg/kg. Concentrations increased with depth at locations 39-61818 and 39-61819; decreased with depth at locations 39-61796, 39-61804, 39-61805, 39-61807, 39-61809, and 39-61816; and decreased downgradient. The residential SSL was approximately 1,300,000 times the maximum concentration. Lateral extent of diethylphthalate is defined and further sampling for vertical extent is not warranted.

Fluoranthene was detected in 50 samples with a maximum concentration of 0.577 mg/kg. Concentrations increased with depth at location 39-61780; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 4020 times the maximum concentration. Lateral extent of fluoranthene is defined and further sampling for vertical extent is not warranted.

Fluorene was detected in five samples with a maximum concentration of 0.0146 mg/kg. Concentrations decreased with depth at locations 39-61789, 39-61804, 39-61805, 39-61813, and 39-61835; and decreased downgradient. The vertical and lateral extent of fluorene is defined.

Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]; 1,2,3,4,6,7,8-heptachlorodibenzofuran; 1,2,3,4,6,7,8,9-octachlorodibenzodioxin; and 1,2,3,4,6,7,8,9-octachlorodibenzofuran were detected in one sample with concentrations of 0.00000146 mg/kg, 0.000000245 mg/kg, 0.00000763 mg/kg, and 0.000000587 mg/kg, respectively. Only one sample was collected at 39-604891 (3–5 ft bgs) and no other locations were sampled for dioxin/furan congeners. The toxicity equivalent SSL was approximately 3360 times to 278,000 times the detected concentrations. Further sampling for vertical and lateral extent of 1,2,3,4,6,7,8-heptachlorodibenzodioxin; 1,2,3,4,6,7,8-heptachlorodibenzofuran; 1,2,3,4,6,7,8,9-octachlorodibenzodioxin; and 1,2,3,4,6,7,8,9-octachlorodibenzofuran is not warranted.

Hexanone[2-] was detected in three samples with a maximum concentration of 0.231 mg/kg. Concentrations increased with depth at location 39-61823; decreased with depth at locations 39-61816 and 39-61825; and decreased downgradient. The residential SSL was approximately 870 times the maximum concentration. Lateral extent of 2-hexanone is defined and further sampling for vertical extent is not warranted.

Indeno(1,2,3-cd)pyrene was detected in 26 samples with a maximum concentration of 0.144 mg/kg. Concentrations decreased with depth at all locations; and decreased laterally. The vertical and lateral extent of indeno(1,2,3-cd)pyrene is defined.

Iodomethane was detected in one sample at a concentration of 0.0009 mg/kg. Concentrations decreased with depth at location 39-604872; and decreased downgradient. The vertical and lateral extent of iodomethane is defined.

Isopropyltoluene[4-] was detected in three samples with a maximum concentration of 0.00816 mg/kg. Concentrations decreased with depth at locations 39-604874, 39-61826, and 39-61827; and decreased downgradient. The vertical and lateral extent of 4-isopropyltoluene is defined.

Methylene chloride was detected in 33 samples with a maximum concentration of 0.00458 mg/kg. Concentrations did not change substantially with depth at locations 39-61782, 39-61786, 39-61790, 39-61824, 39-61828, 39-61835, 39-61840, and 39-61841 (0.00002 mg/kg to 0.00084 mg/kg); decreased with depth at locations 39-61787, 39-61788, 39-61793, and 39-61794; and decreased laterally. The residential SSL was approximately 89,300 times the maximum concentration. Lateral extent of methylene chloride is defined and further sampling for vertical extent is not warranted.

Methylnaphthalene[1-] was detected in two samples with a maximum concentration of 0.00612 mg/kg. Concentrations decreased with depth at location 39-61805; and decreased downgradient. The vertical and lateral extent of 1-methylnaphthalene is defined.

Methylnaphthalene[2-] was detected in four samples with a maximum concentration of 0.00612 mg/kg. Concentrations increased with depth at location 39-61815; decreased with depth at locations 39-61797 and 39-61805; and decreased downgradient. The residential SSL was approximately 37,900 times the maximum concentration. Lateral extent of 2-methylnaphthalene is defined and further sampling for vertical extent is not warranted.

Naphthalene was detected in three samples with a maximum concentration of 0.005 mg/kg. Concentrations decreased with depth at locations 39-61797 and 39-61805; and decreased downgradient. The vertical and lateral extent of naphthalene is defined.

Phenanthrene was detected in 36 samples with a maximum concentration of 0.148 mg/kg. Concentrations decreased with depth at all locations; and decreased downgradient. The vertical and lateral extent of phenanthrene is defined.

Phenol was detected in one sample at a concentration of 0.49 mg/kg. Only one sample was collected at location 39-01502; and concentrations decreased downgradient. The residential SSL was approximately 37,700 times the maximum concentration. Lateral extent of phenol is defined and further sampling for vertical extent is not warranted.

Pyrene was detected in 47 samples with a maximum concentration of 0.417 mg/kg. Concentrations increased with depth at location 39-61780; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 4170 times the maximum concentration. Lateral extent of pyrene is defined and further sampling for vertical extent is not warranted.

Toluene was detected in three samples with a maximum concentration of 0.00048 mg/kg. Concentrations increased with depth at location 39-604887; decreased with depth at locations 39-604893 and 39-61796; and decreased laterally. The residential SSL was approximately 10,900,000 times the maximum concentration. Lateral extent of toluene is defined and further sampling for vertical extent is not warranted.

Trimethylbenzene[1,2,4-] was detected in five samples with a maximum concentration of 0.00056 mg/kg. Concentrations increased with depth at location 39-604879 (0.0001 mg/kg); decreased with depth at locations 39-604878 and 39-604883; and decreased downgradient. The residential SSL was approximately 536,000 times the maximum concentration. The lateral extent of 1,2,4-trimethylbenzene is defined and further sampling for vertical extent is not warranted.

Xylene[1,3-]+xylene[1,4-] was detected in three samples with a maximum concentration of 0.00113 mg/kg. Concentrations decreased with depth at locations 39-61820, 39-61821, and 39-61822; and decreased downgradient. The vertical and lateral extent of 1,3-xylene+1,4-xylene is defined.

Radionuclides

Radionuclide COPCs at SWMU 39-006(a) include cesium-134, cesium-137, tritium, and uranium-238.

Cesium-134 was detected in one soil sample at an activity of 0.117 pCi/g. Activities increased with depth at location 39-61785; and decreased downgradient. The residential SAL was approximately 43 times the maximum activity. Lateral extent of cesium-134 is defined and further sampling for vertical extent is not warranted.

Cesium-137 was detected in 11 soil samples below 1.0 ft bgs with a maximum activity of 0.33 pCi/g. Activities increased with depth at location 39-61807; decreased with depth at locations 39-604893, 39-61788, 39-61797, 39-61805, 39-61808, 39-61809, 39-61824, and 39-61827; and decreased downgradient. The residential SAL was approximately 36 times the maximum activity. Lateral extent of cesium-137 is defined and further sampling for vertical extent is not warranted.

Tritium was detected in eight samples with a maximum activity of 56.1 pCi/g. Activities increased with depth at locations 39-604872, 39-61800, and 39-61801; decreased with depth at locations 39-604874, 39-604877, 39-604883, and 39-604893; and decreased downgradient. The residential SAL was approximately 30 times the maximum activity. Lateral extent of tritium is defined and further sampling for vertical extent is not warranted.

Uranium-238 was detected above the soil BV in three samples with a maximum activity of 2.84 pCi/g. Activities decreased with depth at locations 39-61825, 39-61827, and 39-61828; and decreased downgradient. The vertical and lateral extent of uranium-238 is defined.

6.5.5 Summary of Human Health Risk Screening

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 1×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.5, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.08 mrem/yr.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 7×10^{-9}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.4, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 7×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.4, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 2 mrem/yr.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk, noncarcinogenic hazard or dose for the industrial worker, construction worker, or residential scenarios at SWMU 39-006(a).

Lead was identified as a COPC for industrial, construction worker, and residential scenarios. The EPA recommended levels for lead were used for the industrial, construction worker, and residential scenarios (NMED 2022, 702484). The industrial lead HQ was 0.01, the construction worker lead HQ was 0.02, and the residential lead HQ was 0.04.

6.5.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for SWMU 39-006(a).

6.6 SWMU 39-007(a) – Storage Area

6.6.1 Site Description and Operational History

SWMU 39-007(a) is the location of a former storage area on a concrete pad under a covered porch outside the east side of an equipment shelter (structure 39-63) at TA-39 (Figure 6.6-1). The dates of operation of the storage area are not known. Used oil containing lead and solvents was stored at this area. The area around the concrete pad is relatively flat but slopes eastward to a drainage near the adjacent road. A portion of the site was remediated during a 1995 VCA to remove PCB-contaminated soil (LANL 1996, 053786).

6.6.2 Relationship to Other SWMUs and AOCs

SWMU 39-007(a) is located in an isolated area, approximately 700 ft east of AOC 39-001(b) and SWMU 39-004(c). It is not impacted by or related to other SWMUs or AOCs.

6.6.3 Summary of Previous Investigations

During the 1993 Phase I RFI, three surface samples (0–0.5 ft) were collected from three locations within a few feet of the concrete pad (LANL 1995, 046190). One sample was collected at the southeast corner of the building, and two were collected from the area most likely to receive runoff from the pad. Because PCBs were detected, a VCA was subsequently conducted (LANL 1996, 053786). A portion of the site was excavated, and confirmation samples were collected within and next to the excavated area. The 1996 data are not decision-level and are not included in the current data set. After the VCA was completed, the site was backfilled and seeded with native grasses.

In 2001, five surface soil samples were collected from five locations; one of which was subsequently excavated. Documentation is not available explaining the reason for this additional investigation and excavation; however, the results are presented in the approved IWP (LANL 2007, 101894; NMED 2007, 098948). Available data include results from four sample locations.

In 2009, 25 soil samples were collected as part of the Phase I field investigation (LANL 2010, 108500.11). Based on these results, additional remediation was completed in 2017 to remove soil (0–2 ft bgs) from around 2 specific sample locations. (The total volume of soil removed was approximately 7 yd^3.) Excluding results from the 2 locations (3 samples) that were excavated, the 2009 data set includes results from 22 samples.

Additional samples were collected in 2017 to confirm that the soil removal objective had been met. Analytical results are available from an additional 22 post-excavation samples (LANL 2018, 602861). These data are summarized in the sections below.

6.6.4 Site Contamination

6.6.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization was not required to determine vertical and lateral extent at SWMU 39-007(a) as part of the 2022–2023 investigation.

6.6.4.2 Soil, Rock, and Sediment Field-Screening Results

No field activities were conducted at SWMU 39-007(a) during the 2022–2023 investigation. Therefore, no field-screening results are presented herein for SWMU 39-007(a).

6.6.4.3 Soil, Rock, and Sediment Sampling Analytical Results

Decision-level data at SWMU 39-007(a) consist of results from 4 soil samples collected from 4 locations during the 2001 investigation; 22 soil samples collected from 10 locations during the 2009 investigation; and 22 soil samples collected from 14 locations during the 2017 investigation. Table 6.6-1 summarizes all samples collected and requested analyses for SWMU 39-007(a). Figure 6.6-1 shows the spatial distribution of samples.

Inorganic Chemicals

A total of 25 soil samples were analyzed for TAL metals. A total of 21 soil samples were collected and analyzed for cyanide, nitrate, and perchlorate. Table 6.6-2 presents the inorganic chemicals detected above BVs and detected inorganic chemicals with no BVs. Figure 6.6-2 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was not detected above the soil BV (0.83 mg/kg) but had DLs (1.03 mg/kg to 1.2 mg/kg) above BV in 11 samples. The maximum detected concentration (0.749 mg/kg) was less than BV. The maximum DL was only 0.37 mg/kg above BV and was below the 36 highest DLs in the soil background data set (ranging from 1.3 to 1.5 mg/kg). Antimony was not detected or not detected above BV in 14 other samples (detected below BV in 4 samples) (Figure F-44). Antimony is not a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in 1 sample with a concentration of 0.591 mg/kg and had DLs (0.516–0.58 mg/kg) above BV in 12 samples. The quantile and slippage tests indicated that site concentrations of cadmium in soil are not statistically different than background (Table F-7 and Figure F-45). The maximum concentration was only 0.191 mg/kg above BV and was below the three highest concentrations in the soil background data set (2.6 mg/kg, 1.4 mg/kg, and 0.6 mg/kg). The maximum DL was only 0.18 mg/kg above BV and below the three highest DLs in the soil background data set (2 mg/kg, 2 mg/kg, and 2 mg/kg). Cadmium was not detected or detected above BV in 12 other samples (detected below BV in 8 samples). Cadmium is not a COPC.

Cyanide was not detected above the soil BV (0.5 mg/kg) but had DLs (0.54–0.69 mg/kg) above the BV in three samples. The maximum detected concentration (0.16 mg/kg) was less than BV. The maximum DL was only 0.19 mg/kg above BV. Cyanide was not detected or not detected above BV in 18 other samples (detected below BV in 4 samples). Cyanide is not retained as a COPC.

Nitrate was detected in three samples with a maximum concentration of 3.57 mg/kg. Nitrate is retained as a COPC.

Perchlorate was detected in one sample with a maximum concentration of 0.000567 mg/kg. Perchlorate is retained as a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in four samples with a maximum concentration of 108 mg/kg. The Gehan and quantile tests indicated that site concentrations of zinc in soil are statistically different from background (Figure F-46 and Table F-7). Zinc is retained as a COPC.

Organic Chemicals

A total of 47 soil samples were collected and analyzed for PCBs; a total of 21 soil samples were collected and analyzed for VOCs, SVOCs, and explosive compounds; and 1 soil sample was collected analyzed for dioxins/furans. Table 6.6-3 presents the detected organic chemicals. Figure 6.6-3 shows the spatial distribution of detected organic chemicals.

Organic chemicals detected at SWMU 39-007(a) include acetone, Aroclor-1248, Aroclor-1254, Aroclor-1260, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, chrysene, 1,4-dichlorobenzene, ethylbenzene, fluoranthene, phenanthrene, pyrene, and toluene. The detected organic chemicals are retained as COPCs.

Radionuclides

A total of 21 soil samples were collected and analyzed for gamma-emitting radionuclides, americium-241, tritium, isotopic uranium, and isotopic plutonium.

Radionuclides were not detected or detected above BVs/FVs at SWMU 39-007(a).

6.6.4.4 Nature and Extent of Contamination

The nature and extent of inorganic and organic COPCs at SWMU 39-007(a) are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.6-2 and 6.6-3 and Figures 6.6-2 and 6.6-3.

Inorganic Chemicals

Inorganic COPCs at SWMU 39-007(a) include nitrate, perchlorate, and zinc.

Nitrate was detected in three samples with a maximum concentration of 3.57 mg/kg. Concentrations decreased with depth at locations 39-604855 and 39-604856; and increased laterally. The residential SSL was approximately 35,000 times the maximum concentration. The vertical extent of nitrate is defined and further sampling for lateral extent is not warranted.

Perchlorate was detected in one sample at a concentration of 0.000567 mg/kg. Concentrations increased with depth at location 39-604856; and increased laterally. The residential SSL was approximately 96,600 times the maximum concentration. Further sampling for vertical and lateral extent of perchlorate is not warranted.

Zinc was detected above the soil BV in four samples with a maximum concentration of 108 mg/kg. Concentrations decreased with depth at locations 39-604852 and 39-604857; only one depth was sampled at 39-10018; and concentrations decreased laterally. The vertical and lateral extent of zinc is defined.

Organic Chemicals

Organic COPCs at SWMU 39-007(a) include acetone; Aroclor-1248; Aroclor-1254; Aroclor-1260; benzo(k)fluoranthene; bis(2-ethylhexyl)phthalate; butylbenzylphthalate; chrysene; 1,4-dichlorobenzene; ethylbenzene; fluoranthene; phenanthrene; pyrene; and toluene.

Acetone was detected in one sample at a concentration of 0.0103 mg/kg. Concentrations increased with depth at location 39-604852; and concentrations increased laterally. The residential SSL was approximately 6,400,000 times the maximum concentration. Further sampling for vertical and lateral extent of acetone is not warranted.

Aroclor-1248 was detected in four samples with a maximum concentration of 0.35 mg/kg. Only one depth was sampled at location 39-604861; concentrations decreased with depth at locations 39-604853 and 39-61640; and increased laterally. The residential SSL was approximately 6.9 times and the industrial SSL was approximately 31 times the maximum concentration. Further sampling for vertical and lateral extent is not warranted.

Aroclor-1254 was detected in 11 samples with a maximum concentration of 0.4 mg/kg. Concentrations did not change substantially with depth at location 39-604853 (0.00215 mg/kg); only one sample depth was collected at locations 39-604859 and 39-604861; decreased with depth at locations 39-604852, 39-604854, 39-604855, and 39-604856; and increased downgradient. Where vertical extent is not defined at locations 39-604859 and 39-604861, the residential SSL was approximately 2.8–4.4 times and the industrial SSL was approximately 28–42 times the detected concentration. There is no residential risk for Aroclor-1254 (Appendix G, Table G-4.2-50). Further sampling for vertical and lateral extent of Aroclor-1254 is not warranted.

Aroclor-1260 was detected in 20 samples with a maximum concentration of 0.089 mg/kg. Concentrations increased with depth at location 39-10019; only one sample depth was collected at locations 39-10018, 39-10020, and 39-10022; decreased with depth at locations 39-604852, 39-604853, 39-604854, 39-604855, 39-604856, 39-61638, 39-61639, 39-61641, and 39-61643; and decreased laterally. The residential SSL was approximately 27 times the maximum concentration. Lateral extent of Aroclor-1260 is defined and further sampling for vertical extent is not warranted.

Benzo(k)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene were detected in one sample with concentrations of 0.042 mg/kg, 0.04 mg/kg, 0.076 mg/kg, 0.067, and 0.08 mg/kg, respectively. Only one sample depth was collected at location 39-604861; and concentrations increased downgradient. The residential SSL was approximately 360 times, 3830 times, 30,500 times, 27,600 times, and 21,700 times the maximum concentrations, respectively. Further sampling for vertical extent and lateral extent of benzo(k)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene is not warranted.

Bis(2-ethylhexyl)phthalate was detected in 10 samples with a maximum concentration of 0.225 mg/kg. Concentrations increased with depth at location 39-604853; only one sample depth was collected at location 39-604854; decreased with depth at locations 39-604852, 39-604855, and 39-604856; and increased laterally. The residential SSL was approximately 1690 times the maximum concentration. Further sampling for vertical and lateral extent of bis(2-ethylhexyl)phthalate is not warranted.

Butylbenzylphthalate was detected in one sample at a concentration of 0.077 mg/kg. Concentrations decreased with depth at location 39-604858; and decreased laterally. Vertical and lateral extent of butylbenzylphthalate is defined.

Dichlorobenzene[1,4-] was detected in two samples with a maximum concentration of 0.00074 mg/kg. Concentrations decreased with depth at locations 39-604857 and 39-604858; and decreased laterally. Vertical and lateral extent of 1,4-dichlorobenzene is defined.

Ethylbenzene was detected in three samples with a maximum concentration of 0.00043 mg/kg. Concentrations decreased with depth at locations 39-604857 and 39-604858; and decreased laterally. Vertical and lateral extent of ethylbenzene is defined.

Toluene was detected in two samples with a maximum concentration of 0.00095 mg/kg. Concentrations decreased with depth at locations 39-604857 and 39-604858; and decreased downgradient. Vertical and lateral extent of toluene is defined.

Radionuclides

No radionuclide COPCs were identified at SWMU 39-007(a).

6.6.5 Summary of Human Health Risk Screening

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 4×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.006, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 5×10^{-8}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.01, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 2×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.06, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk or noncarcinogenic hazard for the industrial, construction worker, or residential scenarios at SWMU 39-007(a).

6.6.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for SWMU 39-007(a).

6.7 SWMU 39-010 – Excavated Soil Pile

6.7.1 Site Description and Operational History

SWMU 39-010 is an area used for staging soil excavated during the 1978 construction of a firing site [SWMU 39-004(e)] at TA-39 (Plate 12). During construction of the firing site, large quantities of soil were removed and deposited in the canyon east of the firing site, forming SWMU 39-010. The site has been inactive since 1978. This soil dump, covering approximately 76,200 ft^2, was not identified in the 1990 SWMU report (LANL 1990, 007512). However, it was noted in the RFI work plan (LANL 1993, 015316) and was described in a letter notification to NMED designating a new SWMU (LANL 2001, 071215).

6.7.2 Relationship to Other SWMUs and AOCs

SWMU 39-010 is located in an isolated area, approximately 1500 ft northwest from SWMU 39-001(b). It is not impacted by or related to other SWMUs or AOCs.

6.7.3 Summary of Previous Investigations

The initial investigation of SWMU 39-010 occurred during the 2009 Phase I site investigation. Fifty-four samples were collected covering 0.0–1.0 ft bgs, 1.0–2.0 ft bgs, and 2.0–3.0 ft bgs from 18 locations across the SWMU. Samples were analyzed for inorganics, organics, and radionuclides.

6.7.4 Site Contamination

6.7.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization was required to assess potential contamination at Area 1 of SWMU 39-010. As a result, the following activities were completed as part of the 2022–2023 investigation.

- A total of 20 samples were collected from locations 39-604426, 39-604432, 39-604433, and 39-604442 to determine the extent of contamination. At each location, samples were collected at five subsurface intervals (4.0–5.0, 6.0–7.0, 9.0–10.0, 14.0–15.0, and 19.0–20.0 ft bgs).
- A total of 25 samples were collected from 5 locations across the site, on the east side of site, south of the site across the alluvial terrace, and one location downgradient of the site in the main drainage channel. At each location, samples were collected from the surface (0.0–1.0 ft bgs), and from the subsurface (2.0–3.0, 4.0–5.0, 6.0–7.0, and 9.0–10.0 ft bgs).
- Seven samples were collected from one location to the east, along the alluvial terrace. Samples were collected from the surface (0.0–1.0 ft bgs), and from the subsurface (2.0–3.0, 4.0–5.0, 6.0–7.0, 9.0–10.0, 14.0–15.0, and 19.0–20.0 ft bgs).
- A total of 120 samples were collected from 24 locations across the site, downgradient west of the site between Ancho Road and soil piles, on the east side of site, and south of the site across the alluvial terrace. At each location, samples were collected from the surface (0.0–1.0 ft bgs), and from the subsurface (2.0–3.0, 4.0–5.0, 6.0–7.0, and 9.0–10.0 ft bgs).
- A total of 41 samples were collected from 6 locations across SWMU 39-010 and extending west to the edge of Ancho Road and east along the alluvial terrace. At each location, samples were collected from the surface (0.0–1.0 ft bgs), and from the subsurface (2.0–3.0, 4.0–5.0, 6.0–7.0, 9.0–10.0, 14.0–15.0, and 19.0–20.0 ft bgs). The 19.0–20.0 ft bgs sample at location 39-61736 was canceled due to refusal at 18.5 ft bgs.
- All samples were analyzed at off-site fixed laboratories for TAL metals, nitrate, perchlorate, cyanide, VOCs, SVOCs, PCBs, explosive compounds, americium-241, isotopic uranium, isotopic plutonium, tritium, and gamma-emitting radionuclides. In addition, 1 sample was analyzed for dioxins/furans.

6.7.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at SWMU 39-010, a maximum concentration of 7.8 ppm was detected at location 39-60738 from 4.0–5.0 ft bgs. For the radiological-screening results, 72 samples exceeded twice the maximum site background levels for alpha-emitting radionuclides, and 3 samples exceeded twice the maximum site background levels for beta/gamma-emitting radionuclides. No changes were made to sampling or other activities based on field-screening results Field-screening results are in the sample collection logs (Appendix E).

6.7.4.3 Soil, Rock, and Sediment Sampling Analytical Results

Decision-level data at SWMU 39-010 consist of results from 54 soil samples collected from 18 locations during the 2009 investigation and 211 soil and 2 tuff samples collected from 40 locations during the 2022 investigation. Table 6.7-1 summarizes all samples collected and requested analyses for SWMU 39-010.

Inorganic Chemicals

A total of 267 (265 soil and 2 tuff) samples were collected and analyzed for TAL metals, nitrate, cyanide and perchlorate. Because fewer than 8 tuff samples were collected, statistical tests could not be performed on results for this medium. Table 6.7-2 presents the inorganic chemicals detected above BVs and detected inorganic chemicals with no BVs. Plate 13 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Aluminum was detected above the Qbt 2,3,4 BV (7340 mg/kg) in one sample at a concentration of 11,100 mg/kg (Figure F-47). Aluminum is retained as a COPC.

Antimony was detected above the soil BV (0.83 mg/kg) in four samples with a maximum concentration of 2.56 mg/kg (Figure F-48) and was not detected but had DLs (0.832–3.19 mg/kg) above the soil BV and Qbt 2,3,4 BV (0.5 mg/kg) in 25 soil samples and in 1 tuff sample (Figure F-49). Antimony is retained as a COPC.

Barium was detected above the Qbt 2,3,4 BV (46 mg/kg) in one sample at a concentration of 70.7 mg/kg (Figure F-50). There are too few QBT samples to support statistical comparisons. Barium is retained as COPC.

Beryllium was detected above the soil and Qbt 2,3,4 BVs (1.83 mg/kg and 1.21 mg/kg, respectively) in seven soil samples and one tuff sample with a maximum concentration of 3.9 mg/kg. The Gehan and quantile tests indicated that site concentrations of beryllium in soil were not statistically different from background (Figure F-51 and Table F-8). Tuff data was insufficient to support statistical evaluations (Figure F-52). Beryllium is retained as a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in one sample at a concentration of 0.54 mg/kg and was not detected but had DLs (0.505 mg/kg to 0.587 mg/kg) above the BV in 26 samples. The quantile and slippage tests indicated that soil concentrations of cadmium are not statistically different from BV (Figure F-53 and Table F-8). The maximum concentration was only 0.14 mg/kg above BV and was below the three highest concentrations in the soil background data set (2.6 mg/kg, 1.4 mg/kg, and 0.6 mg/kg). The maximum DL was only 0.187 mg/kg above BV and below the three highest DLs in the soil background data set (2 mg/kg, 2 mg/kg, and 2 mg/kg). Cadmium was not detected or detected above BV in 238 other samples (detected below BV in 158 samples). Cadmium is not a COPC.

Chromium was detected above the soil BV (19.3 mg/kg) in one sample at a concentration of 38.8 mg/kg. The Gehan and quantile tests indicated that soil concentrations of chromium were not statistically different than BV (Figure F-54 and Table F-8). Chromium is not a COPC.

Copper was detected above the soil BV (14.7 mg/kg) in 32 samples with a maximum concentration of 2,530 mg/kg. The Gehan and quantile tests indicated that soil concentrations of copper were not statistically different than BV (Figure F-55 and Table F-8); however, copper was retained as a COPC because the maximum detection substantially exceeded BV.

Cyanide was not detected above the soil BV (0.5 mg/kg) but had DLs (0.52–0.58 mg/kg) above BV in 20 samples. The DLs exceeded BV by only 0.06–0.08 mg/kg. Cyanide was not detected or detected above BV in 229 other samples (detected below BV in 6 samples). Cyanide is not a COPC.

Lead was detected above the soil and Qbt 2,3,4 BVs (22.3 mg/kg and 11.2 mg/kg, respectively) in 18 soil samples and 1 tuff sample with a maximum concentration of 62 mg/kg. The Gehan and quantile tests indicated site concentrations of lead in soil were not statistically different from background (Figure F-56 and Table F-8). The maximum concentration in tuff (13.2 mg/kg) was only 2.0 mg/kg greater than BV and was less than the top two background results (15.5 mg/kg and 14.5 mg/kg; Figure F-57). Lead is not a COPC.

Mercury was detected above the soil BV (0.1 mg/kg) in 45 soil samples with a maximum concentration of 11.1 mg/kg and was not detected but had DLs (0.137–0.157 mg/kg) above BV in 2 samples. The quantile and slippage tests indicated that soil concentrations of mercury were statistically different than BV (Figure F-58 and Table F-8). Mercury is retained as a COPC.

Nickel was detected above the soil BV (15.4 mg/kg) in one soil sample at a concentration of 18.7 mg/kg. The Gehan and quantile tests indicated that soil concentrations of nickel were not statistically different than BV (Figure F-59 and Table F-8). Nickel is not a COPC.

Nitrate was detected in 209 soil and 2 tuff samples with a maximum concentration of 76.1 mg/kg. Nitrate is retained as a COPC.

Perchlorate was detected in 102 soil and 1 tuff samples with a maximum concentration of 0.00893 mg/kg. Perchlorate is retained as a COPC.

Selenium was detected above the soil and Qbt 2,3,4 BV (1.52 and 0.3 mg/kg, respectively) in 35 soil samples and 2 tuff samples with a maximum concentration of 4.11 mg/kg. The Gehan and quantile tests indicated that site concentrations of selenium in soil were statistically different from background (Figure F-60 and Table F-8). Selenium is retained as a COPC.

Silver was not detected above the soil BV (1 mg/kg) but had DLs (1.01–1.19 mg/kg) above BV in five samples. The DLs exceeded BV by only 0.01–0.19 mg/kg. Silver was not detected or detected above BV in 260 other samples (detected below BV in 71 samples). Silver is not a COPC.

Zinc was detected above the soil BV (48.8 mg/kg) in 12 soil samples with a maximum concentration of 138 mg/kg. The Gehan and quantile tests indicated that soil concentrations of zinc were not statistically different than BV (Figure F-61 and Table F-8). Zinc is not a COPC.

Organic Chemicals

A total of 267 samples were collected and analyzed for SVOCs, explosive compounds and PCBs; 255 samples were analyzed for VOCs; and 1 sample was analyzed for dioxins/furans. Table 6.7-3 presents the detected organic chemicals. Plate 14 shows the spatial distribution of detected organic chemicals.

Organic chemicals detected at SWMU 39-007(a) include acenaphthene; acenaphthylene; acetone; acetonitrile; 4-amino-2,6-dinitrotoluene; 2-amino-4,6-dinitrotoluene; anthracene; Aroclor-1242; 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; chloromethane; 2-chloronaphthalene; chrysene; di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene;

diethylphthalate; 14 dioxon/furan congeners; fluoranthene; fluorene; 2-hexanone; HMX; indeno(1,2,3-cd)pyrene; 4-isopropyltoluene; methylene chloride; 1-methylnaphthalene; 2-methylnaphthalene; naphthalene; phenanthrene; pyrene; RDX; 1,3,5-triamino-2,4,6-trinitrobenzene (TATB); toluene; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; and 2,4,6-trinitrotoluene. The detected organic chemicals are retained as COPCs.

Radionuclides

A total of 267 (265 soil and 2 tuff) samples were collected and analyzed for gamma-emitting radionuclides, tritium, americium-241, isotopic uranium, and isotopic plutonium. Table 6.7-4 presents the radionuclides detected or detected above BVs/FVs. Plate 15 shows the spatial distribution of radionuclides detected or detected above BVs/FVs.

Americium-241 was detected above the soil FV (0.13 pCi/g) in one sample at an activity of 1.43 pCi/g. Americium-241 is retained as a COPC.

Cesium-137 was detected in 12 soil samples below 1.0 ft bgs with a maximum activity of 0.205 pCi/g. Cesium-137 is retained as a COPC.

Cobalt-60 was detected in two samples with a maximum activity of 1.86 pCi/g. Cobalt-60 is retained as a COPC.

Plutonium-238 was detected above the soil FV (0.023 pCi/g) in two samples with a maximum activity of 3.25 pCi/g. Plutonium-238 is retained as a COPC.

Plutonium-239/240 was detected above the soil FV(0.054 pCi/g) in two samples with a maximum activity of 13.8 pCi/g. Plutonium-239/240 is retained as a COPC.

Tritium was detected in nine samples with a maximum activity of 136 pCi/g. Tritium is retained as a COPC.

Uranium-234 was detected above the soil BV (2.59 pCi/g) in 49 samples with a maximum activity of 55 pCi/g. Uranium-234 is retained as a COPC.

Uranium-235/236 was detected above the soil and tuff BVs (0.02 pCi/g and 0.09 pCi/g, respectively) in 45 soil samples and 1 tuff sample with a maximum activity of 10.5 pCi/g. Uranium-234/236 is retained as a COPC.

Uranium-238 was detected above the soil and tuff BVs (2.29 pCi/g and 1.93 pCi/g, respectively) in 86 soil samples and 1 tuff sample with a maximum activity of 344 pCi/g. Uranium-238 is retained as a COPC.

6.7.4.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at SWMU 39-010 are discussed below. The spatial distribution of COPCs was evaluated using the data presented in Tables 6.7-2, 6.7-3, and 6.7-4 and Plates 13, 14, and 15.

Inorganic Chemicals

Inorganic COPCs at SWMU 39-010 include aluminum, antimony, barium, beryllium, copper, mercury, nitrate, perchlorate, and selenium.

Aluminum was detected above the Qbt 2,3,4 BV in one sample at a concentration of 11,100 mg/kg. Concentrations increased with depth at location 39-61732 (concentrations were below the soil BV); and increased laterally. The residential SSL was approximately 7.0 times and the industrial SSL was approximately 116 times the maximum concentration. Further sampling for vertical and lateral extent of aluminum is not warranted.

Antimony was detected above the soil BV in four samples with a maximum concentration of 2.56 mg/kg and was not detected but had DLs (0.832–3.19 mg/kg) above the soil BV and Qbt 2,3,4 BV in 25 soil samples and in 1 tuff sample. Concentrations decreased with depth at locations 39-604434, 39-61722, 39-61725, and 39-61726; and decreased laterally. The vertical and lateral extent of antimony is defined.

Barium was detected above the Qbt 2,3,4 BV in one sample at a concentration of 70.7 mg/kg. Concentrations increased with depth at location 39-61732 (concentrations were below the soil BV); and increased laterally. The residential SSL was approximately 222 times the maximum concentration. Further sampling for vertical and lateral extent of barium is not warranted.

Beryllium was detected above the soil and Qbt 2,3,4 BVs in seven soil samples and one tuff sample with a maximum concentration of 3.9 mg/kg. Concentrations increased with depth at locations 39-604437 and 39-61732; decreased with depth at locations 39-604426, 39-604442, and 39-61729; and decreased laterally. The residential SSL was approximately 40 times the maximum concentration. Lateral extent of beryllium is defined and further sampling for vertical extent is not warranted.

Copper was detected above the soil BV in 32 samples with a maximum concentration of 2,530 mg/kg. Concentrations increased with depth at location 39-604439; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 47 times the maximum concentration where vertical extent is not defined (66.7 mg/kg at location 39-604439). The lateral extent of copper is defined, and further sampling for vertical extent is not warranted.

Mercury was detected above the soil BV in 45 soil samples with a maximum concentration of 11.1 mg/kg and was not detected but had DLs (0.137–0.157 mg/kg) above BV in 2 samples. Concentrations decreased with depth at all locations; and decreased laterally. The vertical and lateral extent of mercury is defined.

Nitrate was detected in 209 soil and 2 tuff samples with a maximum concentration of 76.1 mg/kg. Concentrations increased with depth at locations 39-604432, 39-604438, 39-604439, 39-604441, 39-61707, 39-61717, 39-61718, 39-61721, 39-61722, 39-61723, 39-61729, 39-61730, 39-61736, and 39-61740; did not change substantially with depth at location 39-61728; decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 1640 times the maximum concentration. Lateral extent of nitrate is defined, and further sampling for vertical extent is not warranted.

Perchlorate was detected in 102 soil and 1 tuff samples with a maximum concentration of 0.00893 mg/kg. Concentrations increased with depth at locations 39-604432, 39-61707, 39-61710, and 39-61729; did not change substantially with depth at locations 39-604430 (0.00028 mg/kg), 39-61721 (0.00087 mg/kg), and 39-61736 (0.00011 mg/kg); decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 6140 times the maximum concentration. Lateral extent of perchlorate is defined and further sampling for vertical extent is not warranted.

Selenium was detected above the soil and Qbt 2,3,4 BV in 35 soil samples and 2 tuff samples with a maximum concentration of 4.11 mg/kg. Concentrations increased with depth at locations 39-61722, 39-61730, 39-61732, 39-61735, and 39-61739; decreased with depth at all other locations; and decreased downgradient. The residential SSL was approximately 95 times the maximum concentration. Lateral extent of selenium is defined and further sampling for vertical extent is not warranted.

Organic Chemicals

Organic COPCs at SWMU 39-010 include acenaphthene; acenaphthylene; acetone; acetonitrile; 4-amino-2,6-dinitrotoluene; 2-amino-4,6-dinitrotoluene; anthracene; Aroclor-1242; 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; chloromethane; 2-chloronaphthalene; chrysene; di-n-butylphthalate; di-n-octylphthalate; dibenz(a,h)anthracene; diethylphthalate; fluoranthene; fluorene; HMX; 14 dioxins/furans; 2-hexanone; indeno(1,2,3-cd)pyrene; 4-isopropyltoluene; methylene chloride; 1-methylnaphthalene; 2-methylnaphthalene; naphthalene; phenanthrene; pyrene; RDX; TATB; toluene; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; and 2,4,6-trinitrotoluene.

Acenaphthene was detected in eight samples with a maximum concentration of 0.311 mg/kg. Concentrations increased with depth at locations 39-61718 and 39-61733; decreased with depth at locations 39-604442, 39-61710, 39-61719, 39-61726, and 39-61742; and decreased downgradient. The residential SSL was approximately 11,200 times the maximum concentration. Lateral extent of acenaphthene is defined and further sampling for vertical extent is not warranted.

Acenaphthylene was detected in two samples with a maximum concentration of 0.00876 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at location 39-604442; and decreased laterally. The residential SSL was approximately 199,000 times the maximum concentration. Lateral extent of acenaphthylene is defined and further sampling for vertical extent is not warranted.

Acetone was detected in 13 samples with a maximum concentration of 3.16 mg/kg. Concentrations increased with depth at locations 39-61721 and 39-61732; decreased with depth at locations 39-61716, 39-61717, 39-61724, 39-61729, 39-61740, and 39-61741; and decreased downgradient. The residential SSL was approximately 21,000 times the maximum concentration. Lateral extent of acetone is defined and further sampling for vertical extent is not warranted.

Acetonitrile was detected in three samples with a maximum concentration of 0.0172 mg/kg. Concentrations increased with depth at locations 39-61731 and 39-61735; and decreased downgradient. The residential SSL was approximately 47,100 times the maximum concentration. Lateral extent of acetonitrile is defined, and further sampling for vertical extent is not warranted.

Amino-2,6-dinitrotoluene[4-] was detected in two samples with a maximum concentration of 0.016 mg/kg. Concentrations did not change substantially with depth at location 39-604439 (0.0096 mg/kg); and decreased laterally. The residential SSL was approximately 480 times the maximum concentration. Lateral extent of 4-amino-2,6-dinitrotoluene is defined, and further sampling for vertical extent is not warranted.

Amino-4,6-dinitrotoluene[2-] was detected in one sample at a concentration of 0.0099 mg/kg. Concentrations decreased with depth at location 39-604439; and decreased laterally. The vertical and lateral extent of 2-amino-4,6-dinitrotoluene is defined.

Anthracene was detected in three samples with a maximum concentration of 0.0202 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604442 and 39-61742; and decreased laterally. The residential SSL was approximately 861,000 times the maximum concentration. Lateral extent of anthracene is defined, and further sampling for vertical extent is not warranted.

Aroclor-1242 was detected in one sample at a concentration of 0.00494 mg/kg. Concentrations increased with depth at location 39-61709; and decreased downgradient. The residential SSL was approximately 490 times the maximum concentration. Lateral extent of Aroclor-1242 is defined, and further sampling for vertical extent is not warranted.

Aroclor-1254 was detected in five samples with a maximum concentration of 0.0147 mg/kg. Concentrations increased with depth at location 39-61741; decreased with depth at locations 39-604432 and 39-604435; and decreased laterally. The residential SSL was approximately 78 times the maximum concentration. Lateral extent of Aroclor-1254 is defined, and further sampling for vertical extent is not warranted.

Aroclor-1260 was detected in five samples with a maximum concentration of 0.0203 mg/kg. Concentrations decreased with depth at locations 39-604432, 39-604437, 39-604442, and 39-61739; and increased laterally. The residential SSL was approximately 120 times the maximum concentration. Vertical extent of Aroclor-1260 is defined, and further sampling for lateral extent is not warranted.

Benzo(a)anthracene was detected in 14 samples with a maximum concentration of 0.094 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61712, 39-61722, 39-61723, 39-61730, and 39-61742; and decreased laterally. The residential SSL was approximately 184 times the maximum concentration where vertical extent is not defined (0.00832 mg/kg at location 39-61733). Lateral extent of benzo(a)anthracene is defined, and further sampling for vertical extent is not warranted.

Benzo(a)pyrene was detected in 15 samples with a maximum concentration of 0.12 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61721, 39-61722, 39-61723, 39-61728, and 39-61742; and decreased laterally. The residential SSL was approximately 179 times the maximum concentration where vertical extent is not defined (0.00624 mg/kg at location 39-61733). Lateral extent of benzo(a)pyrene is defined, and further sampling for vertical extent is not warranted.

Benzo(b)fluoranthene was detected in 18 samples with a maximum concentration of 0.097 mg/kg. Concentrations did not change substantially with depth at location 39-61733 (0.00011 mg/kg); decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61721, 39-61722, 39-61723, 39-61726, 39-61728, 39-61730, 39-61737, and 39-61742; and decreased laterally. The residential SSL was approximately 245 times the maximum concentration where vertical extent is not defined (0.00624 mg/kg at location 39-61733).Lateral extent of benzo(b)fluoranthene is defined, and further sampling for vertical extent is not warranted.

Benzo(g,h,i)perylene was detected in 13 samples with a maximum concentration of 0.072 mg/kg. Concentrations did not change substantially with depth at location 39-61733 (0.00423 mg/kg); decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61722, 39-61723, 39-61726, and 39-61742; and decreased laterally. The residential SSL was approximately 24,200 times the maximum concentration. Lateral extent of benzo(g,h,i)perylene is defined, and further sampling for vertical extent is not warranted.

Benzo(k)fluoranthene was detected in 11 samples with a maximum concentration of 0.1 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61712, 39-61722, 39-61728, and 39-61742; and decreased laterally.

The residential SSL was approximately 150 times the maximum concentration. Lateral extent of benzo(k)fluoranthene is defined, and further sampling for vertical extent is not warranted.

Benzoic acid was detected in 10 samples with a maximum concentration of 0.364 mg/kg. Concentrations decreased with depth at locations 39-604426, 39-61712, 39-61721, 39-61730, 39-61732, 39-61739, and 39-61741; and increased laterally. The maximum detected concentration was detected at location 39-61730 (0.364 mg/kg), and concentrations did not decrease substantially downgradient to location 39-61441 (0.332 mg/kg). The residential SSL was approximately 687,000 times the maximum concentration. Vertical extent of benzoic acid is defined, and further sampling for lateral extent is not warranted.

Bis(2-ethylhexyl)phthalate was detected in 39 samples with a maximum concentration of 0.84 mg/kg. Concentrations increased with depth at locations 39-604437, 39-604439, 39-61719, and 39-61720; did not change substantially (0.0235 mg/kg) with depth at location 39-604432; decreased with depth at locations 39-604426, 39-604442, 39-61707, 39-61708, 39-61709, 39-61718, 39-61721, 39-61722, 39-61725, 39-61726, 39-61729, 39-61731, and 39-61734; and decreased laterally. The residential SSL was approximately 450 times the maximum concentration. Lateral extent of bis(2-ethylhexyl)phthalate is defined, and further sampling for vertical extent is not warranted.

Butylbenzylphthalate was detected in one sample at a concentration of 0.24 mg/kg. Concentrations decreased with depth at location 39-604428; and decreased laterally. The vertical and lateral extent of butylbenzylphthalate is defined.

Chloromethane was detected in two samples with a maximum concentration of 0.00154 mg/kg. Concentrations decreased with depth at locations 39-604442 and 39-61717; and decreased downgradient. The vertical and lateral extent of chloromethane is defined.

Chloronaphthalene[2-] was detected in one sample at a concentration of 0.00624 mg/kg. Concentrations increased with depth at location 39-61733; and decreased downgradient. The residential SSL was approximately 1,000,000 times the maximum concentration. Lateral extent of 2-chloronaphthalene is defined, and further sampling for vertical extent is not warranted.

Chrysene was detected in 13 samples with a maximum concentration of 0.12 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61709, 39-61710, 39-61711, 39-61722, 39-61723, 39-61728, and 39-61742; and decreased laterally. The residential SSL was approximately 1280 times the maximum concentration. Lateral extent of chrysene is defined, and further sampling for vertical extent is not warranted.

Di-n-butylphthalate was detected in 113 samples with a maximum concentration of 3.8 mg/kg. Concentrations increased with depth at locations 39-604433, 39-604437, 39-604438, 39-604439, and 39-61739; did not change substantially with depth at locations 39-61711 (0.011 mg/kg), 39-61719 (0.0097 mg/kg), 39-61720 (0.0219 mg/kg), 39-61729 (same value, 2nd to bottom depth), and 39-61730 (0.0047 mg/kg); decreased with depth at all other locations; and decreased laterally. The residential SSL was approximately 1620 times the maximum concentration. Lateral extent of di-n-butylphthalate is defined, and further sampling for vertical extent is not warranted.

Di-n-octylphthalate was detected in one sample at a concentration of 0.0214 mg/kg. Concentrations decreased with depth at location 39-61737 and decreased downgradient. The vertical and lateral extent of di-n-octylphthalate is defined.

Dibenz(a,h)anthracene was detected in five samples with a maximum concentration of 0.00728 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604442, 39-61711, and 39-61742; and decreased downgradient. The residential SSL was approximately 21 times the maximum concentration. Lateral extent of dibenz(a,h)anthracene is defined, and further sampling for vertical extent is not warranted.

Diethylphthalate was detected in one sample at a concentration of 0.0462 mg/kg. Concentrations decreased with depth at location 39-61722; and decreased laterally. The vertical and lateral extent of diethylphthalate is defined.

Fluoranthene was detected in 16 samples with a maximum concentration of 0.19 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61712, 39-61721, 39-61722, 39-61723, 39-61728, 39-61730, and 39-61742; and decreased laterally. The residential SSL was approximately 12,200 times the maximum concentration. Lateral extent of fluoranthene is defined, and further sampling for vertical extent is not warranted.

Fluorene was detected in one sample at a concentration of 0.00728 mg/kg. Concentrations increased with depth at location 39-61733; and decreased downgradient. The residential SSL was approximately 318,000 times the maximum concentration. Lateral extent of fluorene is defined, and further sampling for vertical extent is not warranted.

HMX was detected in 12 samples with a maximum concentration of 2.6 mg/kg. Concentrations increased with depth at location 39-604439; decreased with depth at locations 39-604426, 39-604432, 39-604437, 39-604441, 39-604442, and 39-61728; and decreased laterally. The residential SSL was approximately 1480 times the maximum concentration. Lateral extent of HMX is defined, and further sampling for vertical extent is not warranted.

A total of 14 dioxin/furans (TCDD toxicity equivalents) were collected from a single location at a single depth, with maximum concentrations ranging from 0.000000257 mg/kg to 0.000989 mg/kg. Only one depth was collected at location 39-604437. The toxicity equivalent SSL was approximately 52 to 7780 times the detected concentrations. Lateral extent of these congeners is defined, and further sampling for vertical extent is not warranted.

Hexanone[2-] was detected in one sample at a concentration of 0.0038 mg/kg. Concentrations increased with depth at location 39-604437; and decreased laterally. The residential SSL was approximately 52,600 times the maximum concentration. Lateral extent of 2-hexanone is defined, and further sampling for vertical extent is not warranted.

Indeno(1,2,3-cd)pyrene was detected in 12 samples with a maximum concentration of 0.065 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61722, 39-61723, 39-61726, and 39-61742; and decreased laterally. The residential SSL was approximately 24 times the maximum concentration. Lateral extent of indeno(1,2,3-cd)pyrene is defined, and further sampling for vertical extent is not warranted.

Isopropyltoluene[4-] was detected in three samples with a maximum concentration of 0.00241 mg/kg. Concentrations decreased with depth at locations 39-61729, 39-61736, and 39-61740; and increased laterally. The residential SSL was approximately 979,000 times the maximum concentration. Vertical extent of 4-isopropyltoluene is defined, and further sampling for lateral extent is not warranted.

Methylene chloride was detected in 39 samples with a maximum concentration of 0.0464 mg/kg. Concentrations increased with depth at locations 39-604433, 39-61719, 39-61720, and 39-61742; did not change substantially with depth at locations 39-61715 (0.00097 mg/kg), 39-61716 (0.0005 mg/kg) and 39-61723 (0.00051 mg/kg); decreased with depth at locations 39-604432, 39-61707, 39-61711, 39-61728, 39-61731, 39-61734, 39-61736, 39-61739, and 39-61741; and decreased downgradient. The residential SSL was approximately 8810 times the maximum concentration. Lateral extent of methylene chloride is defined, and further sampling for vertical extent is not warranted.

Methylnaphthalene[1-] was detected in four samples with a maximum concentration of 0.0207 mg/kg. Concentrations decreased with depth at locations 39-61715, 39-61716, 39-61722, and 39-61734; and decreased downgradient. The vertical and lateral extent of 1-methylnaphthalene is defined.

Methylnaphthalene[2-] and naphthalene were detected in 8 and 10 samples with maximum concentrations of 0.0304 mg/kg and 0.0984 mg/kg, respectively. Concentrations decreased with depth at all locations; and decreased downgradient. The vertical and lateral extent of 2-methylnaphthalene and naphthalene is defined.

Phenanthrene was detected in 13 samples with a maximum concentration of 0.064 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61721, 39-61722, 39-61728, 39-61730, and 39-61742; and decreased laterally. The residential SSL was approximately 28,900 times the maximum concentration. Lateral extent of phenanthrene is defined and further sampling for vertical extent is not warranted.

Pyrene was detected in 15 samples with a maximum concentration of 0.18 mg/kg. Concentrations increased with depth at location 39-61733; decreased with depth at locations 39-604441, 39-604442, 39-61710, 39-61711, 39-61712, 39-61721, 39-61722, 39-61723, 39-61730, and 39-61742; and decreased laterally. The residential SSL was approximately 9670 times the maximum concentration. Lateral extent of pyrene is defined, and further sampling for vertical extent is not warranted.

RDX was detected in seven samples with a maximum concentration of 25.3 mg/kg. Concentrations decreased with depth at locations 39-604425, 39-604426, 39-604432, 39-604437, and 39-61732; and decreased laterally. The vertical and lateral extent of RDX is defined.

TATB was detected in three samples with a maximum concentration of 0.513 mg/kg. Concentrations increased with depth at location 39-61728; decreased with depth at locations 39-61711 and 39-61722; and decreased laterally. The residential SSL was approximately 4290 times the maximum concentration. Lateral extent of TATB is defined, and further sampling for vertical extent is not warranted.

Toluene was detected in 36 samples with a maximum concentration of 0.0391 mg/kg. Concentrations increased with depth at locations 39-604433 and 39-61733; decreased with depth at locations 39-604426, 39-604432, 39-61711, 39-61721, 39-61722, 39-61724, 39-61727, 39-61728, 39-61729, 39-61732, 39-61734, 39-61735, 39-61736, 39-61740, and 39-61741; and decreased downgradient. The residential SSL was approximately 134,000 times the maximum concentration. Lateral extent of toluene is defined, and further sampling for vertical extent is not warranted.

Trimethylbenzene[1,2,4-] was detected in one sample at a concentration of 0.00666 mg/kg. Concentrations decreased with depth at location 39-61715; and decreased downgradient. The vertical and lateral extent of 1,2,4-trimethylbenzene is defined.

Trimethylbenzene[1,3,5-] was detected in three samples with a maximum concentration of 0.000857 mg/kg. Concentrations increased with depth at location 39-604438; decreased with depth at locations 39-604442 and 39-61715; and decreased downgradient. The residential SSL was approximately 315,000 times the maximum concentration. Lateral extent of 1,3,5-trimethylbenzene is defined, and further sampling for vertical extent is not warranted.

Trinitrotoluene[2,4,6-] was detected in three samples with a maximum concentration of 0.293 mg/kg. Concentrations decreased with depth at locations 39-604432 and 39-604439; and decreased laterally. The vertical and lateral extent of 2,4,6-trinitrotoluene is defined.

Radionuclides

Radionuclide COPCs at SWMU 39-010 include americium-241, cesium-137, cobalt-60, plutonium-238, plutonium-239/240, tritium, uranium-234, uranium-235/236, and uranium-238.

Americium-241 was detected above the soil FV in one sample at an activity of 1.43 pCi/g. Activities decreased with depth at location 39-61736; and decreased laterally. The vertical and lateral extent of americium-241 is defined.

Cesium-137 was detected in 12 soil samples below 1.0 ft bgs with a maximum activity of 0.205 pCi/g. Activities decreased with depth at locations 39-604426, 39-604430, 39-604431, 39-604436, 39-61714, 39-61718, 39-61726, 39-61732, 39-61734, 39-61739, and 39-61740; and decreased laterally. The vertical and lateral extent of cesium-137 is defined.

Cobalt-60 was detected in two samples with a maximum activity of 1.86 pCi/g. Activities decreased with depth at locations 39-604433 and 39-61736; and decreased laterally. The vertical and lateral extent of cobalt-60 is defined.

Plutonium-238 was detected above the soil FV in two samples with a maximum activity of 3.25 pCi/g. Activities decreased with depth at locations 39-61715 and 39-61717; and decreased downgradient. The vertical and lateral extent of plutonium-238 is defined.

Plutonium-239/240 was detected above the soil FV in two samples with a maximum activity of 13.8 pCi/g. Activities decreased with depth at locations 39-61716 and 39-61717; and decreased downgradient. The vertical and lateral extent of plutonium-239/240 is defined.

Tritium was detected in nine samples with a maximum activity of 136 pCi/g. Activities increased with depth at locations 39-604428, 39-61722 and 39-61734; did not change substantially with depth at location 39-61732; decreased with depth at locations 39-604426, 39-604436, and 39-604439; and decreased downgradient. The residential SAL was approximately 13 times the maximum activity. Lateral extent of tritium is defined, and further sampling for vertical extent is not warranted.

Uranium-234 was detected above the soil BV in 49 samples with a maximum activity of 55 pCi/g. Activities increased with depth at location 39-604439; decreased with depth at all other locations; and decreased laterally. The residential SAL was approximately 77 times the maximum activity where vertical extent is not defined (3.76 pCi/g at location 39-604439). Lateral extent of uranium-234 is defined, and further sampling for vertical extent is not warranted.

Uranium-235/236 was detected above the soil and tuff BVs in 45 soil samples and 1 tuff sample with a maximum activity of 10.5 pCi/g. Activities increased with depth at location 39-604439; decreased with depth at all other locations; and decreased laterally. The residential SAL was approximately 153 times the maximum activity where vertical extent is not defined (0.275 pCi/g at location 39-604439). Lateral extent of uranium-235/236 is defined, and further sampling for vertical extent is not warranted.

Uranium-238 was detected above the soil and tuff BVs in 86 soil samples and 1 tuff sample with a maximum activity of 344 pCi/g. Activities increased with depth at locations 39-604439; did not change substantially with depth at location 39-604441 (0.1 pCi/g); decreased with depth at all other locations; and decreased laterally. The residential SAL was approximately 16 times the maximum activity where vertical extent is not defined (9.24 pCi/g at location 39-604441). Lateral extent of uranium-238 is defined, and further sampling for vertical extent is not warranted.

6.7.5 Summary of Human Health Risk Screening

Industrial Scenario

The total excess chemical cancer risk for the industrial scenario is 1×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.01, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.5 mrem/yr.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 2×10^{-8}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 10 mrem/yr.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 1×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 30 mrem/yr.

Based on the risk-screening assessment results, there is no potential unacceptable chemical cancer risk, noncarcinogenic hazard, or dose for the industrial worker or construction worker scenario. However, there is a potential unacceptable radionuclide dose for the residential scenario, but no unacceptable carcinogenic risk and noncarcinogenic hazard.

6.7.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, the relationship of detected concentrations and screening levels to background concentrations, and multiple lines of evidence, no potential unacceptable ecological risk exists for SWMU 39-010.

6.8 SWMU 39-001(a) – Stockpile

This section describes historic activities at the SWMU 39-001(a) stockpile area but does not include an evaluation of nature and extent or risk because the site was previously reported as having no further action required.

6.8.1 Site Description and Operational History

During cleanup activities at the SWMU 39-001(a) landfill in 2009, debris and contaminated soil were stockpiled prior to packaging and shipping for off-site disposal. The stockpile area was located approximately 40 ft north of the northern boundary of the 2009 SWMU 39-001(a) excavation (Figure 6.8-1), consisted of approximately 2800 yd^3, and covered an irregularly shaped area of 8345 ft^2. The contaminated soil and debris were characterized and transported off-site by truck for disposal at the Energy Solutions disposal facility in Clive, Utah, and the Clean Harbors facility in Painted Desert, Colorado (LANL 2010, 108500.11).

6.8.2 Relationship to Other SWMUs and AOCs

SWMU 39-001(a) stockpile area was located approximately 40 ft north of the northern boundary of the 2009 SWMU 39-001(a) excavation. The stockpile area is not impacted by other SWMUs or AOCs.

6.8.3 Summary of Previous Investigations

Sampling was performed in 2010 to characterize residual contamination remaining on the ground surface at the SWMU 39-001(a) stockpile. Surface soil samples indicated that PCB contamination existed at concentrations exceeding the default 2005 Consent Order PCB cleanup level of 1.0 mg/kg. Between June and October 2017, additional step-out sampling was completed to ensure that the lateral extent of contaminated soil had been delineated.

In 2017, ACAs were conducted at the former waste stockpile areas and the former capacitor staging areas at SWMU 39-001(a). The scope of the ACA was to complete extent sampling, remove all contaminated soil, and collect confirmation samples to verify removal of all contaminated soil. In August, September, and October of 2017, approximately 810 yd^3 of contaminated soil was excavated in an incremental manner. Confirmation samples were collected and submitted for laboratory analysis of lead, PCBs, and isotopic uranium. Areas that exhibited unacceptable levels of residual contamination (PCBs) were excavated and resampled until cleanup objectives had been met. In total, 76 confirmation samples were collected and analyzed. In the approved ACA report, it was concluded that the lateral extent of residual contamination had been defined at the former waste stockpile area at SWMU 39-001(a) and all cleanup levels had been met (LANL 2018, 602861; NMED 2018, 602930).

6.9 SWMU 39-001(b) – Stockpile

This section describes the historic activities at the SWMU 39-001(b) stockpile area but does not include an evaluation of nature and extent or risk because this site was previously reported as having no further action required.

6.9.1 Site Description and Operational History

Activities conducted during the 2009 cleanup of the SWMU 39-001(b) landfill included excavation and stockpiling of debris and contaminated soil from the disposal trench within the area of contamination established north of the trench excavation prior to packaging and shipping this waste material for off-site disposal. The former waste stockpile area at SWMU 39-001(b) was located approximately 30 ft north of the northern boundary of the 2009 SWMU 39-001(b) excavation (Figure 6.9-1). At the completion of the excavation of the SWMU 39-001(b) landfill, the waste stockpile area consisted of approximately 9450 yd^3 of material and covered an irregularly shaped area of about 24,212 ft^2. The contaminated soil and debris staged in the waste stockpile area were transported off-site by truck for disposal at the Energy Solutions disposal facility in Clive, Utah, and the Clean Harbors facility in Painted Desert, Colorado, based on characterization results (LANL 2010, 108500.11).

6.9.2 Relationship to Other SWMUs and AOCs

SWMU 39-001(b) stockpile area was located approximately 30 ft north of the northern boundary of the 2009 SWMU 39-001(a) excavation. The stockpile area is not impacted by other SWMUs or AOCs.

6.9.3 Summary of Previous Investigations

In 2017, ACAs were conducted at the former waste stockpile areas and the former capacitor staging areas at SWMU 39-001(a). The scope of the ACAs was to complete extent sampling, remove all contaminated soil, and collect confirmation samples to verify removal of all contaminated soil. Extensive sampling of surface soil was performed to characterize residual contamination and determine whether additional cleanup was required. A total of 88 samples were collected and analyzed for PCBs; the results of which were used to guide the removal of an additional 41 yd^3 of contaminated soil and to confirm that residual PCB concentrations were below the default 2005 Consent Order PCB cleanup level of 1.0 mg/kg. In the approved ACA report, it was concluded that the lateral extent of residual contamination had been defined at the former waste stockpile area at SWMU 39-001(b) and all cleanup levels had been met (NMED 2018, 602930).

6.10 SWMU 39-001(a) – Capacitor Storage Areas

This section describes the historic investigation activities at the 39-001(a) capacitor storage areas but does not include an evaluation of nature and extent or risk because these sites were previously reported as having no further action required.

6.10.1 Site Description and Operational History

Two areas located along the eastern boundary of SWMU 39-001(a), within the designated area of contamination at SWMU 39-001(a), were used to stage electrical capacitors removed from the SWMU 39-001(a) landfill (Figure 6.10-1). In June 2009, a release of PCB-contaminated oil was discovered while the capacitors were being staged on-site. The Laboratory notified EPA and the National Response Center of this release on June 29, 2009, and began cleanup of the site in accordance with the Toxic Substances Control Act self-implementing cleanup process. The capacitors were removed from each staging area, and were packaged in a single drum with absorbent and shipped off-site for disposal at the Clean Harbors facility in Painted Desert, Colorado, based on characterization results. All soil with visible oil staining was removed and containerized. The total volumes of soil removed were approximately 15 yd^3 at the northern capacitor staging area and 20 yd^3 at the southern capacitor staging area. Excavated soil was placed on the waste stockpile at SWMU 39-001(a) and was subsequently removed and disposed of off-site in 2010 (LANL 2010, 108500.11).

6.10.2 Relationship to Other SWMUs and AOCs

SWMU 39-001(a) capacitor storage areas were located along the eastern boundary of former landfill 39-001(a). The capacitor storage areas were not impacted by other SWMUs or AOCs.

6.10.3 Summary of Previous Investigations

Based on waste characterization data, PCBs are the only type of contamination associated with the former capacitor staging areas at SWMU 39-001(a). The total volumes of soil removed during 2009 were approximately 15 yd^3 at the northern capacitor staging area and 20 yd^3 at the southern capacitor staging area. Excavated soil was placed on the waste stockpile located at SWMU 39-001(a) and was subsequently removed and disposed of off-site in 2010 (LANL 2010, 108500.11).

In 2017, ACAs were conducted at the former waste stockpile areas and the former capacitor staging areas at SWMU 39-001(a). The scope of the ACAs was to complete extent sampling, remove all contaminated soil, and collect confirmation samples to verify removal of all contaminated soil. The former waste capacitor staging areas were also sampled and excavated in a similar fashion as the former waste stockpile areas. Step-out sampling was completed to ensure that the lateral extent of contamination was defined. Surface soil confirmation samples were collected and submitted for laboratory analysis of PCBs. Residual levels of PCBs were below the 1.0 mg/kg cleanup level. In total, 37 samples were collected and analyzed. No additional remediation activities were conducted at the former capacitor staging areas at SWMU 39-001(a).

The ACAs concluded that the lateral and vertical extent of residual PCB contamination had been defined and the 1.0 mg/kg PCB cleanup level had been met at the former capacitor staging areas at SWMU 39-001(a) (LANL 2018, 602861).

7.0 CONCLUSIONS

7.1 Nature and Extent of Contamination

The nature and extent of contamination have been defined, and/or no further sampling for extent is warranted for the following sites:

- SWMU 39-001(a) Landfill
- SWMU 39-002(a) Storage Area
- AOC 39-002(b) Storage Area
- SWMU 39-006(a) Septic System
- SWMU 39-007(a) Storage Area
- SWMU 39-010 Excavated Soil Pile

7.2 Summary of Risk-Screening Assessments

A total of six SWMUs/AOCs were evaluated for potential risk by human health risk-screening assessments by ecological risk-screening assessments.

7.2.1 Human Health Risk-Screening Assessment

For the industrial scenario, total excess cancer risks were less than the NMED target risk of 1×10^{-5}, HIs were less than the target of 1, and estimated doses were below the target of 25 mrem/yr at all SWMUs/AOCs evaluated. The surface interval of SWMU 39-001(a) was previously excavated and backfilled with clean soil. Samples were available only from depths greater than 0.0–1.0 ft bgs. Therefore, the industrial scenario was not evaluated for SWMU 39-001(a).

For the construction worker scenario, all sites had total excess cancer risks less than the NMED target risk of 1 × 10^{-5}, HIs were less than the target of 1, and estimated doses were below the target of 25 mrem/yr.

For the residential scenario, all sites had total excess cancer risks less than the NMED target risk of 1 × 10^{-5} except Area 1 of SWMU 39-002(a), Area 2 of SWMU 39-002(a) and AOC 39-002(b), which had cancer risks of

- Area 1 of SWMU 39-002(a): 7 × 10^{-5}, due to benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene);
- Area 2 of SWMU 39-002(a): 2 × 10^{-5}, due to Aroclor-1254 and PAHs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene; and
- AOC 39-002(b): 2 × 10^{-5}, due to Aroclor-1248.

All sites had HIs less than or equal to the target hazard of 1, except Area 1 of SWMU 39-002(a), which had an HI of 2. All sites had estimated doses below the target of 25 mrem/yr except SWMU 39-010, which had a radiological dose of 30 mrem/yr due primarily to cobalt-60 (18 mrem/yr). Although residential cancer risk at Area 1 of SWMU 39-002(a), Area 2 of SWMU 39-002(a) and AOC 39-002(b), residential hazard at Area 1 of SWMU 39-002(a); and residential dose at SWMU 39-010 exceed current risk, hazard, and dose thresholds, the sites currently are under institutional control and land use will remain industrial for the foreseeable future. Therefore, no further action is recommended based on residential risk at this time.

Lead was identified as a COPC at two sites but did not exceed protective soil concentrations for the industrial, construction worker, or residential scenarios.

No sites within the North Ancho Canyon Aggregate Area are accessible to the public and none are 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. If DOE's plans for releasing these areas change, an ALARA evaluation will be conducted at that time.

7.2.2 Ecological Risk-Screening Assessment

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, and COPECs without ESLs, no potential ecological risks to the Mexican spotted owl, gray fox, American kestrel, American robin, mountain cottontail, montane shrew, deer mouse, earthworm, or generic plant exist at SWMU 39-001(a), Area 1 of SWMU 39-002(a), Area 2 of SWMU 39-002(a), Area 3 of SWMU 39-002(a), AOC 39-002(b), SWMU 39-006(a), SWMU 39-007(a), and SWMU 39-010 at North Ancho Canyon Aggregate Area.

8.0 RECOMMENDATIONS

The determination of site status is based on the results of the risk-screening assessments and the nature and extent evaluation. Depending upon the decision scenario used, the sites are recommended for corrective actions complete either with or without controls. The residential scenario is the only scenario under which corrective action complete without controls is applicable; that is, the site meets cleanup objectives for human health, poses no unacceptable risk to ecological receptors, and no additional corrective actions or conditions are necessary. The other decision scenarios (industrial, construction worker, and recreational) result in corrective action complete with controls; that is, some type of institutional controls must be in place to ensure that land use remains consistent with site cleanup levels.

The current and reasonably foreseeable future land use for the North Ancho Canyon Aggregate Area is industrial.

8.1 Recommendations for Corrective Actions Complete

8.1.1 Corrective Actions Complete without Controls

Three SWMUs do not pose a potential unacceptable risk or dose to human health under the industrial, construction worker, and residential scenarios and have no potential ecological risks. The nature and extent of contamination is defined for these sites, and/or no further sampling for extent is warranted (Table 8.1-1). These sites are appropriate for corrective actions complete without controls:

- SWMU 39-001(a), Inactive Landfill,
- SWMU 39-006(a), Septic System, and
- SWMU 39-007(a), Storage Area.

8.1.2 Corrective Actions Complete with Controls

Three SWMUs do not pose a potential unacceptable risk or dose to human health under the industrial or construction worker scenarios and have no ecological risk, but do pose unacceptable risk or dose to human health under the residential scenario. The nature and extent of contamination is defined for these sites and/or no further sampling for extent is warranted (Table 8.1-1). These sites are appropriate for corrective actions complete with controls:

- SWMU 39-002(a), Storage Areas,
- AOC 39-002(b), Storage Area, and
- SWMU 39-010, Soil Stockpile.

9.0 REFERENCES AND MAP DATA SOURCES

9.1 References

The following reference list includes documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. ERIDs were assigned by Los Alamos National Laboratory's (the Laboratory's) Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory's Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B (IDs 700000 and above).

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9.2 Map Data Sources

Data sources for all figures are provided below, unless otherwise indicated on the figures themselves.

Sample location: As published, N3B/T2S, GIS projects folder; \\n3b-fs01\n3b-shares) (Q: GIS DATA) Project: 20-0006; project_data.gdb; point feature dataset; xy_locations_33_011_a; July 2021.

SWMU or AOC boundary: As published; Triad SDE Spatial Geodatabase: GISEMPRD1\PUB.regulatory\PUB.prs_all_reg_admin; July 2021.

Structures: As published; Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Infrastructure\PUB.structures_poly; July 2021.

Former structures: As published; Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Infrastructure\PUB.FRMR_structures_ply; July 2021.

Fences: As published; Triad SDE Spatial Geodatabase: GISPUBPRD1\PUB.Infrastructure\PUB.fences_arc; July 2021.

Paved road centerline: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Infrastructure\PUB.RoadCL; July 2021.

Paved road: As published; Triad SDE Spatial Geodatabase: GISPUBPRD1\PUB.Infrastructure\PUB.paved_rds_arc; July 2021.

Unpaved road: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Infrastructure\PUB.dirt_rds_arc; July 2021.

Index and terrain contours (10- and 2-ft Interval): As published, N3B/T2S, GIS projects folder; \\n3b-fs01\n3b-shares) (Q: GIS DATA) Project 21-0003; project_data.gdb; contour_2ft; July 2021.

Communication line: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Utilities\PUB.Comm_Arc; July 2021.

Electric line: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Utilities\PUB.SW_GravityMain; July 2021.

Secondary utility: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Utilities\PUB.SecondaryUtilLines; July 2021.

Gas line: As published, N3B/T2S, GIS projects folder; \\n3b-fs01\n3b-shares) (Q: GIS DATA) Project: 20-0006; project_data.gdb; merge_gas; July 2021.

Sewer line: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Utilities\PUB.SW_GravityMain; July 2021.

Steam line: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Utilities\PUB.steam_arc; July 2021.

Water line: As published, N3B/T2S, GIS projects folder; \\n3b-fs01\n3b-shares) (Q: GIS DATA) Project: 20-0006; project_data.gdb; merge_water; July 2021.

Landscape feature: As published, Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Infrastructure\PUB.landscape_arc; July 2021.

Tech areas: As published; Triad SDE Spatial Geodatabase: GISPUBPRD1\PUB.Boundaries\PUB.tecareas; July 2021.

LANL boundary: As published; Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Boundaries\PUB.lanlarea; July 2021.

Drainage: As published; Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.Hydrology\PUB.EM_sw_watercourse; July 2021.

Aggregate area: As published; Triad SDE Spatial Geodatabase: gispubprd1.sde\PUB.regulatory\PUB.aggregate_area; July 2021.

Excavation boundary: As published, N3B/T2S, GIS projects folder; \\n3b-fs01\n3b-shares) (Q: GIS DATA) Project: 21-0006; project_data.gdb; poly; excavtion_boundaries; July 2021.

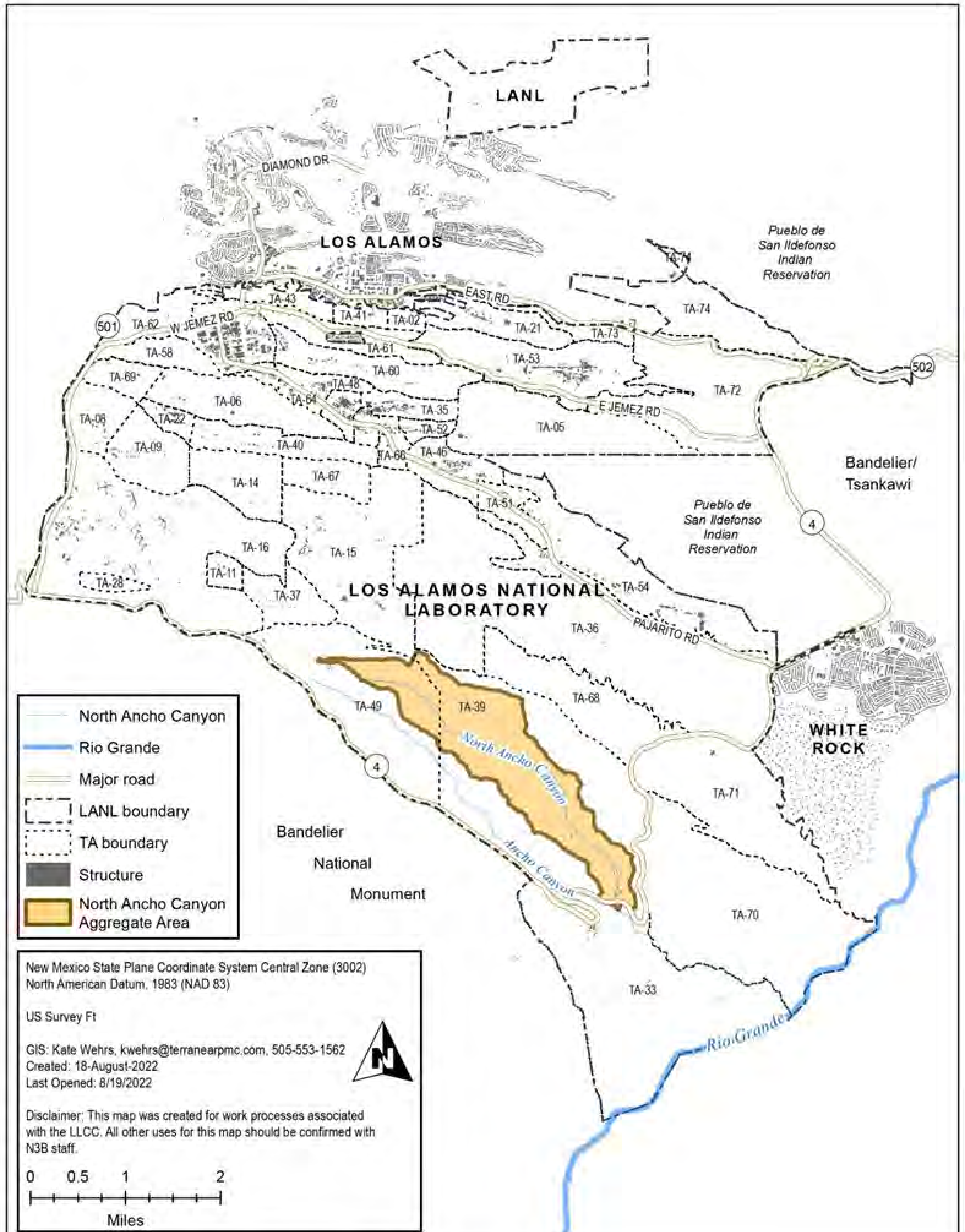

Figure 1.1-1 Location of North Ancho Canyon Aggregate Area with respect to Laboratory technical areas

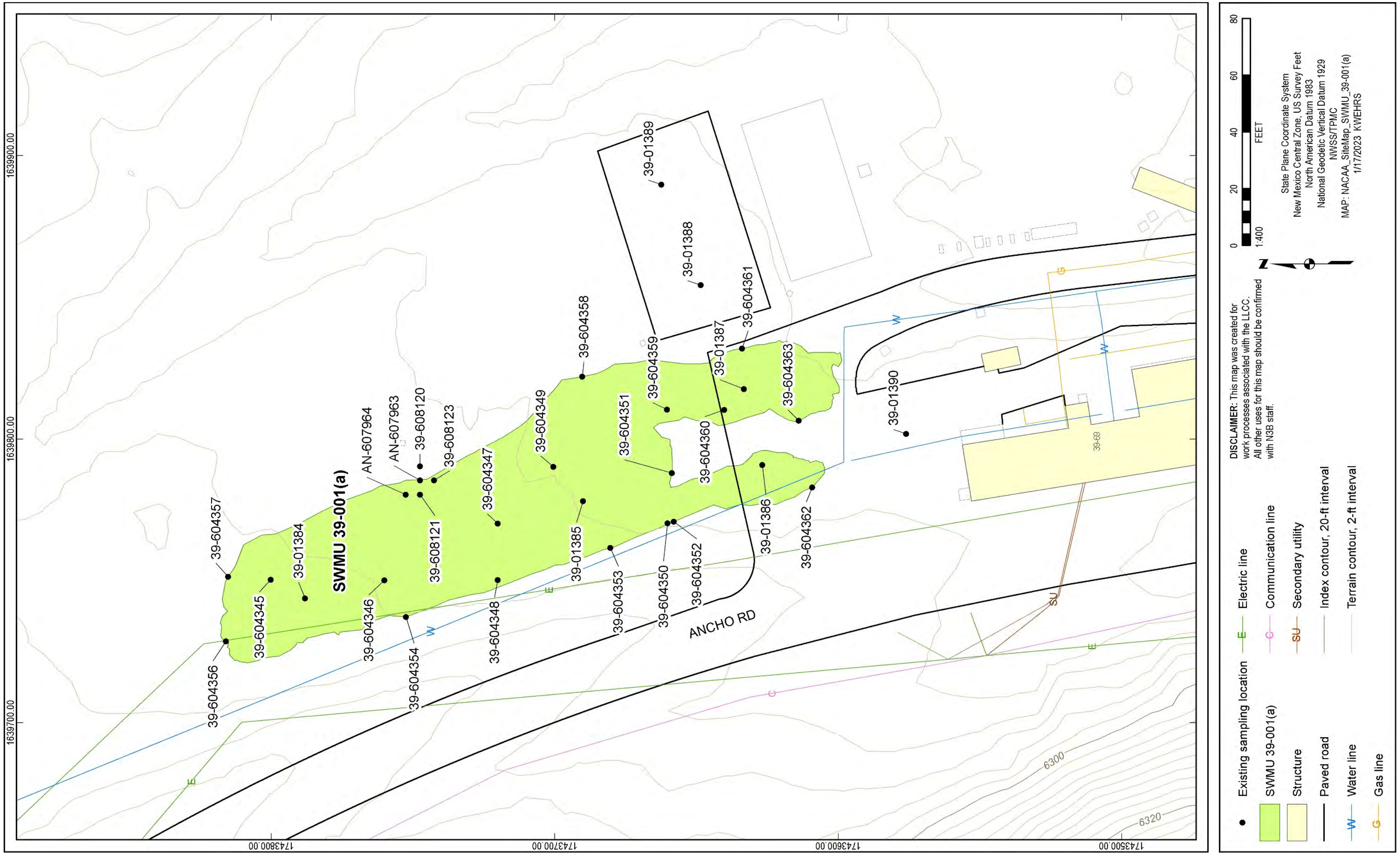

Figure 6.2-1 Site map and sampling locations at SWMU 39-001(a)

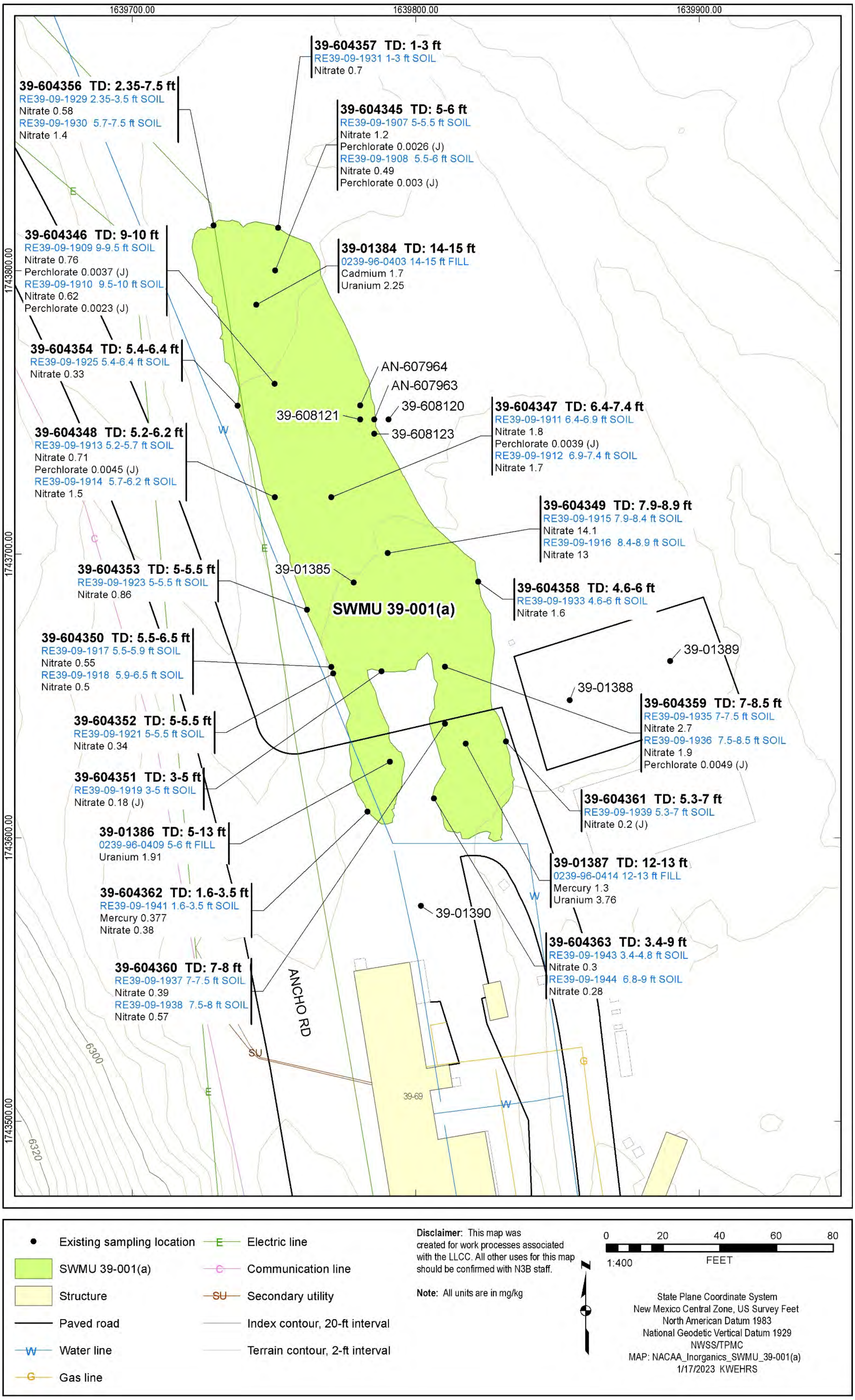

Figure 6.2-2 Inorganic chemicals detected above BVs at SWMU 39-001(a)

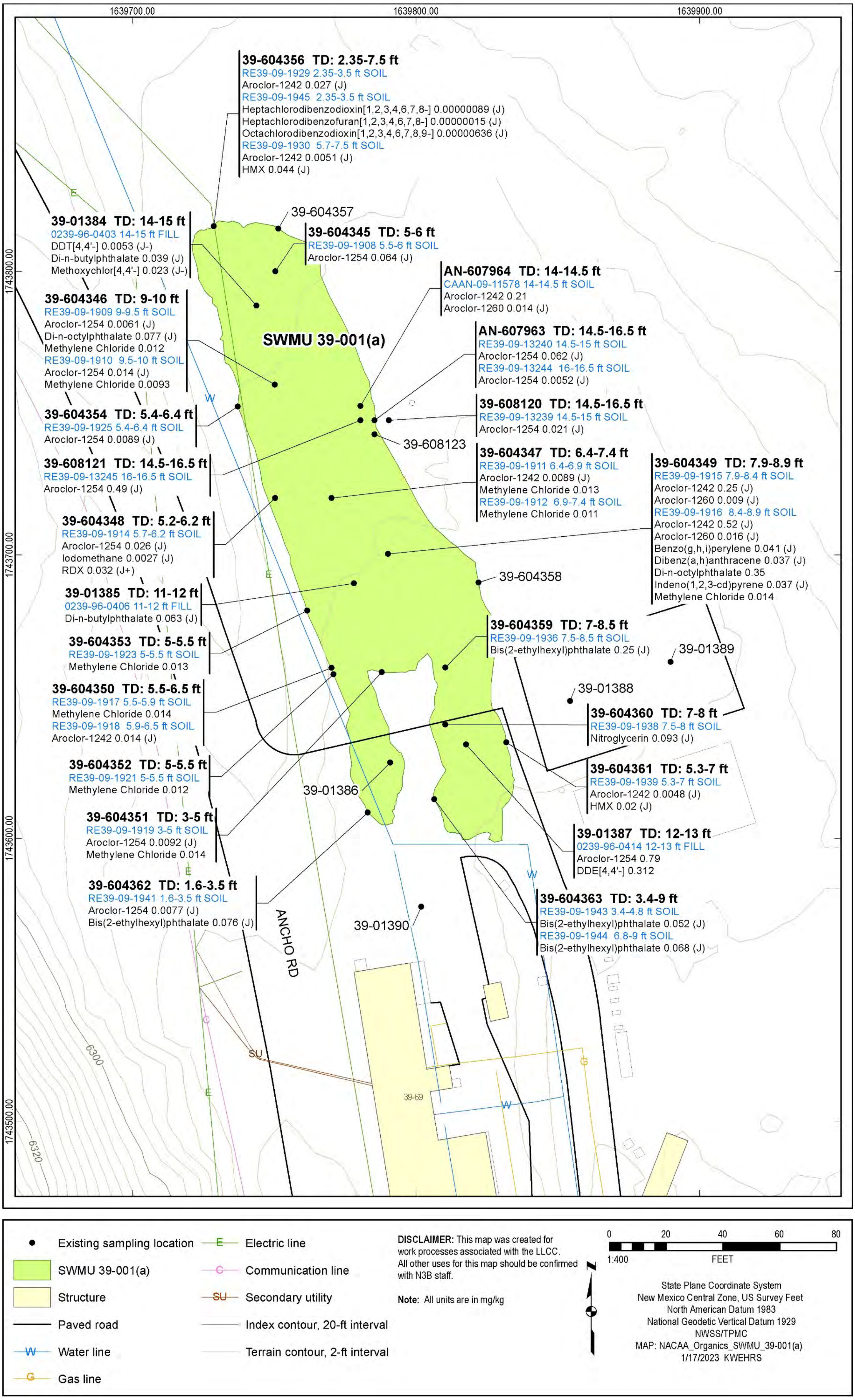

Figure 6.2-3 Organic chemicals detected at SWMU 39-001(a)

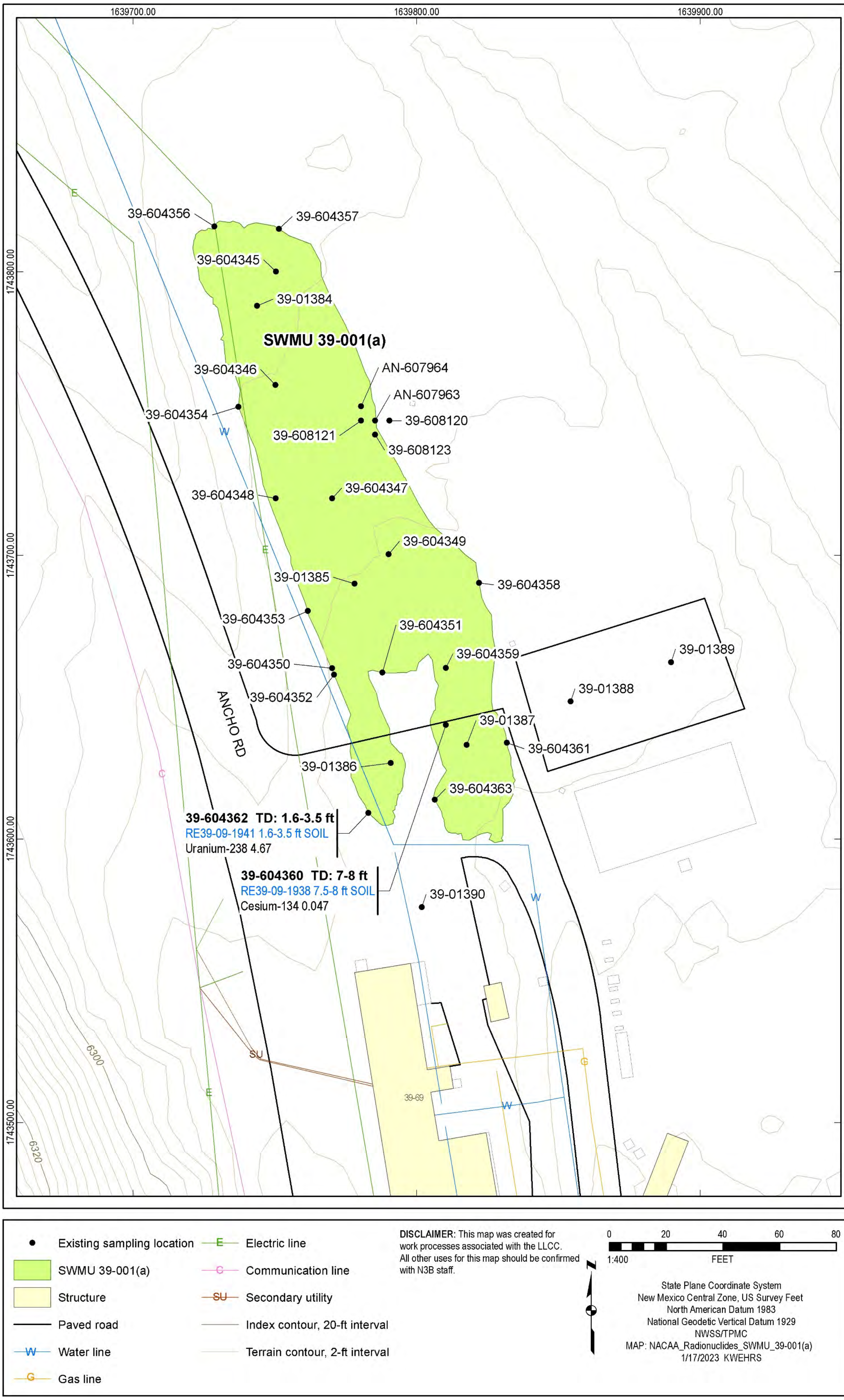

Figure 6.2-4 Radionuclides detected or detected above BVs/FVs at SWMU 39-001(a)

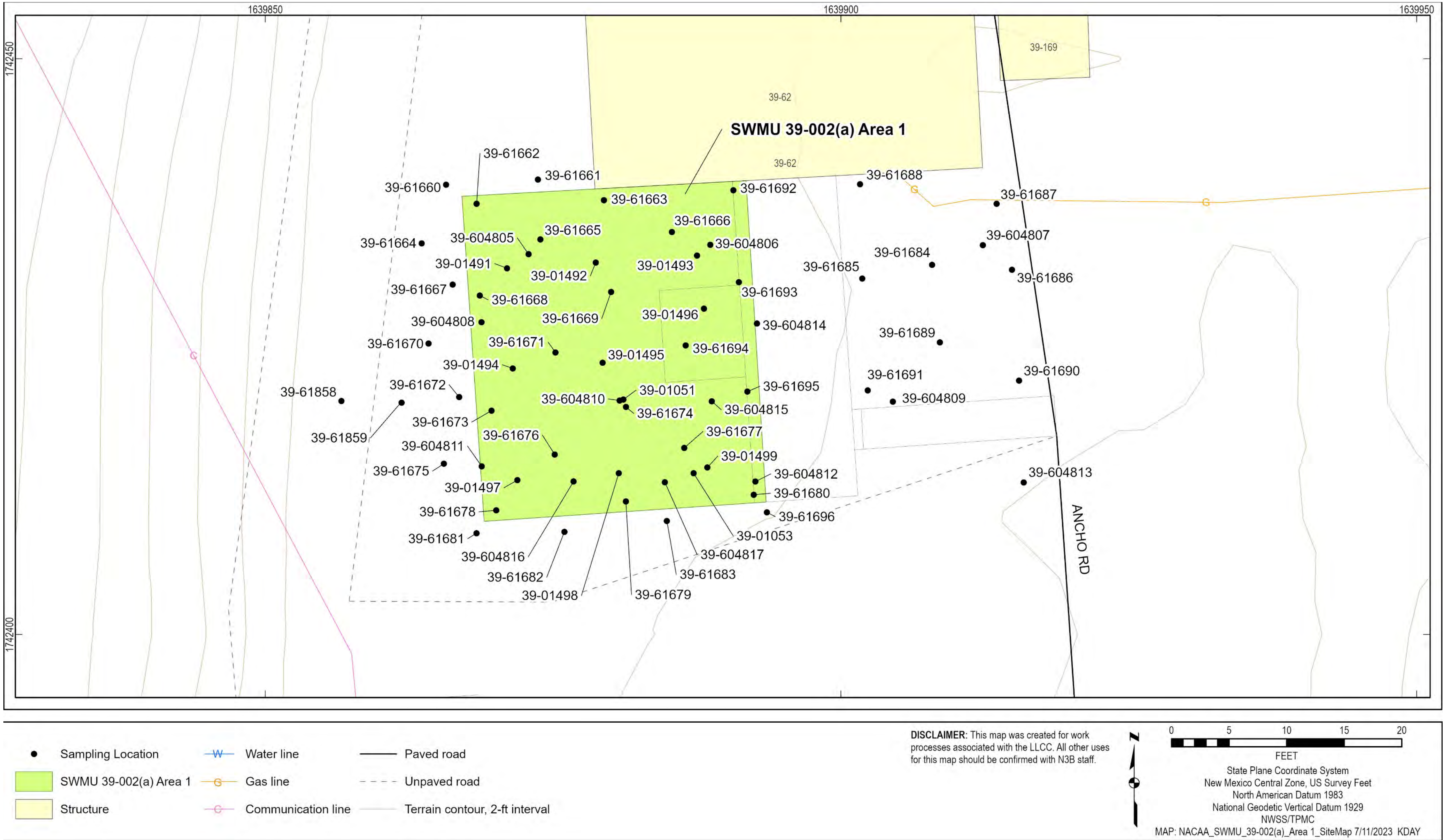

Figure 6.3-1 Site map and sampling locations at Area 1 of SWMU 39-002(a)

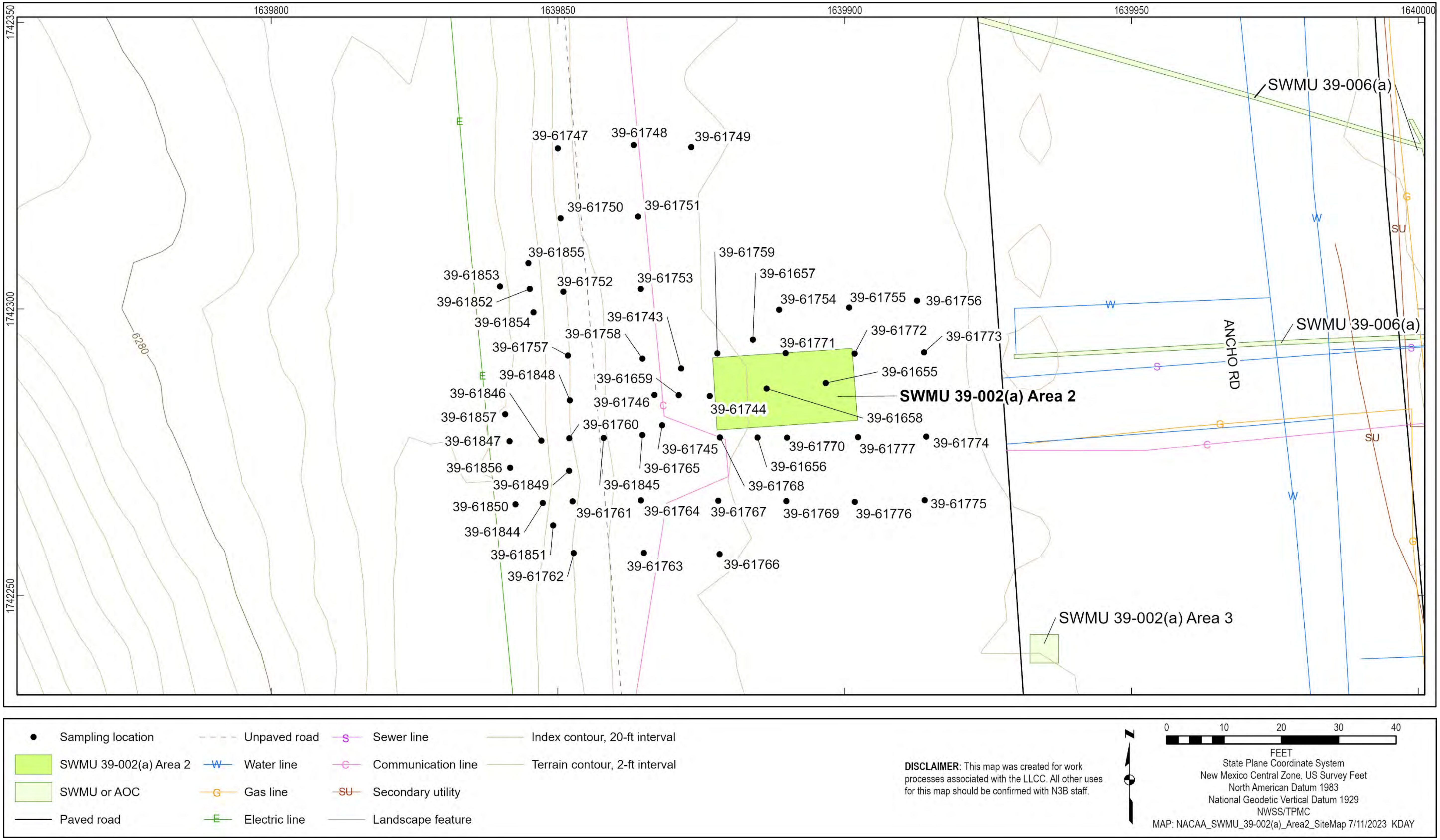

Figure 6.3-2 Site map and sampling locations at Area 2 of SWMU 39-002(a)

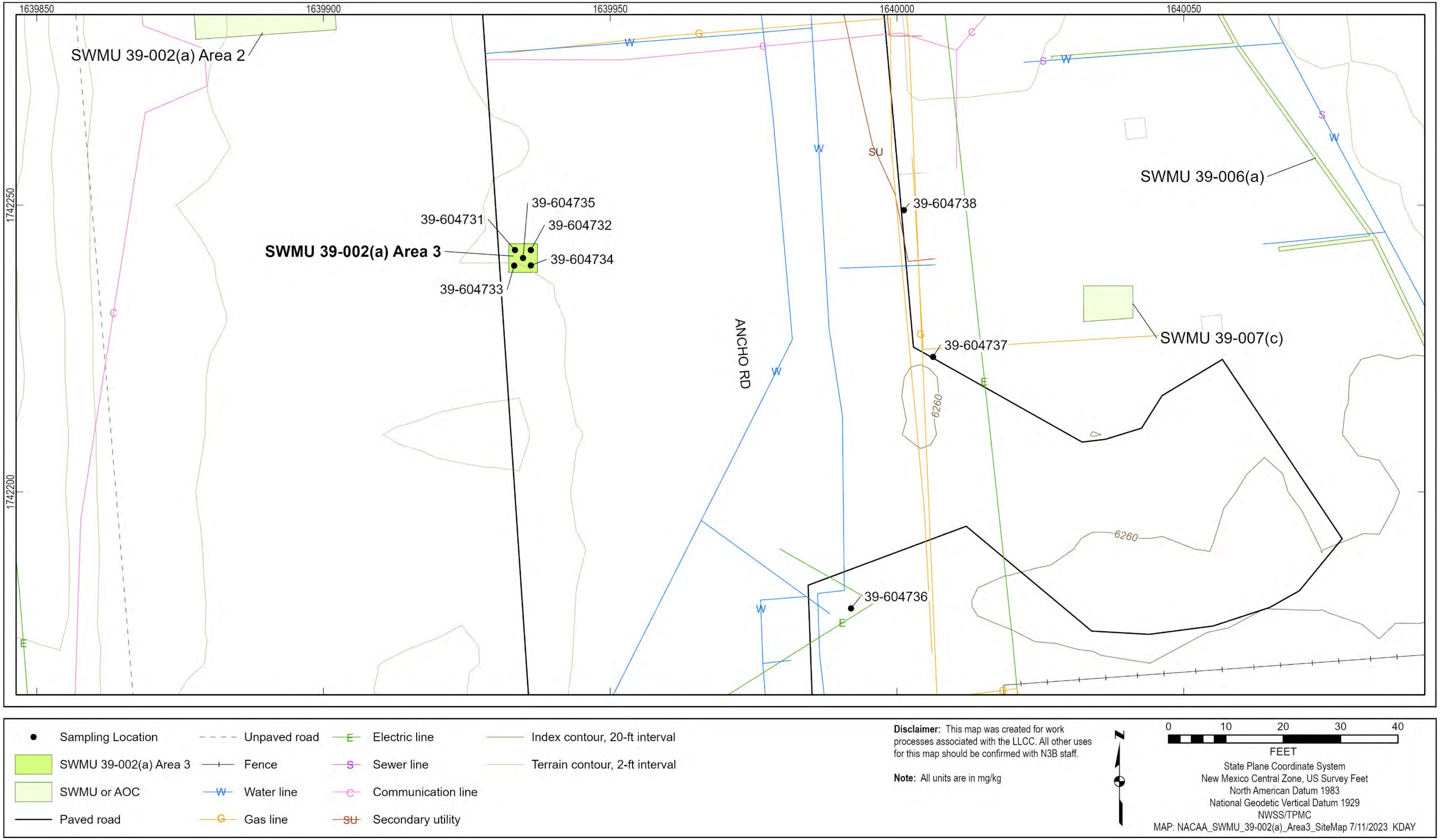

Figure 6.3-3 Site map and sampling locations at Area 3 of SWMU 39-002(a)

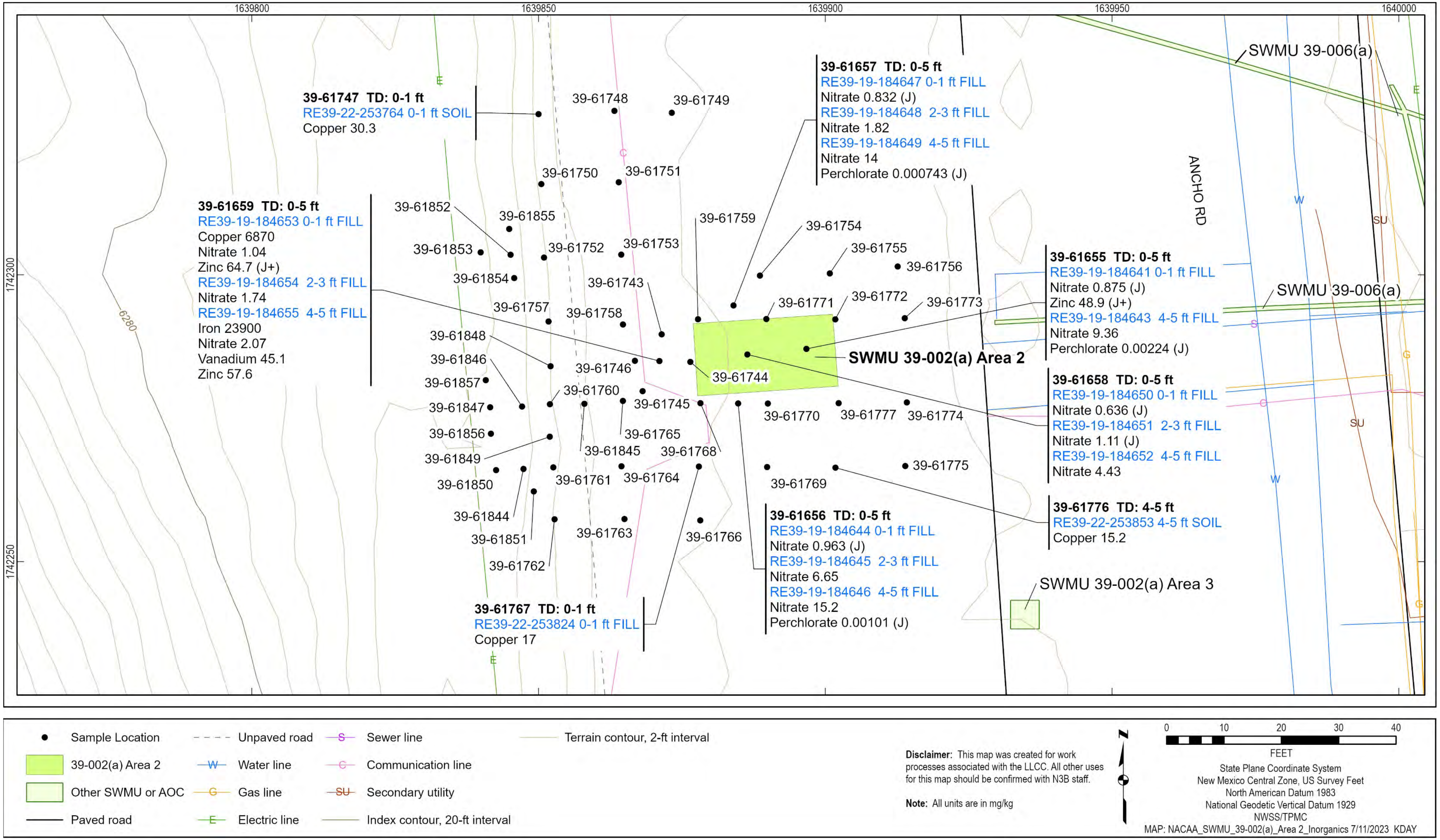

Figure 6.3-4 Inorganic chemicals detected above BVs/FVs at Area 2 of SWMU 39-002(a)

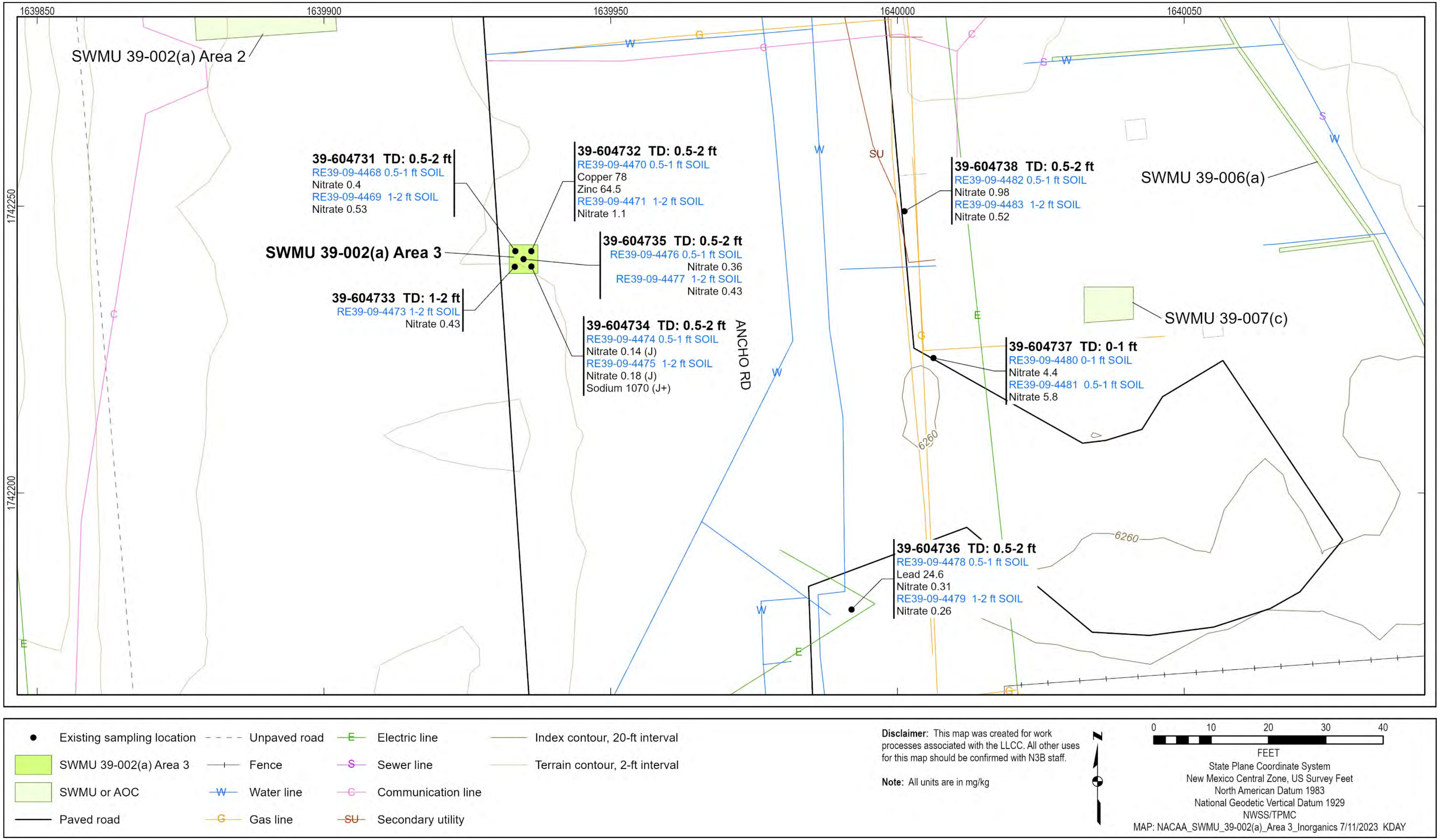

Figure 6.3-5 Inorganic chemicals detected above BVs at Area 3 of SWMU 39-002(a)

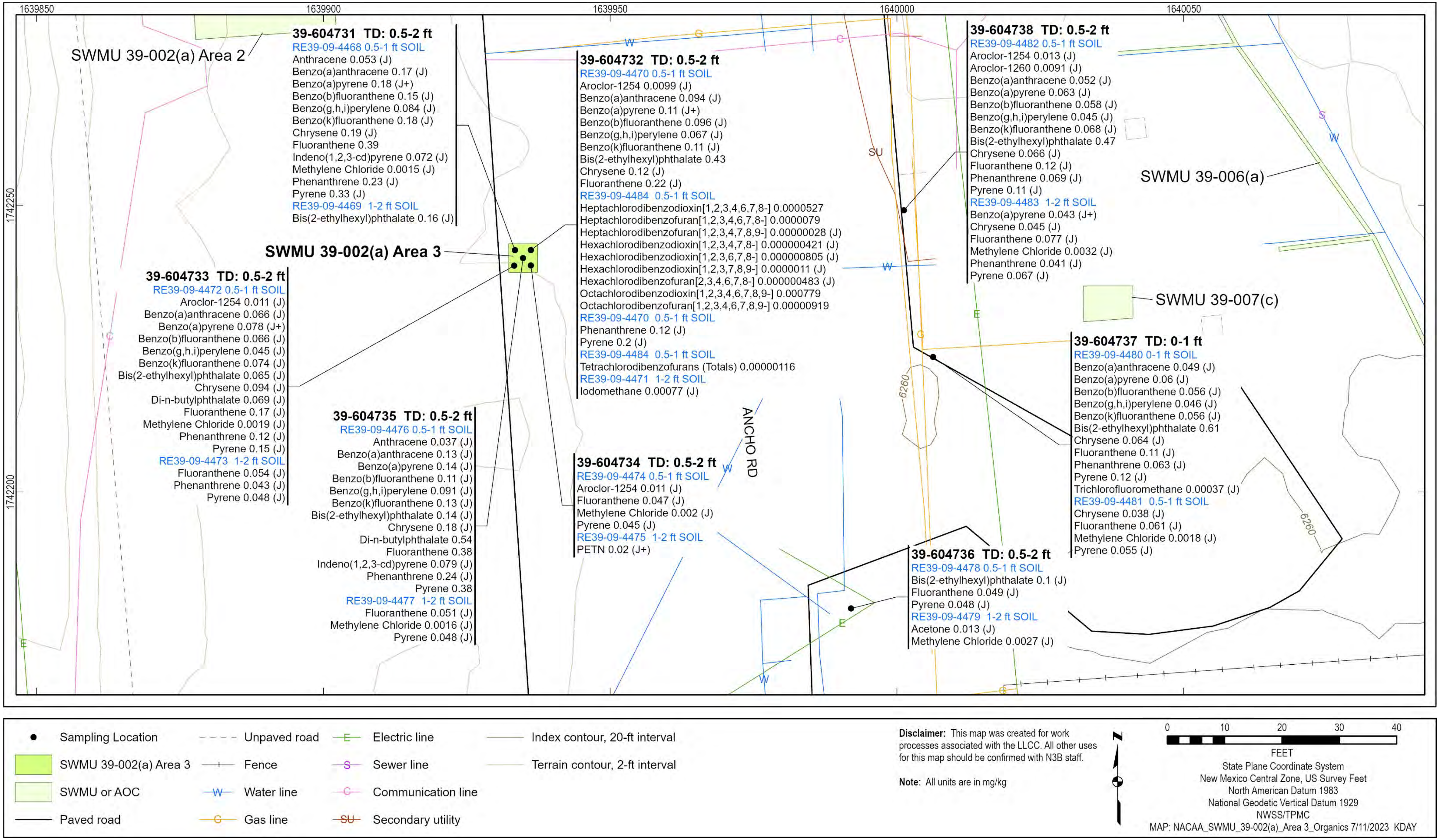

Figure 6.3-6 Organic chemicals detected at Area 3 of SWMU 39-002(a)

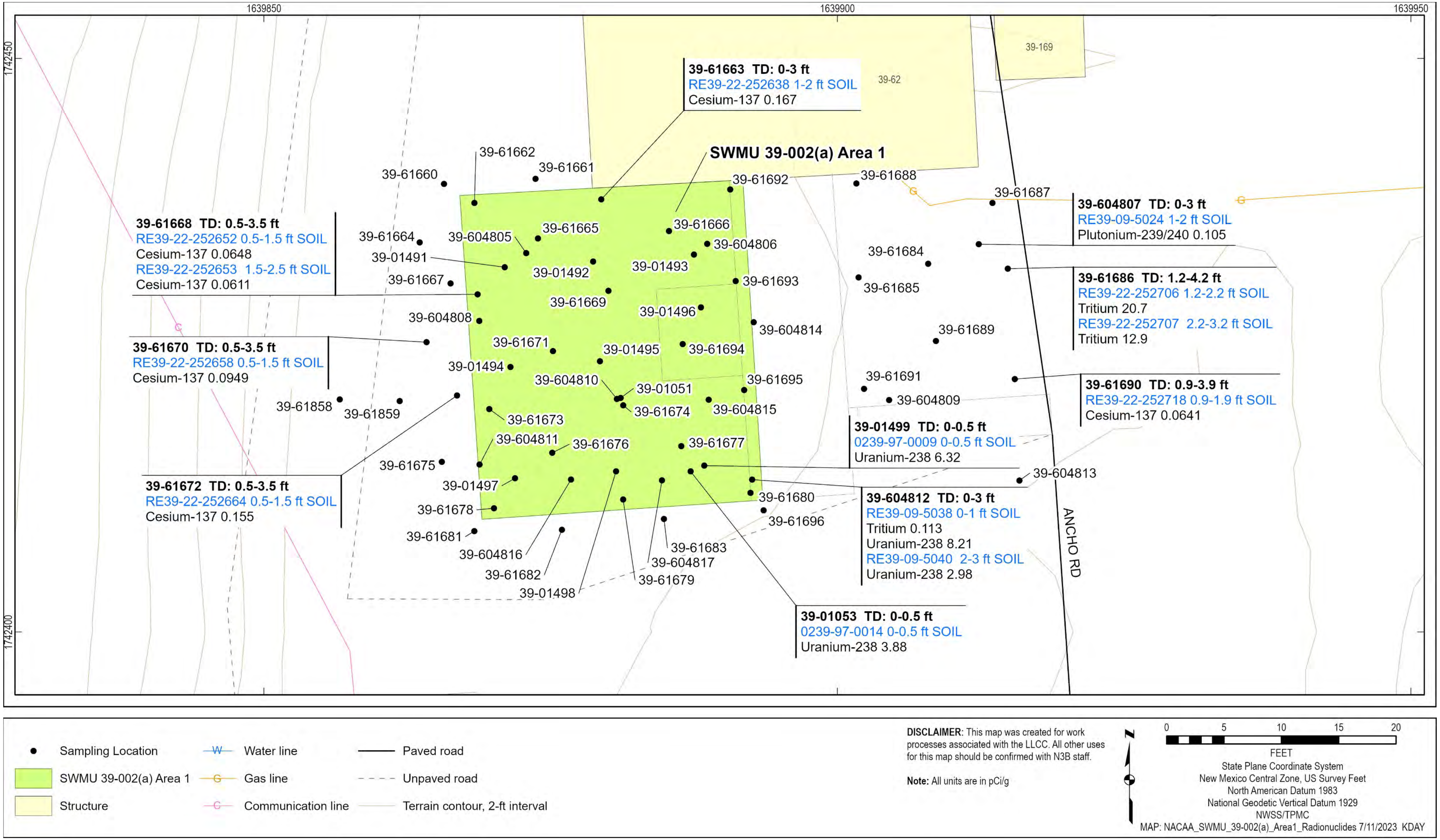

Figure 6.3-7 Radionuclides detected or detected above BV/FV at Area 1 of SWMU 39-002(a)

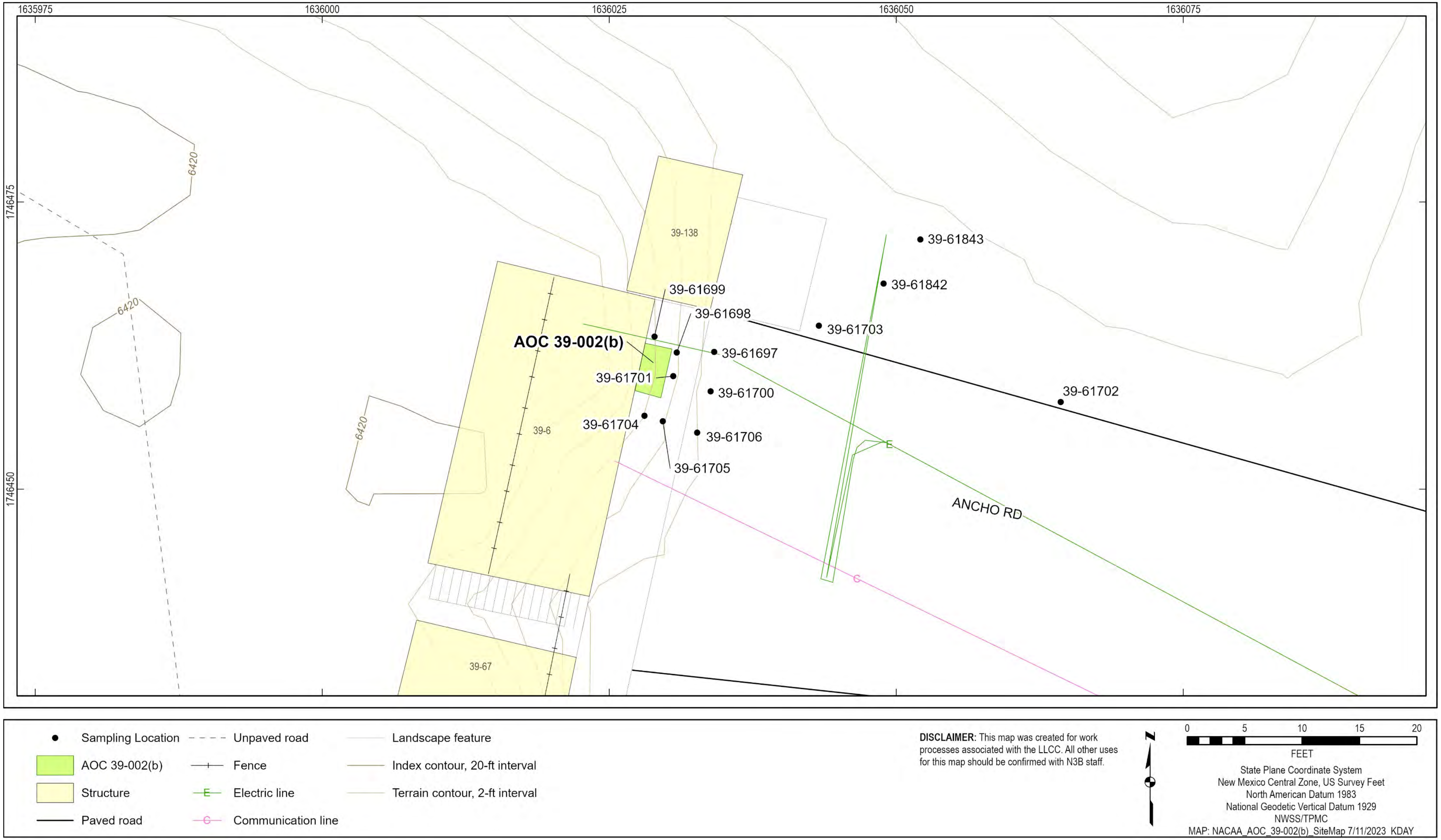

Figure 6.4-1 Site map and sampling locations at AOC 39-002(b)

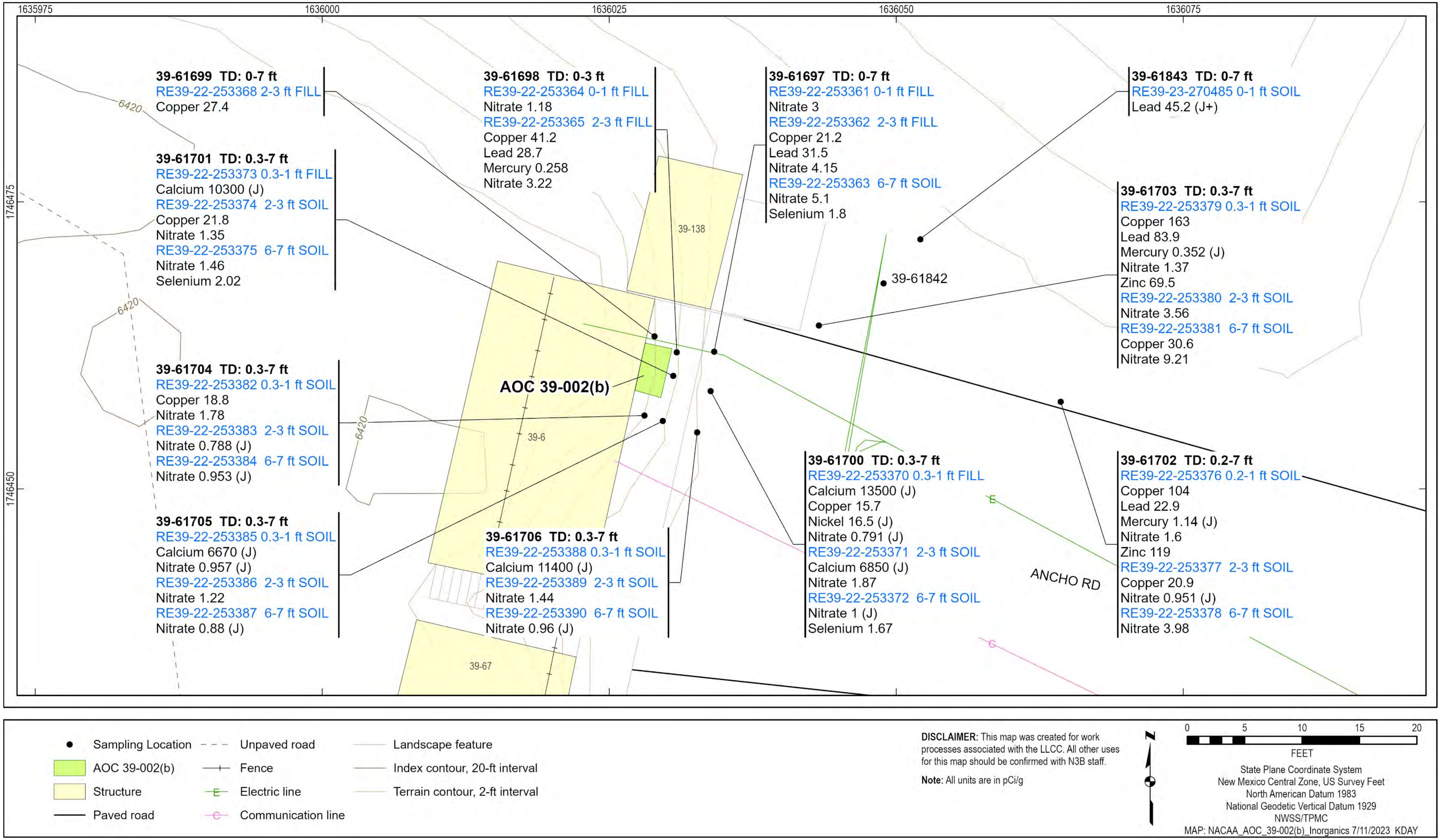

Figure 6.4-2 Inorganic chemicals detected above BV at AOC 39-002(b)

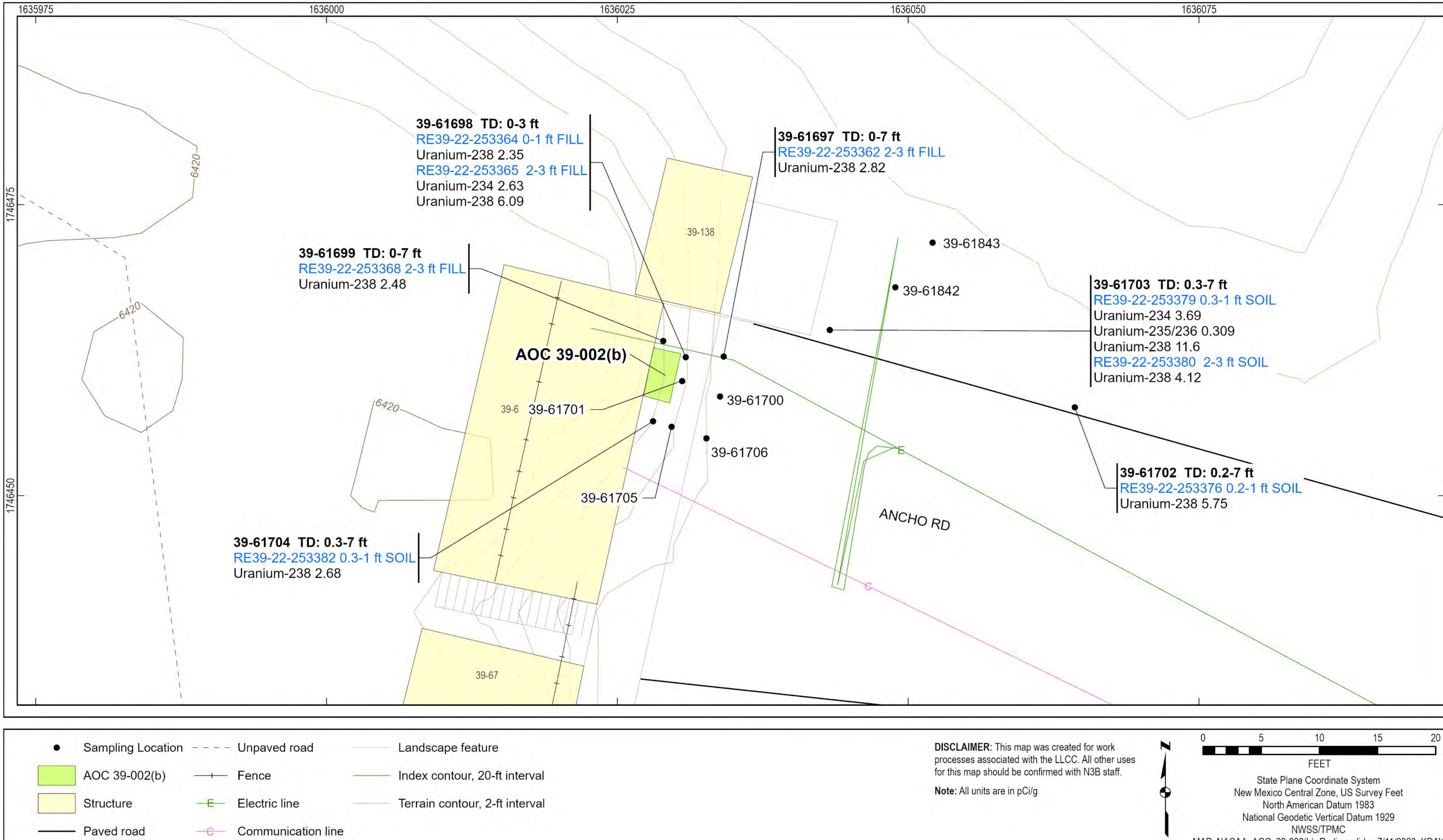

Figure 6.4-3 **Radionuclides detected or detected above BV/FV at AOC 39-002(b)**

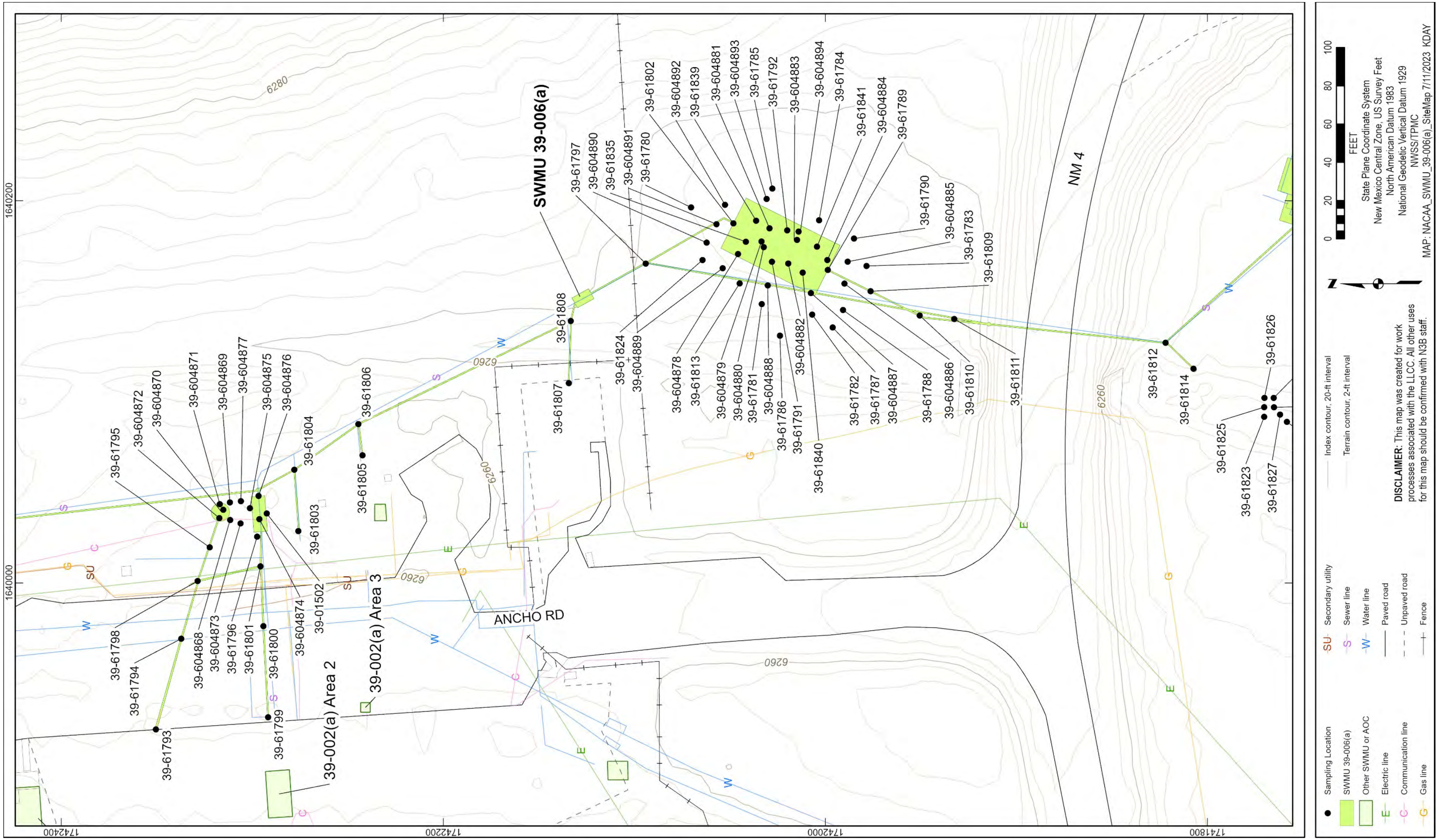

Figure 6.5-1 Site map and sampling locations at SWMU 39-006(a) – North

Figure 6.5-2 Site map and sampling locations at SWMU 39-006(a) – South

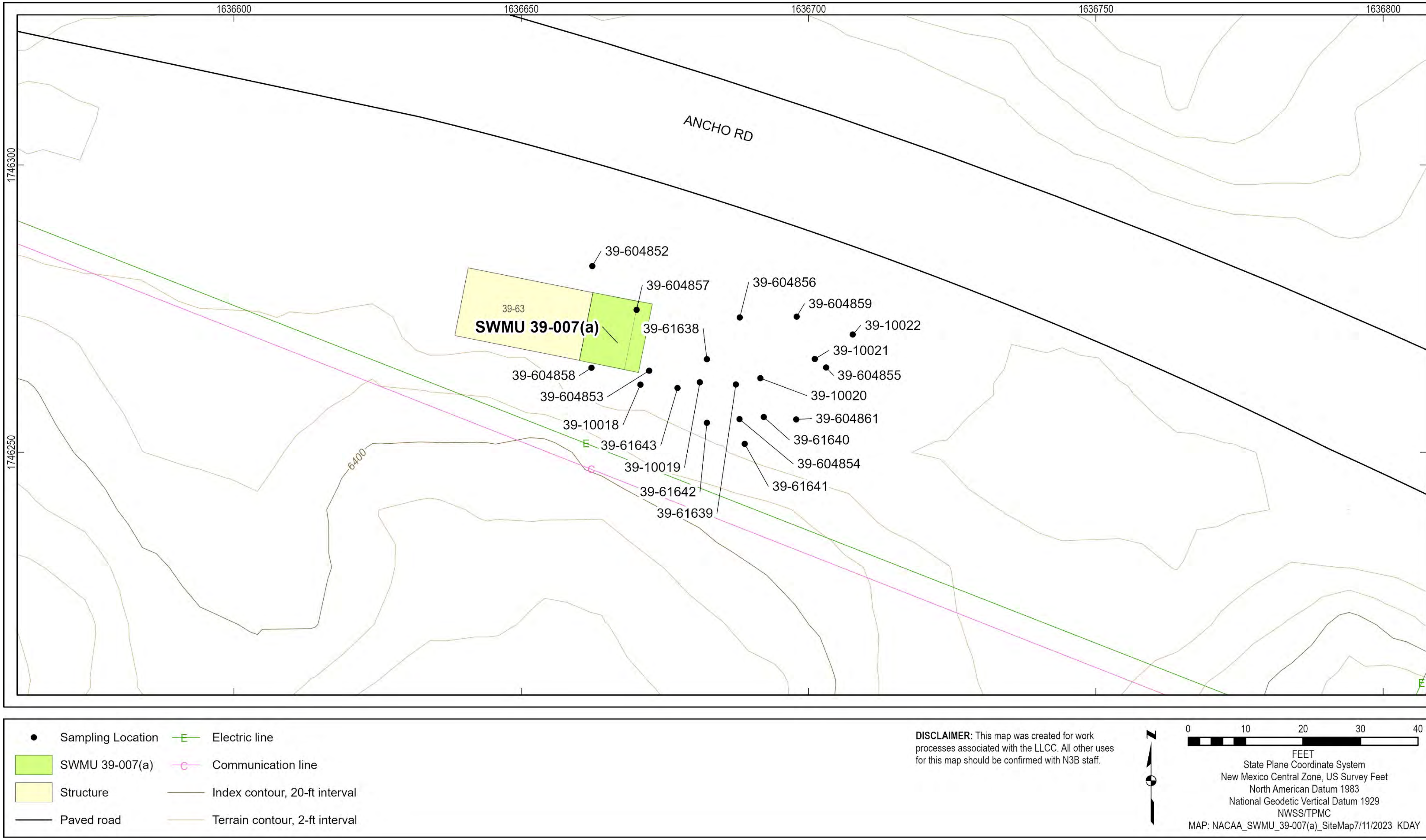

Figure 6.6-1 Site map and sampling locations at SWMU 39-007(a)

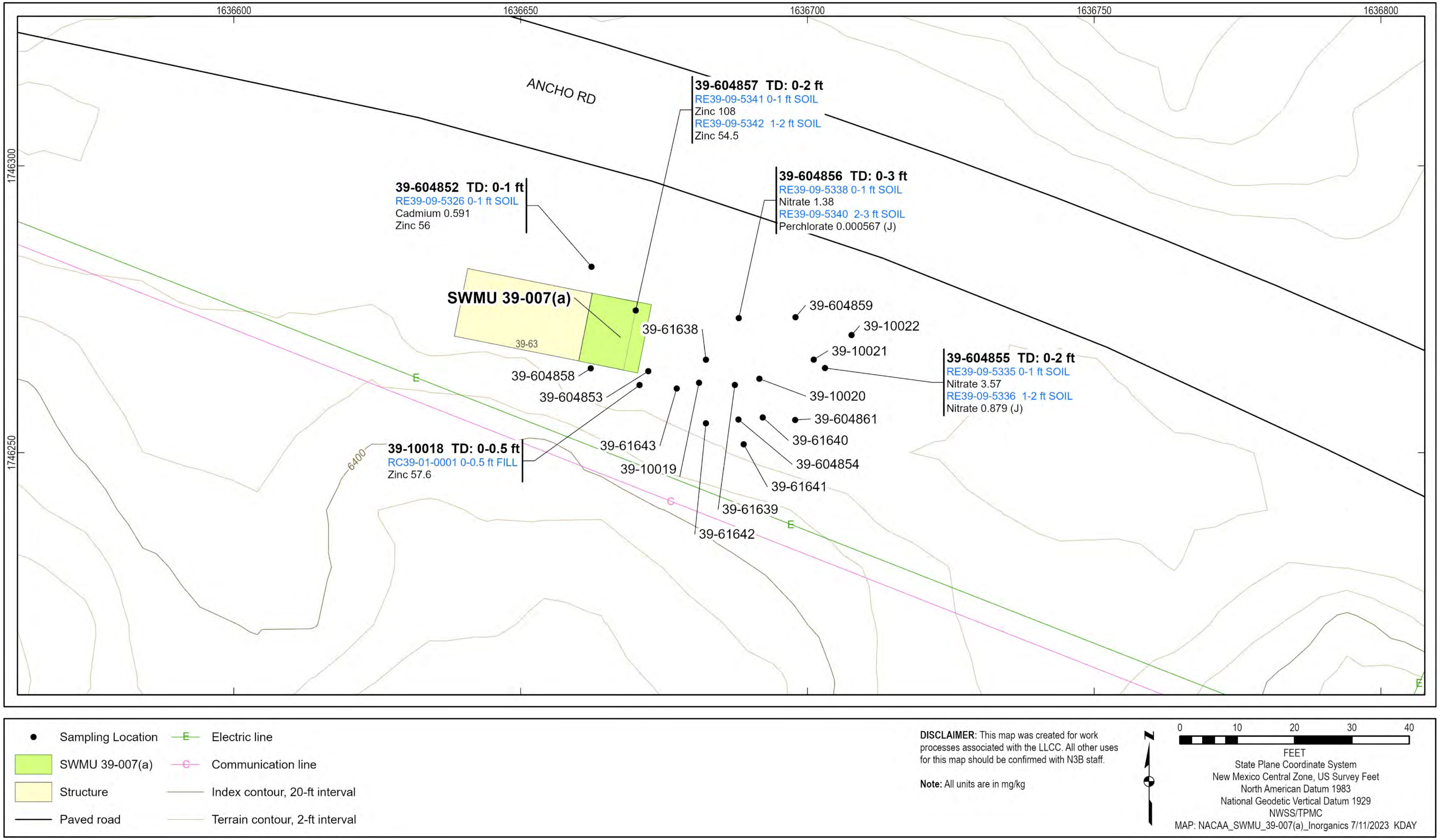

Figure 6.6-2 Inorganic chemicals detected above BVs at SWMU 39-007(a)

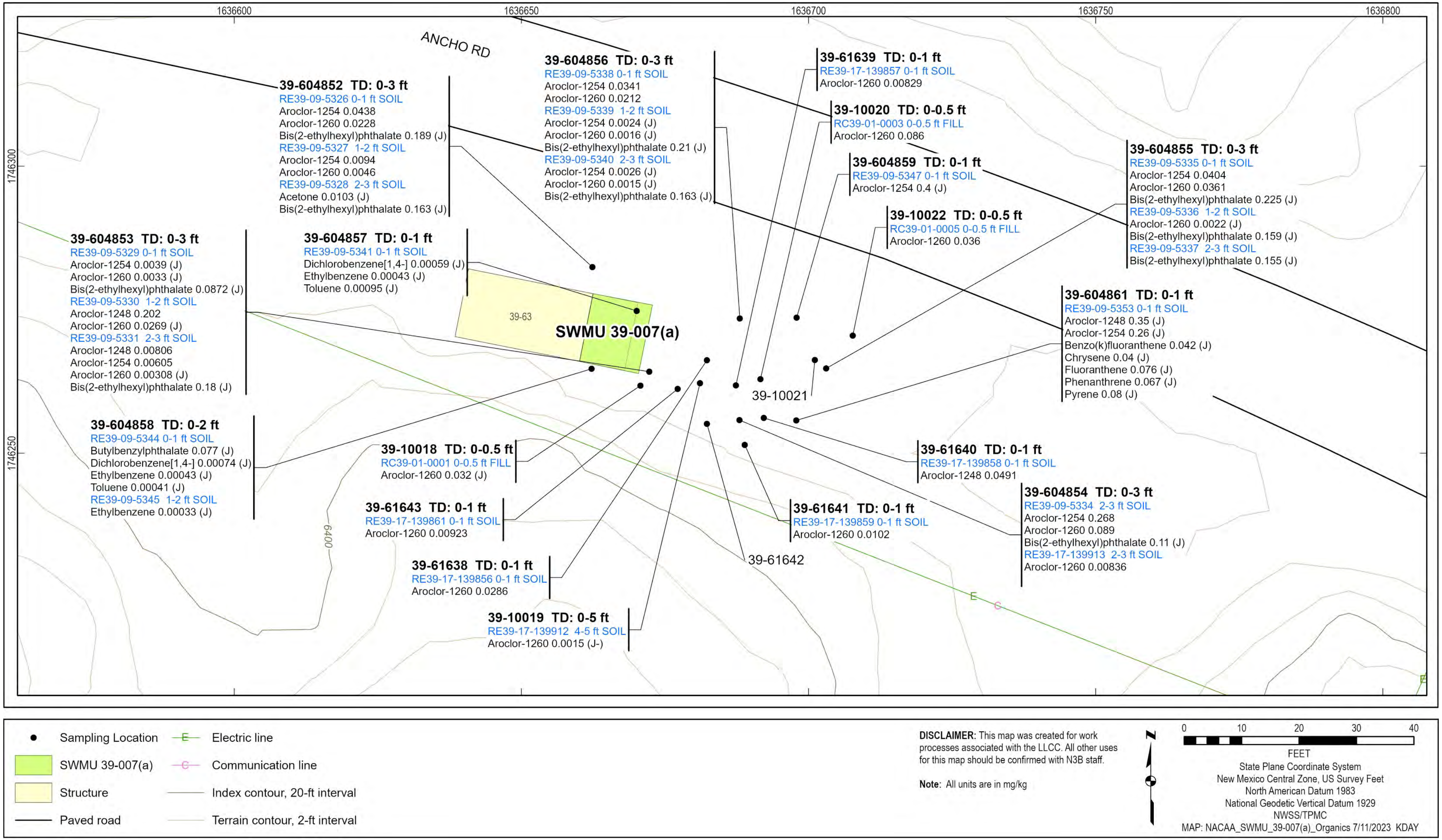

Figure 6.6-3 Organic chemicals detected at SWMU 39-007(a)

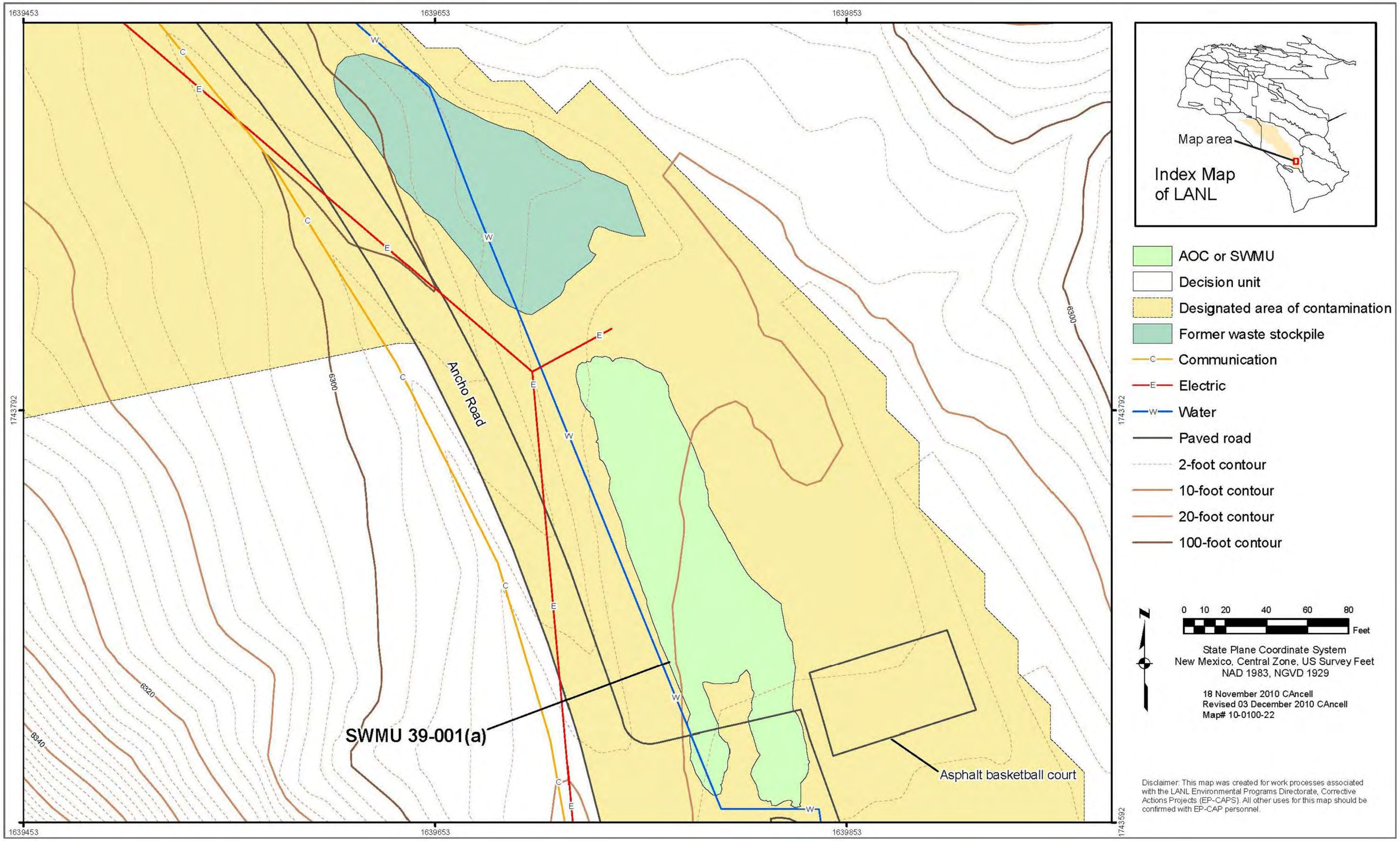

Figure 6.8-1 Location of former waste stockpile area at SWMU 39-001(a)

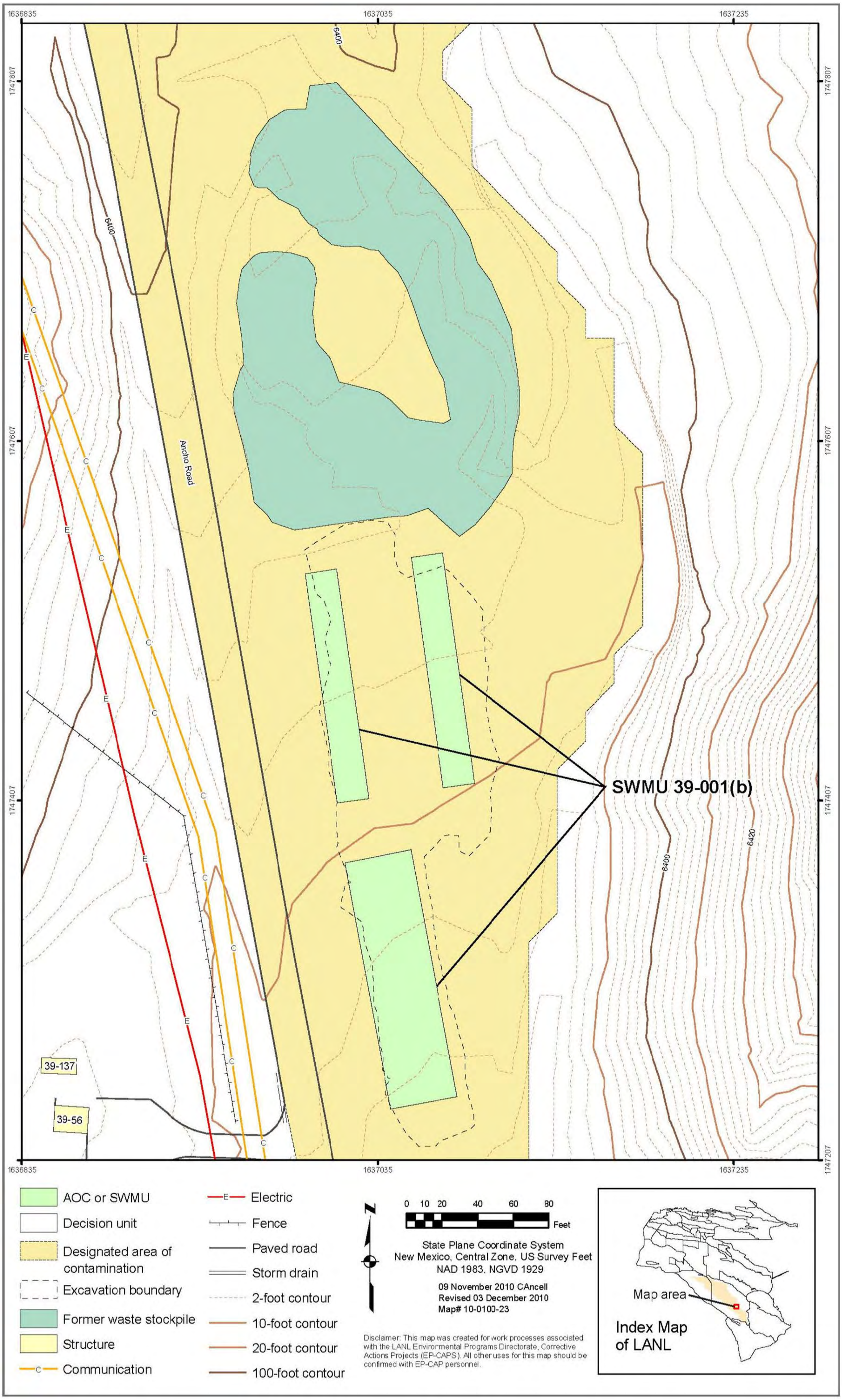

Figure 6.9-1 Location of former waste stockpile area at SWMU 39-001(b)

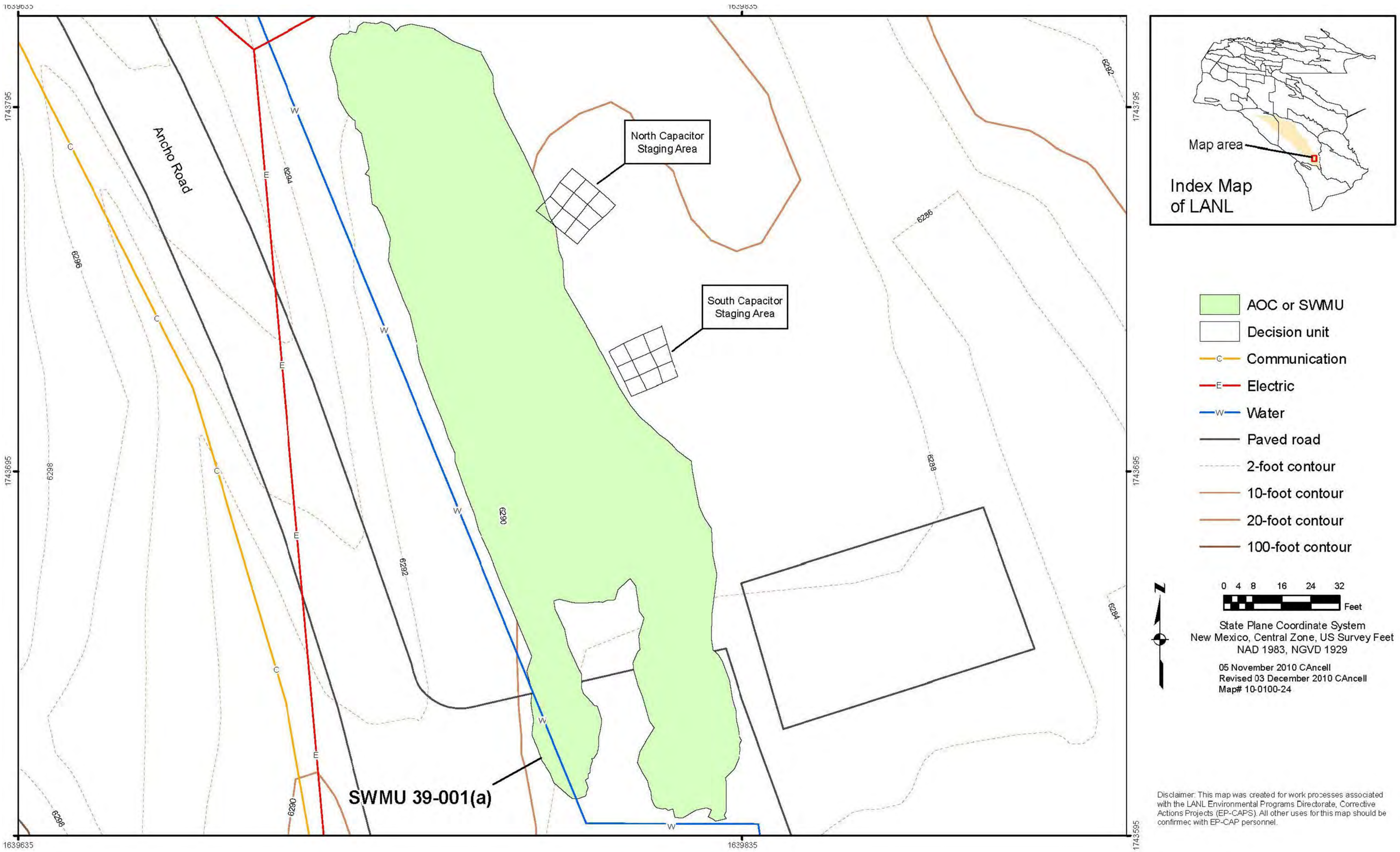

Figure 6.10-1 Location of former capacitor staging areas at SWMU 39-001(a)

Table 1.1-1
Sites Under Investigation in the North Ancho Canyon Aggregate Area Phase II Investigation Report

SWMU/AOC	Brief Description	2009/2010 Phase I	ACA Investigation	Known Sites Investigation	2022 Phase II Investigation	Current Status
SWMU 39-001(a)	Inactive landfill	No	Sampled	No	No	Phase II investigation report (section 6.2)
SWMU 39-002(a)	Inactive Storage Area 1	Sampled	No	No	Sampled	Phase II investigation report (section 6.3)
SWMU 39-002(a)	Inactive Storage Area 2	No	No	Sampled	Sampled	Phase II investigation report (section 6.4)
SWMU 39-002(a)	Inactive Storage Area 3	Sampled	No	No	No	Phase II investigation report (section 6.5)
AOC 39-002(b)	Inactive Storage Area	No	No	No	Sampled	Phase II investigation report (section 6.6)
SWMU 39-006(a)	Septic System Inactive Components	Sampled	No	No	Sampled	Phase II investigation report (section 6.7)
SWMU 39-007(a)	Former satellite accumulation area at structure 39-63	Sampled	No	No	No	Phase II investigation report (section 6.8)
SWMU 39-010	Excavated soil dump from construction of SWMU 39-004(e) firing site	Sampled	No	No	Sampled	Phase II investigation report (section 6.9)

Table 3.2-1
Surveyed Coordinates for Locations Sampled

Location ID	Easting	Northing	SWMU
39-61697	1636034.143	1746461.949	AOC 39-002(b)
39-61698	1636030.889	1746461.895	AOC 39-002(b)
39-61699	1636028.948	1746463.282	AOC 39-002(b)
39-61700	1636033.842	1746458.509	AOC 39-002(b)
39-61701	1636030.587	1746459.837	AOC 39-002(b)
39-61702	1636064.332	1746457.581	AOC 39-002(b)
39-61703	1636043.266	1746464.23	AOC 39-002(b)
39-61704	1636028.081	1746456.387	AOC 39-002(b)
39-61705	1636029.674	1746455.905	AOC 39-002(b)
39-61706	1636032.663	1746454.914	AOC 39-002(b)
39-61842	1636048.902	1746467.897	AOC 39-002(b)
39-61843	1636052.112	1746471.734	AOC 39-002(b)
39-01384	1639743.76	1743788.08	39-001(a)
39-01385	1639778.07	1743690.01	39-001(a)
39-01386	1639790.83	1743626.78	39-001(a)
39-01387	1639817.61	1743633.21	39-001(a)
39-01388	1639854.27	1743648.49	39-001(a)
39-01389	1639889.74	1743662.35	39-001(a)
39-01390	1639801.8	1743575.96	39-001(a)
39-604345	1639750.355	1743800.154	39-001(a)
39-604346	1639750.189	1743760.138	39-001(a)
39-604347	1639770.167	1743720.114	39-001(a)
39-604348	1639750.281	1743720.125	39-001(a)
39-604349	1639790.12	1743700.457	39-001(a)
39-604350	1639770.255	1743660.217	39-001(a)
39-604351	1639787.943	1743658.695	39-001(a)
39-604352	1639770.844	1743657.946	39-001(a)
39-604353	1639761.595	1743680.374	39-001(a)
39-604354	1639737.183	1743752.436	39-001(a)
39-604356	1639728.653	1743816.04	39-001(a)
39-604357	1639751.419	1743815.219	39-001(a)
39-604358	1639822.014	1743690.28	39-001(a)
39-604359	1639810.337	1743660.324	39-001(a)
39-604360	1639810.267	1743640.208	39-001(a)
39-604361	1639831.858	1743633.937	39-001(a)
39-604362	1639782.943	1743609.171	39-001(a)
39-604363	1639806.413	1743613.868	39-001(a)
39-608120	1639790.371	1743747.567	39-001(a)
39-608121	1639780.371	1743747.567	39-001(a)

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-608123	1639785.371	1743742.567	39-001(a)
AN-607963	1639785.371	1743747.567	39-001(a)
AN-607964	1639780.371	1743752.567	39-001(a)
39-01051	1639881.1	1742420.4	39-002(a) Area 1
39-01053	1639887.2	1742414	39-002(a) Area 1
39-01491	1639871	1742431.8	39-002(a) Area 1
39-01492	1639878.7	1742432.3	39-002(a) Area 1
39-01493	1639887.5	1742432.9	39-002(a) Area 1
39-01494	1639871.5	1742423.1	39-002(a) Area 1
39-01495	1639879.3	1742423.6	39-002(a) Area 1
39-01496	1639888.1	1742428.3	39-002(a) Area 1
39-01497	1639871.9	1742413.4	39-002(a) Area 1
39-01498	1639880.7	1742414	39-002(a) Area 1
39-01499	1639888.4	1742414.5	39-002(a) Area 1
39-604805	1639872.872	1742433.021	39-002(a) Area 1
39-604806	1639888.646	1742433.834	39-002(a) Area 1
39-604807	1639912.32	1742433.803	39-002(a) Area 1
39-604808	1639868.787	1742427.113	39-002(a) Area 1
39-604809	1639904.505	1742420.223	39-002(a) Area 1
39-604810	1639880.776	1742420.318	39-002(a) Area 1
39-604811	1639868.806	1742414.596	39-002(a) Area 1
39-604812	1639892.571	1742413.278	39-002(a) Area 1
39-604813	1639915.876	1742413.204	39-002(a) Area 1
39-604814	1639892.704	1742427.005	39-002(a) Area 1
39-604815	1639888.783	1742420.248	39-002(a) Area 1
39-604816	1639876.777	1742413.288	39-002(a) Area 1
39-604817	1639884.707	1742413.221	39-002(a) Area 1
39-61660	1639865.699	1742439.058	39-002(a) Area 1
39-61661	1639873.682	1742439.506	39-002(a) Area 1
39-61662	1639868.358	1742437.397	39-002(a) Area 1
39-61663	1639879.412	1742437.707	39-002(a) Area 1
39-61664	1639863.59	1742433.963	39-002(a) Area 1
39-61665	1639873.9	1742434.304	39-002(a) Area 1
39-61666	1639885.315	1742434.944	39-002(a) Area 1
39-61667	1639866.271	1742430.383	39-002(a) Area 1
39-61668	1639868.636	1742429.436	39-002(a) Area 1
39-61669	1639880.037	1742429.742	39-002(a) Area 1
39-61670	1639864.18	1742425.263	39-002(a) Area 1
39-61671	1639875.205	1742424.488	39-002(a) Area 1
39-61672	1639866.839	1742420.614	39-002(a) Area 1
39-61673	1639869.649	1742419.435	39-002(a) Area 1
39-61674	1639881.331	1742419.754	39-002(a) Area 1

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-61675	1639865.514	1742414.828	39-002(a) Area 1
39-61676	1639875.144	1742415.621	39-002(a) Area 1
39-61677	1639886.388	1742416.202	39-002(a) Area 1
39-61678	1639870.066	1742410.782	39-002(a) Area 1
39-61679	1639881.319	1742411.554	39-002(a) Area 1
39-61680	1639892.43	1742412.133	39-002(a) Area 1
39-61681	1639868.344	1742408.789	39-002(a) Area 1
39-61682	1639875.981	1742408.913	39-002(a) Area 1
39-61683	1639884.883	1742409.849	39-002(a) Area 1
39-61684	1639907.908	1742432.095	39-002(a) Area 1
39-61685	1639901.847	1742430.905	39-002(a) Area 1
39-61686	1639914.854	1742431.669	39-002(a) Area 1
39-61687	1639913.526	1742437.401	39-002(a) Area 1
39-61688	1639901.655	1742439.095	39-002(a) Area 1
39-61689	1639908.595	1742425.367	39-002(a) Area 1
39-61690	1639915.468	1742422.044	39-002(a) Area 1
39-61691	1639902.323	1742421.197	39-002(a) Area 1
39-61692	1639890.657	1742438.579	39-002(a) Area 1
39-61693	1639891.138	1742430.589	39-002(a) Area 1
39-61694	1639886.517	1742425.102	39-002(a) Area 1
39-61695	1639891.876	1742421.087	39-002(a) Area 1
39-61696	1639893.571	1742410.609	39-002(a) Area 1
39-61858	1639856.618	1742420.273	39-002(a) Area 1
39-61859	1639861.838	1742420.132	39-002(a) Area 1
39-61655	1639896.7	1742287.079	39-002(a) Area 2
39-61656	1639884.81	1742277.564	39-002(a) Area 2
39-61657	1639884.009	1742294.647	39-002(a) Area 2
39-61658	1639886.403	1742286.109	39-002(a) Area 2
39-61659	1639871.074	1742284.966	39-002(a) Area 2
39-61743	1639871.479	1742289.615	39-002(a) Area 2
39-61744	1639876.47	1742284.806	39-002(a) Area 2
39-61745	1639868.163	1742279.715	39-002(a) Area 2
39-61746	1639866.811	1742284.997	39-002(a) Area 2
39-61747	1639850.007	1742327.997	39-002(a) Area 2
39-61748	1639863.237	1742328.567	39-002(a) Area 2
39-61749	1639873.243	1742328.227	39-002(a) Area 2
39-61750	1639850.497	1742315.808	39-002(a) Area 2
39-61751	1639863.978	1742316.12	39-002(a) Area 2
39-61752	1639850.97	1742302.995	39-002(a) Area 2
39-61753	1639864.428	1742303.5	39-002(a) Area 2
39-61754	1639888.594	1742299.852	39-002(a) Area 2
39-61755	1639900.788	1742300.239	39-002(a) Area 2

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-61756	1639912.633	1742301.447	39-002(a) Area 2
39-61757	1639851.747	1742291.864	39-002(a) Area 2
39-61758	1639864.725	1742291.335	39-002(a) Area 2
39-61759	1639877.798	1742292.251	39-002(a) Area 2
39-61760	1639851.982	1742277.452	39-002(a) Area 2
39-61761	1639852.59	1742266.44	39-002(a) Area 2
39-61762	1639852.79	1742257.39	39-002(a) Area 2
39-61763	1639864.98	1742257.43	39-002(a) Area 2
39-61764	1639864.46	1742266.62	39-002(a) Area 2
39-61765	1639864.7	1742278.02	39-002(a) Area 2
39-61766	1639878.2	1742257.2	39-002(a) Area 2
39-61767	1639877.97	1742266.56	39-002(a) Area 2
39-61768	1639878.243	1742277.61	39-002(a) Area 2
39-61769	1639889.844	1742266.499	39-002(a) Area 2
39-61770	1639889.979	1742277.555	39-002(a) Area 2
39-61771	1639889.724	1742292.284	39-002(a) Area 2
39-61772	1639901.736	1742292.222	39-002(a) Area 2
39-61773	1639913.844	1742292.43	39-002(a) Area 2
39-61774	1639914.223	1742277.744	39-002(a) Area 2
39-61775	1639913.952	1742266.658	39-002(a) Area 2
39-61776	1639901.774	1742266.37	39-002(a) Area 2
39-61777	1639902.335	1742277.624	39-002(a) Area 2
39-61844	1639847.368	1742266.158	39-002(a) Area 2
39-61845	1639857.994	1742277.506	39-002(a) Area 2
39-61846	1639847.125	1742277.033	39-002(a) Area 2
39-61847	1639841.573	1742276.915	39-002(a) Area 2
39-61848	1639852.109	1742284.062	39-002(a) Area 2
39-61849	1639851.969	1742271.776	39-002(a) Area 2
39-61850	1639842.601	1742265.941	39-002(a) Area 2
39-61851	1639849.172	1742262.245	39-002(a) Area 2
39-61852	1639845.117	1742303.496	39-002(a) Area 2
39-61853	1639839.919	1742303.909	39-002(a) Area 2
39-61854	1639845.767	1742299.42	39-002(a) Area 2
39-61855	1639844.881	1742307.985	39-002(a) Area 2
39-61856	1639841.691	1742272.308	39-002(a) Area 2
39-61857	1639840.805	1742281.64	39-002(a) Area 2
39-604731	1639933.39	1742242.17	39-002(a) Area 3
39-604732	1639936.16	1742242.16	39-002(a) Area 3
39-604733	1639933.26	1742239.44	39-002(a) Area 3
39-604734	1639936.18	1742239.48	39-002(a) Area 3
39-604735	1639934.81	1742240.77	39-002(a) Area 3
39-604736	1639991.998	1742179.678	39-002(a) Area 3

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-01502	1640036.33	1742292.438	39-006(a)
39-604868	1640032.899	1742311.587	39-006(a)
39-604869	1640042.161	1742311.723	39-006(a)
39-604870	1640038.295	1742315.19	39-006(a)
39-604871	1640041.181	1742316.982	39-006(a)
39-604872	1640033.885	1742317.245	39-006(a)
39-604873	1640031.15	1742306.142	39-006(a)
39-604874	1640033.373	1742296.261	39-006(a)
39-604875	1640039.102	1742301.224	39-006(a)
39-604876	1640045.487	1742296.681	39-006(a)
39-604877	1640042.738	1742305.939	39-006(a)
39-604878	1640172.064	1742045.705	39-006(a)
39-604879	1640178.686	1742033.416	39-006(a)
39-604880	1640175.715	1742032.22	39-006(a)
39-604881	1640185.573	1742029.238	39-006(a)
39-604882	1640167.158	1742019.425	39-006(a)
39-604883	1640179.478	1742014.816	39-006(a)
39-604884	1640168.947	1741998.931	39-006(a)
39-604885	1640168.066	1741988.322	39-006(a)
39-604886	1640156.591	1741990.013	39-006(a)
39-604887	1640151.689	1742007.547	39-006(a)
39-604888	1640155.676	1742030.14	39-006(a)
39-604889	1640164.68	1742053.753	39-006(a)
39-604890	1640178.033	1742062.167	39-006(a)
39-604891	1640187.721	1742057.025	39-006(a)
39-604892	1640197.874	1742052.52	39-006(a)
39-604893	1640200.891	1742030.783	39-006(a)
39-604894	1640183.869	1742014.007	39-006(a)
39-61780	1640196.453	1742070.316	39-006(a)
39-61781	1640145.899	1742033.29	39-006(a)
39-61782	1640140.421	1742006.914	39-006(a)
39-61783	1640165.858	1741978.476	39-006(a)
39-61784	1640189.752	1742003.294	39-006(a)
39-61785	1640206.339	1742027.758	39-006(a)
39-61786	1640129.409	1742023.767	39-006(a)
39-61787	1640133.663	1741996.207	39-006(a)
39-61788	1640142.787	1741990.775	39-006(a)
39-61789	1640163.741	1741998.702	39-006(a)
39-61790	1640180.195	1741985.012	39-006(a)
39-61791	1640168.024	1742027.937	39-006(a)
39-61792	1640184.473	1742019.946	39-006(a)
39-61793	1639923.336	1742350.483	39-006(a)

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-61794	1639970.804	1742337.18	39-006(a)
39-61795	1640018.606	1742322.309	39-006(a)
39-61796	1640024.177	1742297.465	39-006(a)
39-61797	1640167.111	1742094.036	39-006(a)
39-61798	1640001.002	1742328.624	39-006(a)
39-61799	1639929.714	1742291.683	39-006(a)
39-61800	1639977.391	1742294.211	39-006(a)
39-61801	1640008.639	1742295.745	39-006(a)
39-61802	1640188.156	1742048.115	39-006(a)
39-61803	1640027.157	1742275.918	39-006(a)
39-61804	1640059.256	1742277.973	39-006(a)
39-61805	1640066.754	1742242.307	39-006(a)
39-61806	1640083.114	1742244.497	39-006(a)
39-61807	1640104.484	1742134.316	39-006(a)
39-61808	1640137.04	1742133.278	39-006(a)
39-61809	1640152.597	1741976.353	39-006(a)
39-61810	1640139.905	1741950.622	39-006(a)
39-61811	1640138.067	1741932.513	39-006(a)
39-61812	1640125.662	1741821.894	39-006(a)
39-61813	1640156.703	1742044.87	39-006(a)
39-61814	1640112.074	1741807.311	39-006(a)
39-61815	1640213.851	1741712.501	39-006(a)
39-61816	1640215.749	1741679.163	39-006(a)
39-61817	1640221.178	1741623.192	39-006(a)
39-61818	1640225.35	1741575.107	39-006(a)
39-61819	1640229.916	1741525.274	39-006(a)
39-61820	1640232.88	1741475.03	39-006(a)
39-61821	1640239.57	1741425.658	39-006(a)
39-61822	1640244.199	1741376.062	39-006(a)
39-61823	1640086.896	1741770.262	39-006(a)
39-61824	1640168.957	1742064.299	39-006(a)
39-61825	1640091.943	1741770.275	39-006(a)
39-61826	1640096.807	1741770.14	39-006(a)
39-61827	1640088.073	1741761.931	39-006(a)
39-61828	1640091.892	1741765.116	39-006(a)
39-61829	1640096.812	1741765.253	39-006(a)
39-61830	1640249.63	1741356.168	39-006(a)
39-61831	1640244.501	1741351.19	39-006(a)
39-61832	1640249.487	1741351.076	39-006(a)
39-61833	1640244.735	1741345.577	39-006(a)
39-61834	1640250.554	1741346.175	39-006(a)
39-61835	1640178.501	1742041.606	39-006(a)

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-61836	1640250.991	1741341.264	39-006(a)
39-61837	1640084.277	1741758.39	39-006(a)
39-61838	1640239.108	1741351.073	39-006(a)
39-61839	1640189.534	1742036.243	39-006(a)
39-61840	1640162.345	1742011.878	39-006(a)
39-61841	1640175.951	1742004.373	39-006(a)
39-10018	1636670.745	1746261.773	39-007(a)
39-10019	1636681.096	1746262.183	39-007(a)
39-10020	1636691.622	1746262.884	39-007(a)
39-10021	1636701.096	1746266.218	39-007(a)
39-10022	1636707.704	1746270.487	39-007(a)
39-604852	1636662.369	1746282.41	39-007(a)
39-604425	1636061.579	1749024.635	39-010
39-604426	1636155.241	1749078.622	39-010
39-604427	1635967.258	1749078.559	39-010
39-604428	1636061.276	1749133.054	39-010
39-604429	1635873.162	1749132.653	39-010
39-604430	1635967.192	1749187.03	39-010
39-604431	1636155.312	1748861.635	39-010
39-604432	1636156.362	1748969.741	39-010
39-604433	1636249.096	1748915.87	39-010
39-604434	1636311.752	1748807.698	39-010
39-604435	1636405.851	1748753.265	39-010
39-604436	1636232.615	1749048.905	39-010
39-604437	1636092.09	1749078.502	39-010
39-604438	1635998.794	1749133.014	39-010
39-604439	1636186.309	1749024.726	39-010
39-604440	1636124.207	1748916.327	39-010
39-604441	1636218.093	1748861.846	39-010
39-604442	1636343.198	1748754.196	39-010
39-61707	1635839.783	1749200.933	39-010
39-61708	1635906.377	1749179.351	39-010
39-61709	1635935.655	1749104.809	39-010
39-61710	1636009.583	1749030.991	39-010
39-61711	1636247.791	1748792.538	39-010
39-61712	1636330.832	1748709.269	39-010
39-61713	1636418.448	1748789.977	39-010
39-61714	1636390.258	1748828.227	39-010
39-61715	1636329.491	1748894.405	39-010
39-61716	1636285.092	1748927.54	39-010
39-61717	1636202.221	1749124.635	39-010
39-61718	1636146.309	1749171.405	39-010

Table 3.2-1 (continued)

Location ID	Easting	Northing	SWMU
39-61719	1636033.044	1749187.83	39-010
39-61720	1635896.259	1749215.471	39-010
39-61721	1636124.429	1749023.472	39-010
39-61722	1636104.384	1748975.441	39-010
39-61723	1636186.353	1748915.462	39-010
39-61724	1636260.376	1748827.369	39-010
39-61725	1636376.473	1748797.438	39-010
39-61726	1636354.722	1748845.748	39-010
39-61727	1636294.441	1748871.46	39-010
39-61728	1636226.369	1748975.39	39-010
39-61729	1636118.26	1749125.324	39-010
39-61730	1636411.945	1748708.065	39-010
39-61731	1635936.351	1749133.343	39-010
39-61732	1636074.875	1748965.58	39-010
39-61733	1636210.86	1748829.326	39-010
39-61734	1636264.028	1748982.886	39-010
39-61735	1636090.38	1749173.665	39-010
39-61736	1636030.299	1749079.292	39-010
39-61737	1636283.4	1748756.983	39-010
39-61738	1636227.9	1749088.79	39-010
39-61739	1636365.597	1748674.616	39-010
39-61740	1636478.37	1748765.308	39-010
39-61741	1636577.132	1748522.047	39-010
39-61742	1635815.551	1749236.28	39-010

Table 6.2-1
Samples Collected and Analyses Requested at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium-241	Isotopic plutonium	Isotopic Thorium	Isotopic uranium	TAL metals	TAL metals plus uranium	Perchlorate	Mercury (TAL metal)	Oranochlorine pesticides and PCBs	PCBs	VOCs	SVOCs	Dioxins/furans	Explosive compounds	Cyanide
0239-96-0403	39-01384	14–15	FILL	—*	1869	—	—	1869	1869	—	1867	1869	—	1867	1866	—	1866	1866	—	1868	1867
0239-96-0406	39-01385	11–12	FILL	—	1875	—	—	—	1875	1875	1873	—	—	1873	1872	—	1872	1872	—	1874	1873
0239-96-0411	39-01386	12–13	FILL	—	1875	—	—	—	1875	—	1873	1875	—	1873	1872	—	1872	1872	—	1874	1873
0239-96-0409	39-01386	5–6	FILL	—	1875	—	—	—	1875	—	1873	1875	—	1873	1872	—	1872	1872	—	1874	1873
0239-96-0414	39-01387	12–13	FILL	—	1875	—	—	—	1875	—	1873	1875	—	1873	1872	—	1872	1872	—	1874	1873
0239-96-0418	39-01388	11–12	FILL	—	1877	—	—	—	1877	—	1879	1877	—	1879	1878	—	1878	1878	—	1876	1879
0239-96-0421	39-01389	11–12	FILL	—	1877	—	—	—	1877	—	1879	1877	—	1879	1878	—	1878	1878	—	1876	1879
0239-96-0426	39-01390	11–12	FILL	—	1877	—	—	—	1877	1877	1879	—	—	1879	1878	—	1878	1878	—	1876	1879
RE39-09-1907	39-604345	5–5.5	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1908	39-604345	5.5–6	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1909	39-604346	9–9.5	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1910	39-604346	9.5–10	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1911	39-604347	6.4–6.9	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1912	39-604347	6.9–7.4	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1913	39-604348	5.2–5.7	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1914	39-604348	5.7–6.2	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1915	39-604349	7.9–8.4	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1916	39-604349	8.4–8.9	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1917	39-604350	5.5–5.9	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1918	39-604350	5.9–6.5	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1919	39-604351	3–5	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1921	39-604352	5–5.5	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1923	39-604353	5–5.5	ALLH	09-1992	09-1993	09-1993	09-1993	09-1993	—	09-1993	—	09-1992	09-1992	09-1992	—	09-1991	09-1991	09-1991	—	09-1991	09-1992
RE39-09-1925	39-604354	5.4–6.4	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1945	39-604356	2.35–3.5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	09-2051	—	—
RE39-09-1929	39-604356	2.35–3.5	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1930	39-604356	5.7–7.5	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1931	39-604357	1–3	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1933	39-604358	4.6–6	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1935	39-604359	7–7.5	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic plutonium	Isotopic Thorium	Isotopic uranium	TAL metals	TAL metals plus uranium	Perchlorate	Mercury (TAL metal)	Oranochlorine pesticides and PCBs	PCBs	VOCs	SVOCs	Dioxins/furans	Explosive compounds	Cyanide
RE39-09-1936	39-604359	7.5–8.5	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1937	39-604360	7–7.5	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1938	39-604360	7.5–8	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1939	39-604361	5.3–7	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1941	39-604362	1.6–3.5	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1943	39-604363	3.4–4.8	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-1944	39-604363	6.8–9	ALLH	09-2033	09-2034	09-2034	09-2034	09-2034	—	09-2034	—	09-2033	09-2033	09-2033	—	09-2032	09-2032	09-2032	—	09-2032	09-2033
RE39-09-13239	39-608120	14.5–15	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13243	39-608120	16–16.5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13241	39-608121	14.5–15	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13245	39-608121	16–16.5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13242	39-608123	14.5–15	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13246	39-608123	16–16.5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13240	AN-607963	14.5–15	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
RE39-09-13244	AN-607963	16–16.5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3287	—	—	—	—	—
CAAN-09-11578	AN-607964	14–14.5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-3007	—	—	—	—	—

Note: Numbers in analyte columns are request numbers.

* — = Analysis not requested.

Table 6.2-2
Inorganic Chemicals above BVs at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Mercury	Nitrate	Perchlorate	Silver	Uranium
Soil Background Value[a]				**0.83**	**0.4**	**0.5**	**0.1**	**na[b]**	**na**	**1**	**1.82**
Construction Worker SSL[c]				**142**	**72.1**	**12.1**	**20.7**	**566,000**	**248**	**1770**	**277**
Industrial SSL[c]				**519**	**1110**	**63.3**	**112**	**2,080,000**	**908**	**6490**	**3880**
Residential SSL[c]				**31.3**	**70.5**	**11.2**	**23.8**	**125,000**	**54.8**	**391**	**234**
0239-96-0403	39-01384	14–15	FILL	6.1 (U)	1.7	0.53 (U)	—[d]	NA[e]	NA	—	2.25
0239-96-0406	39-01385	11–12	FILL	6.1 (U)	0.71 (U)	0.55 (U)	—	NA	NA	—	NA
0239-96-0409	39-01386	5–6	FILL	6.2 (U)	0.71 (U)	0.54 (U)	—	NA	NA	—	1.91
0239-96-0411	39-01386	12–13	FILL	6 (U)	0.7 (U)	0.54 (U)	—	NA	NA	—	—
0239-96-0414	39-01387	12–13	FILL	6.2 (U)	0.71 (U)	0.56 (U)	1.3	NA	NA	—	3.76
0239-96-0418	39-01388	11–12	FILL	9.4 (U)	0.59 (U)	0.54 (U)	—	NA	NA	1.9 (U)	—
0239-96-0421	39-01389	11–12	FILL	8.7 (U)	0.54 (U)	0.52 (U)	—	NA	NA	1.7 (U)	—
0239-96-0426	39-01390	11–12	FILL	10 (U)	0.62 (U)	0.58 (U)	—	NA	NA	2 (U)	NA
RE39-09-1907	39-604345	5–5.5	SOIL	—	—	0.52 (UJ)	—	1.2	0.0026 (J)	—	NA
RE39-09-1908	39-604345	5.5–6	SOIL	—	—	—	—	0.49	0.003 (J)	—	NA
RE39-09-1909	39-604346	9–9.5	SOIL	—	—	0.52 (UJ)	—	0.76	0.0037 (J)	—	NA
RE39-09-1910	39-604346	9.5–10	SOIL	—	—	0.52 (UJ)	—	0.62	0.0023 (J)	—	NA
RE39-09-1911	39-604347	6.4–6.9	SOIL	—	—	0.52 (UJ)	—	1.8	0.0039 (J)	—	NA
RE39-09-1912	39-604347	6.9–7.4	SOIL	—	—	0.53 (UJ)	—	1.7	—	—	NA
RE39-09-1913	39-604348	5.2–5.7	SOIL	—	—	0.56 (UJ)	—	0.71	0.0045 (J)	—	NA
RE39-09-1914	39-604348	5.7–6.2	SOIL	—	—	0.53 (U)	—	1.5	—	—	NA
RE39-09-1915	39-604349	7.9–8.4	SOIL	—	—	0.52 (UJ)	—	14.1	—	—	NA
RE39-09-1916	39-604349	8.4–8.9	SOIL	—	—	0.52 (UJ)	—	13	—	—	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Mercury	Nitrate	Perchlorate	Silver	Uranium
Soil Background Value[a]				**0.83**	**0.4**	**0.5**	**0.1**	**na[b]**	**na**	**1**	**1.82**
Construction Worker SSL[c]				**142**	**72.1**	**12.1**	**20.7**	**566,000**	**248**	**1770**	**277**
Industrial SSL[c]				**519**	**1110**	**63.3**	**112**	**2,080,000**	**908**	**6490**	**3880**
Residential SSL[c]				**31.3**	**70.5**	**11.2**	**23.8**	**125,000**	**54.8**	**391**	**234**
RE39-09-1917	39-604350	5.5–5.9	SOIL	—	—	0.53 (UJ)	—	0.55	—	—	NA
RE39-09-1918	39-604350	5.9–6.5	SOIL	—	—	0.53 (UJ)	—	0.5	—	—	NA
RE39-09-1919	39-604351	3–5	SOIL	—	—	0.55 (UJ)	—	0.18 (J)	—	—	NA
RE39-09-1921	39-604352	5–5.5	SOIL	—	—	0.54 (UJ)	—	0.34	—	—	NA
RE39-09-1923	39-604353	5–5.5	SOIL	—	—	0.53 (UJ)	—	0.86	—	—	NA
RE39-09-1925	39-604354	5.4–6.4	SOIL	—	—	0.53 (UJ)	—	0.33	—	—	NA
RE39-09-1929	39-604356	2.35–3.5	SOIL	—	—	—	—	0.58	—	—	NA
RE39-09-1930	39-604356	5.7–7.5	SOIL	—	—	0.53 (UJ)	—	1.4	—	—	NA
RE39-09-1931	39-604357	1–3	SOIL	—	—	—	—	0.7	—	—	NA
RE39-09-1933	39-604358	4.6–6	SOIL	—	—	0.52 (U)	—	1.6	—	—	NA
RE39-09-1935	39-604359	7–7.5	SOIL	—	—	0.54 (UJ)	—	2.7	—	—	NA
RE39-09-1936	39-604359	7.5–8.5	SOIL	—	—	0.53 (UJ)	—	1.9	0.0049 (J)	—	NA
RE39-09-1937	39-604360	7–7.5	SOIL	—	—	0.54 (UJ)	—	0.39	—	—	NA
RE39-09-1938	39-604360	7.5–8	SOIL	—	—	—	—	0.57	—	—	NA
RE39-09-1939	39-604361	5.3–7	SOIL	—	—	0.54 (UJ)	—	0.2 (J)	—	—	NA
RE39-09-1941	39-604362	1.6–3.5	SOIL	—	—	0.62 (UJ)	0.377	0.38	—	—	NA
RE39-09-1943	39-604363	3.4–4.8	SOIL	—	—	0.57 (UJ)	—	0.3	—	—	NA
RE39-09-1944	39-604363	6.8–9	SOIL	—	—	0.55 (UJ)	—	0.28	—	—	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

[e] NA = Not analyzed.

Table 6.2-3
Organic Chemicals Detected at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	DDE[4,4'-]	DDT[4,4'-]	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methoxychlor[4,4'-]	Methylene Chloride	Nitroglycerin	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	RDX
Construction Worker SSL[a]				**85.3**	**4.91**	**85.3**	**7530[b]**	**5380**	**549**	**162**	**26,900**	**2690[c]**	**24**	**17,400**	**na[d]**	**na**	**na**	**na**	**240**	**17.9[e]**	**na**	**1210**	**26.9**	**na**	**1350**
Industrial SSL[a]				**10.9**	**11**	**11.1**	**25,300[b]**	**1830**	**75.5**	**95**	**91,600**	**8200[f]**	**3.23**	**63,300**	**na**	**na**	**na**	**na**	**32.3**	**94.5[e]**	**na**	**5130**	**91.6**	**na**	**428**
Residential SSL[a]				**2.43**	**1.14**	**2.43**	**1740[b]**	**380**	**15.7**	**18.7**	**6160**	**630[f]**	**0.153**	**3850**	**na**	**na**	**na**	**na**	**1.53**	**17.7[e]**	**na**	**409**	**6.16**	**na**	**83.1**
0239-96-0403	39-01384	14–15	FILL	—[g]	—	—	—	—	—	0.0053 (J-)	0.039 (J)	—	—	—	NA[h]	NA	NA	NA	—	—	0.023 (J-)	—	NA	NA	—
0239-96-0406	39-01385	11–12	FILL	—	—	—	—	—	—	—	0.063 (J)	—	—	—	NA	NA	NA	NA	—	—	—	—	NA	NA	—
0239-96-0414	39-01387	12–13	FILL	—	0.79	—	—	—	0.312	—	—	—	—	—	NA	NA	NA	NA	—	—	—	—	NA	NA	—
RE39-09-1908	39-604345	5.5–6	SOIL	—	0.064 (J)	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1909	39-604346	9–9.5	SOIL	—	0.0061 (J)	—	—	—	NA	NA	—	0.077 (J)	—	—	NA	NA	NA	NA	—	—	NA	0.012	—	NA	—
RE39-09-1910	39-604346	9.5–10	SOIL	—	0.014 (J)	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.0093	—	NA	—
RE39-09-1911	39-604347	6.4–6.9	SOIL	0.0089 (J)	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.013	—	NA	—
RE39-09-1912	39-604347	6.9–7.4	SOIL	—	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.011	—	NA	—
RE39-09-1914	39-604348	5.7–6.2	SOIL	—	0.026 (J)	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	0.0027 (J)	NA	—	—	NA	0.032 (J+)
RE39-09-1915	39-604349	7.9–8.4	SOIL	0.25 (J)	—	0.009 (J)	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1916	39-604349	8.4–8.9	SOIL	0.52 (J)	—	0.016 (J)	0.041 (J)	—	NA	NA	—	0.35	0.037 (J)	—	NA	NA	NA	NA	0.037 (J)	—	NA	0.014	—	NA	—
RE39-09-1917	39-604350	5.5–5.9	SOIL	—	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.014	—	NA	—
RE39-09-1918	39-604350	5.9–6.5	SOIL	0.014 (J)	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1919	39-604351	3–5	SOIL	—	0.0092 (J)	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.014	—	NA	—
RE39-09-1921	39-604352	5–5.5	SOIL	—	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.012	—	NA	—
RE39-09-1923	39-604353	5–5.5	SOIL	—	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	0.013	—	NA	—
RE39-09-1925	39-604354	5.4–6.4	SOIL	—	0.0089 (J)	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1929	39-604356	2.35–3.5	SOIL	0.027 (J)	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1945	39-604356	2.35–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9e-007 (J)	1.54e-006	1.5e-007 (J)	1.5e-007	NA	NA	NA	NA	NA	6.36e-006 (J)	NA
RE39-09-1930	39-604356	5.7–7.5	SOIL	0.0051 (J)	—	—	—	—	NA	NA	—	—	—	0.044 (J)	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1936	39-604359	7.5–8.5	SOIL	—	—	—	—	0.25 (J)	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1938	39-604360	7.5–8	SOIL	—	—	—	—	—	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	0.093 (J)	NA	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	DDE[4,4'-]	DDT[4,4'-]	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methoxychlor[4,4'-]	Methylene Chloride	Nitroglycerin	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	RDX
Construction Worker SSL[a]				**85.3**	**4.91**	**85.3**	**7530[b]**	**5380**	**549**	**162**	**26,900**	**2690[c]**	**24**	**17,400**	**na[d]**	**na**	**na**	**na**	**240**	**17.9[e]**	**na**	**1210**	**26.9**	**na**	**1350**
Industrial SSL[a]				**10.9**	**11**	**11.1**	**25,300[b]**	**1830**	**75.5**	**95**	**91,600**	**8200[f]**	**3.23**	**63,300**	**na**	**na**	**na**	**na**	**32.3**	**94.5[e]**	**na**	**5130**	**91.6**	**na**	**428**
Residential SSL[a]				**2.43**	**1.14**	**2.43**	**1740[b]**	**380**	**15.7**	**18.7**	**6160**	**630[f]**	**0.153**	**3850**	**na**	**na**	**na**	**na**	**1.53**	**17.7[e]**	**na**	**409**	**6.16**	**na**	**83.1**
RE39-09-1939	39-604361	5.3–7	SOIL	0.0048 (J)	—	—	—	—	NA	NA	—	—	—	0.02 (J)	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1941	39-604362	1.6–3.5	SOIL	—	0.0077 (J)	—	—	0.076 (J)	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
E39-09-1943	39-604363	3.4–4.8	SOIL	—	—	—	—	0.052 (J)	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-1944	39-604363	6.8–9	SOIL	—	—	—	—	0.068 (J)	NA	NA	—	—	—	—	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-13239	39-608120	14.5–15	SOIL	—	0.021 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-13245	39-608121	16–16.5	SOIL	—	0.49 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-13240	AN-607963	14.5–15	SOIL	—	0.062 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-13244	AN-607963	16–16.5	SOIL	—	0.0052 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAAN-09-11578	AN-607964	14–14.5	SOIL	0.21	NA	0.014 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[d] na = Not available.

[e] Bromomethane used as a surrogate based on structural similarity.

[f] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[g] — = Not detected.

[h] NA = Not analyzed.

Table 6.2-4
Radionuclides Detected or Detected above BVs/FVs at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Cesium-134	Uranium-238
Soil Background Value[a]				**na[b]**	**2.29**
Construction Worker SAL 25[c]				**15**	**470**
Industrial SAL 25[c]				**17**	**710**
Residential SAL 25[c]				**5**	**150**
RE39-09-1938	39-604360	7.5-8	SOIL	0.047	—
RE39-09-1941	39-604362	1.6-3.5	SOIL	— [d]	4.67

Note: Results are in pCI/g.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SALs from LANL (2015, 600929).

[d] — = Not detected or not detected above BV/FV.

Table 6.3-1
Samples Collected and Analyses Requested at Area 1 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury
0239-97-0013	39-01051	0–0.5	ALLH	—*	—	—	—	—	3032R	3031R	—	3031R
0239-97-0014	39-01053	0–0.5	ALLH	—	—	—	—	—	3032R	3031R	—	3031R
0239-97-0001	39-01491	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0010	39-01491	1–1.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0002	39-01492	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0003	39-01493	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0004	39-01494	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0005	39-01495	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0006	39-01496	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0011	39-01496	1–1.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0007	39-01497	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0008	39-01498	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0012	39-01498	1–1.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
0239-97-0009	39-01499	0–0.5	ALLH	—	—	—	—	—	3024R	3023R	—	3023R
RE39-09-5017	39-604805	0–1	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5018	39-604805	1–2	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5019	39-604805	2–3	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5020	39-604806	0–1	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5021	39-604806	1–2	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5022	39-604806	2–3	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5023	39-604807	0–1	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5024	39-604807	1–2	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5025	39-604807	2–3	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5026	39-604808	0–1	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5027	39-604808	1–2	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5028	39-604808	2–3	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5096	39-604808	2–3	ALLH	—	—	—	—	—	—	—	—	—
RE39-09-5029	39-604809	0–1.5	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury
RE39-09-5030	39-604809	1.5–2.5	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5031	39-604809	2–3	ALLH	09-1478	09-1479	09-1479	09-1479	09-1479	09-1479	09-1478	09-1478	09-1478
RE39-09-5032	39-604810	0–1	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5033	39-604810	1–2	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5034	39-604810	2–3	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5035	39-604811	0–1	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5036	39-604811	1–2	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5037	39-604811	2–3	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5038	39-604812	0–1	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5039	39-604812	1–2	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5040	39-604812	2–3	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5041	39-604813	0–1	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5042	39-604813	1–2	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5044	39-604814	0–1	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5045	39-604814	1–2	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5046	39-604814	2–3	ALLH	09-1502	09-1503	09-1503	09-1503	09-1503	09-1503	09-1502	09-1502	09-1502
RE39-09-5047	39-604815	0–1	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5048	39-604815	1–2	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5049	39-604815	2–3	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5050	39-604816	0–1	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5051	39-604816	1–2	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5052	39-604816	2–3	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5053	39-604817	0–1	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5054	39-604817	1–2	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-09-5055	39-604817	2–3	ALLH	09-1722	09-1724	09-1724	09-1724	09-1724	09-1724	09-1723	09-1722	09-1723
RE39-22-252628	39-61660	0–1	ALLH	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386
RE39-22-252629	39-61660	1–2	ALLH	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386
RE39-22-252630	39-61660	2–3	ALLH	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386
RE39-22-252631	39-61661	0–1	FILL	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury
RE39-22-252632	39-61661	1–2	FILL	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252633	39-61661	2–3	FILL	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252634	39-61662	0–1	FILL	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252635	39-61662	1–2	FILL	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252636	39-61662	2–3	FILL	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252637	39-61663	0–1	ALLH	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252638	39-61663	1–2	ALLH	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252639	39-61663	2–3	ALLH	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395
RE39-22-252640	39-61664	0–1	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252641	39-61664	1–2	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252642	39-61664	2–3	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252643	39-61665	0–1	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252644	39-61665	1–2	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252645	39-61665	2–3	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252646	39-61666	0–1	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252647	39-61666	1–2	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252648	39-61666	2–3	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252649	39-61667	0–1	FILL	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252650	39-61667	1–2	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252651	39-61667	2–3	ALLH	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467
RE39-22-252652	39-61668	0.5–1.5	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252653	39-61668	1.5–2.5	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252654	39-61668	2.5–3.5	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252655	39-61669	0.3–1.3	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252656	39-61669	1.3–2.3	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252657	39-61669	2.3–3.3	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252658	39-61670	0.5–1.5	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252659	39-61670	1.5–2.5	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252660	39-61670	2.5–3.5	ALLH	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619
RE39-22-252661	39-61671	0.8–1.8	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury
RE39-22-252662	39-61671	1.8–2.8	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659
RE39-22-252663	39-61671	2.8–3.8	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659
RE39-22-252664	39-61672	0.5–1.5	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659
RE39-22-252665	39-61672	1.5–2.5	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659
RE39-22-252666	39-61672	2.5–3.5	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659
RE39-22-252667	39-61673	0.9–1.9	ALLH	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659
RE39-22-252668	39-61673	1.9–2.9	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252669	39-61673	2.9–3.9	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252670	39-61674	0.5–1.5	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252671	39-61674	1.5–2.5	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252672	39-61674	2.5–3.5	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252673	39-61675	0.9–1.9	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252674	39-61675	1.9–2.9	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252675	39-61675	2.9–3.2	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252676	39-61676	0.5–1.5	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252677	39-61676	1.5–2.5	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252678	39-61676	2.5–3.5	ALLH	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677
RE39-22-252679	39-61677	0.5–1.5	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252680	39-61677	1.5–2.5	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252681	39-61677	2.5–3.5	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252682	39-61678	0–1	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252683	39-61678	1–2	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252684	39-61678	2–3	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252685	39-61679	0–1	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252686	39-61679	1–2	ALLH	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690
RE39-22-252687	39-61679	2–3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252688	39-61680	1–2	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252689	39-61680	2–3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252690	39-61680	3–4	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury
RE39-22-252691	39-61681	0.3–1.3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252692	39-61681	1.3–2.3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252693	39-61681	2.3–3.3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252694	39-61682	0–1	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252695	39-61682	1–2	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252696	39-61682	2–3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252697	39-61683	0–1	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252698	39-61683	1–2	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252699	39-61683	2–3	ALLH	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719
RE39-22-252700	39-61684	1–2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252701	39-61684	2–3	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252702	39-61684	3–4	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252703	39-61685	1.2–2.2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252704	39-61685	2.2–3.2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252705	39-61685	3.2–4.2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252706	39-61686	1.2–2.2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252707	39-61686	2.2–3.2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252708	39-61686	3.2–4.2	ALLH	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776
RE39-22-252709	39-61687	0.2–1.2	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252710	39-61687	1.2–2.2	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252711	39-61687	2.2–3.2	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252712	39-61688	1.3–2.3	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252713	39-61688	2.3–3.3	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252714	39-61688	3.3–4.3	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252715	39-61689	1.4–2.4	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252716	39-61689	2.4–3.4	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252717	39-61689	3.4–4.4	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252718	39-61690	0.9–1.9	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252719	39-61690	1.9–2.9	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252720	39-61690	2.9–3.9	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury
RE39-22-252721	39-61691	0.5–1.5	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252722	39-61691	1.5–2.5	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252723	39-61691	2.5–3.5	ALLH	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822
RE39-22-252724	39-61692	0.6–1.6	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252725	39-61692	1.6–2.6	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252726	39-61692	2.6–3.6	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252727	39-61693	0.7–1.7	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252728	39-61693	1.7–2.7	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252729	39-61693	2.7–3.7	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252730	39-61694	1–2	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252731	39-61694	2–3	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252732	39-61694	3–4	ALLH	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922
RE39-22-252733	39-61695	1–2	ALLH	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933
RE39-22-252734	39-61695	2–3	ALLH	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933
RE39-22-252735	39-61695	3–4	ALLH	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933
RE39-22-252736	39-61696	0.8–1.8	ALLH	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933
RE39-22-252737	39-61696	1.8–2.8	ALLH	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933
RE39-22-252738	39-61696	2.8–3.8	ALLH	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933
RE39-23-271395	39-61858	0–1	ALLH	—	—	—	—	—	—	—	—	—
RE39-23-271396	39-61858	2–3	ALLH	—	—	—	—	—	—	—	—	—
RE39-23-271397	39-61859	0–1	ALLH	—	—	—	—	—	—	—	—	—
RE39-23-271398	39-61859	2–3	ALLH	—	—	—	—	—	—	—	—	—

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	TPH, Diesel Range Organics	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
0239-97-0013	39-01051	0–0.5	ALLH	3029R	3029R	3029R	3029R	—	3030R	—
0239-97-0014	39-01053	0–0.5	ALLH	3029R	3029R	3029R	3029R	—	3030R	—
0239-97-0001	39-01491	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0010	39-01491	1–1.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0002	39-01492	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0003	39-01493	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0004	39-01494	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0005	39-01495	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0006	39-01496	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0011	39-01496	1–1.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0007	39-01497	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0008	39-01498	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0012	39-01498	1–1.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
0239-97-0009	39-01499	0–0.5	ALLH	3021R	3021R	3021R	3021R	—	3022R	—
RE39-09-5017	39-604805	0–1	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5018	39-604805	1–2	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5019	39-604805	2–3	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5020	39-604806	0–1	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5021	39-604806	1–2	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5022	39-604806	2–3	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5023	39-604807	0–1	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5024	39-604807	1–2	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5025	39-604807	2–3	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5026	39-604808	0–1	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5027	39-604808	1–2	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5028	39-604808	2–3	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5096	39-604808	2–3	ALLH	—	—	—	—	—	—	—
RE39-09-5029	39-604809	0–1.5	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	TPH, Diesel Range Organics	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-09-5030	39-604809	1.5–2.5	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5031	39-604809	2–3	ALLH	—	09-1477	09-1477	09-1477	—	09-1477	09-1478
RE39-09-5032	39-604810	0–1	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5033	39-604810	1–2	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5034	39-604810	2–3	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5035	39-604811	0–1	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5036	39-604811	1–2	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5037	39-604811	2–3	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5038	39-604812	0–1	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5039	39-604812	1–2	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5040	39-604812	2–3	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5041	39-604813	0–1	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5042	39-604813	1–2	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5044	39-604814	0–1	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5045	39-604814	1–2	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5046	39-604814	2–3	ALLH	—	09-1501	09-1501	09-1501	—	09-1501	09-1502
RE39-09-5047	39-604815	0–1	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5048	39-604815	1–2	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5049	39-604815	2–3	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5050	39-604816	0–1	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5051	39-604816	1–2	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5052	39-604816	2–3	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5053	39-604817	0–1	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5054	39-604817	1–2	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-09-5055	39-604817	2–3	ALLH	—	09-1720	09-1720	09-1720	—	09-1721	09-1722
RE39-22-252628	39-61660	0–1	ALLH	—	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	—	N3B-2022-2386	N3B-2022-2386
RE39-22-252629	39-61660	1–2	ALLH	—	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	—	N3B-2022-2386	N3B-2022-2386
RE39-22-252630	39-61660	2–3	ALLH	—	N3B-2022-2386	N3B-2022-2386	N3B-2022-2386	—	N3B-2022-2386	N3B-2022-2386
RE39-22-252631	39-61661	0–1	FILL	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	TPH, Diesel Range Organics	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-252632	39-61661	1–2	FILL	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252633	39-61661	2–3	FILL	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252634	39-61662	0–1	FILL	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252635	39-61662	1–2	FILL	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252636	39-61662	2–3	FILL	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252637	39-61663	0–1	ALLH	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252638	39-61663	1–2	ALLH	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252639	39-61663	2–3	ALLH	—	N3B-2022-2395	N3B-2022-2395	N3B-2022-2395	—	N3B-2022-2395	N3B-2022-2395
RE39-22-252640	39-61664	0–1	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252641	39-61664	1–2	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252642	39-61664	2–3	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252643	39-61665	0–1	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252644	39-61665	1–2	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252645	39-61665	2–3	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252646	39-61666	0–1	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252647	39-61666	1–2	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252648	39-61666	2–3	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252649	39-61667	0–1	FILL	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252650	39-61667	1–2	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252651	39-61667	2–3	ALLH	—	N3B-2022-2467	N3B-2022-2467	N3B-2022-2467	—	N3B-2022-2467	N3B-2022-2467
RE39-22-252652	39-61668	0.5–1.5	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252653	39-61668	1.5–2.5	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252654	39-61668	2.5–3.5	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252655	39-61669	0.3–1.3	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252656	39-61669	1.3–2.3	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252657	39-61669	2.3–3.3	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252658	39-61670	0.5–1.5	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252659	39-61670	1.5–2.5	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252660	39-61670	2.5–3.5	ALLH	—	N3B-2022-2619	N3B-2022-2619	N3B-2022-2619	—	N3B-2022-2619	N3B-2022-2619
RE39-22-252661	39-61671	0.8–1.8	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	TPH, Diesel Range Organics	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-252662	39-61671	1.8–2.8	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659
RE39-22-252663	39-61671	2.8–3.8	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659
RE39-22-252664	39-61672	0.5–1.5	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659
RE39-22-252665	39-61672	1.5–2.5	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659
RE39-22-252666	39-61672	2.5–3.5	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659
RE39-22-252667	39-61673	0.9–1.9	ALLH	—	N3B-2022-2659	N3B-2022-2659	N3B-2022-2659	—	N3B-2022-2659	N3B-2022-2659
RE39-22-252668	39-61673	1.9–2.9	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252669	39-61673	2.9–3.9	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252670	39-61674	0.5–1.5	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252671	39-61674	1.5–2.5	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252672	39-61674	2.5–3.5	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252673	39-61675	0.9–1.9	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252674	39-61675	1.9–2.9	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252675	39-61675	2.9–3.2	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252676	39-61676	0.5–1.5	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252677	39-61676	1.5–2.5	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252678	39-61676	2.5–3.5	ALLH	—	N3B-2022-2677	N3B-2022-2677	N3B-2022-2677	—	N3B-2022-2677	N3B-2022-2677
RE39-22-252679	39-61677	0.5–1.5	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252680	39-61677	1.5–2.5	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252681	39-61677	2.5–3.5	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252682	39-61678	0–1	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252683	39-61678	1–2	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252684	39-61678	2–3	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252685	39-61679	0–1	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252686	39-61679	1–2	ALLH	—	N3B-2022-2690	N3B-2022-2690	N3B-2022-2690	—	N3B-2022-2690	N3B-2022-2690
RE39-22-252687	39-61679	2–3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252688	39-61680	1–2	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252689	39-61680	2–3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252690	39-61680	3–4	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	TPH, Diesel Range Organics	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-252691	39-61681	0.3–1.3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252692	39-61681	1.3–2.3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252693	39-61681	2.3–3.3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252694	39-61682	0–1	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252695	39-61682	1–2	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252696	39-61682	2–3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252697	39-61683	0–1	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252698	39-61683	1–2	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252699	39-61683	2–3	ALLH	—	N3B-2022-2719	N3B-2022-2719	N3B-2022-2719	—	N3B-2022-2719	N3B-2022-2719
RE39-22-252700	39-61684	1–2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252701	39-61684	2–3	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252702	39-61684	3–4	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252703	39-61685	1.2–2.2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252704	39-61685	2.2–3.2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252705	39-61685	3.2–4.2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252706	39-61686	1.2–2.2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252707	39-61686	2.2–3.2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252708	39-61686	3.2–4.2	ALLH	—	N3B-2022-2776	N3B-2022-2776	N3B-2022-2776	—	N3B-2022-2776	N3B-2022-2776
RE39-22-252709	39-61687	0.2–1.2	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252710	39-61687	1.2–2.2	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252711	39-61687	2.2–3.2	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252712	39-61688	1.3–2.3	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252713	39-61688	2.3–3.3	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252714	39-61688	3.3–4.3	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252715	39-61689	1.4–2.4	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252716	39-61689	2.4–3.4	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252717	39-61689	3.4–4.4	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252718	39-61690	0.9–1.9	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252719	39-61690	1.9–2.9	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252720	39-61690	2.9–3.9	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	TPH, Diesel Range Organics	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-252721	39-61691	0.5–1.5	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252722	39-61691	1.5–2.5	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252723	39-61691	2.5–3.5	ALLH	—	N3B-2022-2822	N3B-2022-2822	N3B-2022-2822	—	N3B-2022-2822	N3B-2022-2822
RE39-22-252724	39-61692	0.6–1.6	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252725	39-61692	1.6–2.6	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252726	39-61692	2.6–3.6	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252727	39-61693	0.7–1.7	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252728	39-61693	1.7–2.7	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252729	39-61693	2.7–3.7	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252730	39-61694	1–2	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252731	39-61694	2–3	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252732	39-61694	3–4	ALLH	—	N3B-2022-2922	N3B-2022-2922	N3B-2022-2922	—	N3B-2022-2922	N3B-2022-2922
RE39-22-252733	39-61695	1–2	ALLH	—	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	—	N3B-2022-2933	N3B-2022-2933
RE39-22-252734	39-61695	2–3	ALLH	—	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	—	N3B-2022-2933	N3B-2022-2933
RE39-22-252735	39-61695	3–4	ALLH	—	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	—	N3B-2022-2933	N3B-2022-2933
RE39-22-252736	39-61696	0.8–1.8	ALLH	—	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	—	N3B-2022-2933	N3B-2022-2933
RE39-22-252737	39-61696	1.8–2.8	ALLH	—	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	—	N3B-2022-2933	N3B-2022-2933
RE39-22-252738	39-61696	2.8–3.8	ALLH	—	N3B-2022-2933	N3B-2022-2933	N3B-2022-2933	—	N3B-2022-2933	N3B-2022-2933
RE39-23-271395	39-61858	0–1	ALLH	—	—	—	N3B-2023-1523	—	—	—
RE39-23-271396	39-61858	2–3	ALLH	—	—	—	N3B-2023-1523	—	—	—
RE39-23-271397	39-61859	0–1	ALLH	—	—	—	N3B-2023-1523	—	—	—
RE39-23-271398	39-61859	2–3	ALLH	—	—	—	N3B-2023-1523	—	—	—

Note: Numbers in analyte columns are request numbers
*— = Analysis not requested.

Table 6.3-2
Samples Collected and Analyses Requested at Area 2 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCBs	SVOCs	Explosive Compounds	Cyanide	Nitrate
RE39-19-184641	39-61655	0–1	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184642	39-61655	2–3	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184643	39-61655	4–5	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184644	39-61656	0–1	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184645	39-61656	2–3	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184646	39-61656	4–5	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184647	39-61657	0–1	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184648	39-61657	2–3	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184649	39-61657	4–5	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184650	39-61658	0–1	FILL	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106
RE39-19-184651	39-61658	2–3	FILL	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106
RE39-19-184652	39-61658	4–5	FILL	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106	N3B-2019-3106
RE39-19-184653	39-61659	0–1	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184654	39-61659	2–3	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-19-184655	39-61659	4–5	FILL	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091	N3B-2019-3091
RE39-22-253752	39-61743	0–1	ALLH	—[a]	N3B-2022-2934[b]	—	—	N3B-2022-2934	—	—	—	—
RE39-22-253753	39-61743	2–3	ALLH	—	N3B-2022-2934[b]	—	—	N3B-2022-2934	—	—	—	—
RE39-22-253754	39-61743	4–5	ALLH	—	N3B-2022-2934[b]	—	—	N3B-2022-2934	—	—	—	—
RE39-22-253755	39-61744	0–1	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253756	39-61744	2–3	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253757	39-61744	4–5	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253758	39-61745	0–1	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253759	39-61745	2–3	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253760	39-61745	4–5	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253761	39-61746	0–1	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253762	39-61746	2–3	ALLH	—	N3B-2022-301[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253763	39-61746	4–5	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253764	39-61747	0–1	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253765	39-61747	2–3	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCBs	SVOCs	Explosive Compounds	Cyanide	Nitrate
RE39-22-253766	39-61747	4–5	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253767	39-61748	0–1	FILL	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253768	39-61748	2–3	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253769	39-61748	4–5	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253770	39-61749	0–1	FILL	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253771	39-61749	2–3	ALLH	—	N3B-2022-3010[b]	—	—	N3B-2022-3010	—	—	—	—
RE39-22-253772	39-61749	4–5	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253773	39-61750	0–1	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253774	39-61750	2–3	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253775	39-61750	4–5	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253776	39-61751	0–1	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253777	39-61751	2–3	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253778	39-61751	4–5	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253779	39-61752	0–1	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253780	39-61752	2–3	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253781	39-61752	4–5	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253782	39-61753	0–1	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253783	39-61753	2–3	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253784	39-61753	4–5	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253785	39-61754	0–1	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253786	39-61754	2–3	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253787	39-61754	4–5	ALLH	—	N3B-2022-3039[b]	—	—	N3B-2022-3039	—	—	—	—
RE39-22-253788	39-61755	0–1	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253789	39-61755	2–3	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253790	39-61755	4–5	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253791	39-61756	0–1	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253792	39-61756	2–3	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253793	39-61756	4–5	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253794	39-61757	0–1	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253795	39-61757	2–3	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253796	39-61757	4–5	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCBs	SVOCs	Explosive Compounds	Cyanide	Nitrate
RE39-22-253797	39-61758	0–1	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253798	39-61758	2–3	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253799	39-61758	4–5	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253800	39-61759	0–1	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253801	39-61759	2–3	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253802	39-61759	4–5	ALLH	—	N3B-2022-3052[b]	—	—	N3B-2022-3052	—	—	—	—
RE39-22-253804	39-61760	2–3	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253805	39-61760	4–5	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253806	39-61761	0–1	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253807	39-61761	2–3	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253808	39-61761	4–5	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253809	39-61762	0–1	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253810	39-61762	2–3	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253811	39-61762	4–5	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253812	39-61763	0–1	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253813	39-61763	2–3	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253814	39-61763	4–5	ALLH	—	N3B-2022-3072[b]	—	—	N3B-2022-3072	—	—	—	—
RE39-22-253815	39-61764	0–1	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253816	39-61764	2–3	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253817	39-61764	4–5	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253818	39-61765	0–1	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253819	39-61765	2–3	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253820	39-61765	4–5	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253821	39-61766	0–1	FILL	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253822	39-61766	2–3	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253823	39-61766	4–5	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253824	39-61767	0–1	FILL	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253825	39-61767	2–3	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253826	39-61767	4–5	ALLH	—	N3B-2022-3078[b]	—	—	N3B-2022-3078	—	—	—	—
RE39-22-253827	39-61768	0–1	FILL	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253828	39-61768	2–3	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCBs	SVOCs	Explosive Compounds	Cyanide	Nitrate
RE39-22-253829	39-61768	4–5	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253830	39-61769	0–1	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253831	39-61769	2–3	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253832	39-61769	4–5	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253833	39-61770	0–1	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253834	39-61770	2–3	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253835	39-61770	4–5	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253836	39-61771	0–1	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253837	39-61771	2–3	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253838	39-61771	4–5	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253839	39-61772	0–1	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253840	39-61772	2–3	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253841	39-61772	4–5	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253842	39-61773	0–1	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253843	39-61773	2–3	ALLH	—	N3B-2022-3101[b]	—	—	N3B-2022-3101	—	—	—	—
RE39-22-253844	39-61773	4–5	ALLH	—	N3B-2022-3117[b]	—	—	N3B-2022-3117	—	—	—	—
RE39-22-253845	39-61774	0–1	ALLH	—	N3B-2022-3117[b]	—	—	N3B-2022-3117	—	—	—	—
RE39-22-253846	39-61774	2–3	ALLH	—	N3B-2022-3117[b]	—	—	N3B-2022-3117	—	—	—	—
RE39-22-253847	39-61774	4–5	ALLH	—	N3B-2022-3117[b]	—	—	N3B-2022-3117	—	—	—	—
RE39-22-253848	39-61775	0–1	ALLH	—	N3B-2022-3131[b]	—	—	N3B-2022-3131	—	—	—	—
RE39-22-253849	39-61775	2–3	ALLH	—	N3B-2022-3131[b]	—	—	N3B-2022-3131	—	—	—	—
RE39-22-253850	39-61775	4–5	ALLH	—	N3B-2022-3131[b]	—	—	N3B-2022-3131	—	—	—	—
RE39-22-253851	39-61776	0–1	ALLH	—	N3B-2022-3131[b]	—	—	N3B-2022-3131	—	—	—	—
RE39-22-253852	39-61776	2–3	ALLH	—	N3B-2022-3131[b]	—	—	N3B-2022-3131	—	—	—	—
RE39-22-253853	39-61776	4–5	ALLH	—	N3B-2022-3131[b]	—	—	N3B-2022-3131	—	—	—	—
RE39-22-253854	39-61777	0–1	ALLH	—	N3B-2022-3155[b]	—	—	N3B-2022-3155	—	—	—	—
RE39-22-253855	39-61777	2–3	ALLH	—	N3B-2022-3155[b]	—	—	N3B-2022-3155	—	—	—	—
RE39-22-253856	39-61777	4–5	ALLH	—	N3B-2022-3155[b]	—	—	N3B-2022-3155	—	—	—	—
RE39-23-270490	39-61743	6–7	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270491	39-61743	9–10	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270492	39-61776	6–7	ALLH	—	—	—	—	N3B-2023-1426	—	—	—	—

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCBs	SVOCs	Explosive Compounds	Cyanide	Nitrate
RE39-23-270493	39-61776	9–10	ALLH	—	—	—	—	N3B-2023-1426	—	—	—	—
RE39-23-270494	39-61844	0–1	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270495	39-61844	2–3	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270496	39-61844	4–5	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270497	39-61845	0–1	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270498	39-61845	2–3	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270499	39-61845	4–5	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270500	39-61845	6–7	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270501	39-61846	0–1	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270502	39-61846	2–3	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270503	39-61846	4–5	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270504	39-61846	6–7	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270505	39-61847	0–1	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270506	39-61847	2–3	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270507	39-61847	4–5	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270508	39-61847	6–7	ALLH	—	—	—	—	N3B-2023-1366	—	—	—	—
RE39-23-270509	39-61848	0–1	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270510	39-61848	2–3	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270511	39-61848	4–5	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270512	39-61848	6–7	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270513	39-61849	0–1	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270514	39-61849	2–3	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270515	39-61849	4–5	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270516	39-61849	6–7	ALLH	—	—	—	—	N3B-2023-1395	—	—	—	—
RE39-23-270517	39-61850	0–1	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270518	39-61850	2–3	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270519	39-61850	4–5	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270520	39-61851	0–1	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270521	39-61851	2–3	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270522	39-61851	4–5	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270523	39-61852	0–1	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCBs	SVOCs	Explosive Compounds	Cyanide	Nitrate
RE39-23-270524	39-61852	2–3	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270525	39-61852	4–5	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270526	39-61853	0–1	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270527	39-61853	2–3	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270528	39-61853	4–5	ALLH	—	—	—	—	N3B-2023-1345	—	—	—	—
RE39-23-270529	39-61854	0–1	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270530	39-61854	2–3	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270531	39-61854	4–5	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270532	39-61855	0–1	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270533	39-61855	2–3	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270534	39-61855	4–5	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270535	39-61856	0–1	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270536	39-61856	2–3	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270537	39-61856	4–5	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270538	39-61857	0–1	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270539	39-61857	2–3	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—
RE39-23-270540	39-61857	4–5	ALLH	—	—	—	—	N3B-2023-1365	—	—	—	—

Note: Numbers in analyte columns are request numbers.

[a] — = Analysis not requested.

[b] Analyzed only for copper.

Table 6.3-3
Samples Collected and Analyses Requested at Area 3 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium-241	Isotopic Plutonium	Isotopic Uranium	TAL Metals Plus Uranium	Perchlorate	Mercury (TAL Metal)	PCBs	VOCs	SVOCs	Dioxins/furans	Explosive Compounds	Cyanide
RE39-09-4468	39-604731	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—*	09-1289	09-1290
RE39-09-4469	39-604731	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4470	39-604732	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4484	39-604732	0.5–1	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-1288	—	—
RE39-09-4471	39-604732	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4472	39-604733	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4473	39-604733	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4474	39-604734	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4475	39-604734	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4476	39-604735	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4477	39-604735	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4478	39-604736	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4479	39-604736	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4480	39-604737	0–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4481	39-604737	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4482	39-604738	0.5–1	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290
RE39-09-4483	39-604738	1–2	ALLH	09-1290	09-1291	09-1291	09-1291	09-1291	09-1291	09-1290	09-1290	09-1290	09-1289	09-1289	09-1289	—	09-1289	09-1290

Note: Numbers in analyte columns are request numbers.

* — = Analysis not requested.

Table 6.3-4
Inorganic Chemicals above BVs at Area 1 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
0239-97-0013	39-01051	0–0.5	SOIL	—[d]	0.62 (J)	—	214 (J+)	NA[e]	50 (J+)	1.3 (J+)	—	NA	NA	—	—	—	0.78 (U)	59.3 (J+)
0239-97-0014	39-01053	0–0.5	SOIL	—	1 (J)	—	186 (J+)	NA	96.9 (J+)	2.5 (J+)	39.8	NA	NA	—	—	—	0.87 (J)	110 (J+)
0239-97-0001	39-01491	0–0.5	SOIL	5.2 (U)	0.52 (U)	—	16.8	NA	34.7	0.12	—	NA	NA	—	—	—	—	—
0239-97-0010	39-01491	1–1.5	SOIL	6.1 (U)	0.61 (U)	—	—	NA	—	—	—	NA	NA	—	—	—	—	—
0239-97-0002	39-01492	0–0.5	SOIL	5.2 (U)	0.52 (U)	—	128	NA	29.2	—	—	NA	NA	—	—	—	—	98
0239-97-0003	39-01493	0–0.5	SOIL	4.9 (U)	0.76	—	78.7	NA	41	—	—	NA	NA	—	—	—	—	77.4
0239-97-0004	39-01494	0–0.5	SOIL	5.1 (U)	0.51 (U)	—	28.2	NA	38.9	0.25	—	NA	NA	—	—	—	—	—
0239-97-0005	39-01495	0–0.5	SOIL	5.2 (U)	0.52 (U)	—	—	NA	24.2	0.13	—	NA	NA	—	—	—	—	—
0239-97-0006	39-01496	0–0.5	SOIL	5.1 (U)	0.84	—	61.3	NA	35	0.16	—	NA	NA	—	1.1	—	—	52.4
0239-97-0011	39-01496	1–1.5	SOIL	5.8 (U)	0.58 (U)	—	—	NA	—	1.1	—	NA	NA	—	—	—	—	—
0239-97-0007	39-01497	0–0.5	SOIL	5.5 (U)	0.55 (U)	—	—	NA	—	—	—	NA	NA	—	—	—	—	416
0239-97-0008	39-01498	0–0.5	SOIL	5.3 (U)	0.53 (U)	—	28.6	NA	34.8	0.18	—	NA	NA	—	—	—	—	49
0239-97-0012	39-01498	1–1.5	SOIL	5.9 (U)	0.59 (U)	—	—	NA	—	—	—	NA	NA	—	—	—	—	—
0239-97-0009	39-01499	0–0.5	SOIL	5.2 (U)	1.7	—	508	NA	141	1.9	—	NA	NA	—	—	—	—	191
RE39-09-5017	39-604805	0–1	SOIL	—	—	—	—	—	—	0.125	—	1.1	—	—	—	—	—	61.6
RE39-09-5018	39-604805	1–2	SOIL	—	—	—	—	—	—	—	—	0.71	—	—	—	—	—	—
RE39-09-5019	39-604805	2–3	SOIL	—	—	—	—	—	—	—	—	0.1 (J)	—	—	—	—	—	—
RE39-09-5020	39-604806	0–1	SOIL	—	2.3	—	47.1	—	160	—	—	10.2	—	—	—	—	—	110
RE39-09-5021	39-604806	1–2	SOIL	—	0.85	—	18	—	977	—	—	4.4	—	—	1.2 (U)	—	—	170
RE39-09-5022	39-604806	2–3	SOIL	—	—	—	—	—	29.1	—	—	6.7	—	—	—	—	—	—
RE39-09-5023	39-604807	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5024	39-604807	1–2	SOIL	—	—	—	—	—	—	—	—	0.37	—	—	—	—	—	—
RE39-09-5025	39-604807	2–3	SOIL	—	—	—	—	—	—	—	—	0.78	—	—	—	—	—	—
RE39-09-5026	39-604808	0–1	SOIL	—	—	—	—	—	—	0.138	—	1.3	—	—	—	—	—	—
RE39-09-5027	39-604808	1–2	SOIL	—	—	—	—	—	—	—	—	2.5	—	—	—	—	—	—
RE39-09-5028	39-604808	2–3	SOIL	—	—	—	—	—	—	—	—	0.5	—	—	—	—	—	—
RE39-09-5029	39-604809	0–1.5	SOIL	—	—	—	—	—	—	—	—	0.99	—	—	—	—	—	—
RE39-09-5030	39-604809	1.5–2.5	SOIL	—	—	—	—	—	—	—	—	0.5	—	—	—	—	—	—

Table 6.3-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na**[b]	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
RE39-09-5031	39-604809	2–3	SOIL	—	—	—	—	—	—	—	—	0.23	—	—	—	—	—	—
RE39-09-5032	39-604810	0–1	SOIL	1.11 (U)	—	—	21.9 (J)	—	22.6 (J)	0.422	—	2.06	—	—	—	—	—	71.4
RE39-09-5033	39-604810	1–2	SOIL	1.16 (U)	0.579 (U)	—	—	—	—	—	—	2.45	—	—	—	—	—	—
RE39-09-5034	39-604810	2–3	SOIL	1.07 (U)	0.534 (U)	—	—	—	—	—	—	1.5	—	—	—	—	—	—
RE39-09-5035	39-604811	0–1	SOIL	1.14 (U)	—	—	16.7 (J)	—	—	0.101	—	4.38	—	—	—	—	—	141
RE39-09-5036	39-604811	1–2	SOIL	1.13 (U)	0.566 (U)	—	—	—	—	—	—	7.28	—	—	—	—	—	—
RE39-09-5037	39-604811	2–3	SOIL	1.18 (U)	0.591 (U)	—	—	—	—	—	—	10 (J)	—	—	—	—	—	76.1
RE39-09-5038	39-604812	0–1	SOIL	2.46	1.04	—	122 (J)	1	233 (J)	1.85	—	1.03 (J)	—	—	—	—	1.26 (J)	113
RE39-09-5039	39-604812	1–2	SOIL	1.12 (U)	—	—	27.5 (J)	—	—	1.22	—	1.21	—	—	—	—	—	60.6
RE39-09-5040	39-604812	2–3	SOIL	1.1 (U)	—	—	23.7 (J)	—	24 (J)	0.602	—	1.52	—	—	—	—	—	55
RE39-09-5041	39-604813	0–1	SOIL	1.11 (U)	0.604	—	76.1 (J)	—	43.7 (J)	0.836	—	6.58	—	—	—	—	—	297
RE39-09-5042	39-604813	1–2	SOIL	1.12 (U)	0.46 (J)	—	37.2 (J)	—	27.6 (J)	0.846	—	4.55	—	—	—	—	—	467
RE39-09-5044	39-604814	0–1	SOIL	1.07 (U)	0.429 (J)	—	48.1 (J)	20.8	24.1 (J)	0.109	—	—	—	—	—	—	—	94.6
RE39-09-5045	39-604814	1–2	SOIL	1.16 (U)	0.582 (U)	—	—	20.8	—	0.188	—	—	0.000715 (J)	—	—	—	—	—
RE39-09-5046	39-604814	2–3	SOIL	1.09 (U)	0.547 (U)	—	—	4.85	—	—	—	1.18	—	—	—	—	—	—
RE39-09-5047	39-604815	0–1	SOIL	—	0.53	—	41.3	—	23.7	0.183	—	—	—	—	—	—	—	70.9
RE39-09-5048	39-604815	1–2	SOIL	—	0.68	—	46.6	—	30.9	—	—	—	—	—	—	—	—	62.8
RE39-09-5049	39-604815	2–3	SOIL	—	0.62	—	57.2	—	39.8	0.131	—	—	—	—	—	—	—	58.7
RE39-09-5050	39-604816	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5051	39-604816	1–2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5052	39-604816	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5053	39-604817	0–1	SOIL	—	0.67	—	27.5	—	63.2	0.568	—	—	—	—	—	—	—	75.8
RE39-09-5054	39-604817	1–2	SOIL	—	—	—	—	—	26.8	0.244	—	—	—	—	—	—	—	—
RE39-09-5055	39-604817	2–3	SOIL	—	—	—	—	—	—	0.135	—	—	—	—	—	—	—	—
RE39-22-252628	39-61660	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	3.63	—	—	—	—	—	55.9
RE39-22-252629	39-61660	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	6.45	0.0019 (J)	1.65	—	—	—	—
RE39-22-252630	39-61660	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	2.74	—	—	—	—	—	—
RE39-22-252631	39-61661	0.0–1.0	FILL	1.39 (U)	—	—	77.8 (J+)	—	—	—	—	8.24	0.000731 (J)	—	—	—	—	238

Table 6.3-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
RE39-22-252632	39-61661	1.0–2.0	FILL	1.86 (U)	—	6440 (J)	26.6 (J+)	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252633	39-61661	2.0–3.0	FILL	—	—	—	56.9 (J+)	—	—	—	—	0.943 (J)	—	—	—	—	—	90.5
RE39-22-252634	39-61662	0.0–1.0	FILL	0.994 (U)	—	—	15.7 (J+)	—	—	—	—	6.11	—	—	—	—	—	167
RE39-22-252635	39-61662	1.0–2.0	FILL	1.03 (U)	—	6470 (J)	14.8 (J+)	—	—	—	—	2.91	—	—	—	—	—	85.9
RE39-22-252636	39-61662	2.0–3.0	FILL	—	—	—	—	—	—	—	—	0.986 (J)	—	—	—	—	—	—
RE39-22-252637	39-61663	0.0–1.0	SOIL	—	0.833	—	21.6 (J+)	—	—	0.212	—	1.54	—	—	—	—	—	138
RE39-22-252638	39-61663	1.0–2.0	SOIL	—	—	—	—	—	—	0.142	—	—	—	—	—	—	—	—
RE39-22-252639	39-61663	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	1.27	0.000775 (J)	—	—	—	—	—
RE39-22-252640	39-61664	0.0–1.0	SOIL	—	—	—	—	—	—	0.164	—	1.63	0.000709 (J)	—	—	—	—	55.7
RE39-22-252641	39-61664	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	3.05	0.000604 (J)	—	—	—	—	—
RE39-22-252642	39-61664	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	1.26	—	—	—	—	—	—
RE39-22-252643	39-61665	0.0–1.0	SOIL	—	—	—	—	—	—	0.14	—	2.47	—	—	—	—	—	54.9
RE39-22-252644	39-61665	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	2.05	—	—	—	—	—	—
RE39-22-252645	39-61665	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	2.8	—	—	—	—	—	—
RE39-22-252646	39-61666	0.0–1.0	SOIL	—	2.2	—	323	—	62 (J+)	0.257	—	1	—	—	—	—	—	103
RE39-22-252647	39-61666	1.0–2.0	SOIL	—	0.423 (J)	—	17.9	—	—	—	—	3.14	—	—	—	916	—	—
RE39-22-252648	39-61666	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	2.79	—	—	—	—	—	—
RE39-22-252649	39-61667	0.0–1.0	FILL	—	—	—	—	—	—	—	—	2.32	—	—	—	—	—	—
RE39-22-252650	39-61667	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	4.27	—	—	—	—	—	—
RE39-22-252651	39-61667	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	7.04	—	—	—	—	—	—
RE39-22-252652	39-61668	0.5–1.5	SOIL	—	—	—	25.1 (J)	—	—	0.14 (J)	—	2.73	—	—	—	—	—	—
RE39-22-252653	39-61668	1.5–2.5	SOIL	—	—	—	—	—	—	0.164 (J)	—	7.1	—	—	—	—	—	—
RE39-22-252654	39-61668	2.5–3.5	SOIL	—	—	—	—	—	—	—	—	2.56	0.00794	—	—	—	—	—
RE39-22-252655	39-61669	0.3–1.3	SOIL	—	—	—	—	—	24.2	28.1 (J)	—	0.98 (J)	—	—	—	—	—	—
RE39-22-252656	39-61669	1.3–2.3	SOIL	—	—	—	—	—	36.3	9.22 (J)	—	3.89	0.00125 (J)	—	—	—	—	53
RE39-22-252657	39-61669	2.3–3.3	SOIL	—	—	—	—	—	—	3.31 (J)	—	2.94	—	—	—	—	—	—
RE39-22-252658	39-61670	0.5–1.5	SOIL	—	—	—	—	—	—	0.305 (J)	—	1.51	—	—	—	—	—	—
RE39-22-252659	39-61670	1.5–2.5	SOIL	—	—	—	—	—	—	—	—	3.96	—	—	—	—	—	—

Table 6.3-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
RE39-22-252660	39-61670	2.5–3.5	SOIL	—	—	—	—	—	—	—	—	3.11	0.000567 (J)	—	—	—	—	—
RE39-22-252661	39-61671	0.8–1.8	SOIL	—	0.401 (J)	—	22.7 (J)	—	—	0.256 (J)	—	—	—	—	—	—	—	49.6 (J)
RE39-22-252662	39-61671	1.8–2.8	SOIL	—	—	—	—	—	—	—	—	1.94	—	—	—	—	—	—
RE39-22-252663	39-61671	2.8–3.8	SOIL	—	—	—	—	—	—	—	—	2.69	—	—	—	—	—	—
RE39-22-252664	39-61672	0.5–1.5	SOIL	—	—	—	—	—	—	0.192 (J)	—	—	—	—	—	—	—	62.3 (J)
RE39-22-252665	39-61672	1.5–2.5	SOIL	—	—	—	—	—	—	—	—	1.79	—	—	—	—	—	—
RE39-22-252666	39-61672	2.5–3.5	SOIL	—	—	—	—	—	—	—	—	1.14	—	—	—	—	—	—
RE39-22-252667	39-61673	0.9–1.9	SOIL	—	0.513 (J)	—	—	—	—	0.127 (J)	—	2.75	0.000963 (J)	—	—	—	—	—
RE39-22-252668	39-61673	1.9–2.9	SOIL	1.11 (U)	—	—	—	—	—	—	—	2.41	—	1.74	—	—	—	53.2 (J)
RE39-22-252669	39-61673	2.9–3.9	SOIL	—	—	—	—	—	—	—	—	1.9	—	1.71	—	—	—	—
RE39-22-252670	39-61674	0.5–1.5	SOIL	—	0.497	—	19.3	—	—	1.12	—	0.978 (J)	—	—	—	—	—	60.5 (J)
RE39-22-252671	39-61674	1.5–2.5	SOIL	—	0.473 (J)	—	—	—	—	0.623	—	1.74	0.000845 (J)	—	—	—	—	56.3 (J)
RE39-22-252672	39-61674	2.5–3.5	SOIL	—	—	—	—	—	—	—	—	0.862 (J)	—	1.56	—	—	—	—
RE39-22-252673	39-61675	0.9–1.9	SOIL	1.53 (U)	—	17100	—	—	—	—	—	1.25	0.00066 (J)	1.91	—	—	—	58.3 (J)
RE39-22-252674	39-61675	1.9–2.9	SOIL	—	—	—	—	—	—	—	—	1.12	0.000614 (J)	—	—	—	—	—
RE39-22-252675	39-61675	2.9–3.2	SOIL	—	—	—	—	—	—	—	—	0.984 (J)	0.00054 (J)	1.76	—	—	—	—
RE39-22-252676	39-61676	0.5–1.5	SOIL	—	—	—	—	—	—	—	—	1.1	—	1.63	—	—	—	—
RE39-22-252677	39-61676	1.5–2.5	SOIL	—	—	—	—	—	—	—	—	1.03 (J)	0.000565 (J)	1.69	—	—	—	—
RE39-22-252678	39-61676	2.5–3.5	SOIL	—	—	—	—	—	—	—	—	1.39	0.000903 (J)	1.59	—	—	—	—
RE39-22-252679	39-61677	0.5–1.5	SOIL	—	0.521	—	38.3 (J+)	—	—	1.27 (J-)	—	—	—	—	—	—	—	58.4
RE39-22-252680	39-61677	1.5–2.5	SOIL	1.2 (J)	—	—	—	—	—	0.257 (J-)	—	—	—	—	—	—	—	—
RE39-22-252681	39-61677	2.5–3.5	SOIL	—	—	—	—	—	—	0.115 (J-)	—	—	—	—	—	—	—	—
RE39-22-252682	39-61678	0.0–1.0	SOIL	0.89 (J)	—	—	—	—	—	—	—	2.29	—	—	—	—	—	—
RE39-22-252683	39-61678	1.0–2.0	SOIL	—	—	—	—	—	23.4	—	—	4.67	—	—	—	—	—	—
RE39-22-252684	39-61678	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	1.79	—	—	—	—	—	55.9
RE39-22-252685	39-61679	0.0–1.0	SOIL	—	—	7900	—	—	—	0.111 (J-)	—	—	—	—	—	—	—	—
RE39-22-252686	39-61679	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252687	39-61679	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.3-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
RE39-22-252688	39-61680	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252689	39-61680	2.0–3.0	SOIL	—	—	6230	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252690	39-61680	3.0–4.0	SOIL	—	—	—	—	—	—	—	—	1.6	0.000528 (J)	—	—	—	—	—
RE39-22-252691	39-61681	0.3–1.3	SOIL	—	—	8180	—	—	—	—	—	1.01	0.000512 (J)	—	—	—	—	—
RE39-22-252692	39-61681	1.3–2.3	SOIL	—	—	—	—	—	—	—	—	1.28	—	1.58	—	—	—	—
RE39-22-252693	39-61681	2.3–3.3	SOIL	—	—	—	—	—	—	0.466	—	0.884 (J)	—	—	—	—	—	—
RE39-22-252694	39-61682	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	0.883 (J)	—	—	—	—	—	—
RE39-22-252695	39-61682	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	1.24	—	—	—	—	—	—
RE39-22-252696	39-61682	2.0–3.0	SOIL	1.07 (U)	—	7090	—	—	—	—	—	1.21	—	—	—	—	—	—
RE39-22-252697	39-61683	0.0–1.0	SOIL	—	—	—	—	—	—	0.315	—	0.696 (J)	—	—	—	—	—	—
RE39-22-252698	39-61683	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252699	39-61683	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252700	39-61684	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252701	39-61684	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	1.32	—	—	—	—	—	—
RE39-22-252702	39-61684	3.0–4.0	SOIL	—	—	—	—	—	—	—	—	0.863 (J)	—	—	—	—	—	—
RE39-22-252703	39-61685	1.2–2.2	SOIL	—	—	—	—	—	—	—	—	1.44	—	—	—	—	—	—
RE39-22-252704	39-61685	2.2–3.2	SOIL	—	—	—	—	—	—	—	—	0.89 (J)	—	—	—	—	—	—
RE39-22-252705	39-61685	3.2–4.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252706	39-61686	1.2–2.2	SOIL	—	—	—	—	—	—	0.242 (J)	—	0.877 (J)	—	—	—	—	—	—
RE39-22-252707	39-61686	2.2–3.2	SOIL	—	—	—	—	—	—	—	—	1.23	—	—	—	—	—	—
RE39-22-252708	39-61686	3.2–4.2	SOIL	—	—	—	—	—	—	—	—	1.05 (J)	—	—	—	—	—	—
RE39-22-252709	39-61687	0.2–1.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252710	39-61687	1.2–2.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252711	39-61687	2.2–3.2	SOIL	—	—	—	—	—	—	0.106	—	—	—	—	—	—	—	—
RE39-22-252712	39-61688	1.3–2.3	SOIL	—	—	—	—	—	—	—	—	1.56	—	—	—	—	—	—
RE39-22-252713	39-61688	2.3–3.3	SOIL	—	—	—	—	—	—	—	—	0.833 (J)	—	—	—	—	—	—
RE39-22-252714	39-61688	3.3–4.3	SOIL	—	—	—	—	—	—	—	—	0.875 (J)	—	—	—	—	—	—
RE39-22-252715	39-61689	1.4–2.4	SOIL	—	—	—	—	—	—	—	—	0.951 (J)	—	—	—	—	—	—

Table 6.3-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
RE39-22-252716	39-61689	2.4–3.4	SOIL	—	—	—	—	—	—	—	—	0.953 (J)	—	—	—	—	—	—
RE39-22-252717	39-61689	3.4–4.4	SOIL	—	—	—	—	—	—	—	—	0.713 (J)	—	—	—	—	—	—
RE39-22-252718	39-61690	0.9–1.9	SOIL	—	—	—	—	—	—	0.174	—	1.34	—	—	—	—	—	—
RE39-22-252719	39-61690	1.9–2.9	SOIL	—	—	—	—	—	—	—	—	1.15	—	—	—	—	—	—
RE39-22-252720	39-61690	2.9–3.9	SOIL	—	—	—	—	—	—	—	—	1.04 (J)	—	—	—	—	—	—
RE39-22-252721	39-61691	0.5–1.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252722	39-61691	1.5–2.5	SOIL	—	—	—	—	—	—	—	—	0.781 (J)	—	—	—	—	—	—
RE39-22-252723	39-61691	2.5–3.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252724	39-61692	0.6–1.6	SOIL	—	—	—	—	—	—	—	—	2.72	—	—	—	—	—	—
RE39-22-252725	39-61692	1.6–2.6	SOIL	—	—	—	—	—	—	—	—	4.59	—	—	—	—	—	—
RE39-22-252726	39-61692	2.6–3.6	SOIL	—	—	—	—	—	—	—	—	2.73	—	—	—	—	—	—
RE39-22-252727	39-61693	0.7–1.7	SOIL	—	—	—	—	—	—	0.306	—	1.29	—	—	—	—	—	—
RE39-22-252728	39-61693	1.7–2.7	SOIL	—	—	—	—	—	—	0.216	—	1.12	—	—	—	—	—	—
RE39-22-252729	39-61693	2.7–3.7	SOIL	—	—	—	—	—	—	—	—	0.694 (J)	—	—	—	—	—	—
RE39-22-252730	39-61694	1.0–2.0	SOIL	—	—	—	—	—	—	—	—	1.56	—	—	—	—	—	—
RE39-22-252731	39-61694	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	1.1	—	—	—	—	—	—
RE39-22-252732	39-61694	3.0–4.0	SOIL	—	—	—	—	—	—	—	—	0.772 (J)	—	—	—	—	—	—
RE39-22-252733	39-61695	1.0–2.0	SOIL	—	—	—	—	—	—	0.462 (J)	—	1.41	—	—	—	—	—	—
RE39-22-252734	39-61695	2.0–3.0	SOIL	1.04 (U)	—	—	15.3 (J)	—	—	—	—	0.81 (J)	—	—	—	—	—	—
RE39-22-252735	39-61695	3.0–4.0	SOIL	—	—	—	—	—	—	—	—	0.67 (J)	—	—	—	—	—	—
RE39-22-252736	39-61696	0.8–1.8	SOIL	0.866 (U)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252737	39-61696	1.8–2.8	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252738	39-61696	2.8–3.8	SOIL	—	—	—	—	—	—	—	—	1.42	—	—	—	—	—	—

Table 6.3-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Sodium	Thallium	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**915**	**0.73**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**na**	**3.54**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**na**	**13**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**na**	**0.782**	**23,500**
RE39-23-271395	39-61858	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-271396	39-61858	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-271397	39-61859	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-271398	39-61859	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730)

[b] na = Not available.SLs from NMED (2022, 700550) unless otherwise noted.

[c] SLs from NMED (2022, 700550) unless otherwise noted.

[d] — = Not detected or not detected above BV.

[e] NA = Not analyzed.

Table 6.3-5
Inorganic Chemicals above BVs at Area 2 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na**[b]	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-19-184641	39-61655	0–1	FILL	—[d]	—	—	0.875 (J)	—	—	48.9 (J+)
RE39-19-184642	39-61655	2–3	FILL	—	—	—	—	—	—	—
RE39-19-184643	39-61655	4–5	FILL	—	—	—	9.36	0.00224 (J)	—	—
RE39-19-184644	39-61656	0–1	FILL	—	—	—	0.963 (J)	—	—	—
RE39-19-184645	39-61656	2–3	FILL	—	—	—	6.65	—	—	—
RE39-19-184646	39-61656	4–5	FILL	—	—	—	15.2	0.00101 (J)	—	—
RE39-19-184647	39-61657	0–1	FILL	—	—	—	0.832 (J)	—	—	—
RE39-19-184648	39-61657	2–3	FILL	—	—	—	1.82	—	—	—
RE39-19-184649	39-61657	4–5	FILL	—	—	—	14	0.000743 (J)	—	—
RE39-19-184650	39-61658	0–1	FILL	—	—	—	0.636 (J)	—	—	—
RE39-19-184651	39-61658	2–3	FILL	—	—	—	1.11 (J)	—	—	—
RE39-19-184652	39-61658	4–5	FILL	—	—	—	4.43	—	—	—
RE39-19-184653	39-61659	0–1	FILL	—	6870	—	1.04	—	—	64.7 (J+)
RE39-19-184654	39-61659	2–3	FILL	—	—	—	1.74	—	—	—
RE39-19-184655	39-61659	4–5	FILL	4.05 (U)	—	23900	2.07	—	45.1	57.6
RE39-22-253752	39-61743	0–1	SOIL	NA[e]	—	NA	NA	NA	NA	NA
RE39-22-253753	39-61743	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253754	39-61743	4–5	SOIL	NA	—	NA	NA	NA	NA	NA

Table 6.3-5 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na**[b]	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-22-253755	39-61744	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253756	39-61744	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253757	39-61744	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253758	39-61745	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253759	39-61745	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253760	39-61745	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253761	39-61746	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253762	39-61746	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253763	39-61746	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253764	39-61747	0–1	SOIL	NA	30.3	NA	NA	NA	NA	NA
RE39-22-253765	39-61747	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253766	39-61747	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253767	39-61748	0–1	FILL	NA	—	NA	NA	NA	NA	NA
RE39-22-253768	39-61748	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253769	39-61748	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253770	39-61749	0–1	FILL	NA	—	NA	NA	NA	NA	NA
RE39-22-253771	39-61749	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253772	39-61749	4–5	SOIL	NA	—	NA	NA	NA	NA	NA

Table 6.3-5 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na[b]**	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-22-253773	39-61750	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253774	39-61750	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253775	39-61750	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253776	39-61751	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253777	39-61751	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253778	39-61751	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253779	39-61752	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253780	39-61752	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253781	39-61752	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253782	39-61753	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253783	39-61753	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253784	39-61753	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253785	39-61754	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253786	39-61754	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253787	39-61754	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253788	39-61755	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253789	39-61755	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253790	39-61755	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253791	39-61756	0–1	SOIL	NA	—	NA	NA	NA	NA	NA

Table 6.3-5 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na[b]**	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-22-253792	39-61756	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253793	39-61756	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253794	39-61757	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253795	39-61757	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253796	39-61757	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253797	39-61758	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253798	39-61758	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253799	39-61758	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253800	39-61759	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253801	39-61759	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253802	39-61759	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253804	39-61760	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253805	39-61760	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253806	39-61761	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253807	39-61761	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253808	39-61761	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253809	39-61762	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253810	39-61762	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253811	39-61762	4–5	SOIL	NA	—	NA	NA	NA	NA	NA

Table 6.3-5 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na[b]**	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-22-253812	39-61763	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253813	39-61763	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253814	39-61763	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253815	39-61764	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253816	39-61764	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253817	39-61764	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253818	39-61765	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253819	39-61765	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253820	39-61765	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253821	39-61766	0–1	FILL	NA	—	NA	NA	NA	NA	NA
RE39-22-253822	39-61766	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253823	39-61766	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253824	39-61767	0–1	FILL	NA	17	NA	NA	NA	NA	NA
RE39-22-253825	39-61767	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253826	39-61767	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253827	39-61768	0–1	FILL	NA	—	NA	NA	NA	NA	NA
RE39-22-253828	39-61768	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253829	39-61768	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253830	39-61769	0–1	SOIL	NA	—	NA	NA	NA	NA	NA

Table 6.3-5 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na**[b]	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-22-253831	39-61769	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253832	39-61769	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253833	39-61770	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253834	39-61770	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253835	39-61770	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253836	39-61771	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253837	39-61771	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253838	39-61771	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253839	39-61772	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253840	39-61772	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253841	39-61772	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253842	39-61773	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253843	39-61773	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253844	39-61773	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253845	39-61774	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253846	39-61774	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253847	39-61774	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253848	39-61775	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253849	39-61775	2–3	SOIL	NA	—	NA	NA	NA	NA	NA

Table 6.3-5 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Iron	Nitrate	Perchlorate	Vanadium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**21,500**	**na[b]**	**na**	**39.6**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**248,000**	**566,000**	**248**	**614**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**908,000**	**2,080,000**	**908**	**6530**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**54,800**	**125,000**	**54.8**	**394**	**23,500**
RE39-22-253850	39-61775	4–5	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253851	39-61776	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253852	39-61776	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253853	39-61776	4–5	SOIL	NA	15.2	NA	NA	NA	NA	NA
RE39-22-253854	39-61777	0–1	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253855	39-61777	2–3	SOIL	NA	—	NA	NA	NA	NA	NA
RE39-22-253856	39-61777	4–5	SOIL	NA	—	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

[e] NA = Not analyzed.

Table 6.3-6
Inorganic Chemicals above BVs at Area 3 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Copper	Cyanide (Total)	Lead	Nitrate	Sodium	Zinc
Soil Background Value[a]				**0.83**	**14.7**	**0.5**	**22.3**	**na[b]**	**915**	**48.8**
Construction Worker SSL[c]				**142**	**14,200**	**12.1**	**800**	**566,000**	**na**	**106,000**
Industrial SSL[c]				**519**	**51,900**	**63.3**	**800**	**2,080,000**	**na**	**389,000**
Residential SSL[c]				**31.3**	**3130**	**11.2**	**400**	**125,000**	**na**	**23,500**
RE39-09-4468	39-604731	0.5–1	SOIL	—[d]	—	0.54 (U)	—	0.4	—	—
RE39-09-4469	39-604731	1–2	SOIL	—	—	—	—	0.53	—	—
RE39-09-4470	39-604732	0.5–1	SOIL	—	78	0.53 (U)	—	—	—	64.5
RE39-09-4471	39-604732	1–2	SOIL	0.94 (U)	—	—	—	1.1	—	—
RE39-09-4472	39-604733	0.5–1	SOIL	—	—	—	—	—	—	—
RE39-09-4473	39-604733	1–2	SOIL	—	—	—	—	0.43	—	—
RE39-09-4474	39-604734	0.5–1	SOIL	—	—	0.53 (U)	—	0.14 (J)	—	—
RE39-09-4475	39-604734	1–2	SOIL	—	—	—	—	0.18 (J)	1070 (J+)	—
RE39-09-4476	39-604735	0.5–1	SOIL	—	—	—	—	0.36	—	—
RE39-09-4477	39-604735	1–2	SOIL	—	—	—	—	0.43	—	—
RE39-09-4478	39-604736	0.5–1	SOIL	—	—	—	24.6	0.31	—	—
RE39-09-4479	39-604736	1–2	SOIL	—	—	—	—	0.26	—	—
RE39-09-4480	39-604737	0–1	SOIL	—	—	—	—	4.4	—	—
RE39-09-4481	39-604737	0.5–1	SOIL	—	—	0.56 (U)	—	5.8	—	—
RE39-09-4482	39-604738	0.5–1	SOIL	—	—	—	—	0.98	—	—
RE39-09-4483	39-604738	1–2	SOIL	—	—	—	—	0.52	—	—

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

Table 6.3-7
Organic Chemicals Detected at Area 1 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**99,000[c]**
Industrial SSL[a]				**50,500**	**25,300**	**125**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**3,300,000[d]**	**1830**	**12,000[d]**
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**2900[d]**
0239-97-0013	39-01051	0–0.5	SOIL	—[e]	—	—	—	—	0.057	—	0.88	0.99	0.86	0.45	0.96	—	—	—
0239-97-0014	39-01053	0–0.5	SOIL	0.5	—	0.171	1	—	0.18	—	2.3	2.7	2.4	0.95	2.3	—	—	—
0239-97-0001	39-01491	0–0.5	SOIL	—	—	—	—	—	0.21	—	1.3	1.6	1.2	1.5	1.3	—	—	—
0239-97-0010	39-01491	1–1.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0239-97-0002	39-01492	0–0.5	SOIL	—	—	—	—	—	0.16	—	0.73	0.84	0.6	0.72	0.73	—	—	—
0239-97-0003	39-01493	0–0.5	SOIL	—	—	—	0.35	—	0.16	—	0.97	1	0.82	0.53	0.87	—	—	—
0239-97-0004	39-01494	0–0.5	SOIL	—	—	—	—	—	0.26	—	1.3	1.5	1.2	0.84	1.4	—	—	—
0239-97-0005	39-01495	0–0.5	SOIL	0.43	—	—	0.81	—	0.1	—	—	3.6	3.6	1.8	3	—	—	—
0239-97-0006	39-01496	0–0.5	SOIL	0.34 (J)	—	—	—	—	0.24	—	—	1.5 (J)	1.5 (J)	0.67 (J)	1.5 (J)	—	—	—
0239-97-0011	39-01496	1–1.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0239-97-0007	39-01497	0–0.5	SOIL	1.8 (J)	—	—	3.1 (J)	—	0.14	—	5.5 (J)	6.4 (J)	4.9 (J)	4 (J)	5.2 (J)	—	—	—
0239-97-0008	39-01498	0–0.5	SOIL	—	—	—	0.82 (J)	—	0.1	—	2 (J)	2.1 (J)	1.9 (J)	1 (J)	2.1 (J)	—	—	—
0239-97-0009	39-01499	0–0.5	SOIL	0.7 (J)	—	—	1.4 (J)	—	0.38	—	2.9 (J)	3.3 (J)	3.3 (J)	0.67 (J)	3.4 (J)	—	0.74 (J)	—
RE39-09-5017	39-604805	0–1	SOIL	0.048 (J)	—	—	0.074 (J)	—	0.035 (J)	—	0.35 (J)	0.41	0.33 (J)	0.23 (J)	0.44	—	—	—
RE39-09-5018	39-604805	1–2	SOIL	—	—	—	—	—	0.019 (J)	—	0.11 (J)	0.13 (J)	0.12 (J)	0.12 (J)	0.11 (J)	—	—	—
RE39-09-5020	39-604806	0–1	SOIL	0.059 (J-)	—	—	0.086 (J-)	—	0.39 (J)	—	0.22 (J-)	0.22 (J-)	0.18 (J-)	0.12 (J-)	0.25 (J-)	—	0.065 (J-)	—
RE39-09-5021	39-604806	1–2	SOIL	0.046 (J)	—	—	0.081 (J)	—	0.066 (J)	—	0.19 (J)	0.21 (J)	0.14 (J)	0.11 (J)	0.22 (J)	—	0.082 (J)	—
RE39-09-5022	39-604806	2–3	SOIL	0.04 (J)	—	—	0.068 (J)	—	0.024 (J)	—	0.13 (J)	0.12 (J)	0.095 (J)	0.057 (J)	0.12 (J)	—	—	—
RE39-09-5024	39-604807	1–2	SOIL	0.25 (J)	—	—	0.35 (J)	—	—	—	0.46	0.4	0.29 (J)	0.16 (J)	0.38 (J)	—	—	—
RE39-09-5026	39-604808	0–1	SOIL	0.18 (J)	—	—	0.22 (J)	—	0.12 (J)	—	0.65	0.7	0.58	0.39	0.64	—	—	—
RE39-09-5027	39-604808	1–2	SOIL	—	—	—	—	—	0.0075 (J)	—	—	—	—	—	—	—	—	—
RE39-09-5096	39-604808	2–3	SOIL	NA[f]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**99,000[c]**
Industrial SSL[a]				**50,500**	**25,300**	**125**	**25,3000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**3,300,000[d]**	**1830**	**12,000[d]**
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**2900[d]**
RE39-09-5029	39-604809	0–1.5	SOIL	—	—	—	—	—	0.0064 (J)	—	—	—	—	—	—	—	—	—
RE39-09-5031	39-604809	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5032	39-604810	0–1	SOIL	0.22	0.06 (J)	—	0.417	—	0.0318	0.0167	1.43	1.61	2.82	1.25	—	—	—	—
RE39-09-5033	39-604810	1–2	SOIL	—	—	—	0.0255 (J)	—	0.0023 (J)	0.0017 (J)	0.106	0.117	0.199	0.113	—	—	—	—
RE39-09-5034	39-604810	2–3	SOIL	—	—	—	0.0169 (J)	—	0.0029 (J)	—	0.0664	0.0732	0.101	0.0498	0.0509	—	—	—
RE39-09-5035	39-604811	0–1	SOIL	1.61	0.201	—	2.44	—	—	—	6.48	6.75	8.36	4.45	3.69	—	—	—
RE39-09-5036	39-604811	1–2	SOIL	0.123	0.0211 (J)	—	0.238	—	—	—	0.603	0.611	0.7	0.439	—	—	—	—
RE39-09-5037	39-604811	2–3	SOIL	0.405	0.054 (J)	—	0.841	—	—	—	1.9	1.86	2.21	1.52	—	—	—	—
RE39-09-5038	39-604812	0–1	SOIL	0.308	—	—	0.607	—	0.449	0.155	1.34	1.32	1.77	0.841	—	—	0.908 (J)	—
RE39-09-5039	39-604812	1–2	SOIL	0.113	0.0119 (J)	—	0.229	—	0.0432	0.0203	0.393	0.396	0.51	0.258	—	—	0.0808 (J)	—
RE39-09-5040	39-604812	2–3	SOIL	0.161	—	—	0.385	—	0.148	0.0391	0.713	0.632	0.741	0.523	—	—	—	—
RE39-09-5041	39-604813	0–1	SOIL	0.339	—	—	0.643	—	0.147	0.0571	1.26	1.25	1.6	0.668	—	—	—	—
RE39-09-5042	39-604813	1–2	SOIL	0.327	—	—	0.555	—	0.127	0.0486	1.23	1.27	1.57	0.799	—	—	—	—
RE39-09-5044	39-604814	0–1	SOIL	0.0335 (J)	—	—	0.0626	—	0.199	0.114	0.198	0.233	0.292	0.134	—	—	0.19 (J)	—
RE39-09-5045	39-604814	1–2	SOIL	—	—	—	0.0179 (J)	—	0.0963	0.0497	—	0.0637	0.078	0.05	—	—	0.547	—
RE39-09-5046	39-604814	2–3	SOIL	—	—	—	—	—	0.0333	0.0173	—	0.0228 (J)	0.0256 (J)	0.0146 (J)	0.0165 (J)	—	—	—
RE39-09-5047	39-604815	0–1	SOIL	0.15 (J)	—	—	0.23 (J)	—	0.15 (J)	0.071	0.74	0.88 (J+)	0.77	0.46	0.92	—	0.25 (J)	—
RE39-09-5048	39-604815	1–2	SOIL	0.15 (J)	—	—	0.2 (J)	—	0.15 (J)	—	0.73	0.86 (J+)	0.78	0.47	0.76	—	0.14 (J)	—
RE39-09-5049	39-604815	2–3	SOIL	0.085 (J)	—	—	0.12 (J)	—	0.19 (J)	—	0.43	0.5 (J+)	0.45	0.25 (J)	0.51	—	0.17 (J)	—
RE39-09-5050	39-604816	0–1	SOIL	1	0.077 (J)	—	1.4	—	—	—	3.1	3.4 (J+)	2.6	1.6	3.2	—	0.068 (J)	—
RE39-09-5051	39-604816	1–2	SOIL	0.084 (J)	—	—	0.11 (J)	—	—	—	0.27 (J)	0.28 (J+)	0.23 (J)	0.17 (J)	0.23 (J)	—	0.16 (J)	—
RE39-09-5052	39-604816	2–3	SOIL	—	—	—	0.041 (J)	—	—	—	0.1 (J)	0.11 (J+)	0.11 (J)	0.058 (J)	0.098 (J)	—	—	—
RE39-09-5053	39-604817	0–1	SOIL	0.84	0.078 (J)	—	1.3	—	0.071 (J)	—	3	3.3 (J+)	2.9	1.6	3.1	—	0.14 (J)	—
RE39-09-5054	39-604817	1–2	SOIL	0.3 (J)	—	—	0.46 (J)	—	—	—	1.2 (J)	1.5 (J)	1.1 (J)	0.9 (J)	1.4 (J)	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**99,000[c]**
Industrial SSL[a]				**50,500**	**25,300**	**125**	**25,3000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**3,300,000[d]**	**1830**	**12,000[d]**
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**2900[d]**
RE39-09-5055	39-604817	2–3	SOIL	0.085 (J)	—	—	0.13 (J)	—	0.021 (J)	—	0.37 (J)	0.4 (J+)	0.31 (J)	0.31 (J)	0.35 (J)	—	0.057 (J)	—
RE39-22-252628	39-61660	0.0–1.0	SOIL	0.172 (J)	0.108 (J)	—	0.318 (J)	—	0.0177 (J)	—	1.14 (J)	1.4 (J)	1.71 (J)	1.04 (J)	0.619 (J)	—	—	—
RE39-22-252629	39-61660	1.0–2.0	SOIL	—	—	—	—	—	—	—	0.0332 (J)	0.029 (J)	0.0373 (J)	0.029 (J)	—	—	—	—
RE39-22-252630	39-61660	2.0–3.0	SOIL	—	—	—	—	—	—	—	0.0116 (J)	0.00965 (J)	0.0116 (J)	—	—	—	—	—
RE39-22-252631	39-61661	0.0–1.0	FILL	0.0807	0.0667	—	0.228	—	—	—	0.4	0.435	0.625	0.396	0.232	—	—	—
RE39-22-252632	39-61661	1.0–2.0	FILL	—	0.00239 (J)	—	0.0065	—	—	—	0.0109	0.0195 (J)	0.0284 (J)	0.00992	0.012 (J)	—	—	—
RE39-22-252633	39-61661	2.0–3.0	FILL	0.00428	0.0135	—	0.0438	—	—	—	0.0253	0.0406	0.0663	0.0242	0.016	—	—	—
RE39-22-252634	39-61662	0.0–1.0	FILL	0.0574	0.0296	—	0.104	—	—	—	0.33	0.391	0.504	0.211	0.228	—	—	—
RE39-22-252635	39-61662	1.0–2.0	FILL	0.0112 (J)	0.00508	—	0.0217 (J)	—	0.00233 (J)	—	0.0475	0.0763	0.101	0.0346	0.0417	—	—	—
RE39-22-252636	39-61662	2.0–3.0	FILL	0.0119 (J)	0.00443	—	0.016 (J)	—	0.00197 (J)	—	0.0402	0.0648	0.0835	0.031	0.0399	—	—	—
RE39-22-252637	39-61663	0.0–1.0	SOIL	0.0597	0.0238	—	0.11	—	0.0555	0.0286	0.33	0.365	0.499	0.16	0.21	—	—	—
RE39-22-252638	39-61663	1.0–2.0	SOIL	0.0846	0.0201	—	0.11	—	0.0427	0.0208	0.27	0.282	0.405	0.117	0.168	—	—	—
RE39-22-252639	39-61663	2.0–3.0	SOIL	0.00312 (J)	—	—	0.00585	—	0.00471	0.00305 (J)	0.0257 (J)	0.023 (J)	0.0323 (J)	0.0105	0.0148 (J)	—	—	—
RE39-22-252640	39-61664	0.0–1.0	SOIL	0.0836 (J)	0.0691	—	0.214 (J)	—	0.0141	0.00685	0.603 (J)	0.694 (J)	0.862 (J)	0.651 (J)	0.36 (J)	—	0.0305 (J)	—
RE39-22-252641	39-61664	1.0–2.0	SOIL	0.00472 (J)	0.00393	—	0.0118 (J)	—	0.00185 (J)	—	0.0425 (J)	0.0472 (J)	0.0515 (J)	0.0389 (J)	0.0201 (J)	—	—	—
RE39-22-252642	39-61664	2.0–3.0	SOIL	0.00292 (J)	0.0025 (J)	—	0.00625 (J)	—	—	—	0.0183 (J)	0.0246 (J)	0.0263 (J)	0.0192 (J)	0.0104 (J)	—	—	—
RE39-22-252643	39-61665	0.0–1.0	SOIL	0.0221 (J)	0.0251	—	0.0555 (J)	—	0.037	0.0193	0.209 (J)	0.273 (J)	0.288 (J)	0.219 (J)	0.138 (J)	—	—	—
RE39-22-252644	39-61665	1.0–2.0	SOIL	0.0059 (J)	0.00315 (J)	—	0.0114 (J)	—	0.00993	0.00441	0.0303 (J)	0.039 (J)	0.0429 (J)	0.0311 (J)	0.0185 (J)	—	—	—
RE39-22-252645	39-61665	2.0–3.0	SOIL	—	—	—	—	—	—	—	0.00284 (J)	0.00284 (J)	0.00405 (J)	0.00324 (J)	—	—	—	—
RE39-22-252646	39-61666	0.0–1.0	SOIL	0.0205 (J)	0.0171	—	0.0496 (J)	—	0.129	0.0549	0.135 (J)	0.168 (J)	0.2 (J)	0.135 (J)	0.0805 (J)	—	—	—
RE39-22-252647	39-61666	1.0–2.0	SOIL	0.00493 (J)	0.00531	—	0.0231 (J)	—	0.029	0.0112	0.0861 (J)	0.113 (J)	0.141 (J)	0.0739 (J)	0.0402 (J)	—	—	—
RE39-22-252648	39-61666	2.0–3.0	SOIL	0.00235 (J)	0.00235 (J)	—	0.0286 (J)	—	0.0114	0.00439	0.0239 (J)	0.0215 (J)	0.027 (J)	0.0184 (J)	0.0113 (J)	—	—	—
RE39-22-252649	39-61667	0.0–1.0	FILL	0.111 (J)	0.0389	—	0.209 (J)	—	0.0146	0.00675	0.657 (J)	0.904 (J)	1.13 (J)	0.495 (J)	0.466 (J)	—	—	—
RE39-22-252650	39-61667	1.0–2.0	SOIL	0.00426 (J)	0.0031 (J)	—	0.00968 (J)	—	0.00332 (J)	0.00188 (J)	0.0275 (J)	0.0403 (J)	0.0391 (J)	0.0279 (J)	0.0205 (J)	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**99,000[c]**
Industrial SSL[a]				**50,500**	**25,300**	**125**	**25,3000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**3,300,000[d]**	**1830**	**12,000[d]**
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**2900[d]**
RE39-22-252651	39-61667	2.0–3.0	SOIL	—	—	—	—	—	—	—	0.0151 (J)	0.00289 (J)	0.00371 (J)	0.00248 (J)	—	—	—	—
RE39-22-252652	39-61668	0.5–1.5	SOIL	0.0784	0.0634	—	0.19	—	0.0176	0.0098	0.623	0.825 (J)	0.977 (J)	0.754	0.407 (J)	—	—	—
RE39-22-252653	39-61668	1.5–2.5	SOIL	0.0185 (J)	0.01	—	0.0262	—	0.00755	0.00414	0.0905 (J)	0.117 (J)	0.143 (J)	0.0851 (J)	0.0447	—	—	—
RE39-22-252654	39-61668	2.5–3.5	SOIL	0.014 (J)	0.00568	—	0.0212 (J)	—	0.00868	0.00479	0.073 (J)	0.0889 (J)	0.102 (J)	0.0655 (J)	0.0307	—	—	—
RE39-22-252655	39-61669	0.3–1.3	SOIL	0.105	0.0488	—	0.191	—	0.0269 (J)	—	0.518	0.667 (J)	0.822 (J)	0.54	0.337 (J)	—	—	0.0206 (J)
RE39-22-252656	39-61669	1.3–2.3	SOIL	0.0639 (J)	0.0277	—	0.107	—	0.0306 (J)	—	0.336 (J)	0.453 (J)	0.57 (J)	0.321	0.221 (J)	—	—	—
RE39-22-252657	39-61669	2.3–3.3	SOIL	0.0195 (J)	0.00877	—	0.0347	—	0.0055	0.00285 (J)	0.109 (J)	0.141 (J)	0.18 (J)	0.095	0.0816 (J)	—	—	0.0137 (J)
RE39-22-252658	39-61670	0.5–1.5	SOIL	0.0806	0.0513	—	0.191	—	0.0258 (J)	—	0.572	0.742 (J)	0.996 (J)	0.616	0.449 (J)	—	—	0.0436 (J)
RE39-22-252659	39-61670	1.5–2.5	SOIL	0.15 (J)	0.0159 (J)	—	0.263 (J)	—	—	—	0.402 (J)	0.424 (J)	0.498 (J)	0.251	0.208 (J)	—	—	0.0155 (J)
RE39-22-252660	39-61670	2.5–3.5	SOIL	—	—	—	—	—	—	—	0.00357 (J)	0.00397	0.00516	0.00437	0.00198 (J)	—	—	—
RE39-22-252661	39-61671	0.8–1.8	SOIL	0.375 (J)	0.382 (J)	—	1.04 (J)	—	0.0376	—	2.72 (J)	2.97 (J)	3.72 (J)	2.87 (J)	1.47 (J)	—	0.077 (J)	—
RE39-22-252662	39-61671	1.8–2.8	SOIL	0.089 (J)	0.0244 (J)	—	0.17 (J)	—	—	—	0.288 (J)	0.287 (J)	0.317 (J)	0.222 (J)	0.116 (J)	—	—	—
RE39-22-252663	39-61671	2.8–3.8	SOIL	0.0483 (J)	0.00817 (J)	—	0.0607 (J)	—	—	—	0.11 (J)	0.119 (J)	0.126 (J)	0.0907 (J)	0.0501 (J)	—	—	—
RE39-22-252664	39-61672	0.5–1.5	SOIL	0.731 (J)	0.55 (J)	—	1.98 (J)	—	—	—	4.99 (J)	5.24 (J)	6.73 (J)	4.95 (J)	2.45 (J)	—	—	—
RE39-22-252665	39-61672	1.5–2.5	SOIL	0.0141 (J)	0.0186 (J)	—	0.0401 (J)	—	—	—	0.129 (J)	0.173 (J)	0.198 (J)	0.143 (J)	0.0799 (J)	—	—	—
RE39-22-252666	39-61672	2.5–3.5	SOIL	—	0.00181 (J)	—	0.00361 (J)	—	—	—	0.0159 (J)	0.0156 (J)	0.0178 (J)	0.0141 (J)	0.00578 (J)	—	0.022 (J)	—
RE39-22-252667	39-61673	0.9–1.9	SOIL	0.0133 (J)	0.0122 (J)	—	0.0358 (J)	—	—	—	0.0922 (J)	0.11 (J)	0.133 (J)	0.0987 (J)	0.0464 (J)	—	—	—
RE39-22-252668	39-61673	1.9–2.9	SOIL	0.0203 (J)	0.0317	—	0.0663	—	—	—	0.275 (J)	0.381 (J)	0.433 (J)	0.239 (J)	0.164 (J)	—	0.0324 (J)	—
RE39-22-252669	39-61673	2.9–3.9	SOIL	0.00343 (J)	0.00305 (J)	—	0.00992	—	—	—	0.0343 (J)	0.0351 (J)	0.0439 (J)	0.0309 (J)	0.0156	—	—	—
RE39-22-252670	39-61674	0.5–1.5	SOIL	0.298 (J)	0.189	—	0.682	—	0.0357	—	1.7	2.04 (J)	2.37 (J)	1.67	0.936	—	0.107 (J)	—
RE39-22-252671	39-61674	1.5–2.5	SOIL	0.228 (J)	0.149	—	0.526	—	0.0187 (J)	—	1.33 (J)	1.58 (J)	1.76 (J)	1.27 (J)	0.698 (J)	—	0.14 (J)	0.0142 (J)
RE39-22-252672	39-61674	2.5–3.5	SOIL	0.0175 (J)	0.00833	—	0.0301	—	0.00164 (J)	—	0.0992 (J)	0.117 (J)	0.136 (J)	0.0892 (J)	0.0583 (J)	—	0.0143 (J)	—
RE39-22-252673	39-61675	0.9–1.9	SOIL	0.0337 (J)	0.00985	—	0.0603 (J)	—	0.00461	—	0.169 (J)	0.2 (J)	0.223 (J)	0.142 (J)	0.0872 (J)	—	0.0155 (J)	—
RE39-22-252674	39-61675	1.9–2.9	SOIL	0.0177 (J)	0.00678	—	0.0328 (J)	—	0.00275 (J)	—	0.0946 (J)	0.105 (J)	0.122 (J)	0.0754 (J)	0.0448 (J)	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**99,000[c]**
Industrial SSL[a]				**50,500**	**25,300**	**125**	**25,3000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**3,300,000[d]**	**1830**	**12,000[d]**
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**2900[d]**
RE39-22-252675	39-61675	2.9–3.2	SOIL	0.168 (J)	0.0306 (J)	—	0.321	—	0.00249 (J)	—	0.486	0.452 (J)	0.497	0.295	0.21	—	—	—
RE39-22-252676	39-61676	0.5–1.5	SOIL	0.0119 (J)	0.00613	—	0.0279	—	0.0045	—	0.0781 (J)	0.0869 (J)	0.0992 (J)	0.0685	0.0394	—	—	—
RE39-22-252677	39-61676	1.5–2.5	SOIL	0.0136 (J)	0.00621	—	0.0245	—	0.00138 (J)	—	0.071 (J)	0.0788 (J)	0.0928 (J)	0.0575 (J)	0.0349 (J)	—	0.0151 (J)	—
RE39-22-252678	39-61676	2.5–3.5	SOIL	0.0027 (J)	0.00193 (J)	—	0.00656	—	0.00372 (J)	—	0.0243 (J)	0.0255 (J)	0.0297 (J)	0.0208 (J)	0.0104	—	—	—
RE39-22-252679	39-61677	0.5–1.5	SOIL	0.0802	0.0437	—	0.175	—	0.0728	0.0404	0.361 (J)	0.372	0.47 (J)	0.353 (J)	0.179	—	—	—
RE39-22-252680	39-61677	1.5–2.5	SOIL	0.00228 (J)	0.0019 (J)	—	0.00761	—	0.00451	0.00304 (J)	0.0198 (J)	0.0164 (J)	0.0213 (J)	0.0152 (J)	0.00799	—	—	—
RE39-22-252681	39-61677	2.5–3.5	SOIL	0.00578	0.00308 (J)	—	0.0131	—	0.00567	0.00348 (J)	0.0254 (J)	0.0262 (J)	0.0327 (J)	0.0235 (J)	0.0139 (J)	—	—	—
RE39-22-252682	39-61678	0.0–1.0	SOIL	0.0457	0.0189	—	0.0944	—	0.0697	0.0284	0.182	0.216	0.256	0.15 (J)	0.097	—	—	—
RE39-22-252683	39-61678	1.0–2.0	SOIL	0.019	0.0143	—	0.0538	—	0.216	0.0739	0.115 (J)	0.12	0.144	0.0936 (J)	0.0573	—	—	—
RE39-22-252684	39-61678	2.0–3.0	SOIL	0.0937	0.0351	—	0.219	—	0.0726	0.0231	0.461 (J)	0.431 (J)	0.558 (J)	0.369 (J)	0.198	—	—	—
RE39-22-252685	39-61679	0.0–1.0	SOIL	0.0237	0.0135	—	0.0551	—	0.0904	0.037	0.152	0.186	0.234	0.126 (J)	0.113	—	—	0.0372
RE39-22-252686	39-61679	1.0–2.0	SOIL	0.372	0.11	—	0.891	—	0.295	0.104	1.29 (J)	1.1	1.46	0.823 (J)	0.541	—	—	—
RE39-22-252687	39-61679	2.0–3.0	SOIL	0.015 (J)	0.00828 (J)	—	0.0363 (J)	—	0.377	—	0.0947	0.0954	0.117	0.0749 (J)	0.0457 (J)	—	0.0193 (J)	—
RE39-22-252688	39-61680	1.0–2.0	SOIL	0.0291 (J)	0.0123 (J)	—	0.0612 (J)	—	0.645	—	0.144 (J)	0.153	0.183	0.122 (J)	0.0739 (J)	—	—	—
RE39-22-252689	39-61680	2.0–3.0	SOIL	0.0228 (J)	0.00948 (J)	—	0.0432 (J)	—	0.212	—	0.107	0.116	0.141	0.0899 (J)	0.0542 (J)	—	—	—
RE39-22-252690	39-61680	3.0–4.0	SOIL	0.0117 (J)	0.00226 (J)	—	0.0226 (J)	—	0.0208	—	0.04	0.0369 (J)	0.0415 (J)	0.0286 (J)	0.0177 (J)	—	—	—
RE39-22-252691	39-61681	0.3–1.3	SOIL	0.00865 (J)	0.00685 (J)	—	0.0202 (J)	—	0.041	—	0.058	0.0685	0.0804	0.0537 (J)	0.0324 (J)	—	—	—
RE39-22-252692	39-61681	1.3–2.3	SOIL	0.00855 (J)	0.00505 (J)	—	0.0214 (J)	—	0.101	—	0.0555	0.0571	0.0656	0.0451 (J)	0.0272 (J)	—	—	—
RE39-22-252693	39-61681	2.3–3.3	SOIL	0.0693 (J)	0.0243 (J)	—	0.139 (J)	—	0.015	—	0.277	0.289	0.346	0.208 (J)	0.128	—	0.0485	—
RE39-22-252694	39-61682	0.0–1.0	SOIL	0.0143	0.00866	—	0.0347	—	0.142	—	0.0765	0.0787	0.0972	0.0659	0.0403	—	—	—
RE39-22-252695	39-61682	1.0–2.0	SOIL	0.0133 (J)	0.0113 (J)	—	0.0374 (J)	—	0.335	—	0.107	0.114	0.137	0.0838 (J)	0.053 (J)	—	0.0168 (J)	—
RE39-22-252696	39-61682	2.0–3.0	SOIL	0.05	0.0311	—	0.146	—	0.452	—	0.274	0.249	0.305	0.188	0.121	—	—	—
RE39-22-252697	39-61683	0.0–1.0	SOIL	0.0128 (J)	—	—	0.0311 (J)	—	0.241	—	0.0914 (J)	0.0822 (J)	0.0969 (J)	0.064 (J)	0.0384 (J)	—	—	—
RE39-22-252698	39-61683	1.0–2.0	SOIL	0.0193 (J)	0.00786 (J)	—	0.0389 (J)	—	0.527	—	0.0951	0.0998	0.119	0.0704	0.044 (J)	—	0.0255 (J)	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530**[b]	**2310**	**1,100,000**[c]	**5380**	**99,000**[c]
Industrial SSL[a]				**50,500**	**25,300**	**125**	**25,3000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300**[b]	**323**	**3,300,000**[d]	**1830**	**12,000**[d]
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740**[b]	**15.3**	**250,000**[d]	**380**	**2900**[d]
RE39-22-252699	39-61683	2.0–3.0	SOIL	0.00315 (J)	0.00236 (J)	—	0.0118 (J)	—	0.0383	—	0.0358 (J)	0.0299 (J)	0.0386 (J)	0.0228 (J)	0.0154 (J)	—	0.0351 (J)	—
RE39-22-252700	39-61684	1.0–2.0	SOIL	—	—	—	—	—	—	—	0.00196 (J)	—	0.00196 (J)	0.00236 (J)	—	—	—	—
RE39-22-252701	39-61684	2.0–3.0	SOIL	0.0226	0.00358 (J)	—	0.0334	—	—	—	0.0707	0.062	0.0703	0.0548 (J+)	0.033 (J)	—	—	—
RE39-22-252702	39-61684	3.0–4.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252703	39-61685	1.2–2.2	SOIL	—	—	—	—	—	—	—	0.00235 (J)	—	0.00235 (J)	0.00235 (J)	—	—	—	—
RE39-22-252704	39-61685	2.2–3.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252705	39-61685	3.2–4.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252706	39-61686	1.2–2.2	SOIL	3.06	0.142 (J)	—	3.49	—	—	—	4.73	3.86	4.57	2.54	1.94	—	—	—
RE39-22-252707	39-61686	2.2–3.2	SOIL	0.318	—	—	0.474	—	—	—	0.637	0.567	0.645	0.458	0.287	—	—	—
RE39-22-252708	39-61686	3.2–4.2	SOIL	—	—	—	0.00264 (J)	—	—	—	0.0049	0.00415	0.00528	0.00415	0.00226 (J)	—	—	—
RE39-22-252709	39-61687	0.2–1.2	SOIL	—	—	—	—	—	—	—	0.0192	0.0192	0.025	0.0231	—	—	—	—
RE39-22-252710	39-61687	1.2–2.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252711	39-61687	2.2–3.2	SOIL	0.00423	0.00269 (J)	—	0.0108	—	—	—	0.0273	0.0262	0.0312	0.0227	0.0112	—	—	—
RE39-22-252712	39-61688	1.3–2.3	SOIL	0.00443	—	—	0.00644	—	0.00297 (J)	—	0.0209 (J)	0.0197 (J)	0.0225 (J)	0.0145 (J)	0.00604	—	—	—
RE39-22-252713	39-61688	2.3–3.3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252714	39-61688	3.3–4.3	SOIL	—	—	—	—	—	0.00166 (J)	—	—	—	—	—	—	—	—	—
RE39-22-252715	39-61689	1.4–2.4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252716	39-61689	2.4–3.4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252717	39-61689	3.4–4.4	SOIL	—	—	—	—	0.00169 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-252718	39-61690	0.9–1.9	SOIL	—	—	—	0.00277 (J)	—	—	—	0.00672	0.00554	0.00672	0.00474	0.00198 (J)	—	—	—
RE39-22-252719	39-61690	1.9–2.9	SOIL	0.00506	0.00195 (J)	—	0.0105	—	—	—	0.0206	0.0214	0.0257	0.0199	0.00857	—	—	—
RE39-22-252720	39-61690	2.9–3.9	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-252721	39-61691	0.5–1.5	SOIL	0.00273 (J)	—	—	0.00545	—	—	—	0.0136	0.0129	0.016	0.00974	0.00584	—	—	—
RE39-22-252722	39-61691	1.5–2.5	SOIL	0.0263 (J)	—	—	0.0447	—	—	—	0.0818	0.0724	0.0721	0.0548	0.0285 (J)	—	0.0199 (J)	—
RE39-22-252723	39-61691	2.5–3.5	SOIL	—	—	—	0.00218 (J)	—	—	—	0.0207 (J)	0.0199 (J)	0.0178 (J)	0.017 (J)	0.0163 (J)	—	0.0192 (J)	0.017 (J)

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	Anthracene	Aroclor-1242	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
Construction Worker SSL[a]				**15,100**	**7530**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**99,000[c]**
Industrial SSL[a]				**50,500**	**25,300**	**125**	**25,3000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**3,300,000[d]**	**1830**	**12,000[d]**
Residential SSL[a]				**3480**	**1740**	**7.64**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**2900[d]**
RE39-22-252724	39-61692	0.6–1.6	SOIL	—	—	—	—	—	—	0.00138 (J)	0.0176 (J)	0.00332 (J)	0.00368	0.00295 (J)	—	—	0.0282 (J)	—
RE39-22-252725	39-61692	1.6–2.6	SOIL	—	—	—	0.00308 (J)	—	—	—	0.00846	0.00846	0.00961	0.0073	0.00423	—	—	—
RE39-22-252726	39-61692	2.6–3.6	SOIL	—	—	—	—	—	—	—	0.00292 (J)	0.00292 (J)	0.00328 (J)	0.00255 (J)	—	—	—	—
RE39-22-252727	39-61693	0.7–1.7	SOIL	0.0264 (J)	0.00185 (J)	—	0.0448	—	0.00358 (J)	0.00263 (J)	0.0244	0.128	0.137	0.0991	0.0543	—	0.637	0.033 (J)
RE39-22-252728	39-61693	1.7–2.7	SOIL	0.00351 (J)	—	—	0.00703	—	—	—	0.0238 (J)	0.0211 (J)	0.0223	0.0164	0.00937	0.346 (J)	—	—
RE39-22-252730	39-61694	1.0–2.0	SOIL	—	—	—	—	—	0.00702	0.00639	0.00463	0.00424	0.00501	0.00385	0.00231 (J)	—	—	—
RE39-22-252731	39-61694	2.0–3.0	SOIL	—	—	—	—	—	0.00258 (J)	—	—	—	—	—	—	—	—	—
RE39-22-252732	39-61694	3.0–4.0	SOIL	—	—	—	—	—	0.00435	0.00229 (J)	—	—	—	—	—	—	—	—
RE39-22-252733	39-61695	1.0–2.0	SOIL	0.0216 (J)	0.00607 (J)	—	0.0361 (J)	—	—	—	0.112 (J)	0.116 (J)	0.123 (J)	0.0976 (J)	0.0478 (J)	—	—	—
RE39-22-252734	39-61695	2.0–3.0	SOIL	0.002 (J)	—	—	0.00399 (J)	—	—	—	0.016 (J)	0.0132 (J)	0.0164 (J)	0.00958 (J)	0.00559 (J)	—	—	—
RE39-22-252735	39-61695	3.0–4.0	SOIL	—	—	—	—	—	—	—	0.00179 (J)	—	—	—	—	—	—	—
RE39-22-252736	39-61696	0.8–1.8	SOIL	—	—	—	0.00525 (J)	—	0.026	0.00767	0.0156 (J)	0.0145 (J)	0.0171 (J)	0.0123 (J)	0.00525 (J)	—	—	—
RE39-22-252737	39-61696	1.8–2.8	SOIL	0.012 (J)	0.00342 (J)	—	0.0239 (J)	—	0.349 (J)	—	0.076	0.0849	0.108	0.0664	0.0413	—	—	—
RE39-22-252738	39-61696	2.8–3.8	SOIL	—	—	—	0.0118 (J)	—	0.0435	—	0.0309 (J)	0.0316 (J)	0.0381	0.0252 (J)	0.0164	—	—	—
RE39-23-271395	39-61858	0–1	SOIL	2.03 (J)	0.11 (J)	NA	3.18 (J)	NA	NA	NA	4.64 (J-)	5.19 (J)	5.39 (J)	3.72 (J)	2.18 (J)	—	—	—
RE39-23-271396	39-61858	2–3	SOIL	—	—	NA	—	NA	NA	NA	0.0166 (J-)	0.0185 (J)	0.0196 (J)	0.0211 (J)	—	—	—	—
RE39-23-271397	39-61859	0–1	SOIL	8.97 (J)	0.304 (J)	NA	10.2 (J)	NA	NA	NA	13.6 (J-)	13.7 (J)	14.9 (J)	8.7 (J)	5.87 (J)	—	—	—
RE39-23-271398	39-61859	2–3	SOIL	0.0313 (J)	—	NA	0.0425 (J)	NA	NA	NA	0.0682 (J-)	0.0715 (J)	0.0749 (J)	0.054 (J)	0.0272 (J)	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
0239-97-0013	39-01051	0–0.5	SOIL	NA	—	1.1	—	—	—	—	—	—	—	2.2	—	NA	NA
0239-97-0014	39-01053	0–0.5	SOIL	NA	—	2.4	1.3	—	0.38	—	—	—	—	6.5	0.57	NA	NA
0239-97-0001	39-01491	0–0.5	SOIL	NA	—	1.6	—	—	—	—	—	—	—	3.4	—	NA	NA
0239-97-0010	39-01491	1–1.5	SOIL	NA	—	—	—	—	—	—	—	—	—	—	—	NA	NA
0239-97-0002	39-01492	0–0.5	SOIL	NA	—	0.93	—	—	—	—	—	—	—	2.1	—	NA	NA
0239-97-0003	39-01493	0–0.5	SOIL	NA	—	1.2	—	—	—	—	—	—	—	2.1	—	NA	NA
0239-97-0004	39-01494	0–0.5	SOIL	NA	—	1.5	—	—	—	—	—	—	—	3.4	—	NA	NA
0239-97-0005	39-01495	0–0.5	SOIL	NA	—	3.1	0.64	—	—	—	—	—	—	8.4	0.36	NA	NA
0239-97-0006	39-01496	0–0.5	SOIL	NA	—	1.6 (J)	—	—	—	—	—	—	—	3.7 (J)	—	NA	NA
0239-97-0011	39-01496	1–1.5	SOIL	NA	—	—	—	—	—	—	—	—	—	—	—	NA	NA
0239-97-0007	39-01497	0–0.5	SOIL	NA	—	5.6 (J)	—	—	—	1.1 (J)	—	—	—	21 (J)	2 (J)	NA	NA
0239-97-0008	39-01498	0–0.5	SOIL	NA	—	2.2 (J)	2.8 (J)	—	—	—	—	—	—	4.8 (J)	0.41 (J)	NA	NA
0239-97-0009	39-01499	0–0.5	SOIL	NA	—	3.3 (J)	4.4 (J)	—	—	0.41 (J)	—	—	—	8.8 (J)	0.76 (J)	NA	NA
RE39-09-5017	39-604805	0–1	SOIL	NA	—	0.45	—	—	—	—	—	—	—	0.87	—	NA	NA
RE39-09-5018	39-604805	1–2	SOIL	NA	—	0.14 (J)	—	—	—	—	0.0007 (J)	—	—	0.26 (J)	—	NA	NA
RE39-09-5020	39-604806	0–1	SOIL	NA	—	0.26 (J-)	0.048 (J-)	—	—	—	—	—	—	0.56 (J-)	0.049 (J-)	NA	NA
RE39-09-5021	39-604806	1–2	SOIL	NA	—	0.23 (J)	0.062 (J)	—	—	—	—	—	—	0.46	0.047 (J)	NA	NA
RE39-09-5022	39-604806	2–3	SOIL	NA	—	0.14 (J)	—	—	—	—	—	—	—	0.32 (J)	0.049 (J)	NA	NA
RE39-09-5024	39-604807	1–2	SOIL	NA	—	0.48	—	—	—	0.14 (J)	—	—	—	1.1	0.24 (J)	NA	NA
RE39-09-5026	39-604808	0–1	SOIL	NA	—	0.8	—	—	—	0.1 (J)	—	—	—	1.7	0.17 (J)	NA	NA
RE39-09-5027	39-604808	1–2	SOIL	NA	—	—	—	—	—	—	—	—	—	0.067 (J)	—	NA	NA
RE39-09-5096	39-604808	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.07e-006	1.38e-005

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
RE39-09-5029	39-604809	0–1.5	SOIL	NA	—	—	—	—	—	—	0.00043 (J)	—	—	0.045 (J)	—	NA	NA
RE39-09-5031	39-604809	2–3	SOIL	NA	—	—	—	—	—	—	0.00043 (J)	—	—	—	—	NA	NA
RE39-09-5032	39-604810	0–1	SOIL	NA	—	1.64	0.197 (J)	—	—	—	—	—	0.000718 (J)	3.72	0.183	NA	NA
RE39-09-5033	39-604810	1–2	SOIL	NA	—	0.127	—	—	—	—	—	—	—	0.268	—	NA	NA
RE39-09-5034	39-604810	2–3	SOIL	NA	—	0.0793	—	—	—	—	—	—	—	0.168	—	NA	NA
RE39-09-5035	39-604811	0–1	SOIL	NA	—	7.3	0.29 (J)	—	—	0.942 (J)	—	—	—	15.5	1.63	NA	NA
RE39-09-5036	39-604811	1–2	SOIL	NA	—	0.671	—	—	—	—	—	—	—	1.59	0.122	NA	NA
RE39-09-5037	39-604811	2–3	SOIL	NA	—	2.15	—	—	—	—	—	—	—	5.31	0.418	NA	NA
RE39-09-5038	39-604812	0–1	SOIL	NA	—	1.47	1.11 (J)	—	—	—	—	—	—	3.71	0.309	NA	NA
RE39-09-5039	39-604812	1–2	SOIL	NA	—	0.472	0.164 (J)	—	—	—	—	—	—	1.13	0.133	NA	NA
RE39-09-5040	39-604812	2–3	SOIL	NA	—	0.787	0.285 (J)	—	—	—	—	—	—	2.1	0.249	NA	NA
RE39-09-5041	39-604813	0–1	SOIL	NA	—	1.4	0.261 (J)	—	—	—	—	—	—	3.47	0.339	NA	NA
RE39-09-5042	39-604813	1–2	SOIL	NA	—	1.43	—	—	—	—	—	—	—	3.56	0.314	NA	NA
RE39-09-5044	39-604814	0–1	SOIL	NA	—	0.263	0.0954 (J)	—	—	—	—	—	—	0.573	0.0295 (J)	NA	NA
RE39-09-5045	39-604814	1–2	SOIL	NA	—	0.0651	0.179 (J)	—	—	—	—	—	—	0.159	—	NA	NA
RE39-09-5046	39-604814	2–3	SOIL	NA	—	0.0239 (J)	—	—	—	—	—	—	—	0.0512	—	NA	NA
RE39-09-5047	39-604815	0–1	SOIL	NA	—	0.91	0.3 (J)	—	0.15 (J)	0.067 (J)	—	—	—	2.1	0.13 (J)	NA	NA
RE39-09-5048	39-604815	1–2	SOIL	NA	—	0.92	0.51	—	0.16 (J)	0.051 (J)	—	—	—	2	0.11 (J)	NA	NA
RE39-09-5049	39-604815	2–3	SOIL	NA	—	0.53	0.47	—	0.084 (J)	—	—	—	—	1.2	0.072 (J)	NA	NA
RE39-09-5050	39-604816	0–1	SOIL	NA	—	3.7	—	—	0.5	0.56	—	—	—	8.8	0.98	NA	NA
RE39-09-5051	39-604816	1–2	SOIL	NA	—	0.33 (J)	—	—	0.053 (J)	0.051 (J)	—	—	—	0.78	0.078 (J)	NA	NA
RE39-09-5052	39-604816	2–3	SOIL	NA	—	0.12 (J)	—	—	—	—	—	—	—	0.29 (J)	—	NA	NA
RE39-09-5053	39-604817	0–1	SOIL	NA	—	3.4	0.32 (J)	—	0.46	0.45	—	—	—	8.1	0.82	NA	NA
RE39-09-5054	39-604817	1–2	SOIL	NA	—	1.4 (J)	0.1 (J)	—	0.28 (J)	0.16 (J)	—	—	—	3.4 (J)	0.3 (J)	NA	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
RE39-09-5055	39-604817	2–3	SOIL	NA	—	0.46	0.05 (J)	—	0.091 (J)	0.042 (J)	—	—	—	0.99	0.078 (J)	NA	NA
RE39-22-252628	39-61660	0.0–1.0	SOIL	0.23 (J)	—	1.37 (J)	—	—	0.219 (J)	—	—	—	—	3.45 (J)	0.131 (J)	NA	NA
RE39-22-252629	39-61660	1.0–2.0	SOIL	—	—	0.029 (J)	—	—	—	—	—	—	—	0.0788 (J)	—	NA	NA
RE39-22-252630	39-61660	2.0–3.0	SOIL	—	—	0.00965 (J)	—	—	—	—	—	—	—	0.0251	—	NA	NA
RE39-22-252631	39-61661	0.0–1.0	FILL	0.0993	—	0.571	—	—	0.0947	—	—	—	—	1.29	0.074	NA	NA
RE39-22-252632	39-61661	1.0–2.0	FILL	—	—	0.0226 (J)	0.0113 (J)	—	0.00239 (J)	—	—	—	—	0.0445	—	NA	NA
RE39-22-252633	39-61661	2.0–3.0	FILL	—	—	0.0428	—	—	0.00606	—	—	—	—	0.0987	0.00499	NA	NA
RE39-22-252634	39-61662	0.0–1.0	FILL	0.0845	—	0.413	—	—	0.0527	—	—	—	—	0.693	0.0582	NA	NA
RE39-22-252635	39-61662	1.0–2.0	FILL	0.018 (J)	—	0.0793	—	—	0.00915	—	—	—	—	0.173	0.0122 (J)	NA	NA
RE39-22-252636	39-61662	2.0–3.0	FILL	0.014 (J)	—	0.0675	—	—	0.00886	—	—	—	—	0.152	0.0119 (J)	NA	NA
RE39-22-252637	39-61663	0.0–1.0	SOIL	0.0893	—	0.378	0.0372	—	0.0462	—	—	—	—	0.71	0.0607	NA	NA
RE39-22-252638	39-61663	1.0–2.0	SOIL	0.0926	—	0.307	0.025 (J)	—	0.0361	—	—	—	—	0.694	0.093	NA	NA
RE39-22-252639	39-61663	2.0–3.0	SOIL	—	—	0.0249 (J)	—	—	0.00312 (J)	—	—	—	—	0.0639	0.00234 (J)	NA	NA
RE39-22-252640	39-61664	0.0–1.0	SOIL	0.104 (J)	—	0.698 (J)	—	—	0.149 (J)	—	—	—	—	1.69 (J)	0.0654 (J)	NA	NA
RE39-22-252641	39-61664	1.0–2.0	SOIL	—	—	0.0468 (J)	—	—	0.00905 (J)	—	—	—	—	0.111 (J)	0.00393 (J)	NA	NA
RE39-22-252642	39-61664	2.0–3.0	SOIL	—	—	0.0254 (J)	—	—	0.00459 (J)	—	—	—	—	0.0621 (J)	0.00208 (J)	NA	NA
RE39-22-252643	39-61665	0.0–1.0	SOIL	0.0367 (J)	—	0.257 (J)	—	—	0.053 (J)	—	—	—	—	0.487 (J)	0.0167 (J)	NA	NA
RE39-22-252644	39-61665	1.0–2.0	SOIL	—	—	0.039 (J)	—	—	0.00708 (J)	—	—	—	—	0.0913 (J)	0.00472 (J)	NA	NA
RE39-22-252645	39-61665	2.0–3.0	SOIL	—	—	0.00284 (J)	—	—	—	—	—	—	—	0.00729 (J)	—	NA	NA
RE39-22-252646	39-61666	0.0–1.0	SOIL	—	—	0.173 (J)	0.0685 (J)	—	0.0342 (J)	—	—	—	—	0.395 (J)	0.0154 (J)	NA	NA
RE39-22-252647	39-61666	1.0–2.0	SOIL	0.0134 (J)	—	0.105 (J)	—	—	0.0178 (J)	—	—	—	—	0.231 (J)	0.00683 (J)	NA	NA
RE39-22-252648	39-61666	2.0–3.0	SOIL	—	—	0.0227 (J)	—	—	0.00469 (J)	—	—	—	—	0.0547 (J)	0.00195 (J)	NA	NA
RE39-22-252649	39-61667	0.0–1.0	FILL	0.159 (J)	—	0.801 (J)	—	—	0.126 (J)	—	—	—	—	1.84 (J)	0.1 (J)	NA	NA
RE39-22-252650	39-61667	1.0–2.0	SOIL	—	—	0.0395 (J)	—	—	0.00658 (J)	—	—	—	—	0.0848 (J)	0.00387 (J)	NA	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
RE39-22-252651	39-61667	2.0–3.0	SOIL	—	—	0.00289 (J)	—	—	—	—	—	—	—	0.0294 (J)	—	NA	NA
RE39-22-252652	39-61668	0.5–1.5	SOIL	0.0944 (J)	—	0.728	—	—	0.168	—	—	—	—	1.64	0.056	NA	NA
RE39-22-252653	39-61668	1.5–2.5	SOIL	0.0196 (J)	0.00231 (J)	0.104 (J)	—	—	0.0189	—	—	—	—	0.246 (J)	0.0142 (J)	NA	NA
RE39-22-252654	39-61668	2.5–3.5	SOIL	0.0129 (J)	—	0.0829 (J)	—	—	0.0129	—	—	—	—	0.196 (J)	0.0117 (J)	NA	NA
RE39-22-252655	39-61669	0.3–1.3	SOIL	0.127 (J)	—	0.582	—	—	0.126 (J)	—	—	—	—	1.43	0.0863	NA	NA
RE39-22-252656	39-61669	1.3–2.3	SOIL	0.0794 (J)	—	0.402 (J)	—	—	0.0812	—	—	—	—	0.956 (J)	0.052 (J)	NA	NA
RE39-22-252657	39-61669	2.3–3.3	SOIL	0.0301 (J)	—	0.121 (J)	—	—	0.0248 (J)	—	—	—	—	0.289 (J)	0.0172 (J)	NA	NA
RE39-22-252658	39-61670	0.5–1.5	SOIL	0.132 (J)	—	0.663	—	—	0.143	—	—	—	—	1.55	0.0696	NA	NA
RE39-22-252659	39-61670	1.5–2.5	SOIL	0.158 (J)	—	0.42 (J)	—	—	0.0737	—	—	—	—	1.08	0.164 (J)	NA	NA
RE39-22-252660	39-61670	2.5–3.5	SOIL	—	—	0.00437	—	—	—	—	—	—	—	0.0155 (J)	—	NA	NA
RE39-22-252661	39-61671	0.8–1.8	SOIL	0.372	—	2.94 (J)	0.528 (J)	—	0.632 (J)	—	—	—	—	7.12 (J)	0.257 (J)	NA	NA
RE39-22-252662	39-61671	1.8–2.8	SOIL	0.0705	—	0.283 (J)	0.0285 (J)	—	0.0526 (J)	—	—	—	—	0.748 (J)	0.0947 (J)	NA	NA
RE39-22-252663	39-61671	2.8–3.8	SOIL	0.0285 (J)	—	0.119 (J)	—	—	0.021 (J)	—	—	—	—	0.316 (J)	0.0463 (J)	NA	NA
RE39-22-252664	39-61672	0.5–1.5	SOIL	0.495	—	5.24 (J)	—	—	1.1 (J)	—	—	—	—	13.2 (J)	0.659 (J)	NA	NA
RE39-22-252665	39-61672	1.5–2.5	SOIL	0.0197 (J)	—	0.159 (J)	—	—	0.0297 (J)	—	—	—	—	0.364 (J)	0.00928 (J)	NA	NA
RE39-22-252666	39-61672	2.5–3.5	SOIL	—	—	0.0137 (J)	0.0148 (J)	—	0.00289 (J)	—	—	—	—	0.0303 (J)	—	NA	NA
RE39-22-252667	39-61673	0.9–1.9	SOIL	0.0188 (J)	—	0.106 (J)	—	—	0.0206 (J)	—	—	—	—	0.253 (J)	0.0111 (J)	NA	NA
RE39-22-252668	39-61673	1.9–2.9	SOIL	0.0339 (J)	—	0.318 (J)	0.0203 (J)	—	0.0622	—	—	—	—	0.438 (J)	0.0151 (J)	NA	NA
RE39-22-252669	39-61673	2.9–3.9	SOIL	—	—	0.037 (J)	—	—	0.00648	—	—	—	—	0.0866 (J)	0.00305 (J)	NA	NA
RE39-22-252670	39-61674	0.5–1.5	SOIL	0.364 (J)	—	1.88	0.131 (J)	—	0.421	0.129 (J)	—	—	—	4.66 (J)	0.276 (J)	NA	NA
RE39-22-252671	39-61674	1.5–2.5	SOIL	0.291 (J)	—	1.47 (J)	0.19 (J)	—	0.317	—	—	—	—	3.57 (J)	0.213 (J)	NA	NA
RE39-22-252672	39-61674	2.5–3.5	SOIL	0.0234 (J)	—	0.11 (J)	—	—	0.0226 (J)	—	—	—	—	0.272 (J)	0.0143 (J)	NA	NA
RE39-22-252673	39-61675	0.9–1.9	SOIL	0.0508 (J)	—	0.192 (J)	—	—	0.0352 (J)	—	—	—	—	0.497 (J)	0.0315 (J)	NA	NA
RE39-22-252674	39-61675	1.9–2.9	SOIL	0.0234 (J)	—	0.106 (J)	—	—	0.017 (J)	—	—	—	—	0.272 (J)	0.0151 (J)	NA	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
RE39-22-252675	39-61675	2.9–3.2	SOIL	0.18 (J)	—	0.493	—	—	0.0841	0.144 (J)	—	—	—	1.4 (J)	0.203 (J)	NA	NA
RE39-22-252676	39-61676	0.5–1.5	SOIL	0.0168 (J)	—	0.0823	—	—	0.0176	—	—	—	—	0.203 (J)	0.0107 (J)	NA	NA
RE39-22-252677	39-61676	1.5–2.5	SOIL	0.0198 (J)	—	0.0808 (J)	—	—	0.0151 (J)	—	—	—	—	0.189 (J)	0.0132 (J)	NA	NA
RE39-22-252678	39-61676	2.5–3.5	SOIL	—	—	0.0235 (J)	—	—	0.00463	—	—	—	—	0.0563 (J)	0.00231 (J)	NA	NA
RE39-22-252679	39-61677	0.5–1.5	SOIL	—	—	0.401 (J)	—	—	0.0765	—	—	—	—	1.02 (J)	0.0765	NA	NA
RE39-22-252680	39-61677	1.5–2.5	SOIL	—	—	0.0194 (J)	—	—	0.00343 (J)	—	—	—	—	0.0457 (J)	0.00266 (J)	NA	NA
RE39-22-252681	39-61677	2.5–3.5	SOIL	—	—	0.0277 (J)	—	—	0.00501	—	—	—	—	0.0709 (J)	0.00578	NA	NA
RE39-22-252682	39-61678	0.0–1.0	SOIL	0.0521	—	0.211	—	—	0.0442	—	—	—	—	0.556	0.0461	NA	NA
RE39-22-252683	39-61678	1.0–2.0	SOIL	0.0279 (J)	—	0.12	—	—	0.0217	—	—	—	—	0.298	0.0201	NA	NA
RE39-22-252684	39-61678	2.0–3.0	SOIL	0.127	—	0.47 (J)	—	—	0.0839	—	—	—	—	1.26 (J)	0.0976	NA	NA
RE39-22-252685	39-61679	0.0–1.0	SOIL	0.0562	—	0.179	—	—	0.0584	—	—	—	—	0.392	0.0219	NA	NA
RE39-22-252686	39-61679	1.0–2.0	SOIL	0.471	—	1.3 (J)	—	—	0.205	0.364 (J)	—	—	—	3.39 (J)	0.478	NA	NA
RE39-22-252687	39-61679	2.0–3.0	SOIL	0.0197 (J)	—	0.108	—	—	0.0201 (J)	—	—	—	—	0.248 (J)	0.0146 (J)	NA	NA
RE39-22-252688	39-61680	1.0–2.0	SOIL	0.0332 (J)	—	0.16	0.0131 (J)	—	0.0321 (J)	—	—	—	—	0.402 (J)	0.0269 (J)	NA	NA
RE39-22-252689	39-61680	2.0–3.0	SOIL	0.0281 (J)	—	0.12	—	—	0.0239 (J)	—	—	—	—	0.318 (J)	0.019 (J)	NA	NA
RE39-22-252690	39-61680	3.0–4.0	SOIL	0.0128 (J)	—	0.0407	—	—	0.00716 (J)	—	—	—	—	0.101 (J)	0.0124 (J)	NA	NA
RE39-22-252691	39-61681	0.3–1.3	SOIL	—	—	0.0696	—	—	0.013 (J)	—	—	—	—	0.154 (J)	0.00757 (J)	NA	NA
RE39-22-252692	39-61681	1.3–2.3	SOIL	—	—	0.0575	—	—	0.0113 (J)	—	—	—	—	0.14 (J)	0.00816 (J)	NA	NA
RE39-22-252693	39-61681	2.3–3.3	SOIL	0.0833	—	0.299	0.0184 (J)	—	0.056 (J)	—	—	0.0141 (J)	—	0.779 (J)	0.0771 (J)	NA	NA
RE39-22-252694	39-61682	0.0–1.0	SOIL	0.0169 (J)	—	0.0847	0.02 (J)	—	0.0177	—	—	—	—	0.208	0.0139	NA	NA
RE39-22-252695	39-61682	1.0–2.0	SOIL	0.0242 (J)	—	0.12	—	—	0.0226 (J)	—	—	—	—	0.293 (J)	0.0148 (J)	NA	NA
RE39-22-252696	39-61682	2.0–3.0	SOIL	0.0794	—	0.279	—	—	0.0516	—	—	—	—	0.707	0.0609	NA	NA
RE39-22-252697	39-61683	0.0–1.0	SOIL	—	—	0.0841 (J)	—	—	0.0146 (J)	—	—	—	—	0.201 (J)	0.0128 (J)	NA	NA
RE39-22-252698	39-61683	1.0–2.0	SOIL	0.0244 (J)	—	0.102	0.0126 (J)	—	0.0173 (J)	—	—	—	—	0.249 (J)	0.0181 (J)	NA	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
RE39-22-252699	39-61683	2.0–3.0	SOIL	—	—	0.0355 (J)	—	—	0.00591 (J)	—	—	—	—	0.0894 (J)	—	NA	NA
RE39-22-252700	39-61684	1.0–2.0	SOIL	—	—	—	0.0141 (J)	—	—	—	—	—	—	0.00471	—	NA	NA
RE39-22-252701	39-61684	2.0–3.0	SOIL	0.0167 (J)	—	0.0668	—	—	0.0123 (J)	—	—	—	—	0.171	0.0211 (J)	NA	NA
RE39-22-252702	39-61684	3.0–4.0	SOIL	—	—	—	0.0137 (J)	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252703	39-61685	1.2–2.2	SOIL	—	—	—	0.0313 (J)	—	—	—	—	—	—	0.0047	—	NA	NA
RE39-22-252704	39-61685	2.2–3.2	SOIL	—	—	—	0.0174 (J)	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252705	39-61685	3.2–4.2	SOIL	—	—	—	0.0126 (J)	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252706	39-61686	1.2–2.2	SOIL	1.55 (J)	—	5.06	—	—	0.805	—	—	—	—	16	2.93	NA	NA
RE39-22-252707	39-61686	2.2–3.2	SOIL	0.188	—	0.621	0.0175 (J)	—	0.124	0.174 (J)	—	—	—	1.82	0.28	NA	NA
RE39-22-252708	39-61686	3.2–4.2	SOIL	—	—	0.00452	—	—	—	—	—	—	—	0.017 (J)	—	NA	NA
RE39-22-252709	39-61687	0.2–1.2	SOIL	—	—	0.0212	—	—	—	—	—	—	—	0.05	—	NA	NA
RE39-22-252710	39-61687	1.2–2.2	SOIL	—	—	—	—	—	—	—	—	—	—	0.00366 (J)	—	NA	NA
RE39-22-252711	39-61687	2.2–3.2	SOIL	—	—	0.0265	—	—	0.00538	—	—	—	—	0.0639	0.00385	NA	NA
RE39-22-252712	39-61688	1.3–2.3	SOIL	—	—	0.0193 (J)	—	—	0.00282 (J)	—	—	—	—	0.0527 (J)	0.00483	NA	NA
RE39-22-252713	39-61688	2.3–3.3	SOIL	—	—	—	0.0138 (J)	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252714	39-61688	3.3–4.3	SOIL	—	—	—	—	—	—	—	—	—	—	0.00284 (J)	—	NA	NA
RE39-22-252715	39-61689	1.4–2.4	SOIL	—	—	—	0.0364 (J)	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252716	39-61689	2.4–3.4	SOIL	—	—	—	0.014 (J)	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252717	39-61689	3.4–4.4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252718	39-61690	0.9–1.9	SOIL	—	—	0.00593	0.0138 (J)	—	—	—	—	—	—	0.017 (J)	—	NA	NA
RE39-22-252719	39-61690	1.9–2.9	SOIL	—	—	0.0199	—	—	0.00428	—	—	—	—	0.0491	0.00506	NA	NA
RE39-22-252720	39-61690	2.9–3.9	SOIL	—	—	—	0.0137 (J)	—	—	—	—	—	—	0.00343 (J)	—	NA	NA
RE39-22-252721	39-61691	0.5–1.5	SOIL	—	—	0.0132	—	—	0.00234 (J)	—	—	—	—	0.0339	0.00234 (J)	NA	NA
RE39-22-252722	39-61691	1.5–2.5	SOIL	0.0195 (J)	—	0.0792	0.0443	—	0.0113 (J)	—	—	—	—	0.22	0.0248 (J)	NA	NA
RE39-22-252723	39-61691	2.5–3.5	SOIL	0.0123 (J)	—	0.0178 (J)	0.021 (J)	0.0189 (J)	0.0123 (J)	—	—	—	—	0.0268 (J)	—	NA	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Dimethyl Phthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85[g]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**85[c]**	**2500**	**269,000**	**1770**	**10,000**	**10,000**	**na[h]**	**na**
Industrial SSL[a]				**1200[g]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**1200[d]**	**13,000**	**916,000**	**368**	**33,700**	**33,700**	**na**	**na**
Residential SSL[a]				**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**78[d]**	**2150**	**61,600**	**75.1**	**2320**	**2320**	**na**	**na**
RE39-22-252724	39-61692	0.6–1.6	SOIL	—	—	0.0139 (J)	0.0334 (J)	—	—	—	—	—	—	0.0348 (J)	—	NA	NA
RE39-22-252725	39-61692	1.6–2.6	SOIL	—	—	0.00923	0.0371 (J)	—	—	—	—	—	—	0.0248 (J)	—	NA	NA
RE39-22-252726	39-61692	2.6–3.6	SOIL	—	—	0.00255 (J)	—	—	—	—	—	—	—	0.00693	—	NA	NA
RE39-22-252727	39-61693	0.7–1.7	SOIL	0.0217 (J)	—	0.126	—	—	0.00554	—	—	—	—	0.309	0.0231 (J)	NA	NA
RE39-22-252728	39-61693	1.7–2.7	SOIL	—	—	0.0203	—	—	0.0043	—	—	—	—	0.0484	0.00312 (J)	NA	NA
RE39-22-252730	39-61694	1.0–2.0	SOIL	—	—	0.00463	0.0772	—	—	—	—	—	—	0.0243 (J)	—	NA	NA
RE39-22-252731	39-61694	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252732	39-61694	3.0–4.0	SOIL	—	—	—	0.0502	—	—	—	—	—	—	—	—	NA	NA
RE39-22-252733	39-61695	1.0–2.0	SOIL	0.0178 (J)	—	0.115 (J)	0.0429 (J)	—	0.0216 (J)	—	—	—	—	0.258 (J)	0.0178 (J)	NA	NA
RE39-22-252734	39-61695	2.0–3.0	SOIL	—	—	0.0108 (J)	0.0295 (J)	—	0.00239 (J)	—	—	—	—	0.0263 (J)	—	NA	NA
RE39-22-252735	39-61695	3.0–4.0	SOIL	—	—	—	0.0236 (J)	—	—	—	—	—	—	0.00322 (J)	—	NA	NA
RE39-22-252736	39-61696	0.8–1.8	SOIL	—	—	0.013 (J)	—	—	0.00225 (J)	—	—	—	—	0.0272 (J)	—	NA	NA
RE39-22-252737	39-61696	1.8–2.8	SOIL	0.0181 (J)	—	0.0899	0.012 (J)	—	0.00874 (J)	—	—	—	—	0.202	0.00874 (J)	NA	NA
RE39-22-252738	39-61696	2.8–3.8	SOIL	—	—	0.0301 (J)	—	—	—	—	—	—	—	0.0747	—	NA	NA
RE39-23-271395	39-61858	0–1	SOIL	1.54 (J)	—	5.36 (J-)	—	—	0.844 (J)	1.04 (J)	—	—	NA	15.4	2.06 (J)	NA	NA
RE39-23-271396	39-61858	2–3	SOIL	—	—	0.0173 (J-)	—	—	—	—	—	—	NA	0.0316 (J)	—	NA	NA
RE39-23-271397	39-61859	0–1	SOIL	6.82 (J)	—	16.1 (J-)	—	—	2.12 (J)	7.16 (J)	—	—	NA	52.2	10 (J)	NA	NA
RE39-23-271398	39-61859	2–3	SOIL	0.0231 (J)	—	0.0779 (J-)	—	—	0.0175 (J)	—	—	—	NA	0.213	0.0332 (J)	NA	NA

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
0239-97-0013	39-01051	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.46	—	NA	—	—	NA	—
0239-97-0014	39-01053	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.95	—	NA	—	—	NA	—
0239-97-0001	39-01491	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	1.3	—	NA	—	—	NA	—
0239-97-0010	39-01491	1–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	—	—	NA	—
0239-97-0002	39-01492	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.64	—	NA	—	—	NA	—
0239-97-0003	39-01493	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.51	—	NA	—	—	NA	—
0239-97-0004	39-01494	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.8	—	NA	—	—	NA	—
0239-97-0005	39-01495	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	1.8	—	NA	—	—	NA	—
0239-97-0006	39-01496	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	—	—	NA	—
0239-97-0011	39-01496	1–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	—	—	NA	—
0239-97-0007	39-01497	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	3.7 (J)	—	NA	0.44 (J)	1.5 (J)	NA	—
0239-97-0008	39-01498	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.91 (J)	—	NA	—	—	NA	—
0239-97-0009	39-01499	0–0.5	SOIL	NA	NA	NA	NA	NA	NA	NA	1.4 (J)	—	NA	—	0.52 (J)	NA	—
RE39-09-5017	39-604805	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.21 (J)	—	NA	—	—	NA	—
RE39-09-5018	39-604805	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.095 (J)	—	NA	—	—	NA	—
RE39-09-5020	39-604806	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.086 (J-)	—	NA	—	0.039 (J-)	NA	—
RE39-09-5021	39-604806	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.085 (J)	—	NA	—	—	NA	—
RE39-09-5022	39-604806	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	—	—	NA	—
RE39-09-5024	39-604807	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.14 (J)	—	NA	0.083 (J)	0.23 (J)	NA	—
RE39-09-5026	39-604808	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.35 (J)	—	NA	0.041 (J)	0.14 (J)	NA	—
RE39-09-5027	39-604808	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.00081 (J)	—	NA	—	—	NA
RE39-09-5096	39-604808	2–3	SOIL	1.78e-006 (J)	5.35e-006	1.29e-007 (J)	3.1e-007 (J)	1.91e-007 (J)	1.73e-006	1.54e-006	NA	NA	NA	NA	NA	NA	6.44e-005

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
RE39-09-5029	39-604809	0–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	—	—	NA
RE39-09-5031	39-604809	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	—	—	NA
RE39-09-5032	39-604810	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	1.12	—	0.00233 (J)	NA	0.038 (J)	0.121 (J)	NA
RE39-09-5033	39-604810	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0976	—	0.0024 (J)	NA	—	—	NA
RE39-09-5034	39-604810	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0497	—	—	NA	—	—	NA
RE39-09-5035	39-604811	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	4.2	—	—	NA	0.41	1.24	NA
RE39-09-5036	39-604811	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.392	—	—	NA	0.0297 (J)	0.096	NA
RE39-09-5037	39-604811	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	1.35	—	0.00302 (J)	NA	0.108 (J)	0.368	NA
RE39-09-5038	39-604812	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.793	—	0.00287 (J)	NA	0.0679 (J)	0.198	NA
RE39-09-5039	39-604812	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.239	—	0.00265 (J)	NA	0.0284 (J)	0.0885	NA
RE39-09-5040	39-604812	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.45	—	0.00296 (J)	NA	0.0456 (J)	0.14 (J)	NA
RE39-09-5041	39-604813	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.628	—	—	NA	0.0777 (J)	0.19	NA
RE39-09-5042	39-604813	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.743	—	0.00345 (J)	NA	0.0719 (J)	0.186	NA
RE39-09-5044	39-604814	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.132	—	0.00269 (J)	NA	—	0.0129 (J)	NA
RE39-09-5045	39-604814	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0453	—	0.00294 (J)	NA	—	—	NA
RE39-09-5046	39-604814	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0133 (J)	—	0.00267 (J)	NA	—	—	NA
RE39-09-5047	39-604815	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	0.42	—	—	NA	—	0.073 (J)	NA
RE39-09-5048	39-604815	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.44	—	—	NA	—	0.038 (J)	NA
RE39-09-5049	39-604815	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.22 (J)	—	—	NA	—	—	NA
RE39-09-5050	39-604816	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	1.5	—	—	NA	0.21 (J)	0.69	NA
RE39-09-5051	39-604816	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.17 (J)	—	—	NA	—	0.055 (J)	NA
RE39-09-5052	39-604816	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.054 (J)	—	—	NA	—	—	NA
RE39-09-5053	39-604817	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	1.5	—	—	NA	0.16 (J)	0.48	NA
RE39-09-5054	39-604817	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.75 (J)	—	—	NA	0.056 (J)	0.17 (J)	NA

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
RE39-09-5055	39-604817	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.27 (J)	—	—	NA	—	0.042 (J)	NA
RE39-22-252628	39-61660	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	1.03 (J)	—	—	0.0256 (J)	0.0183 (J)	0.0438 (J)	NA
RE39-22-252629	39-61660	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.029 (J)	—	—	—	—	—	NA
RE39-22-252630	39-61660	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252631	39-61661	0.0–1.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.428	—	—	0.0168 (J)	0.0158 (J)	0.0456	NA
RE39-22-252632	39-61661	1.0–2.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.0103	—	—	—	—	—	NA
RE39-22-252633	39-61661	2.0–3.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.0253	—	—	—	—	0.00249 (J)	NA
RE39-22-252634	39-61662	0.0–1.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.234	—	—	0.00732 (J-)	0.00622	0.0282 (J)	NA
RE39-22-252635	39-61662	1.0–2.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.0437	—	—	—	—	0.00305 (J)	NA
RE39-22-252636	39-61662	2.0–3.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.0344	—	—	0.00204 (J-)	0.0017 (J)	0.00511	NA
RE39-22-252637	39-61663	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.18	—	—	0.00759 (J-)	0.00655	0.0255 (J)	NA
RE39-22-252638	39-61663	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.139	—	—	0.0163 (J-)	0.0239 (J)	0.0786	NA
RE39-22-252639	39-61663	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0125	—	—	—	—	—	NA
RE39-22-252640	39-61664	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.672 (J)	—	—	0.0124 (J)	—	0.0189 (J)	NA
RE39-22-252641	39-61664	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0389 (J)	—	—	—	—	—	NA
RE39-22-252642	39-61664	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0221 (J)	—	—	—	—	—	NA
RE39-22-252643	39-61665	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.227 (J)	—	—	0.00254 (J)	—	—	NA
RE39-22-252644	39-61665	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0334 (J)	—	—	—	—	—	NA
RE39-22-252645	39-61665	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00324 (J)	—	—	—	—	—	NA
RE39-22-252646	39-61666	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.14 (J)	—	—	—	—	—	NA
RE39-22-252647	39-61666	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0709 (J)	—	—	—	—	—	NA
RE39-22-252648	39-61666	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0199 (J)	—	—	—	—	—	NA
RE39-22-252649	39-61667	0.0–1.0	FILL	NA	NA	NA	NA	NA	NA	NA	0.583 (J)	—	—	0.018 (J)	0.0138 (J)	0.0385 (J)	NA
RE39-22-252650	39-61667	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0294 (J)	—	—	—	—	—	NA

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
RE39-22-252651	39-61667	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00248 (J)	—	—	—	—	—	NA
RE39-22-252652	39-61668	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.772	—	—	—	—	0.0213 (J)	NA
RE39-22-252653	39-61668	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0893 (J)	—	—	0.00462	0.00385	0.00578	NA
RE39-22-252654	39-61668	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0708 (J)	—	—	0.00265 (J)	0.00227 (J)	0.00341 (J)	NA
RE39-22-252655	39-61669	0.3–1.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.555	—	—	0.0221 (J)	0.0176 (J)	0.0398 (J)	NA
RE39-22-252656	39-61669	1.3–2.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.338	—	—	0.0118 (J)	—	0.021 (J)	NA
RE39-22-252657	39-61669	2.3–3.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0996	—	—	0.00305 (J)	0.00229 (J)	0.00496	NA
RE39-22-252658	39-61670	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.645	—	—	0.011 (J)	—	0.0257 (J)	NA
RE39-22-252659	39-61670	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.285	—	—	0.0391 (J)	0.0494 (J)	0.193 (J)	NA
RE39-22-252660	39-61670	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00397	—	—	—	—	—	NA
RE39-22-252661	39-61671	0.8–1.8	SOIL	NA	NA	NA	NA	NA	NA	NA	2.88 (J)	—	—	0.0486 (J)	—	0.0764	NA
RE39-22-252662	39-61671	1.8–2.8	SOIL	NA	NA	NA	NA	NA	NA	NA	0.233 (J)	—	—	0.0177	0.018	0.0593	NA
RE39-22-252663	39-61671	2.8–3.8	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0998 (J)	—	—	0.0117	0.0121	0.0339	NA
RE39-22-252664	39-61672	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	5 (J)	—	—	0.0869	0.0579 (J)	0.101	NA
RE39-22-252665	39-61672	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.151 (J)	—	—	—	—	—	NA
RE39-22-252666	39-61672	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0126 (J)	—	—	—	—	—	NA
RE39-22-252667	39-61673	0.9–1.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.101 (J)	—	—	0.00221 (J)	—	0.00332 (J)	NA
RE39-22-252668	39-61673	1.9–2.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.271 (J)	—	—	0.00301 (J)	0.00188 (J)	0.00414	NA
RE39-22-252669	39-61673	2.9–3.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0336 (J)	—	—	—	—	—	NA
RE39-22-252670	39-61674	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	1.75	—	—	0.0548 (J)	0.0468 (J)	0.137 (J)	NA
RE39-22-252671	39-61674	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	1.34 (J)	—	—	0.0418 (J)	0.0366 (J)	0.0997 (J)	NA
RE39-22-252672	39-61674	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.098 (J)	—	—	0.00278 (J)	—	0.00476	NA
RE39-22-252673	39-61675	0.9–1.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.161 (J)	—	—	0.00493	0.00417	0.014 (J)	NA
RE39-22-252674	39-61675	1.9–2.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0806 (J)	—	—	0.00264 (J)	0.00226 (J)	0.00565	NA

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
RE39-22-252675	39-61675	2.9–3.2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.333	—	—	0.0535	0.0803	0.417	NA
RE39-22-252676	39-61676	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.072	—	—	—	—	0.00421	NA
RE39-22-252677	39-61676	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0617 (J)	—	—	0.00233 (J)	0.00233 (J)	0.00738	NA
RE39-22-252678	39-61676	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0208 (J)	—	—	—	—	—	NA
RE39-22-252679	39-61677	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.342 (J)	—	—	—	—	—	NA
RE39-22-252680	39-61677	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0145 (J)	—	—	—	—	—	NA
RE39-22-252681	39-61677	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0235 (J)	—	—	—	—	—	NA
RE39-22-252682	39-61678	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.158 (J)	—	—	0.00755	0.00679	0.0211 (J)	NA
RE39-22-252683	39-61678	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0963 (J)	—	—	0.0031 (J)	0.0031 (J)	—	NA
RE39-22-252684	39-61678	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.371 (J)	—	—	0.0215	0.0215	0.0702 (J+)	NA
RE39-22-252685	39-61679	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.132	—	—	0.00401	0.00365	0.00985 (J+)	NA
RE39-22-252686	39-61679	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.845 (J)	—	—	0.102	0.167	0.675 (J+)	NA
RE39-22-252687	39-61679	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0801 (J)	—	—	0.00355 (J)	0.00316 (J)	—	NA
RE39-22-252688	39-61680	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.129 (J)	—	—	0.00597	0.00597	0.0194 (J)	NA
RE39-22-252689	39-61680	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0971 (J)	—	—	0.00607	0.00645	0.0231 (J)	NA
RE39-22-252690	39-61680	3.0–4.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0302 (J)	—	—	0.00339 (J)	0.00452	0.0207 (J)	NA
RE39-22-252691	39-61681	0.3–1.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.057 (J)	—	—	—	—	—	NA
RE39-22-252692	39-61681	1.3–2.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0482 (J)	—	—	—	—	—	NA
RE39-22-252693	39-61681	2.3–3.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.224 (J)	—	—	0.018	0.0215	0.0923 (J)	NA
RE39-22-252694	39-61682	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0708	—	—	0.00301 (J)	0.00264 (J)	0.00753	NA
RE39-22-252695	39-61682	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.09 (J)	—	—	0.00234 (J)	—	—	NA
RE39-22-252696	39-61682	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.204	—	—	0.0113	0.0133 (J)	0.0448	NA
RE39-22-252697	39-61683	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0658 (J)	—	—	—	—	—	NA
RE39-22-252698	39-61683	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0747 (J)	—	—	0.00432	0.00432	0.0157 (J)	NA

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
RE39-22-252699	39-61683	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0264 (J)	—	—	—	—	—	NA
RE39-22-252700	39-61684	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252701	39-61684	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0489	—	—	0.00556	0.00437	0.00795	NA
RE39-22-252702	39-61684	3.0–4.0	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252703	39-61685	1.2–2.2	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252704	39-61685	2.2–3.2	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252705	39-61685	3.2–4.2	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252706	39-61686	1.2–2.2	SOIL	NA	NA	NA	NA	NA	NA	NA	2.98	—	—	0.805	1.2	4.39	NA
RE39-22-252707	39-61686	2.2–3.2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.497	—	—	0.0707	0.0745	0.156	NA
RE39-22-252708	39-61686	3.2–4.2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00377	—	—	—	—	—	NA
RE39-22-252709	39-61687	0.2–1.2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0192	—	—	—	—	—	NA
RE39-22-252710	39-61687	1.2–2.2	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252711	39-61687	2.2–3.2	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0227	—	—	—	—	—	NA
RE39-22-252712	39-61688	1.3–2.3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0161 (J)	—	—	—	—	0.00282 (J)	NA
RE39-22-252713	39-61688	2.3–3.3	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252714	39-61688	3.3–4.3	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252715	39-61689	1.4–2.4	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252716	39-61689	2.4–3.4	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252717	39-61689	3.4–4.4	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252718	39-61690	0.9–1.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00435	—	—	—	—	—	NA
RE39-22-252719	39-61690	1.9–2.9	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0187	—	—	0.00234 (J)	0.00234 (J)	0.00351 (J)	NA
RE39-22-252720	39-61690	2.9–3.9	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA

Table 6.3-7 (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)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**na**	**1210**	**6060**	**1000**	**159**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**na**	**5130**	**813**	**3370**	**108**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**na**	**409**	**172**	**232**	**22.6**	**na**
RE39-22-252721	39-61691	0.5–1.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00896	—	—	—	—	—	NA
RE39-22-252722	39-61691	1.5–2.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.057	—	—	—	—	—	NA
RE39-22-252723	39-61691	2.5–3.5	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0178 (J)	—	—	—	—	—	NA
RE39-22-252724	39-61692	0.6–1.6	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00295 (J)	—	—	—	—	—	NA
RE39-22-252725	39-61692	1.6–2.6	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00692	—	—	—	—	—	NA
RE39-22-252726	39-61692	2.6–3.6	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00255 (J)	—	—	—	—	—	NA
RE39-22-252727	39-61693	0.7–1.7	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0988	—	—	—	—	—	NA
RE39-22-252728	39-61693	1.7–2.7	SOIL	NA	NA	NA	NA	NA	NA	NA	0.018 (J)	—	—	—	—	—	NA
RE39-22-252730	39-61694	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00347 (J)	—	—	—	—	—	NA
RE39-22-252731	39-61694	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252732	39-61694	3.0–4.0	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252733	39-61695	1.0–2.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0991 (J)	—	—	0.00342 (J)	0.00342 (J)	0.00456 (J)	NA
RE39-22-252734	39-61695	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	0.00958 (J)	—	—	—	—	—	NA
RE39-22-252735	39-61695	3.0–4.0	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	—	—	—	—	NA
RE39-22-252736	39-61696	0.8–1.8	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0138 (J)	—	—	—	—	—	NA
RE39-22-252737	39-61696	1.8–2.8	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0691	—	—	0.00266 (J)	0.00342 (J)	0.0133 (J)	NA
RE39-22-252738	39-61696	2.8–3.8	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0286 (J)	—	—	—	—	—	NA
RE39-23-271395	39-61858	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	3.78 (J)	NA	NA	0.386 (J)	0.416 (J)	1.19 (J)	NA
RE39-23-271396	39-61858	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0196 (J)	NA	NA	—	—	—	NA
RE39-23-271397	39-61859	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	9.37 (J)	NA	NA	2.37 (J)	3.36 (J)	13.8 (J)	NA
RE39-23-271398	39-61859	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0574 (J)	NA	NA	—	—	0.041 (J)	NA

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
0239-97-0013	39-01051	0–0.5	SOIL	NA	—	1.4	1.9	—	NA	—	—	51	—	—	—	NA	NA
0239-97-0014	39-01053	0–0.5	SOIL	NA	—	3.7	3.8	—	NA	0.345	—	110	—	—	1.02	NA	NA
0239-97-0001	39-01491	0–0.5	SOIL	NA	—	1.8	3	—	NA	—	—	57	—	—	—	NA	NA
0239-97-0010	39-01491	1–1.5	SOIL	NA	—	—	—	—	NA	—	—	9.1	—	—	—	NA	NA
0239-97-0002	39-01492	0–0.5	SOIL	NA	—	1.3	1.9	—	NA	—	—	18	—	—	—	NA	NA
0239-97-0003	39-01493	0–0.5	SOIL	NA	—	2.1	2.4	—	NA	—	—	56	—	—	—	NA	NA
0239-97-0004	39-01494	0–0.5	SOIL	NA	—	2.1	2.9	—	NA	—	—	34	—	—	—	NA	NA
0239-97-0005	39-01495	0–0.5	SOIL	NA	—	4.2	5	—	NA	—	—	70	—	—	—	NA	NA
0239-97-0006	39-01496	0–0.5	SOIL	NA	—	2.9 (J)	3.7 (J)	—	NA	—	—	41	—	—	—	NA	NA
0239-97-0011	39-01496	1–1.5	SOIL	NA	—	—	—	—	NA	—	—	9.8	—	—	—	NA	NA
0239-97-0007	39-01497	0–0.5	SOIL	NA	—	18 (J)	17 (J)	—	NA	—	—	170	—	—	—	NA	NA
0239-97-0008	39-01498	0–0.5	SOIL	NA	—	4 (J)	4.7 (J)	—	NA	—	—	110	—	—	—	NA	NA
0239-97-0009	39-01499	0–0.5	SOIL	NA	—	7.3 (J)	7.6 (J)	—	NA	—	—	43	—	—	—	NA	NA
RE39-09-5017	39-604805	0–1	SOIL	NA	—	0.48	0.83	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5018	39-604805	1–2	SOIL	NA	—	0.14 (J)	0.28 (J)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5020	39-604806	0–1	SOIL	NA	—	0.46 (J-)	0.49 (J-)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5021	39-604806	1–2	SOIL	NA	—	0.39	0.41	—	NA	—	—	NA	0.00084 (J)	—	—	NA	NA
RE39-09-5022	39-604806	2–3	SOIL	NA	—	0.31 (J)	0.28 (J)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5024	39-604807	1–2	SOIL	NA	—	1.2	0.99	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5026	39-604808	0–1	SOIL	NA	—	1.4	1.5	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5027	39-604808	1–2	SOIL	NA	—	0.045 (J)	0.059 (J)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5096	39-604808	2–3	SOIL	5.74e-006	NA	NA	NA	NA	1.65e-007	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5029	39-604809	0–1.5	SOIL	NA	—	0.038 (J)	0.041 (J)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5031	39-604809	2–3	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5032	39-604810	0–1	SOIL	NA	—	2.38	3.25	—	NA	—	0.0233	NA	0.000747 (J)	—	—	0.000501 (J)	0.00177 (J)
RE39-09-5033	39-604810	1–2	SOIL	NA	—	0.151	0.234	—	NA	—	—	NA	—	—	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
RE39-09-5034	39-604810	2–3	SOIL	NA	—	0.0961	0.148	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5035	39-604811	0–1	SOIL	NA	—	13.6	14.1	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5036	39-604811	1–2	SOIL	NA	—	1.28	1.37	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5037	39-604811	2–3	SOIL	NA	—	4.36	4.41	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5038	39-604812	0–1	SOIL	NA	—	3.11	3.27	—	NA	—	—	NA	0.000501 (J)	—	—	—	—
RE39-09-5039	39-604812	1–2	SOIL	NA	—	1.04	0.939	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5040	39-604812	2–3	SOIL	NA	—	1.95	1.56	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5041	39-604813	0–1	SOIL	NA	—	3.03	2.94	—	NA	—	0.000375 (J)	NA	—	—	—	0.000624 (J)	0.00091 (J)
RE39-09-5042	39-604813	1–2	SOIL	NA	—	2.96	2.96	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5044	39-604814	0–1	SOIL	NA	—	0.368	0.476	—	NA	—	0.000326 (J)	NA	—	—	—	—	—
RE39-09-5045	39-604814	1–2	SOIL	NA	—	0.102	0.136	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5046	39-604814	2–3	SOIL	NA	—	0.0296 (J)	0.046	—	NA	—	—	NA	—	—	—	—	—
RE39-09-5047	39-604815	0–1	SOIL	NA	—	1.3	1.7	—	NA	—	—	NA	—	0.00047 (J)	—	NA	NA
RE39-09-5048	39-604815	1–2	SOIL	NA	—	1.3	1.9	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5049	39-604815	2–3	SOIL	NA	—	0.74	1	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5050	39-604816	0–1	SOIL	NA	—	7.1	7.6	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5051	39-604816	1–2	SOIL	NA	—	0.66	0.7	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5052	39-604816	2–3	SOIL	NA	—	0.21 (J)	0.24 (J)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5053	39-604817	0–1	SOIL	NA	—	6.3	7.2	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5054	39-604817	1–2	SOIL	NA	—	2.6 (J)	3.2 (J)	—	NA	—	—	NA	—	—	—	NA	NA
RE39-09-5055	39-604817	2–3	SOIL	NA	—	0.74	0.94	—	NA	—	—	NA	—	—	—	NA	NA
RE39-22-252628	39-61660	0.0–1.0	SOIL	NA	—	2.07 (J)	3.18 (J)	0.38 (J)	NA	—	—	NA	—	—	—	—	—
RE39-22-252629	39-61660	1.0–2.0	SOIL	NA	—	0.0456 (J)	0.0747 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252630	39-61660	2.0–3.0	SOIL	NA	—	0.0174 (J)	0.0231	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252631	39-61661	0.0–1.0	FILL	NA	1.99	0.819	1.13	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252632	39-61661	1.0–2.0	FILL	NA	—	0.0291 (J)	0.0294	—	NA	—	—	NA	—	—	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
RE39-22-252633	39-61661	2.0–3.0	FILL	NA	1.01	0.0688	0.0823	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252634	39-61662	0.0–1.0	FILL	NA	—	0.616	0.66	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252635	39-61662	1.0–2.0	FILL	NA	—	0.139	0.151	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252636	39-61662	2.0–3.0	FILL	NA	—	0.114	0.132	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252637	39-61663	0.0–1.0	SOIL	NA	—	0.587	0.666	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252638	39-61663	1.0–2.0	SOIL	NA	—	0.69	0.627	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252639	39-61663	2.0–3.0	SOIL	NA	—	0.0436	0.0464	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252640	39-61664	0.0–1.0	SOIL	NA	—	0.934 (J)	1.56 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252641	39-61664	1.0–2.0	SOIL	NA	—	0.0637 (J)	0.0944 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252642	39-61664	2.0–3.0	SOIL	NA	—	0.0388 (J)	0.0488 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252643	39-61665	0.0–1.0	SOIL	NA	—	0.264 (J)	0.486 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252644	39-61665	1.0–2.0	SOIL	NA	—	0.0653 (J)	0.0799 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252645	39-61665	2.0–3.0	SOIL	NA	—	0.00365 (J)	0.00648 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252646	39-61666	0.0–1.0	SOIL	NA	—	0.26 (J)	0.351 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252647	39-61666	1.0–2.0	SOIL	NA	—	0.132 (J)	0.209 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252648	39-61666	2.0–3.0	SOIL	NA	—	0.0324 (J)	0.05 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252649	39-61667	0.0–1.0	FILL	NA	—	1.27 (J)	1.64 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252650	39-61667	1.0–2.0	SOIL	NA	—	0.0534 (J)	0.0755 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252651	39-61667	2.0–3.0	SOIL	NA	—	0.02 (J)	0.0261 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252652	39-61668	0.5–1.5	SOIL	NA	—	0.791	1.56	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252653	39-61668	1.5–2.5	SOIL	NA	—	0.142 (J)	0.222 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252654	39-61668	2.5–3.5	SOIL	NA	—	0.12 (J)	0.173 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252655	39-61669	0.3–1.3	SOIL	NA	—	0.943 (J)	1.3	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252656	39-61669	1.3–2.3	SOIL	NA	—	0.634 (J)	0.855 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252657	39-61669	2.3–3.3	SOIL	NA	—	0.198 (J)	0.253 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252658	39-61670	0.5–1.5	SOIL	NA	—	0.854	1.43	—	NA	—	—	NA	—	—	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
RE39-22-252659	39-61670	1.5–2.5	SOIL	NA	—	1.1 (J)	0.933	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252660	39-61670	2.5–3.5	SOIL	NA	—	0.00556	0.0135 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252661	39-61671	0.8–1.8	SOIL	NA	—	3.82 (J)	6.71 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252662	39-61671	1.8–2.8	SOIL	NA	—	0.618 (J)	0.641 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252663	39-61671	2.8–3.8	SOIL	NA	—	0.286 (J)	0.275 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252664	39-61672	0.5–1.5	SOIL	NA	—	8.06 (J)	12.2 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252665	39-61672	1.5–2.5	SOIL	NA	—	0.158 (J)	0.341 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252666	39-61672	2.5–3.5	SOIL	NA	—	0.0148 (J)	0.0289 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252667	39-61673	0.9–1.9	SOIL	NA	—	0.15 (J)	0.228 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252668	39-61673	1.9–2.9	SOIL	NA	—	0.23 (J)	0.413 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252669	39-61673	2.9–3.9	SOIL	NA	—	0.0522 (J)	0.0797 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252670	39-61674	0.5–1.5	SOIL	NA	—	2.97 (J)	4.17 (J+)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252671	39-61674	1.5–2.5	SOIL	NA	—	2.38 (J)	3.17 (J+)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252672	39-61674	2.5–3.5	SOIL	NA	—	0.17 (J)	0.243 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252673	39-61675	0.9–1.9	SOIL	NA	—	0.359 (J)	0.447 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252674	39-61675	1.9–2.9	SOIL	NA	—	0.192 (J)	0.239 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252675	39-61675	2.9–3.2	SOIL	NA	—	1.48 (J)	1.19 (J+)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252676	39-61676	0.5–1.5	SOIL	NA	—	0.133 (J)	0.184 (J+)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252677	39-61676	1.5–2.5	SOIL	NA	—	0.141 (J)	0.169 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252678	39-61676	2.5–3.5	SOIL	NA	—	0.0324 (J)	0.0509 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252679	39-61677	0.5–1.5	SOIL	NA	—	0.769 (J)	0.918 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252680	39-61677	1.5–2.5	SOIL	NA	—	0.0286 (J)	0.0407 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252681	39-61677	2.5–3.5	SOIL	NA	—	0.0562 (J)	0.0632 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252682	39-61678	0.0–1.0	SOIL	NA	—	0.454	0.486	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252683	39-61678	1.0–2.0	SOIL	NA	—	0.222	0.263	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252684	39-61678	2.0–3.0	SOIL	NA	—	1.03 (J)	1.12 (J)	—	NA	—	—	NA	—	—	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
RE39-22-252685	39-61679	0.0–1.0	SOIL	NA	—	0.258	0.351	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252686	39-61679	1.0–2.0	SOIL	NA	—	3.67 (J)	2.9 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252687	39-61679	2.0–3.0	SOIL	NA	—	0.168 (J)	0.218 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252688	39-61680	1.0–2.0	SOIL	NA	—	0.301 (J)	0.358 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252689	39-61680	2.0–3.0	SOIL	NA	—	0.254 (J)	0.271 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252690	39-61680	3.0–4.0	SOIL	NA	—	0.0946 (J)	0.0882 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252691	39-61681	0.3–1.3	SOIL	NA	—	0.0995 (J)	0.137 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252692	39-61681	1.3–2.3	SOIL	NA	—	0.0983 (J)	0.124 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252693	39-61681	2.3–3.3	SOIL	NA	—	0.684 (J)	0.652 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252694	39-61682	0.0–1.0	SOIL	NA	—	0.147	0.185	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252695	39-61682	1.0–2.0	SOIL	NA	—	0.189 (J)	0.251 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252696	39-61682	2.0–3.0	SOIL	NA	—	0.599	0.605	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252697	39-61683	0.0–1.0	SOIL	NA	—	0.144 (J)	0.179 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252698	39-61683	1.0–2.0	SOIL	NA	—	0.204 (J)	0.217 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252699	39-61683	2.0–3.0	SOIL	NA	—	0.067 (J)	0.0752 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252700	39-61684	1.0–2.0	SOIL	NA	—	0.00275 (J)	0.00432	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252701	39-61684	2.0–3.0	SOIL	NA	—	0.151	0.156	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252702	39-61684	3.0–4.0	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252703	39-61685	1.2–2.2	SOIL	NA	—	0.00313 (J)	0.00431	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252704	39-61685	2.2–3.2	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252705	39-61685	3.2–4.2	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252706	39-61686	1.2–2.2	SOIL	NA	—	20	13.4	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252707	39-61686	2.2–3.2	SOIL	NA	—	1.86	1.59	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252708	39-61686	3.2–4.2	SOIL	NA	—	0.0192 (J)	0.0121	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252709	39-61687	0.2–1.2	SOIL	NA	—	0.0289	0.0443	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252710	39-61687	1.2–2.2	SOIL	NA	—	0.00244 (J)	0.00366 (J)	—	NA	—	—	NA	—	—	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
RE39-22-252711	39-61687	2.2–3.2	SOIL	NA	—	0.0388	0.0673 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252712	39-61688	1.3–2.3	SOIL	NA	—	0.0487 (J)	0.0463 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252713	39-61688	2.3–3.3	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252714	39-61688	3.3–4.3	SOIL	NA	—	0.00248 (J)	0.00248 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252715	39-61689	1.4–2.4	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252716	39-61689	2.4–3.4	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252717	39-61689	3.4–4.4	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252718	39-61690	0.9–1.9	SOIL	NA	—	0.0103	0.0142 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252719	39-61690	1.9–2.9	SOIL	NA	—	0.0374	0.0448	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252720	39-61690	2.9–3.9	SOIL	NA	—	0.00305 (J)	0.00305 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252721	39-61691	0.5–1.5	SOIL	NA	—	0.023	0.0304	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252722	39-61691	1.5–2.5	SOIL	NA	—	0.22	0.184	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252723	39-61691	2.5–3.5	SOIL	NA	—	0.0196 (J)	0.0236 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252724	39-61692	0.6–1.6	SOIL	NA	—	0.0293 (J)	0.0301 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252725	39-61692	1.6–2.6	SOIL	NA	—	0.0154	0.0214 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252726	39-61692	2.6–3.6	SOIL	NA	—	0.00474	0.0062	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252727	39-61693	0.7–1.7	SOIL	NA	—	0.238	0.273	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252728	39-61693	1.7–2.7	SOIL	NA	—	0.034 (J)	0.0441	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252730	39-61694	1.0–2.0	SOIL	NA	—	0.0161 (J)	0.0223 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252731	39-61694	2.0–3.0	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252732	39-61694	3.0–4.0	SOIL	NA	—	—	—	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252733	39-61695	1.0–2.0	SOIL	NA	—	0.181 (J)	0.229 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252734	39-61695	2.0–3.0	SOIL	NA	—	0.0188 (J)	0.0239 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252735	39-61695	3.0–4.0	SOIL	NA	—	0.0025 (J)	0.00286 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252736	39-61696	0.8–1.8	SOIL	NA	—	0.0216 (J)	0.0238 (J)	—	NA	—	—	NA	—	—	—	—	—
RE39-22-252737	39-61696	1.8–2.8	SOIL	NA	—	0.144 (J)	0.179	—	NA	—	—	NA	—	—	—	—	—

Table 6.3-7 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorophenol	Phenanthrene	Pyrene	RDX	Tetrachlorodibenzofurans (Totals)	Tetryl	Toluene	Total Petroleum Hydrocarbons Diesel Range Organics	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**na**	**346**	**8070**	**7530**	**1350**	**na**	**706**	**14,000**	**na**	**6.90**	**600[c]**	**161**	**736**	**798**
Industrial SSL[a]				**na**	**44.5**	**27,500**	**25,300**	**428**	**na**	**2590**	**61,300**	**na**	**36.5**	**1800[d]**	**573**	**3940**	**4280**
Residential SSL[a]				**na**	**9.85**	**1850**	**1740**	**83.1**	**na**	**156**	**5230**	**na**	**6.77**	**300[d]**	**36**	**805**	**871**
RE39-22-252738	39-61696	2.8–3.8	SOIL	NA	—	0.0644	0.0652	—	NA	—	—	NA	—	—	—	—	—
RE39-23-271395	39-61858	0–1	SOIL	NA	—	14.8 (J)	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-271396	39-61858	2–3	SOIL	NA	—	0.0267 (J)	0.0275 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-271397	39-61859	0–1	SOIL	NA	—	66.7 (J)	43.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-271398	39-61859	2–3	SOIL	NA	—	0.243 (J)	0.177	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[d] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[e] — = Not detected.

[f] NA = Not analyzed.

[g] Dibenzofuran used as a surrogate based on structural similarity.

[h] na = Not available.

Table 6.3-8
Organic Chemicals Detected at Area 2 of SWMU 39-002(a)

Sample	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1248	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	Chrysene
Construction Worker SSL[a]				**15,100**	**75300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**5380**	**99,000[c]**	**23,100**
Industrial SSL[a]				**50,500**	**253,000**	**10.7**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**1830**	**12,000[d]**	**3230**
Residential SSL[a]				**3480**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**380**	**2900[d]**	**153**
RE39-19-184641	39-61655	0–1	FILL	—[e]	—	—	—	—	—	—	—	—	—	0.079 (J+)	0.0118 (J-)	—
RE39-19-184642	39-61655	2–3	FILL	—	—	—	—	—	—	—	—	—	—	0.109 (J+)	0.0177 (J)	—
RE39-19-184643	39-61655	4–5	FILL	—	—	—	—	—	—	—	—	—	—	0.0658 (J+)	—	—
RE39-19-184644	39-61656	0–1	FILL	0.0153 (J)	0.025 (J)	0.0769	0.161	0.0346	0.101	0.108	0.138	0.0834	0.0557	0.0699 (J+)	—	0.112
RE39-19-184645	39-61656	2–3	FILL	—	—	0.00795	0.00425	0.0013 (J)	—	—	—	—	—	0.0718 (J+)	0.0127 (J-)	—
RE39-19-184646	39-61656	4–5	FILL	—	—	—	—	—	—	—	—	—	—	0.0614 (J+)	—	—
RE39-19-184647	39-61657	0–1	FILL	—	0.0128 (J)	—	0.988	0.185	0.0477	0.0462	0.0601	0.0337 (J)	0.0221 (J)	—	0.0151 (J)	0.0531
RE39-19-184648	39-61657	2–3	FILL	—	—	—	0.00217 (J)	—	—	—	—	—	—	0.0733 (J+)	—	—
RE39-19-184649	39-61657	4–5	FILL	—	—	—	—	—	—	—	—	—	—	0.0726 (J+)	—	—
RE39-19-184650	39-61658	0–1	FILL	—	—	—	0.0152	—	—	—	—	—	—	—	0.0161 (J-)	—
RE39-19-184651	39-61658	2–3	FILL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-19-184652	39-61658	4–5	FILL	—	—	—	—	—	—	—	—	—	—	0.0954 (J+)	0.0147 (J)	—
RE39-19-184653	39-61659	0–1	FILL	0.0585	0.0891	—	8.26	—	0.315	0.361	0.448	0.238	0.166	0.0601 (J+)	0.0117 (J)	0.365
RE39-19-184654	39-61659	2–3	FILL	—	—	—	0.115	—	—	—	—	—	—	0.108 (J+)	0.0171 (J-)	—
RE39-19-184655	39-61659	4–5	FILL	—	—	—	0.125	—	—	—	—	—	—	0.0922 (J+)	0.0136 (J)	—
RE39-22-253752	39-61743	0–1	SOIL	NA[f]	NA	—	0.471 (J)	0.152	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253753	39-61743	2–3	SOIL	NA	NA	—	0.782 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253754	39-61743	4–5	SOIL	NA	NA	—	4.94 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270490	39-61743	6–7	SOIL	NA	NA	—	0.252	0.071	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270491	39-61743	9–10	SOIL	NA	NA	—	0.413 (J)	0.126 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253755	39-61744	0–1	SOIL	NA	NA	—	0.208	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253756	39-61744	2–3	SOIL	NA	NA	—	1.31	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253757	39-61744	4–5	SOIL	NA	NA	0.667	1.26	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253758	39-61745	0–1	SOIL	NA	NA	—	0.0684	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253759	39-61745	2–3	SOIL	NA	NA	—	0.738	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253760	39-61745	4–5	SOIL	NA	NA	—	0.71	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253761	39-61746	0–1	SOIL	NA	NA	—	7.19	—	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1248	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	Chrysene
Construction Worker SSL[a]				**15,100**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530**[b]	**2310**	**5380**	**99,000**[c]	**23,100**
Industrial SSL[a]				**50,500**	**253,000**	**10.7**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300**[b]	**323**	**1830**	**12,000**[d]	**3230**
Residential SSL[a]				**3480**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740**[b]	**15.3**	**380**	**2900**[d]	**153**
RE39-22-253762	39-61746	2–3	SOIL	NA	NA	—	0.47	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253763	39-61746	4–5	SOIL	NA	NA	—	0.23	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253764	39-61747	0–1	SOIL	NA	NA	—	0.0583	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253765	39-61747	2–3	SOIL	NA	NA	—	0.00246 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253767	39-61748	0–1	FILL	NA	NA	—	0.286	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253768	39-61748	2–3	SOIL	NA	NA	—	0.429	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253769	39-61748	4–5	SOIL	NA	NA	—	0.0355	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253770	39-61749	0–1	FILL	NA	NA	—	0.0017 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253771	39-61749	2–3	SOIL	NA	NA	—	3.26	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253772	39-61749	4–5	SOIL	NA	NA	—	0.941	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253773	39-61750	0–1	SOIL	NA	NA	—	0.615	0.251	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253774	39-61750	2–3	SOIL	NA	NA	—	0.0385	0.0153	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253775	39-61750	4–5	SOIL	NA	NA	—	0.0241	0.0103	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253776	39-61751	0–1	SOIL	NA	NA	—	0.507	0.184	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253777	39-61751	2–3	SOIL	NA	NA	—	0.0258	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253778	39-61751	4–5	SOIL	NA	NA	—	0.0208	0.00737	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253779	39-61752	0–1	SOIL	NA	NA	—	11.8	4.18	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253780	39-61752	2–3	SOIL	NA	NA	—	1.47	0.553	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253781	39-61752	4–5	SOIL	NA	NA	—	0.742	0.233	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253782	39-61753	0–1	SOIL	NA	NA	—	10.6	3.13	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253783	39-61753	2–3	SOIL	NA	NA	—	0.162	0.0496	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253784	39-61753	4–5	SOIL	NA	NA	—	0.668	0.182	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253785	39-61754	0–1	SOIL	NA	NA	—	0.00233 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253791	39-61756	0–1	SOIL	NA	NA	—	0.00774	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253792	39-61756	2–3	SOIL	NA	NA	—	0.0143	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253793	39-61756	4–5	SOIL	NA	NA	—	0.00179 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253794	39-61757	0–1	SOIL	NA	NA	—	0.378	—	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1248	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	Chrysene
Construction Worker SSL[a]				**15,100**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**5380**	**99,000[c]**	**23,100**
Industrial SSL[a]				**50,500**	**253,000**	**10.7**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**1830**	**12,000[d]**	**3230**
Residential SSL[a]				**3480**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**380**	**2900[d]**	**153**
RE39-22-253795	39-61757	2–3	SOIL	NA	NA	—	0.163	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253796	39-61757	4–5	SOIL	NA	NA	—	0.0892	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253797	39-61758	0–1	SOIL	NA	NA	—	4.25	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253798	39-61758	2–3	SOIL	NA	NA	—	0.0547	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253799	39-61758	4–5	SOIL	NA	NA	—	0.376	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253800	39-61759	0–1	SOIL	NA	NA	—	0.0234	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253801	39-61759	2–3	SOIL	NA	NA	—	16.5	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253802	39-61759	4–5	SOIL	NA	NA	—	1.79	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253804	39-61760	2–3	SOIL	NA	NA	—	1.04 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253805	39-61760	4–5	SOIL	NA	NA	—	6.27 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253806	39-61761	0–1	SOIL	NA	NA	—	4.41 (J)	1.44	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253807	39-61761	2–3	SOIL	NA	NA	—	0.0701 (J)	0.0228	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253808	39-61761	4–5	SOIL	NA	NA	—	0.121 (J)	0.0419	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253809	39-61762	0–1	SOIL	NA	NA	—	1.04 (J)	0.398	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253810	39-61762	2–3	SOIL	NA	NA	—	0.0159 (J)	0.00639	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253811	39-61762	4–5	SOIL	NA	NA	—	0.0185 (J)	0.00751	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253812	39-61763	0–1	SOIL	NA	NA	—	0.176 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253813	39-61763	2–3	SOIL	NA	NA	—	0.00172 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253814	39-61763	4–5	SOIL	NA	NA	—	0.012 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253815	39-61764	0–1	SOIL	NA	NA	—	0.467 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253816	39-61764	2–3	SOIL	NA	NA	—	0.0148 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253817	39-61764	4–5	SOIL	NA	NA	—	0.00191 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253818	39-61765	0–1	SOIL	NA	NA	—	1.13 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253819	39-61765	2–3	SOIL	NA	NA	—	0.0154 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253820	39-61765	4–5	SOIL	NA	NA	—	0.021 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253821	39-61766	0–1	FILL	NA	NA	—	0.0607 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253822	39-61766	2–3	SOIL	NA	NA	—	2.67 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1248	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	Chrysene
Construction Worker SSL[a]				**15,100**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**5380**	**99,000[c]**	**23,100**
Industrial SSL[a]				**50,500**	**253,000**	**10.7**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**1830**	**12,000[d]**	**3230**
Residential SSL[a]				**3480**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**380**	**2900[d]**	**153**
RE39-22-253823	39-61766	4–5	SOIL	NA	NA	—	0.0381 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253824	39-61767	0–1	FILL	NA	NA	—	0.325 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253825	39-61767	2–3	SOIL	NA	NA	—	3.88 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253826	39-61767	4–5	SOIL	NA	NA	—	0.257 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253827	39-61768	0–1	FILL	NA	NA	—	0.0728	0.0229	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253828	39-61768	2–3	SOIL	NA	NA	0.33	0.748	0.224	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253829	39-61768	4–5	SOIL	NA	NA	0.0729	0.0816	0.0244	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253830	39-61769	0–1	SOIL	NA	NA	—	0.051	0.0141	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253831	39-61769	2–3	SOIL	NA	NA	—	0.969	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253832	39-61769	4–5	SOIL	NA	NA	—	0.173	0.0516	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253833	39-61770	0–1	SOIL	NA	NA	—	0.0084	0.00315 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253834	39-61770	2–3	SOIL	NA	NA	—	0.00168 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253836	39-61771	0–1	SOIL	NA	NA	—	0.0228	0.00787	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253839	39-61772	0–1	SOIL	NA	NA	—	0.118	0.0454	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253840	39-61772	2–3	SOIL	NA	NA	—	0.00335 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253842	39-61773	0–1	SOIL	NA	NA	—	0.0609	0.0161	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253843	39-61773	2–3	SOIL	NA	NA	—	0.0402	0.0132	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253844	39-61773	4–5	SOIL	NA	NA	—	0.00541	0.00188 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253845	39-61774	0–1	SOIL	NA	NA	—	0.0096	0.00348	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253846	39-61774	2–3	SOIL	NA	NA	—	0.0169	0.00557	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253847	39-61774	4–5	SOIL	NA	NA	—	0.00293 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253848	39-61775	0–1	SOIL	NA	NA	—	0.0556	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253849	39-61775	2–3	SOIL	NA	NA	—	0.00585	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253851	39-61776	0–1	SOIL	NA	NA	—	0.046	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253852	39-61776	2–3	SOIL	NA	NA	—	0.0244	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253853	39-61776	4–5	SOIL	NA	NA	—	0.192	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270492	39-61776	6–7	SOIL	NA	NA	—	0.13	0.0401	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1248	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	Chrysene
Construction Worker SSL[a]				**15,100**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**5380**	**99,000[c]**	**23,100**
Industrial SSL[a]				**50,500**	**253,000**	**10.7**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**1830**	**12,000[d]**	**3230**
Residential SSL[a]				**3480**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**380**	**2900[d]**	**153**
RE39-23-270493	39-61776	9–10	SOIL	NA	NA	—	0.048 (J-)	0.0151 (J-)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253854	39-61777	0–1	SOIL	NA	NA	—	0.112	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270494	39-61844	0–1	SOIL	NA	NA	—	0.115 (J)	0.0516	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270495	39-61844	2–3	SOIL	NA	NA	—	0.291 (J)	0.121	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270496	39-61844	4–5	SOIL	NA	NA	—	0.0396 (J)	0.0148	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270497	39-61845	0–1	SOIL	NA	NA	—	5.48	2.44	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270498	39-61845	2–3	SOIL	NA	NA	—	0.44	0.21	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270499	39-61845	4–5	SOIL	NA	NA	—	0.139	0.0594	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270500	39-61845	6–7	SOIL	NA	NA	—	0.0325	0.0155 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270501	39-61846	0–1	SOIL	NA	NA	—	2.11	0.796	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270502	39-61846	2–3	SOIL	NA	NA	—	0.115	0.0413	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270503	39-61846	4–5	SOIL	NA	NA	—	0.019	0.00646 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270504	39-61846	6–7	SOIL	NA	NA	—	0.0245	0.00709	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270505	39-61847	0–1	SOIL	NA	NA	—	0.054	0.0234	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270506	39-61847	2–3	SOIL	NA	NA	—	0.00237 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270507	39-61847	4–5	SOIL	NA	NA	—	0.00171 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270509	39-61848	0–1	SOIL	NA	NA	—	0.0834	0.0234	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270510	39-61848	2–3	SOIL	NA	NA	—	0.0339	0.00986	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270511	39-61848	4–5	SOIL	NA	NA	—	0.00924	0.00246 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270512	39-61848	6–7	SOIL	NA	NA	—	0.00676	0.00199 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270513	39-61849	0–1	SOIL	NA	NA	—	4.54	1.51	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270514	39-61849	2–3	SOIL	NA	NA	—	1.69	0.579	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270515	39-61849	4–5	SOIL	NA	NA	—	0.483	0.168	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270516	39-61849	6–7	SOIL	NA	NA	—	0.225	0.0755	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270517	39-61850	0–1	SOIL	NA	NA	—	0.0147 (J)	0.00806	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270518	39-61850	2–3	SOIL	NA	NA	—	0.0151 (J)	0.00649	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270519	39-61850	4–5	SOIL	NA	NA	—	0.00275 (J)	0.00123 (J)	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1248	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	Chrysene
Construction Worker SSL[a]				**15,100**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**5380**	**99,000[c]**	**23,100**
Industrial SSL[a]				**50,500**	**253,000**	**10.7**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**1830**	**12,000[d]**	**3230**
Residential SSL[a]				**3480**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**380**	**2900[d]**	**153**
RE39-23-270520	39-61851	0–1	SOIL	NA	NA	—	0.474 (J)	0.183	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270521	39-61851	2–3	SOIL	NA	NA	—	0.0904 (J)	0.0365	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270522	39-61851	4–5	SOIL	NA	NA	—	0.0349 (J)	0.0127	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270523	39-61852	0–1	SOIL	NA	NA	—	0.777 (J)	0.341	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270524	39-61852	2–3	SOIL	NA	NA	—	0.0524 (J)	0.0225	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270525	39-61852	4–5	SOIL	NA	NA	—	0.0386 (J)	0.0177	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270526	39-61853	0–1	SOIL	NA	NA	—	0.00467 (J)	0.00226 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270527	39-61853	2–3	SOIL	NA	NA	—	0.00213 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270528	39-61853	4–5	SOIL	NA	NA	—	0.00149 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270529	39-61854	0–1	SOIL	NA	NA	—	0.0327	0.0138	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270530	39-61854	2–3	SOIL	NA	NA	—	0.107	0.0488	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270531	39-61854	4–5	SOIL	NA	NA	—	0.0136	0.00678	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270532	39-61855	0–1	SOIL	NA	NA	—	0.772	0.354	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270533	39-61855	2–3	SOIL	NA	NA	—	0.0244	0.0119	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270534	39-61855	4–5	SOIL	NA	NA	—	0.0234	0.0102	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270535	39-61856	0–1	SOIL	NA	NA	—	0.00999	0.00518	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270536	39-61856	2–3	SOIL	NA	NA	—	0.00958	0.00407	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270537	39-61856	4–5	SOIL	NA	NA	—	0.00218 (J)	0.00143 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270538	39-61857	0–1	SOIL	NA	NA	—	0.0276	0.0102	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270539	39-61857	2–3	SOIL	NA	NA	—	0.00489	0.00206 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270540	39-61857	4–5	SOIL	NA	NA	—	0.00184 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Construction Worker SSL[a]				**26,900**	**24**	**215,000**	**10,000**	**10,000**	**240**	**159**	**8070**	**7530**
Industrial SSL[a]				**91,600**	**3.23**	**733,000**	**33,700**	**33,700**	**32.3**	**108**	**27,500**	**25,300**
Residential SSL[a]				**6160**	**0.153**	**49,300**	**2320**	**2320**	**1.53**	**22.6**	**1850**	**1740**
RE39-19-184641	39-61655	0–1	FILL	—	—	—	—	—	—	—	—	—
RE39-19-184642	39-61655	2–3	FILL	0.323 (J+)	—	0.0177 (J)	—	—	—	—	—	—
RE39-19-184643	39-61655	4–5	FILL	—	—	—	—	—	—	—	—	—
RE39-19-184644	39-61656	0–1	FILL	0.26 (J+)	0.0191 (J)	0.0123 (J)	0.28	0.0135 (J)	0.0935	0.0131 (J)	0.174	0.236
RE39-19-184645	39-61656	2–3	FILL	—	—	—	0.0146 (J-)	—	—	—	—	0.0123 (J-)
RE39-19-184646	39-61656	4–5	FILL	—	—	—	—	—	—	—	—	—
RE39-19-184647	39-61657	0–1	FILL	—	—	0.0124 (J)	0.12	—	0.0372 (J)	—	0.0966	0.0974
RE39-19-184648	39-61657	2–3	FILL	—	—	—	—	—	—	—	—	—
RE39-19-184649	39-61657	4–5	FILL	—	—	—	—	—	—	—	—	—
RE39-19-184650	39-61658	0–1	FILL	0.401 (J+)	—	0.0142 (J-)	—	—	—	—	—	—
RE39-19-184651	39-61658	2–3	FILL	0.0188 (J-)	—	—	—	—	—	—	—	—
RE39-19-184652	39-61658	4–5	FILL	0.536 (J+)	—	0.0174 (J)	—	—	—	—	—	—
RE39-19-184653	39-61659	0–1	FILL	—	0.0635	0.0117 (J)	0.84	0.0453	0.24	0.0291 (J)	0.531	0.641
RE39-19-184654	39-61659	2–3	FILL	—	—	0.0132 (J-)	—	—	—	—	—	—
RE39-19-184655	39-61659	4–5	FILL	—	—	—	—	—	—	—	—	—
RE39-22-253752	39-61743	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253753	39-61743	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253754	39-61743	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270490	39-61743	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270491	39-61743	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253755	39-61744	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253756	39-61744	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253757	39-61744	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253758	39-61745	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253759	39-61745	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253760	39-61745	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253761	39-61746	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Construction Worker SSL[a]				**26,900**	**24**	**215,000**	**10,000**	**10,000**	**240**	**159**	**8070**	**7530**
Industrial SSL[a]				**91,600**	**3.23**	**733,000**	**33,700**	**33,700**	**32.3**	**108**	**27,500**	**25,300**
Residential SSL[a]				**6160**	**0.153**	**49,300**	**2320**	**2320**	**1.53**	**22.6**	**1850**	**1740**
RE39-22-253762	39-61746	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253763	39-61746	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253764	39-61747	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253765	39-61747	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253767	39-61748	0–1	FILL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253768	39-61748	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253769	39-61748	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253770	39-61749	0–1	FILL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253771	39-61749	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253772	39-61749	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253773	39-61750	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253774	39-61750	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253775	39-61750	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253776	39-61751	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253777	39-61751	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253778	39-61751	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253779	39-61752	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253780	39-61752	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253781	39-61752	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253782	39-61753	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253783	39-61753	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253784	39-61753	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253785	39-61754	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253791	39-61756	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253792	39-61756	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253793	39-61756	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253794	39-61757	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Construction Worker SSL[a]				**26,900**	**24**	**215,000**	**10,000**	**10,000**	**240**	**159**	**8070**	**7530**
Industrial SSL[a]				**91,600**	**3.23**	**733,000**	**33,700**	**33,700**	**32.3**	**108**	**27,500**	**25,300**
Residential SSL[a]				**6160**	**0.153**	**49,300**	**2320**	**2320**	**1.53**	**22.6**	**1850**	**1740**
RE39-22-253795	39-61757	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253796	39-61757	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253797	39-61758	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253798	39-61758	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253799	39-61758	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253800	39-61759	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253801	39-61759	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253802	39-61759	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253804	39-61760	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253805	39-61760	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253806	39-61761	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253807	39-61761	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253808	39-61761	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253809	39-61762	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253810	39-61762	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253811	39-61762	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253812	39-61763	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253813	39-61763	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253814	39-61763	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253815	39-61764	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253816	39-61764	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253817	39-61764	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253818	39-61765	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253819	39-61765	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253820	39-61765	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253821	39-61766	0–1	FILL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253822	39-61766	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Construction Worker SSL[a]				**26,900**	**24**	**215,000**	**10,000**	**10,000**	**240**	**159**	**8070**	**7530**
Industrial SSL[a]				**91,600**	**3.23**	**733,000**	**33,700**	**33,700**	**32.3**	**108**	**27,500**	**25,300**
Residential SSL[a]				**6160**	**0.153**	**49,300**	**2320**	**2320**	**1.53**	**22.6**	**1850**	**1740**
RE39-22-253823	39-61766	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253824	39-61767	0–1	FILL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253825	39-61767	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253826	39-61767	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253827	39-61768	0–1	FILL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253828	39-61768	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253829	39-61768	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253830	39-61769	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253831	39-61769	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253832	39-61769	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253833	39-61770	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253834	39-61770	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253836	39-61771	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253839	39-61772	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253840	39-61772	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253842	39-61773	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253843	39-61773	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253844	39-61773	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253845	39-61774	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253846	39-61774	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253847	39-61774	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253848	39-61775	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253849	39-61775	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253851	39-61776	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253852	39-61776	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253853	39-61776	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270492	39-61776	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Construction Worker SSL[a]				**26,900**	**24**	**215,000**	**10,000**	**10,000**	**240**	**159**	**8070**	**7530**
Industrial SSL[a]				**91,600**	**3.23**	**733,000**	**33,700**	**33,700**	**32.3**	**108**	**27,500**	**25,300**
Residential SSL[a]				**6160**	**0.153**	**49,300**	**2320**	**2320**	**1.53**	**22.6**	**1850**	**1740**
RE39-23-270493	39-61776	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-253854	39-61777	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270494	39-61844	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270495	39-61844	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270496	39-61844	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270497	39-61845	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270498	39-61845	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270499	39-61845	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270500	39-61845	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270501	39-61846	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270502	39-61846	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270503	39-61846	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270504	39-61846	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270505	39-61847	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270506	39-61847	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270507	39-61847	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270509	39-61848	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270510	39-61848	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270511	39-61848	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270512	39-61848	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270513	39-61849	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270514	39-61849	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270515	39-61849	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270516	39-61849	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270517	39-61850	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270518	39-61850	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270519	39-61850	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.3-8 (continued)

Sample	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Construction Worker SSL[a]				**26,900**	**24**	**215,000**	**10,000**	**10,000**	**240**	**159**	**8070**	**7530**
Industrial SSL[a]				**91,600**	**3.23**	**733,000**	**33,700**	**33,700**	**32.3**	**108**	**27,500**	**25,300**
Residential SSL[a]				**6160**	**0.153**	**49,300**	**2320**	**2320**	**1.53**	**22.6**	**1850**	**1740**
RE39-23-270520	39-61851	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270521	39-61851	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270522	39-61851	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270523	39-61852	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270524	39-61852	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270525	39-61852	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270526	39-61853	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270527	39-61853	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270528	39-61853	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270529	39-61854	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270530	39-61854	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270531	39-61854	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270532	39-61855	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270533	39-61855	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270534	39-61855	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270535	39-61856	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270536	39-61856	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270537	39-61856	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270538	39-61857	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270539	39-61857	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270540	39-61857	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[d] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[e] — = Not detected.

[f] NA = Not analyzed.

Table 6.3-9
Organic Chemicals Detected at Area 3 of SWMU 39-002(a)

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	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**242,000**	**75,300**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**5380**	**23,100**	**26,900**	**10,000**	**na[c]**	**na**	**na**
Industrial SSL[a]				**960,000**	**253,000**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[b]**	**323**	**1830**	**3230**	**91,600**	**33,700**	**na**	**na**	**na**
Residential SSL[a]				**66,300**	**17,400**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**380**	**153**	**6160**	**2320**	**na**	**na**	**na**
RE39-09-4468	39-604731	0.5–1	Soil	—[d]	0.053 (J)	—	—	0.17 (J)	0.18 (J+)	0.15 (J)	0.084 (J)	0.18 (J)	—	0.19 (J)	—	0.39	NA[e]	NA	NA
RE39-09-4469	39-604731	1–2	Soil	—	—	—	—	—	—	—	—	—	0.16 (J)	—	—	—	NA	NA	NA
RE39-09-4470	39-604732	0.5–1	Soil	—	—	0.0099 (J)	—	0.094 (J)	0.11 (J+)	0.096 (J)	0.067 (J)	0.11 (J)	0.43	0.12 (J)	—	0.22 (J)	NA	NA	NA
RE39-09-4484	39-604732	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.27e-005	0.00011	7.9e-006
RE39-09-4471	39-604732	1–2	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-09-4472	39-604733	0.5–1	Soil	—	—	0.011 (J)	—	0.066 (J)	0.078 (J+)	0.066 (J)	0.045 (J)	0.074 (J)	0.065 (J)	0.094 (J)	0.069 (J)	0.17 (J)	NA	NA	NA
RE39-09-4473	39-604733	1–2	Soil	—	—	—	—	—	—	—	—	—	—	—	—	0.054 (J)	NA	NA	NA
RE39-09-4474	39-604734	0.5–1	Soil	—	—	0.011 (J)	—	—	—	—	—	—	—	—	—	0.047 (J)	NA	NA	NA
RE39-09-4475	39-604734	1–2	Soil	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-09-4476	39-604735	0.5–1	Soil	—	0.037 (J)	—	—	0.13 (J)	0.14 (J)	0.11 (J)	0.091 (J)	0.13 (J)	0.14 (J)	0.18 (J)	0.54	0.38	NA	NA	NA
RE39-09-4477	39-604735	1–2	Soil	—	—	—	—	—	—	—	—	—	—	—	—	0.051 (J)	NA	NA	NA
RE39-09-4478	39-604736	0.5–1	Soil	—	—	—	—	—	—	—	—	—	0.1 (J)	—	—	0.049 (J)	NA	NA	NA
RE39-09-4479	39-604736	1–2	Soil	0.013 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-09-4480	39-604737	0–1	Soil	—	—	—	—	0.049 (J)	0.06 (J)	0.056 (J)	0.046 (J)	0.056 (J)	0.61	0.064 (J)	—	0.11 (J)	NA	NA	NA
RE39-09-4481	39-604737	0.5–1	Soil	—	—	—	—	—	—	—	—	—	—	0.038 (J)	—	0.061 (J)	NA	NA	NA
RE39-09-4482	39-604738	0.5–1	Soil	—	—	0.013 (J)	0.0091 (J)	0.052 (J)	0.063 (J)	0.058 (J)	0.045 (J)	0.068 (J)	0.47	0.066 (J)	—	0.12 (J)	NA	NA	NA
RE39-09-4483	39-604738	1–2	Soil	—	—	—	—	—	0.043 (J+)	—	—	—	—	0.045 (J)	—	0.077 (J)	NA	NA	NA

Table 6.3-9 (continued)

Sample ID	Location ID	Depth (ft)	Media	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 [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	PETN	Pentachlorodibenzofurans (Total)	Phenanthrene	Pyrene	Tetrachlorodibenzofurans (Total)	Trichlorofluoromethane
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**240**	**17.9[f]**	**1210**	**na**	**na**	**43,800[g]**	**na**	**8070**	**7530**	**na**	**1130**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**32.3**	**94.5[f]**	**5130**	**na**	**na**	**5300[h]**	**na**	**27,500**	**25,300**	**na**	**6030**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1.53**	**17.7[f]**	**409**	**na**	**na**	**1300[h]**	**na**	**1850**	**1740**	**na**	**1230**
RE39-09-4468	39-604731	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	0.072 (J)	—	0.0015 (J)	NA	NA	—	NA	0.23 (J)	0.33 (J)	NA	—
RE39-09-4469	39-604731	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	—	NA	—	—	NA	—
RE39-09-4470	39-604732	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	—	NA	0.12 (J)	0.2 (J)	NA	—
RE39-09-4484	39-604732	0.5–1	Soil	2.8e-007 (J)	1.42e-005	4.21e-007 (J)	8.05e-007 (J)	1.1e-006 (J)	7.69e-006	4.83e-007 (J)	8.02e-006	NA	NA	NA	0.000779	9.19e-006	NA	3.44e-006	NA	NA	1.16e-006	NA
RE39-09-4471	39-604732	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00077 (J)	—	NA	NA	—	NA	—	—	NA	—
RE39-09-4472	39-604733	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.0019 (J)	NA	NA	—	NA	0.12 (J)	0.15 (J)	NA	—
RE39-09-4473	39-604733	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	—	NA	0.043 (J)	0.048 (J)	NA	—
RE39-09-4474	39-604734	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.002 (J)	NA	NA	—	NA	—	0.045 (J)	NA	—
RE39-09-4475	39-604734	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	0.02 (J+)	NA	—	—	NA	—
RE39-09-4476	39-604735	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	0.079 (J)	—	—	NA	NA	—	NA	0.24 (J)	0.38	NA	—
RE39-09-4477	39-604735	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.0016 (J)	NA	NA	—	NA	—	0.048 (J)	NA	—
RE39-09-4478	39-604736	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	—	NA	—	0.048 (J)	NA	—
RE39-09-4479	39-604736	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.0027 (J)	NA	NA	—	NA	—	—	NA	—
RE39-09-4480	39-604737	0–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	—	NA	0.063 (J)	0.12 (J)	NA	0.00037 (J)
RE39-09-4481	39-604737	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.0018 (J)	NA	NA	—	NA	—	0.055 (J)	NA	—
RE39-09-4482	39-604738	0.5–1	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	NA	NA	—	NA	0.069 (J)	0.11 (J)	NA	—
RE39-09-4483	39-604738	1–2	Soil	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.0032 (J)	NA	NA	—	NA	0.041 (J)	0.067 (J)	NA	—

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] na = Not available

[d] — = Not detected.

[e] NA = Not analyzed.

[f] Bromomethane used as a surrogate based on structural similarity.

[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[h] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table 6.3-10
Radionuclides Detected or Detected above BVs/FVs at Area 1 of SWMU 39-002(a)

Sample ID	Location ID	Depth (ft)	Media	Cesium-137	Plutonium-239/240	Tritium	Uranium-238
Soil Background Value[a]				**1.65**	**0.054**	**na[b]**	**2.29**
Construction Worker SAL 25[c]				**37**	**200**	**1,600,000**	**470**
Industrial SAL 25[c]				**41**	**1200**	**2,400,000**	**710**
Residential SAL 25[c]				**12**	**79**	**1700**	**150**
0239-97-0014	39-01053	0–0.5	SOIL	NA[d]	NA	NA	3.88
0239-97-0009	39-01499	0–0.5	SOIL	NA	NA	NA	6.32
RE39-09-5024	39-604807	1–2	SOIL	—[e]	0.105	—	—
RE39-09-5038	39-604812	0–1	SOIL	—	—	0.11291	8.21
RE39-09-5040	39-604812	2–3	SOIL	—	—	—	2.98
RE39-22-252638	39-61663	1–2	SOIL	0.167	—	—	—
RE39-22-252652	39-61668	0.5–1.5	SOIL	0.0648	—	—	—
RE39-22-252653	39-61668	1.5–2.5	SOIL	0.0611	—	—	—
RE39-22-252658	39-61670	0.5–1.5	SOIL	0.0949	—	—	—
RE39-22-252664	39-61672	0.5–1.5	SOIL	0.155	—	—	—
RE39-22-252718	39-61690	0.9–1.9	SOIL	0.0641	—	—	—
RE39-22-252706	39-61686	1.2–2.2	SOIL	—	—	20.7	—
RE39-22-252707	39-61686	2.2–3.2	SOIL	—	—	12.9	—

Note: Results are in pCI/g.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SALs from LANL (2015, 600929).

[d] NA = Not analyzed

[e] — = Not detected or not detected above BV/FV.

Table 6.4-1
Samples Collected and Analyses Requested at AOC 39-002(b)

Sample ID	Location ID	Depth (ft)	Media	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253361	39-61697	0–1	FILL	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253362	39-61697	2–3	FILL	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253363	39-61697	6–7	ALLH	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253364	39-61698	0–1	FILL	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253365	39-61698	2–3	FILL	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253367	39-61699	0–1	FILL	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253368	39-61699	2–3	FILL	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253369	39-61699	6–7	ALLH	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2531	N3B-2022-2532	N3B-2022-2531	N3B-2022-2531
RE39-22-253370	39-61700	0.3–1	FILL	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2855	N3B-2022-2854	N3B-2022-2854
RE39-22-253371	39-61700	2–3	ALLH	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2855	N3B-2022-2854	N3B-2022-2854
RE39-22-253372	39-61700	6–7	ALLH	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2855	N3B-2022-2854	N3B-2022-2854
RE39-22-253373	39-61701	0.3–1	FILL	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2855	N3B-2022-2854	N3B-2022-2854
RE39-22-253374	39-61701	2–3	ALLH	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2855	N3B-2022-2854	N3B-2022-2854
RE39-22-253375	39-61701	6–7	ALLH	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2854	N3B-2022-2855	N3B-2022-2854	N3B-2022-2854
RE39-22-253376	39-61702	0.2–1	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253377	39-61702	2–3	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253378	39-61702	6–7	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253379	39-61703	0.3–1	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253380	39-61703	2–3	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253381	39-61703	6–7	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253382	39-61704	0.3–1	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253383	39-61704	2–3	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253384	39-61704	6–7	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253385	39-61705	0.3–1	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253386	39-61705	2–3	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253387	39-61705	6–7	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253388	39-61706	0.3–1	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-22-253389	39-61706	2–3	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881

Table 6.4-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253390	39-61706	6–7	ALLH	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2881	N3B-2022-2882	N3B-2022-2881	N3B-2022-2881
RE39-23-270482	39-61842	0–1	ALLH	—[a]	—	—	—	—	N3B-2023-1506[b]	—	—	N3B-2023-1506	—	—	—	—	—
RE39-23-270483	39-61842	2–3	ALLH	—	—	—	—	—	N3B-2023-1506[b]	—	—	N3B-2023-1506	—	—	—	—	—
RE39-23-270484	39-61842	6–7	ALLH	—	—	—	—	—	N3B-2023-1506[b]	—	—	N3B-2023-1506	—	—	—	—	—
RE39-23-270485	39-61843	0–1	ALLH	—	—	—	—	—	N3B-2023-1506[b]	—	—	N3B-2023-1506	—	—	—	—	—
RE39-23-270486	39-61843	2–3	ALLH	—	—	—	—	—	N3B-2023-1506[b]	—	—	N3B-2023-1506	—	—	—	—	—
RE39-23-270487	39-61843	6–7	ALLH	—	—	—	—	—	N3B-2023-1506[b]	—	—	N3B-2023-1506	—	—	—	—	—
RE39-23-280688	39-61842	8–9	QBT3	—	—	—	—	—	—	—	—	N3B-2023-1959	—	—	—	—	—
RE39-23-280689	39-61842	10–11	QBT3	—	—	—	—	—	—	—	—	N3B-2023-1959	—	—	—	—	—

Note: Numbers in analyte columns are request numbers

[a] — = Analysis not requested.

[b] Analyzed only for lead.

Table 6.4-2
Inorganic Chemicals above BVs at AOC 39-002(b)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Calcium	Copper	Lead	Mercury	Nickel	Nitrate	Selenium	Zinc
Soil Background Value[a]				**0.83**	**6120**	**14.7**	**22.3**	**0.1**	**15.4**	**na[b]**	**1.52**	**48.8**
Construction Worker SSL[c]				**142**	**na**	**14,200**	**800**	**20.7**	**753**	**566,000**	**1750**	**106,000**
Industrial SSL[c]				**519**	**na**	**51,900**	**800**	**112**	**25,700**	**2,080,000**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**na**	**3130**	**400**	**23.8**	**1560**	**125,000**	**391**	**23,500**
RE39-22-253361	39-61697	0–1	FILL	0.988 (U)	—[d]	—	—	—	—	3	—	—
RE39-22-253362	39-61697	2–3	FILL	—	—	21.2	31.5	—	—	4.15	—	—
RE39-22-253363	39-61697	6–7	SOIL	—	—	—	—	—	—	5.1	1.8	—
RE39-22-253364	39-61698	0–1	FILL	—	—	—	—	—	—	1.18	—	—
RE39-22-253365	39-61698	2–3	FILL	0.884 (U)	—	41.2	28.7	0.258	—	3.22	—	—
RE39-22-253367	39-61699	0–1	FILL	—	—	—	—	—	—	—	—	—
RE39-22-253368	39-61699	2–3	FILL	1.12 (U)	—	27.4	—	—	—	—	—	—
RE39-22-253369	39-61699	6–7	SOIL	1.22 (U)	—	—	—	—	—	—	—	—
RE39-22-253370	39-61700	0.3–1	FILL	—	13500 (J)	15.7	—	—	16.5 (J)	0.791 (J)	—	—

Sample ID	Location ID	Depth (ft)	Media	Antimony	Calcium	Copper	Lead	Mercury	Nickel	Nitrate	Selenium	Zinc
Soil Background Value[a]				**0.83**	**6120**	**14.7**	**22.3**	**0.1**	**15.4**	**na[b]**	**1.52**	**48.8**
Construction Worker SSL[c]				**142**	**na**	**14,200**	**800**	**20.7**	**753**	**566,000**	**1750**	**106,000**
Industrial SSL[c]				**519**	**na**	**51,900**	**800**	**112**	**25,700**	**2,080,000**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**na**	**3130**	**400**	**23.8**	**1560**	**125,000**	**391**	**23,500**
RE39-22-253371	39-61700	2–3	SOIL	—	6850 (J)	—	—	—	—	1.87	—	—
RE39-22-253372	39-61700	6–7	SOIL	—	—	—	—	—	—	1 (J)	1.67	—
RE39-22-253373	39-61701	0.3–1	FILL	—	10300 (J)	—	—	—	—	—	—	—
RE39-22-253374	39-61701	2–3	SOIL	—	—	21.8	—	—	—	1.35	—	—
RE39-22-253375	39-61701	6–7	SOIL	—	—	—	—	—	—	1.46	2.02	—
RE39-22-253376	39-61702	0.2–1	SOIL	—	—	104	22.9	1.14 (J)	—	1.6	—	119
RE39-22-253377	39-61702	2–3	SOIL	—	—	20.9	—	—	—	0.951 (J)	—	—
RE39-22-253378	39-61702	6–7	SOIL	—	—	—	—	—	—	3.98	—	—
RE39-22-253379	39-61703	0.3–1	SOIL	—	—	163	83.9	0.352 (J)	—	1.37	—	69.5
RE39-22-253380	39-61703	2–3	SOIL	—	—	—	—	—	—	3.56	—	—
RE39-22-253381	39-61703	6–7	SOIL	—	—	30.6	—	—	—	9.21	—	—
RE39-22-253382	39-61704	0.3-1	SOIL	—	—	18.8	—	—	—	1.78	—	—
RE39-22-253383	39-61704	2–3	SOIL	—	—	—	—	—	—	0.788 (J)	—	—
RE39-22-253384	39-61704	6–7	SOIL	—	—	—	—	—	—	0.953 (J)	—	—
RE39-22-253385	39-61705	0.3–1	SOIL	—	6670 (J)	—	—	—	—	0.957 (J)	—	—
RE39-22-253386	39-61705	2–3	SOIL	—	—	—	—	—	—	1.22	—	—
RE39-22-253387	39-61705	6–7	SOIL	—	—	—	—	—	—	0.88 (J)	—	—
RE39-22-253388	39-61706	0.3–1	SOIL	—	11400 (J)	—	—	—	—	—	—	—
RE39-22-253389	39-61706	2–3	SOIL	—	—	—	—	—	—	1.44	—	—
RE39-22-253390	39-61706	6–7	SOIL	—	—	—	—	—	—	0.96 (J)	—	—
RE39-23-270482	39-61842	0–1	SOIL	NA[e]	NA	NA	—	NA	NA	NA	NA	NA
RE39-23-270483	39-61842	2–3	SOIL	NA	NA	NA	—	NA	NA	NA	NA	NA
RE39-23-270484	39-61842	6–7	SOIL	NA	NA	NA	—	NA	NA	NA	NA	NA
RE39-23-270485	39-61843	0–1	SOIL	NA	NA	NA	45.2 (J+)	NA	NA	NA	NA	NA
RE39-23-270486	39-61843	2–3	SOIL	NA	NA	NA	—	NA	NA	NA	NA	NA
RE39-23-270487	39-61843	6–7	SOIL	NA	NA	NA	—	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

[e] NA = Not analyzed.

Table 6.4-3
Organic Chemicals Detected at AOC 39-002(b)

Sample ID	Location ID	Depth (ft)	Media	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	Di-n-butylphthalate	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85.3**	**85.3**	**4.91**	**85.3**	**7530[b]**	**5380**	**99,000[c]**	**23,100**	**26,900**	**17,400**	**na[d]**	**na**
Industrial SSL[a]				**10.9**	**10.7**	**11**	**11.1**	**25,300[b]**	**1830**	**12,000[e]**	**3230**	**91,600**	**63,300**	**na**	**na**
Residential SSL[a]				**2.43**	**2.43**	**1.14**	**2.43**	**1740[b]**	**380**	**2900[e]**	**153**	**6160**	**3850**	**na**	**na**
RE39-22-253361	39-61697	0–1	FILL	—[f]	0.0188	0.0244	0.0134 (J)	—	—	—	—	—	—	6.93e-006	1.21e-005
RE39-22-253362	39-61697	2–3	FILL	—	0.336	0.163	0.063	—	—	—	—	0.1 (J)	—	1.17e-005	2.09e-005
RE39-22-253363	39-61697	6–7	SOIL	—	0.00647	0.00272 (J)	—	—	—	—	—	—	—	—	—
RE39-22-253364	39-61698	0–1	FILL	—	0.0145 (J)	0.0324	0.0144 (J)	—	—	—	—	—	—	7.8e-006	1.32e-005
RE39-22-253365	39-61698	2–3	FILL	—	1.42	0.54	0.16 (J)	—	—	—	—	0.915	—	3.19e-005	5.78e-005
RE39-22-253367	39-61699	0–1	FILL	0.242	—	0.0809	0.0325 (J)	—	—	—	—	—	—	1.19e-005	2.22e-005
RE39-22-253368	39-61699	2–3	FILL	—	0.444	0.494	0.185	—	—	—	—	0.982	0.134 (J-)	2.47e-005	4.73e-005
RE39-22-253369	39-61699	6–7	SOIL	0.00859	—	0.00549	—	—	0.016 (J)	—	—	—	—	—	—
RE39-22-253370	39-61700	0.3–1.0	FILL	—	0.00222 (J)	0.00243 (J)	0.00165 (J)	—	—	—	—	0.0426	—	—	—
RE39-22-253371	39-61700	2–3	SOIL	—	—	0.00384	0.00285 (J)	—	—	—	—	0.0221 (J)	—	1.21e-006 (J)	9.94e-007 (J)
RE39-22-253372	39-61700	6–7	SOIL	—	—	—	—	—	—	—	—	0.0129 (J)	—	—	—
RE39-22-253373	39-61701	0.3–1.0	FILL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253374	39-61701	2–3	SOIL	—	14.6	3.91	1.08 (J)	—	—	—	—	—	—	8.38e-006	1.53e-005
RE39-22-253375	39-61701	6–7	SOIL	—	0.123	0.0307	0.00914 (J)	—	—	—	—	0.0204 (J)	—	9.71e-007 (J)	9.71e-007 (J)
RE39-22-253376	39-61702	0.2–1.0	SOIL	0.892	—	—	0.116	—	—	—	—	—	—	3.2e-005 (J)	5.86e-005 (J)
RE39-22-253377	39-61702	2–3	SOIL	0.351	—	—	0.0627	—	—	—	—	0.0145 (J)	—	4.97e-006 (J)	9.94e-006 (J)
RE39-22-253378	39-61702	6–7	SOIL	0.0125	—	—	0.00397	—	—	—	—	0.0177 (J)	—	8.07e-007 (J)	—
RE39-22-253379	39-61703	0.3–1.0	SOIL	3.75	—	—	0.483	—	0.984	0.51	—	—	—	7.88e-005 (J)	0.000149 (J)
RE39-22-253380	39-61703	2–3	SOIL	3.33	—	—	0.167 (J)	—	—	—	—	—	—	3.24e-006 (J)	6.31e-006 (J)
RE39-22-253381	39-61703	6–7	SOIL	0.315	—	—	0.0518	—	—	—	—	0.0234 (J)	—	3.58e-006 (J)	6.51e-006 (J)
RE39-22-253382	39-61704	0.3–1.0	SOIL	0.00666	—	0.00588	0.00383	0.0237 (J)	—	—	0.0305 (J)	—	0.221 (J)	4e-005 (J)	7.01e-005 (J)
RE39-22-253383	39-61704	2–3	SOIL	0.00142 (J)	—	0.00156 (J)	—	—	—	—	—	0.0248 (J)	0.16 (J)	2.71e-006 (J)	2.71e-006 (J)
RE39-22-253384	39-61704	6–7	SOIL	—	—	—	—	—	—	—	—	0.0206 (J)	—	—	—

Table 6.4-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	Di-n-butylphthalate	HMX	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Construction Worker SSL[a]				**85.3**	**85.3**	**4.91**	**85.3**	**7530[b]**	**5380**	**99,000[c]**	**23,100**	**26,900**	**17,400**	**na[d]**	**na**
Industrial SSL[a]				**10.9**	**10.7**	**11**	**11.1**	**25,300[b]**	**1830**	**12,000[e]**	**3230**	**91,600**	**63,300**	**na**	**na**
Residential SSL[a]				**2.43**	**2.43**	**1.14**	**2.43**	**1740[b]**	**380**	**2900[e]**	**153**	**6160**	**3850**	**na**	**na**
RE39-22-253385	39-61705	0.3–1.0	SOIL	—	—	0.00166 (J)	0.00159 (J)	—	0.0202 (J)	0.0161 (J)	—	0.0472	—	1.67e-006 (J)	—
RE39-22-253386	39-61705	2–3	SOIL	—	—	—	—	—	—	—	—	0.0186 (J)	—	2e-006 (J)	6.56e-007 (J)
RE39-22-253387	39-61705	6–7	SOIL	—	—	—	—	—	—	—	—	0.0219 (J)	—	—	—
RE39-22-253388	39-61706	0.3–1.0	SOIL	0.00685	—	—	0.00187 (J)	0.0085 (J)	—	—	—	—	—	3.91e-006 (J)	3.91e-006 (J)
RE39-22-253389	39-61706	2–3	SOIL	—	—	—	—	—	—	—	—	0.0242 (J)	—	1e-006 (J)	1.16e-006 (J)
RE39-22-253390	39-61706	6–7	SOIL	—	—	—	—	—	—	—	—	0.0232 (J)	—	—	—
RE39-23-270482	39-61842	0–1	SOIL	—	0.228 (J)	0.0699 (J)	0.0293 (J)	NA[g]	NA	NA	NA	NA	NA	NA	NA
RE39-23-270483	39-61842	2–3	SOIL	—	0.0525 (J)	0.0204 (J)	0.0124 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270484	39-61842	6–7	SOIL	—	1.19 (J)	0.0934 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-280688	39-61842	8–9	QBT3	0.0483	—	0.0166	0.00754	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-280689	39-61842	10–11	QBT3	0.0373	—	0.00615	0.0024 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270485	39-61843	0–1	SOIL	—	0.329 (J)	0.104 (J)	0.0412 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270486	39-61843	2–3	SOIL	—	0.164 (J)	0.259 (J)	0.15 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270487	39-61843	6–7	SOIL	—	0.00566 (J)	0.00246 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.4-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**2740[h]**	**na**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**14,200[h]**	**na**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**2360[h]**	**na**	**na**
RE39-22-253361	39-61697	0–1	FILL	1.33e-006 (J)	1.33e-006 (J)	—	—	—	—	—	—	6.6e-007 (J)	—	4.51e-005 (J+)	1.95e-006 (J)
RE39-22-253362	39-61697	2–3	FILL	1.97e-006 (J)	1.97e-006 (J)	—	—	1.17e-006 (J)	1.08e-006 (J)	—	—	1.57e-006 (J)	—	7.07e-005 (J+)	3.69e-006 (J)
RE39-22-253363	39-61697	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253364	39-61698	0–1	FILL	1.06e-006 (J)	1.36e-006 (J)	—	—	—	—	—	—	6.62e-007 (J)	—	4.04e-005 (J+)	2.34e-006 (J)
RE39-22-253365	39-61698	2–3	FILL	4.14e-006 (J)	6.34e-006 (J)	1.15e-006 (J)	—	5.76e-006 (J)	4.27e-006 (J)	9.46e-007 (J)	1.27e-006 (J)	1.22e-005 (J)	—	0.000204	9.17e-006 (J)
RE39-22-253367	39-61699	0–1	FILL	1e-006 (J)	2.62e-006 (J)	—	—	—	1.36e-006 (J)	—	—	3.09e-006 (J)	—	6.11e-005 (J+)	2.85e-006 (J)
RE39-22-253368	39-61699	2–3	FILL	3.37e-006 (J)	4.69e-006 (J)	6.32e-007 (J)	—	2.31e-006 (J)	1.96e-006 (J)	7.85e-007 (J)	6.07e-007 (J)	5.08e-006 (J)	—	0.000139	6.29e-006 (J)
RE39-22-253369	39-61699	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253370	39-61700	0.3–1.0	FILL	—	—	—	—	—	—	—	—	—	—	3.6e-006 (J)	—
RE39-22-253371	39-61700	2–3	SOIL	5.47e-007 (J)	—	—	—	—	—	—	—	—	—	1.05e-005	—
RE39-22-253372	39-61700	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253373	39-61701	0.3–1.0	FILL	—	—	—	—	—	—	—	—	—	—	2.31e-006 (J)	—
RE39-22-253374	39-61701	2–3	SOIL	1.21e-006 (J)	3.02e-006 (J)	—	—	2e-006 (J)	1.55e-006 (J)	—	—	2.09e-006 (J)	0.00399	5.29e-005	3.02e-006 (J)
RE39-22-253375	39-61701	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	1.98e-005	—
RE39-22-253376	39-61702	0.2–1.0	SOIL	3.44e-006 (J)	9.62e-006 (J)	6.59e-007 (J)	—	5.44e-006 (J)	1.5e-006 (J)	—	6.48e-007 (J)	5.21e-006 (J)	—	0.000304 (J)	6.88e-006 (J)
RE39-22-253377	39-61702	2–3	SOIL	1.08e-006 (J)	—	—	—	—	5.64e-007 (J)	—	—	7.9e-007 (J)	—	3.67e-005 (J)	2.07e-006 (J)
RE39-22-253378	39-61702	6–7	SOIL	6.28e-007 (J)	—	—	—	—	—	—	—	—	—	5.7e-006 (J)	—
RE39-22-253379	39-61703	0.3–1.0	SOIL	9.47e-006	2.65e-005	1.66e-006 (J)	—	1.51e-005 (J)	5.44e-006	1.29e-006 (J)	1.62e-006 (J)	2.14e-005 (J)	—	0.000712 (J)	2.21e-005
RE39-22-253380	39-61703	2–3	SOIL	1.02e-006 (J)	1.91e-006 (J)	—	—	—	8.04e-007 (J)	—	—	1.05e-006 (J)	—	2.56e-005 (J)	1.93e-006 (J)
RE39-22-253381	39-61703	6–7	SOIL	9.13e-007 (J)	—	—	—	—	5.22e-007 (J)	—	—	—	—	2.8e-005 (J)	—
RE39-22-253382	39-61704	0.3–1.0	SOIL	2.79e-006 (J)	4.81e-006 (J)	8.66e-007 (J)	7.88e-007 (J)	4.87e-006 (J)	8.51e-007 (J)	—	5.07e-007 (J)	3.74e-006 (J)	—	0.000207 (J)	7.09e-006 (J)
RE39-22-253383	39-61704	2–3	SOIL	1.1e-006 (J)	1.1e-006 (J)	—	—	—	—	—	—	4.74e-007 (J)	—	1.19e-005 (J)	1.5e-006 (J)
RE39-22-253384	39-61704	6–7	SOIL	6.59e-007 (J)	—	—	—	—	—	—	—	—	—	1.05e-006 (J)	—

Table 6.4-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]
Construction Worker SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**2740[h]**	**na**	**na**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**14,200[h]**	**na**	**na**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**2360[h]**	**na**	**na**
RE39-22-253385	39-61705	0.3–1.0	SOIL	8.87e-007 (J)	—	—	—	—	—	—	—	—	—	1.03e-005 (J)	—
RE39-22-253386	39-61705	2–3	SOIL	6.67e-007 (J)	6.67e-007 (J)	—	—	—	—	—	—	—	—	5.21e-006 (J)	—
RE39-22-253387	39-61705	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253388	39-61706	0.3–1.0	SOIL	7.39e-007 (J)	7.84e-007 (J)	—	—	—	—	—	—	—	—	2.87e-005 (J)	1.5e-006 (J)
RE39-22-253389	39-61706	2–3	SOIL	8.08e-007 (J)	8.08e-007 (J)	—	—	—	—	—	—	—	—	4.43e-006 (J)	—
RE39-22-253390	39-61706	6–7	SOIL	6.9e-007 (J)	6.9e-007 (J)	—	—	—	—	—	—	—	—	2.63e-006 (J)	—
RE39-23-270482	39-61842	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270483	39-61842	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270484	39-61842	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-280688	39-61842	8–9	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-280689	39-61842	10–11	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270485	39-61843	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270486	39-61843	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270487	39-61843	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.4-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	PETN	Pentachlorodibenzodioxin[1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran[1,2,3,7,8-]	Pentachlorodibenzofuran[2,3,4,7,8-]	Pentachlorodibenzofurans (Total)	RDX	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran[2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Tetrachloroethene	Trichloroethene
Construction Worker SSL[a]				**44,000[c]**	**na**	**na**	**na**	**na**	**na**	**1350**	**na**	**0.0172**	**na**	**120**	**6.90**
Industrial SSL[a]				**5300[e]**	**na**	**na**	**na**	**na**	**na**	**428**	**na**	**0.00243**	**na**	**629**	**36.5**
Residential SSL[a]				**570[e]**	**na**	**na**	**na**	**na**	**na**	**83.1**	**na**	**0.00049**	**na**	**111**	**6.77**
RE39-22-253361	39-61697	0–1	FILL	—	—	—	7.41e-007 (J)	—	1.29e-006 (J)	—	—	1.04e-006	2.24e-006	—	—
RE39-22-253362	39-61697	2–3	FILL	—	—	5e-007 (J)	2.82e-006 (J)	1.61e-006 (J)	1.69e-005 (J)	—	—	4.32e-006	1.23e-005 (J)	—	—
RE39-22-253363	39-61697	6–7	Soil	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253364	39-61698	0–1	FILL	—	—	—	2.02e-006 (J)	1.33e-006 (J)	1.17e-005 (J)	—	—	4.16e-006	1.21e-005 (J)	—	—
RE39-22-253365	39-61698	2–3	FILL	—	2.82e-006 (J)	2.67e-006 (J)	1.48e-005	6.39e-006	0.000101 (J)	—	7.93e-006	2.35e-005	0.000177	—	—
RE39-22-253367	39-61699	0–1	FILL	—	—	—	4.51e-006 (J)	2.17e-006 (J)	2.83e-005 (J)	—	—	9.59e-006	2.56e-005	—	—
RE39-22-253368	39-61699	2–3	FILL	0.246 (J-)	—	—	6.35e-006	4.4e-006 (J)	5.13e-005 (J)	—	—	2.13e-005	7.48e-005	0.000457 (J)	—
RE39-22-253369	39-61699	6–7	SOIL	—	—	—	—	—	—	0.481 (J-)	—	—	—	—	—
RE39-22-253370	39-61700	0.3–1.0	FILL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253371	39-61700	2–3	SOIL	—	—	—	—	—	—	—	—	5.97e-007 (J)	—	0.000825 (J)	0.00247
RE39-22-253372	39-61700	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253373	39-61701	0.3–1.0	FILL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253374	39-61701	2–3	SOIL	—	—	—	5.94e-006	3.41e-006 (J)	3.23e-005 (J)	—	2.11e-006 (J)	1.42e-005	0.000107	—	—
RE39-22-253375	39-61701	6–7	SOIL	—	—	—	—	—	—	—	—	—	1.5e-006 (J)	—	—
RE39-22-253376	39-61702	0.2–1.0	SOIL	—	—	—	4.48e-006 (J)	2.76e-006 (J)	2.53e-005 (J)	—	—	1.13e-005 (J)	4.68e-005 (J)	—	—
RE39-22-253377	39-61702	2–3	SOIL	—	—	—	1.21e-006 (J)	—	8.39e-007 (J)	—	—	2.7e-006 (J)	7.93e-006 (J)	—	—
RE39-22-253378	39-61702	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253379	39-61703	0.3–1.0	SOIL	—	1.69e-006 (J)	—	1.79e-005	1.33e-005	0.000129	—	9.88e-007	6.06e-005 (J)	0.000381 (J)	—	—
RE39-22-253380	39-61703	2–3	SOIL	—	—	—	2.1e-006 (J)	1.46e-006 (J)	9.42e-006 (J)	—	—	6.17e-006 (J)	2.95e-005 (J)	—	—
RE39-22-253381	39-61703	6–7	SOIL	—	—	—	—	1.08e-006 (J)	2.78e-006 (J)	—	—	2.96e-006 (J)	8.68e-006 (J)	—	—
RE39-22-253382	39-61704	0.3–1.0	SOIL	—	—	—	1.27e-006 (J)	2.36e-006 (J)	1.38e-005 (J)	—	—	8.61e-006 (J)	3.48e-005 (J)	—	—
RE39-22-253383	39-61704	2–3	SOIL	—	—	—	—	—	—	—	—	9.65e-007 (J)	—	—	—
RE39-22-253384	39-61704	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.4-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	PETN	Pentachlorodibenzodioxin[1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran[1,2,3,7,8-]	Pentachlorodibenzofuran[2,3,4,7,8-]	Pentachlorodibenzofurans (Total)	RDX	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran[2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Tetrachloroethene	Trichloroethene
Construction Worker SSL[a]				**44,000[c]**	**na**	**na**	**na**	**na**	**na**	**1350**	**na**	**0.0172**	**na**	**120**	**6.90**
Industrial SSL[a]				**5300[e]**	**na**	**na**	**na**	**na**	**na**	**428**	**na**	**0.00243**	**na**	**629**	**36.5**
Residential SSL[a]				**570[e]**	**na**	**na**	**na**	**na**	**na**	**83.1**	**na**	**0.00049**	**na**	**111**	**6.77**
RE39-22-253385	39-61705	0.3–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253386	39-61705	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253387	39-61705	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253388	39-61706	0.3–1.0	SOIL	—	—	—	—	—	5.67e-007 (J)	—	—	—	—	—	—
RE39-22-253389	39-61706	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253390	39-61706	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE39-23-270482	39-61842	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270483	39-61842	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270484	39-61842	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-280688	39-61842	8–9	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-280689	39-61842	10–11	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270485	39-61843	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270486	39-61843	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-23-270487	39-61843	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[d] na = Not available.

[e] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[f] — = Not detected.

[g] NA = Not analyzed.

[h] Isopropylbenzene used as a surrogate based on structural similarity.

Table 6.4-4
Radionuclides Detected or Detected above BVs/FVs at AOC 39-002(b)

Sample ID	Location ID	Depth (ft)	Media	Uranium-234	Uranium-235/236	Uranium-238
Soil Background Value[a]				**2.59**	**0.2**	**2.29**
Construction Worker SAL 25[b]				**1000**	**130**	**470**
Industrial SAL 25[b]				**3100**	**160**	**710**
Residential SAL 25[b]				**290**	**42**	**150**
RE39-22-253362	39-61697	2–3	FILL	—[c]	—	2.82
RE39-22-253364	39-61698	0–1	FILL	—	—	2.35
RE39-22-253365	39-61698	2–3	FILL	2.63	—	6.09
RE39-22-253368	39-61699	2–3	FILL	—	—	2.48
RE39-22-253376	39-61702	0.2–1	Soil	—	—	5.75
RE39-22-253379	39-61703	0.3–1	Soil	3.69	0.309	11.6
RE39-22-253380	39-61703	2–3	Soil	—	—	4.12
RE39-22-253382	39-61704	0.3–1	Soil	—	—	2.68

Note: Results are in pCI/g.

[a] BVs from LANL (1998, 059730).

[b] SALs from LANL (2015, 600929).

[c] — = Not detected or not detected above BV/FV.

Table 6.5-1
Samples Collected and Analyses Requested at SWMU 39-006(a)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
0239-96-0485	39-01502	8–9	FILL	—*	1919	—	—	—	1919	—	—	—	1916	1916	1916	—	—	—
RE39-09-5390	39-604868	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5389	39-604868	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5392	39-604869	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-22-254710	39-604869	12–13	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-518
RE39-22-254711	39-604869	20–21	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-518
RE39-09-5391	39-604869	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5394	39-604870	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5393	39-604870	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5396	39-604871	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-22-254712	39-604871	12–13	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-509
RE39-22-254713	39-604871	20–21	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-509
RE39-09-5395	39-604871	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5398	39-604872	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5397	39-604872	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5400	39-604873	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5399	39-604873	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5402	39-604874	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5401	39-604874	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5404	39-604875	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5403	39-604875	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5406	39-604876	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5405	39-604876	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5408	39-604877	10–10.5	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-22-254714	39-604877	12–13	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-518
RE39-22-254715	39-604877	20–21	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-529
RE39-09-5407	39-604877	9.5–10	ALLH	09-1533	09-1534	09-1534	09-1534	09-1534	09-1534	09-1533	09-1533	09-1533	09-1532	09-1532	09-1532	—	09-1532	09-1533
RE39-09-5409	39-604878	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5410	39-604878	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-09-5411	39-604879	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5412	39-604879	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5413	39-604880	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5414	39-604880	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5415	39-604881	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5416	39-604881	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5417	39-604882	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5418	39-604882	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5419	39-604883	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5420	39-604883	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5421	39-604884	10–10.5	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5422	39-604884	10.5–11	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-22-254717	39-604885	16–17	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-62
RE39-09-5423	39-604885	3–4	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5424	39-604885	6–7	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-22-254716	39-604885	8–9	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-62
RE39-09-5425	39-604886	3–4	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5426	39-604886	6–7	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-22-254719	39-604887	16–17	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-99
RE39-09-5427	39-604887	3–4	ALLH	09-1706	09-1690	09-1690	09-1690	09-1690	09-1690	09-1689	09-1706	09-1689	09-1688	09-1688	09-1688	—	09-1705	09-1706
RE39-09-5428	39-604887	6–7	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-22-254718	39-604887	8–9	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-99
RE39-22-254720	39-604888	10–11	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-99
RE39-22-254721	39-604888	19–20	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N3B-2023-99
RE39-09-5429	39-604888	3–4	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5430	39-604888	6–9	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5431	39-604889	3–4	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5432	39-604889	6–7	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5433	39-604890	5–7	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5434	39-604890	9–12	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5435	39-604891	3–5	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-9771	39-604891	3–5	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	09-2064	—	—

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-09-5436	39-604891	8–10	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5437	39-604892	2–4	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5438	39-604892	7–9	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5439	39-604893	1–3	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5440	39-604893	4–5.5	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5441	39-604894	1–2	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-09-5442	39-604894	3–4.5	ALLH	09-1708	09-1693	09-1693	09-1693	09-1693	09-1693	09-1692	09-1708	09-1692	09-1691	09-1691	09-1691	—	09-1707	09-1708
RE39-22-254725	39-61780	14–15	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254722	39-61780	3–4	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254723	39-61780	6–7	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254724	39-61780	9–10	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254729	39-61781	14–15	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254726	39-61781	3–4	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254727	39-61781	6–7	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254728	39-61781	9–10	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254733	39-61782	14–15	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254730	39-61782	3–4	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254731	39-61782	6–7	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254732	39-61782	9–10	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254737	39-61783	14–15	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254734	39-61783	3–4	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254735	39-61783	6–7	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254736	39-61783	9–10	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254741	39-61784	14–15	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254738	39-61784	3–4	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254739	39-61784	6–7	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254740	39-61784	9–10	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254745	39-61785	14–15	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254742	39-61785	3–4	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254743	39-61785	6–7	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254744	39-61785	9–10	ALLH	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	N3B-2022-3362	—	N3B-2022-3362	N3B-2022-3362
RE39-22-254749	39-61786	14–15	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-254746	39-61786	3–4	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254747	39-61786	6–7	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254748	39-61786	9–10	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254753	39-61787	14–15	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254750	39-61787	3–4	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254751	39-61787	6–7	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254752	39-61787	9–10	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254757	39-61788	14–15	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254754	39-61788	3–4	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254755	39-61788	6–7	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254756	39-61788	9–10	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254761	39-61789	14–15	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254758	39-61789	3–4	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254759	39-61789	6–7	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254760	39-61789	9–10	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254765	39-61790	14–15	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254762	39-61790	3–4	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254763	39-61790	6–7	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254764	39-61790	9–10	ALLH	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	N3B-2022-3363	—	N3B-2022-3363	N3B-2022-3363
RE39-22-254769	39-61791	14–15	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254766	39-61791	3–4	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254767	39-61791	6–7	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254768	39-61791	9–10	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254773	39-61792	14–15	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254770	39-61792	3–4	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254771	39-61792	6–7	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254772	39-61792	9–10	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254774	39-61793	3.8–4.8	ALLH	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	—	N3B-2023-566	N3B-2023-566
RE39-22-254775	39-61793	5.8–6.8	ALLH	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	—	N3B-2023-566	N3B-2023-566
RE39-22-254776	39-61793	7.8–8.8	ALLH	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	N3B-2023-566	—	N3B-2023-566	N3B-2023-566
RE39-22-254777	39-61794	3.7–4.7	ALLH	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	—	N3B-2023-552	N3B-2023-552
RE39-22-254778	39-61794	5.7–6.7	ALLH	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	—	N3B-2023-552	N3B-2023-552

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-254779	39-61794	7.7–8.7	ALLH	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	—	N3B-2023-552	N3B-2023-552
RE39-22-254780	39-61795	4.75–5.75	ALLH	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	—	N3B-2023-529	N3B-2023-529
RE39-22-254781	39-61795	6.75–7.75	ALLH	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	—	N3B-2023-529	N3B-2023-529
RE39-22-254782	39-61795	8.75–9.75	ALLH	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	N3B-2023-529	—	N3B-2023-529	N3B-2023-529
RE39-22-254783	39-61796	3.8–4.8	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254784	39-61796	5.8–6.8	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254785	39-61796	7.8–8.8	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254788	39-61797	11.66–12.66	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254786	39-61797	7.66–8.66	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254787	39-61797	9.66–10.66	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254789	39-61798	4–5	ALLH	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	—	N3B-2023-552	N3B-2023-552
RE39-22-254790	39-61798	6–7	ALLH	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	—	N3B-2023-552	N3B-2023-552
RE39-22-254791	39-61798	8–9	ALLH	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	N3B-2023-552	—	N3B-2023-552	N3B-2023-552
RE39-22-254792	39-61799	1.95–2.95	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254793	39-61799	3.95–4.95	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254794	39-61799	5.95–6.95	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254795	39-61800	2.2–3.2	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254796	39-61800	4.2–5.2	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254797	39-61800	6.2–7.2	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254798	39-61801	3.3–4.3	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254799	39-61801	5.3–6.3	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254800	39-61801	7.3–8.3	ALLH	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	—	—	N3B-2023-479	N3B-2023-479	N3B-2023-479	—	N3B-2023-479	—
RE39-22-254804	39-61802	14–15	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254801	39-61802	3–4	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254802	39-61802	6–7	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254803	39-61802	9–10	ALLH	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	N3B-2022-3369	—	N3B-2022-3369	N3B-2022-3369
RE39-22-254805	39-61803	4.3–5.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254806	39-61803	6.3–7.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254807	39-61803	8.3–9.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254808	39-61804	4.8–5.8	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254809	39-61804	6.8–7.8	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254810	39-61804	8.8–9.8	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-254811	39-61805	4.3–5.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254812	39-61805	6.3–7.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254813	39-61805	8.3–9.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254814	39-61806	4.3–5.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254815	39-61806	6.3–7.3	ALLH	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	N3B-2023-825	—	N3B-2023-825	N3B-2023-825
RE39-22-254816	39-61806	8.3–9.3	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254817	39-61807	4.8–5.8	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254818	39-61807	6.8–7.8	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254819	39-61807	8.8–9.8	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254820	39-61808	5.1–6.1	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254821	39-61808	7.1–8.1	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254822	39-61808	9.1–10.1	ALLH	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	N3B-2023-844	—	N3B-2023-844	N3B-2023-844
RE39-22-254824	39-61809	11.5–12.5	ALLH	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	—	N3B-2023-794	N3B-2023-794
RE39-22-254825	39-61809	13.5–14.5	ALLH	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	—	N3B-2023-794	N3B-2023-794
RE39-22-254823	39-61809	9.5–10.5	ALLH	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	—	N3B-2023-794	N3B-2023-794
RE39-22-254826	39-61810	5.75–6.75	ALLH	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	—	N3B-2023-656	N3B-2023-656
RE39-22-254827	39-61810	7.75–8.75	ALLH	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	—	N3B-2023-656	N3B-2023-656
RE39-22-254828	39-61810	9.75–10.75	ALLH	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	N3B-2023-656	—	N3B-2023-656	N3B-2023-656
RE39-22-254831	39-61811	11.66–12.66	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254829	39-61811	7.66–8.66	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254830	39-61811	9.66–10.66	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254832	39-61812	3.8–4.8	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254833	39-61812	5.8–6.8	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254834	39-61812	7.8–8.8	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254838	39-61813	14.0–15.0	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254835	39-61813	3.0–4.0	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254836	39-61813	6.0–7.0	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254837	39-61813	9.0–10.0	ALLH	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	N3B-2023-108	—	N3B-2023-108	N3B-2023-108
RE39-22-254839	39-61814	1.3–2.3	ALLH	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	—	N3B-2023-378	N3B-2023-378
RE39-22-254840	39-61814	3.3–4.3	ALLH	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	—	N3B-2023-378	N3B-2023-378
RE39-22-254841	39-61814	5.3–6.3	ALLH	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	—	N3B-2023-378	N3B-2023-378
RE39-22-254842	39-61815	12.9–13.9	ALLH	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	—	N3B-2023-794	N3B-2023-794

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-254843	39-61815	14.9–15.9	ALLH	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	—	N3B-2023-794	N3B-2023-794
RE39-22-254844	39-61815	16.9–17.9	ALLH	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	N3B-2023-794	—	N3B-2023-794	N3B-2023-794
RE39-22-254845	39-61816	10–11	ALLH	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	—	N3B-2023-768	N3B-2023-768
RE39-22-254846	39-61816	12–13	ALLH	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	—	N3B-2023-768	N3B-2023-768
RE39-22-254847	39-61816	14–15	ALLH	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	N3B-2023-768	—	N3B-2023-768	N3B-2023-768
RE39-22-254849	39-61817	10–11	ALLH	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	—	N3B-2023-756	N3B-2023-756
RE39-22-254850	39-61817	12–13	ALLH	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	—	N3B-2023-756	N3B-2023-756
RE39-22-254848	39-61817	8–9	ALLH	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	—	N3B-2023-756	N3B-2023-756
RE39-22-254853	39-61818	11.25–12.25	ALLH	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	—	N3B-2023-756	N3B-2023-756
RE39-22-254851	39-61818	7.25–8.25	ALLH	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	—	N3B-2023-756	N3B-2023-756
RE39-22-254852	39-61818	9.25–10.25	ALLH	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	N3B-2023-756	—	N3B-2023-756	N3B-2023-756
RE39-22-254856	39-61819	10.4–11.4	ALLH	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	—	N3B-2023-730	N3B-2023-730
RE39-22-254854	39-61819	6.4–7.4	ALLH	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	—	N3B-2023-730	N3B-2023-730
RE39-22-254855	39-61819	8.4–9.4	ALLH	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	—	N3B-2023-730	N3B-2023-730
RE39-22-254857	39-61820	5.5–6.5	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254858	39-61820	7.6–8.6	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254859	39-61820	9.6–10.6	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254860	39-61821	4.58–5.58	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254861	39-61821	6.58–7.58	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254862	39-61821	8.58–9.58	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254863	39-61822	3.25–4.25	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254864	39-61822	6.25–7.25	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254865	39-61822	8.25–9.25	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254866	39-61823	0–1	ALLH	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	—	N3B-2022-3204	N3B-2022-3204
RE39-22-254867	39-61823	4–5	ALLH	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	N3B-2022-3204	—	N3B-2022-3204	N3B-2022-3204
RE39-22-254868	39-61823	9–10	ALLH	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	—	N3B-2022-3221	N3B-2022-3221
RE39-22-254872	39-61824	14–15	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254869	39-61824	3–4	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254870	39-61824	6–7	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254871	39-61824	9–10	ALLH	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	N3B-2022-3348	—	N3B-2022-3348	N3B-2022-3348
RE39-22-254873	39-61825	0–1	ALLH	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	—	N3B-2022-3221	N3B-2022-3221
RE39-22-254874	39-61825	4–5	ALLH	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	—	N3B-2022-3221	N3B-2022-3221

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-254875	39-61825	9–10	ALLH	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	N3B-2022-3221	—	N3B-2022-3221	N3B-2022-3221
RE39-22-254876	39-61826	0–1	ALLH	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	—	N3B-2022-3265	N3B-2022-3265
RE39-22-254877	39-61826	4.0–5.0	ALLH	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	—	N3B-2022-3265	N3B-2022-3265
RE39-22-254878	39-61826	9.0–10.0	ALLH	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	—	N3B-2022-3265	N3B-2022-3265
RE39-22-254879	39-61827	0.0–1.0	ALLH	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	—	N3B-2022-3265	N3B-2022-3265
RE39-22-254880	39-61827	4.0–5.0	ALLH	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	N3B-2022-3265	—	N3B-2022-3265	N3B-2022-3265
RE39-22-254881	39-61827	9	ALLH	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	—	N3B-2023-270	N3B-2023-270
RE39-22-254882	39-61828	0–1	ALLH	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	—	N3B-2023-662	N3B-2023-662
RE39-22-254883	39-61828	4–5	ALLH	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	—	N3B-2023-662	N3B-2023-662
RE39-22-254884	39-61828	9–10	ALLH	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	N3B-2023-662	—	N3B-2023-662	N3B-2023-662
RE39-22-254885	39-61829	0–1	ALLH	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	—	N3B-2023-730	N3B-2023-730
RE39-22-254886	39-61829	4–5	ALLH	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	—	N3B-2023-730	N3B-2023-730
RE39-22-254887	39-61829	9–10	ALLH	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	N3B-2023-730	—	N3B-2023-730	N3B-2023-730
RE39-22-254888	39-61830	0–1	ALLH	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	—	N3B-2023-270	N3B-2023-270
RE39-22-254889	39-61830	4–5	ALLH	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	—	N3B-2023-270	N3B-2023-270
RE39-22-254890	39-61830	9–10	ALLH	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	—	N3B-2023-292	N3B-2023-292
RE39-22-254891	39-61831	0–1	ALLH	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	—	N3B-2023-292	N3B-2023-292
RE39-22-254892	39-61831	4–5	ALLH	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	—	N3B-2023-292	N3B-2023-292
RE39-22-254893	39-61831	9–10	ALLH	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	—	N3B-2023-292	N3B-2023-292
RE39-22-254894	39-61832	0–1	ALLH	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	N3B-2023-292	—	N3B-2023-292	N3B-2023-292
RE39-22-254895	39-61832	4–5	ALLH	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	—	N3B-2023-309	N3B-2023-309
RE39-22-254896	39-61832	9–10	ALLH	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	—	N3B-2023-309	N3B-2023-309
RE39-22-254897	39-61833	0–1	ALLH	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	—	N3B-2023-309	N3B-2023-309
RE39-22-254898	39-61833	4–5	ALLH	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	—	N3B-2023-309	N3B-2023-309
RE39-22-254899	39-61833	9–10	ALLH	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	—	N3B-2023-309	N3B-2023-309
RE39-22-254900	39-61834	0–1	ALLH	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	N3B-2023-309	—	N3B-2023-309	N3B-2023-309
RE39-22-254901	39-61834	4–5	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254902	39-61834	9–10	ALLH	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	N3B-2023-325	—	N3B-2023-325	N3B-2023-325
RE39-22-254906	39-61835	14–15	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254903	39-61835	3–4	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254904	39-61835	6–7	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254905	39-61835	9–10	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-254907	39-61836	0–1	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254908	39-61836	4–5	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254909	39-61836	9–10	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254910	39-61837	0–1	ALLH	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	—	N3B-2023-270	N3B-2023-270
RE39-22-254911	39-61837	4–5	ALLH	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	—	N3B-2023-270	N3B-2023-270
RE39-22-254912	39-61837	9–10	ALLH	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	N3B-2023-270	—	N3B-2023-270	N3B-2023-270
RE39-22-254913	39-61838	0–1	ALLH	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	N3B-2023-359	—	N3B-2023-359	N3B-2023-359
RE39-22-254914	39-61838	4–5	ALLH	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	—	N3B-2023-378	N3B-2023-378
RE39-22-254915	39-61838	9–10	ALLH	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	N3B-2023-378	—	N3B-2023-378	N3B-2023-378
RE39-22-254919	39-61839	14–15	ALLH	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	—	N3B-2023-62	N3B-2023-62
RE39-22-254916	39-61839	3–4	SED	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	—	N3B-2023-62	N3B-2023-62
RE39-22-254917	39-61839	6–7	ALLH	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	—	N3B-2023-62	N3B-2023-62
RE39-22-254918	39-61839	9–10	ALLH	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	N3B-2023-62	—	N3B-2023-62	N3B-2023-62
RE39-22-254923	39-61840	14–15	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254920	39-61840	3–4	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254921	39-61840	6–7	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254922	39-61840	9–10	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254927	39-61841	14–15	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254924	39-61841	3–4	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254925	39-61841	6–7	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370
RE39-22-254926	39-61841	9–10	ALLH	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	N3B-2022-3370	—	N3B-2022-3370	N3B-2022-3370

Note: Numbers in analyte columns are request numbers
* — = Analysis not requested.

Table 6.5-2
Inorganic Chemicals above BVs at SWMU 39-006(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-5389	39-604868	9.5–10	SOIL	—[d]	0.94 (J)	—	—	—	7.5 (J-)	—	—	3	—	—	9.4 (J)	—
RE39-09-5390	39-604868	10–10.5	SOIL	—	2.7	—	—	—	7.4 (J-)	—	—	8.6	—	—	23.4	—
RE39-09-5391	39-604869	9.5–10	SOIL	—	1.8	—	—	—	—	—	—	2.5	—	—	23.1	—
RE39-09-5392	39-604869	10–10.5	SOIL	—	1.7	—	—	—	1.4 (J-)	—	—	3.3	—	—	14.9	—
RE39-22-254710	39-604869	12–13	SOIL	NA[e]	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-22-254711	39-604869	20–21	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-09-5393	39-604870	9.5–10	SOIL	—	6.7	—	32.3 (J)	—	10.9 (J-)	24	—	10.2	—	—	227 (J)	66.2
RE39-09-5394	39-604870	10–10.5	SOIL	—	4.2	—	—	—	8.6 (J-)	—	—	10.4	—	—	94.7 (J)	51.5
RE39-09-5395	39-604871	9.5–10	SOIL	—	1.2	—	—	—	0.83 (J-)	—	—	5.2	—	—	10.4	—
RE39-09-5396	39-604871	10–10.5	SOIL	—	1.3	—	—	—	1.7 (J-)	—	—	4.3	—	—	7.4	—
RE39-22-254712	39-604871	12–13	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-22-254713	39-604871	20–21	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-09-5397	39-604872	9.5–10	SOIL	—	—	—	—	—	0.57 (UJ)	—	—	1.4	—	—	4.4	—
RE39-09-5398	39-604872	10–10.5	SOIL	—	1.1	—	—	—	0.61 (UJ)	—	—	2.4	—	—	6.3	—
RE39-09-5399	39-604873	9.5–10	SOIL	—	—	—	—	—	—	—	—	8.8	—	—	1.1	—
RE39-09-5400	39-604873	10–10.5	SOIL	—	—	—	—	—	0.62 (UJ)	—	—	10.6	—	—	—	—
RE39-09-5401	39-604874	9.5–10	SOIL	—	—	—	—	—	0.65 (J-)	—	—	8.4	—	—	—	—
RE39-09-5402	39-604874	10–10.5	SOIL	—	—	—	—	—	0.58 (J-)	—	—	8.6	—	—	—	55.8
RE39-09-5403	39-604875	9.5–10	SOIL	—	—	—	—	—	—	—	—	4.5	—	—	—	—
RE39-09-5404	39-604875	10–10.5	SOIL	—	—	—	—	—	—	—	—	8.9	—	—	—	—
RE39-09-5405	39-604876	9.5–10	SOIL	—	—	—	—	—	—	—	—	1.9	—	—	—	—
RE39-09-5406	39-604876	10–10.5	SOIL	—	—	—	—	—	—	—	—	7.4	—	—	—	—
RE39-09-5407	39-604877	9.5–10	SOIL	—	—	—	—	—	—	—	—	3	—	—	—	—
RE39-09-5408	39-604877	10–10.5	SOIL	—	—	—	—	—	1.4 (J-)	—	—	4.6	—	—	—	—
RE39-22-254714	39-604877	12–13	SOIL	NA	NA	NA	NA	NA	0.516	NA	NA	NA	NA	NA	NA	NA
RE39-22-254715	39-604877	20–21	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-5409	39-604878	10–10.5	SOIL	—	—	—	—	—	0.83	—	—	16 (J)	—	—	—	—
RE39-09-5410	39-604878	10.5–11	SOIL	—	—	—	—	—	—	—	—	16.2 (J)	—	—	—	—
RE39-09-5411	39-604879	10–10.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5412	39-604879	10.5–11	SOIL	—	—	—	—	—	—	—	—	-	—	—	—	—
RE39-09-5413	39-604880	10–10.5	SOIL	—	—	—	—	—	1.38	—	—	5.73 (J)	—	—	—	—
RE39-09-5414	39-604880	10.5–11	SOIL	—	—	—	—	—	1	—	—	7.32 (J)	—	—	—	—
RE39-09-5415	39-604881	10–10.5	SOIL	—	—	—	—	—	3.99	—	—	—	—	—	—	—
RE39-09-5416	39-604881	10.5–11	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5417	39-604882	10–10.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5418	39-604882	10.5–11	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5419	39-604883	10–10.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5420	39-604883	10.5–11	SOIL	—	—	—	—	—	—	—	—	5.91 (J)	—	—	—	—
RE39-09-5421	39-604884	10–10.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5422	39-604884	10.5–11	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5423	39-604885	3–4	SOIL	—	—	—	—	—	1.05	—	—	7.49 (J)	—	—	1.3	—
RE39-09-5424	39-604885	6–7	SOIL	—	—	—	—	—	1.53	—	—	7.35 (J)	—	—	1.1	—
RE39-22-254716	39-604885	8–9	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-22-254717	39-604885	16–17	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-09-5425	39-604886	3–4	SOIL	—	—	—	—	—	1.03	—	—	5.32 (J)	—	—	—	—
RE39-09-5426	39-604886	6–7	SOIL	—	—	—	—	—	—	—	—	15.3 (J)	0.00124 (J)	—	—	—
RE39-09-5427	39-604887	3–4	SOIL	—	—	—	—	—	—	—	—	—	0.000604 (J)	—	—	—
RE39-09-5428	39-604887	6–7	SOIL	—	—	—	—	—	8.2 (J)	—	—	11.4	0.000757 (J)	—	10.2	—
RE39-22-254718	39-604887	8–9	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-22-254719	39-604887	16–17	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-09-5429	39-604888	3–4	SOIL	—	—	—	—	—	1.19 (J)	—	—	56.4	—	—	—	—
RE39-09-5430	39-604888	6–9	SOIL	—	—	—	—	—	2.82 (J)	—	—	10.9	—	—	2.1	—
RE39-22-254720	39-604888	10–11	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA
RE39-22-254721	39-604888	19–20	SOIL	NA	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA	NA

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-5431	39-604889	3–4	SOIL	—	—	—	—	—	—	—	—	68.2	0.00324	—	—	—
RE39-09-5432	39-604889	6–7	SOIL	—	—	—	—	—	—	—	—	6.77	0.00106 (J)	—	—	—
RE39-09-5433	39-604890	5–7	SOIL	—	—	—	—	—	—	—	—	8.2	0.0016 (J)	—	—	—
RE39-09-5434	39-604890	9–12	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5435	39-604891	3–5	SOIL	—	—	—	—	—	8.02 (J)	—	—	—	—	—	2.2	—
RE39-09-5436	39-604891	8–10	SOIL	—	—	—	—	—	—	—	—	4.49	—	—	—	—
RE39-09-5437	39-604892	2–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5438	39-604892	7–9	SOIL	—	—	—	—	—	—	—	—	10.1	0.00095 (J)	—	—	—
RE39-09-5439	39-604893	1–3	SOIL	—	—	—	—	—	0.614 (J)	—	—	7.97	0.000615 (J)	—	—	—
RE39-09-5440	39-604893	4–5.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5441	39-604894	1–2	SOIL	—	—	—	—	—	—	—	—	6.75	—	—	—	—
RE39-09-5442	39-604894	3–4.5	SOIL	—	—	—	—	—	—	—	—	10.8	—	—	—	—
RE39-22-254722	39-61780	3–4	SOIL	—	—	—	—	—	—	—	—	1.57	—	—	—	—
RE39-22-254723	39-61780	6–7	SOIL	—	—	—	—	—	—	—	—	1.19	—	—	—	—
RE39-22-254724	39-61780	9–10	SOIL	—	—	—	—	—	—	—	—	1.36	—	—	—	—
RE39-22-254725	39-61780	14–15	SOIL	—	—	—	—	—	—	—	—	1.12	—	—	—	—
RE39-22-254726	39-61781	3–4	SOIL	—	—	—	—	—	—	—	—	48.5	0.00257	—	—	—
RE39-22-254727	39-61781	6–7	SOIL	—	—	—	—	—	—	—	—	19.4	0.0011 (J)	—	—	—
RE39-22-254728	39-61781	9–10	SOIL	—	—	—	—	—	—	—	—	27	0.000654 (J)	—	—	—
RE39-22-254729	39-61781	14–15	SOIL	—	—	—	—	—	—	—	—	25.8	0.00134 (J)	—	—	—
RE39-22-254730	39-61782	3–4	SOIL	—	—	—	—	—	—	—	—	42.8	0.00117 (J)	—	—	—
RE39-22-254731	39-61782	6–7	SOIL	—	—	—	—	—	—	—	—	5.54	—	—	—	—
RE39-22-254732	39-61782	9–10	SOIL	—	—	—	—	—	—	—	—	30.6	—	—	—	—
RE39-22-254733	39-61782	14–15	SOIL	—	—	—	—	—	—	—	—	53.8	0.000671 (J)	—	—	—
RE39-22-254734	39-61783	3–4	SOIL	—	—	—	—	—	—	—	—	12.2	0.00182 (J)	—	—	—
RE39-22-254735	39-61783	6–7	SOIL	—	—	—	—	—	—	—	—	1.51	0.00171 (J)	—	—	—
RE39-22-254736	39-61783	9–10	SOIL	—	—	—	—	—	—	—	—	0.6 (J)	—	—	—	—
RE39-22-254737	39-61783	14–15	SOIL	—	—	—	—	—	—	—	—	2.98	—	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254738	39-61784	3–4	SOIL	—	—	—	—	—	—	—	—	1.82	—	—	—	—
RE39-22-254739	39-61784	6–7	SOIL	—	—	—	—	—	—	—	—	3.64	—	—	—	—
RE39-22-254740	39-61784	9–10	SOIL	—	—	—	—	—	—	—	—	0.87 (J)	—	—	—	—
RE39-22-254741	39-61784	14–15	SOIL	—	—	—	—	—	—	—	—	0.758 (J)	0.00109 (J)	1.87	—	—
RE39-22-254742	39-61785	3–4	SOIL	—	—	—	—	—	—	—	—	6.41	—	—	—	—
RE39-22-254743	39-61785	6–7	SOIL	—	—	—	—	—	—	—	—	2.61	—	—	—	—
RE39-22-254744	39-61785	9–10	SOIL	—	—	—	—	—	—	—	—	2.3	—	—	—	—
RE39-22-254745	39-61785	14–15	SOIL	—	—	—	—	—	—	—	—	1.5	—	1.71	—	—
RE39-22-254746	39-61786	3–4	SOIL	—	—	—	—	—	—	—	—	18 (J)	0.00227	—	—	—
RE39-22-254747	39-61786	6–7	SOIL	—	—	—	—	—	—	—	—	16.8 (J)	0.00202	—	—	130
RE39-22-254748	39-61786	9–10	SOIL	—	—	—	—	—	—	—	—	11.5 (J)	0.00129 (J)	—	—	—
RE39-22-254749	39-61786	14–15	SOIL	—	—	—	—	—	—	—	—	70.1 (J)	0.00499	—	—	—
RE39-22-254750	39-61787	3–4	SOIL	—	—	—	—	—	—	—	—	44.9	0.00199	—	—	—
RE39-22-254751	39-61787	6–7	SOIL	—	—	—	—	—	—	—	—	16.6	0.000781 (J)	—	—	—
RE39-22-254752	39-61787	9–10	SOIL	—	—	—	—	—	—	—	—	15	0.000688 (J)	—	—	—
RE39-22-254753	39-61787	14–15	SOIL	—	—	—	—	—	—	—	—	20.7	0.00071 (J)	—	—	—
RE39-22-254754	39-61788	3–4	SOIL	—	—	—	—	—	—	—	—	38.3	0.000657 (J)	—	—	—
RE39-22-254755	39-61788	6–7	SOIL	—	—	—	—	—	—	—	—	4.93	—	—	—	—
RE39-22-254756	39-61788	9–10	SOIL	—	—	—	—	—	—	—	—	4.63	—	—	—	—
RE39-22-254757	39-61788	14–15	SOIL	—	—	—	—	—	—	—	—	7.94	—	—	—	—
RE39-22-254758	39-61789	3–4	SOIL	—	—	—	—	—	5.99 (J)	—	—	8.86	—	—	1.76	—
RE39-22-254759	39-61789	6–7	SOIL	—	—	—	—	—	1.97 (J)	—	—	97.5	0.00186 (J)	—	—	—
RE39-22-254760	39-61789	9–10	SOIL	—	—	—	—	—	—	—	—	24.9	0.000563 (J)	—	—	—
RE39-22-254761	39-61789	14–15	SOIL	—	—	—	—	—	—	—	—	18	—	—	—	—
RE39-22-254762	39-61790	3–4	SOIL	—	—	—	—	—	—	—	—	4.55	0.000452 (J)	—	—	—
RE39-22-254763	39-61790	6–7	SOIL	—	—	—	—	—	—	—	—	3.12	—	—	—	—
RE39-22-254764	39-61790	9–10	SOIL	—	—	—	—	—	—	—	—	4.66	0.000625 (J)	—	—	—
RE39-22-254765	39-61790	14–15	SOIL	—	—	—	—	—	—	—	—	22.5	0.00215	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254766	39-61791	3–4	SOIL	—	—	—	—	—	23.1 (J)	—	—	22.9	0.000554 (J)	—	3.95	—
RE39-22-254767	39-61791	6–7	SOIL	—	—	—	—	—	23.3 (J)	—	—	30.3	0.000548 (J)	—	2.21	—
RE39-22-254768	39-61791	9–10	SOIL	—	—	—	—	—	—	—	—	25.9	0.000865 (J)	—	—	—
RE39-22-254769	39-61791	14–15	SOIL	—	—	—	—	—	—	—	—	107	0.0016 (J)	—	—	—
RE39-22-254770	39-61792	3–4	SOIL	—	—	—	—	—	—	—	—	4.3	—	—	—	—
RE39-22-254771	39-61792	6–7	SOIL	—	—	—	—	—	—	—	—	27.3	0.000822 (J)	—	—	—
RE39-22-254772	39-61792	9–10	SOIL	—	—	—	—	—	—	—	—	16.4	0.000533 (J)	—	—	—
RE39-22-254773	39-61792	14–15	SOIL	—	—	—	—	—	—	—	—	6.86	—	—	—	—
RE39-22-254774	39-61793	3.8–4.8	SOIL	—	—	—	—	—	—	292	—	1.2	—	—	—	—
RE39-22-254775	39-61793	5.8–6.8	SOIL	—	—	—	—	—	—	591	—	1.21	—	—	—	—
RE39-22-254776	39-61793	7.8–8.8	SOIL	—	—	—	—	—	—	—	—	0.997 (J)	—	—	—	—
RE39-22-254777	39-61794	3.7–4.7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254778	39-61794	5.7–6.7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254779	39-61794	7.7–8.7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254780	39-61795	4.75–5.75	SOIL	—	—	—	—	—	—	—	—	0.841 (J)	—	—	—	—
RE39-22-254781	39-61795	6.75–7.75	SOIL	—	—	—	—	—	—	—	—	0.744 (J)	—	—	—	—
RE39-22-254782	39-61795	8.75–9.75	SOIL	—	—	—	—	—	—	—	—	0.908 (J)	—	—	—	—
RE39-22-254783	39-61796	3.8–4.8	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254784	39-61796	5.8–6.8	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254785	39-61796	7.8–8.8	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254786	39-61797	7.66–8.66	SOIL	—	—	—	—	—	-	—	—	6.12	—	—	—	—
RE39-22-254787	39-61797	9.66–10.66	SOIL	—	0.839	14400 (J)	—	—	3.32 (J)	—	—	42.2	0.000926 (J)	—	4.91 (J)	—
RE39-22-254788	39-61797	11.66–12.66	SOIL	—	—	—	—	—	1.65 (J)	—	—	5.2	—	—	—	—
RE39-22-254789	39-61798	4–5	SOIL	—	—	—	—	—	—	—	—	1.02 (J)	0.00171 (J)	—	—	—
RE39-22-254790	39-61798	6–7	SOIL	—	—	—	—	—	—	—	—	0.994 (J)	—	—	—	—
RE39-22-254791	39-61798	8–9	SOIL	—	—	—	—	—	—	—	—	1.39	—	—	—	—
RE39-22-254792	39-61799	1.95–2.95	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254793	39-61799	3.95–4.95	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254794	39-61799	5.95–6.95	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254795	39-61800	2.2–3.2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254796	39-61800	4.2–5.2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254797	39-61800	6.2–7.2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254798	39-61801	3.3–4.3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254799	39-61801	5.3–6.3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254800	39-61801	7.3–8.3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-22-254801	39-61802	3–4	SOIL	—	—	—	—	—	9.5 (J)	—	—	35.7	—	—	1.82	—
RE39-22-254802	39-61802	6–7	SOIL	—	—	—	—	—	—	—	—	45.2	0.000807 (J)	—	—	—
RE39-22-254803	39-61802	9–10	SOIL	—	—	—	—	—	—	—	—	22	—	—	—	—
RE39-22-254804	39-61802	14–15	SOIL	—	—	—	—	—	—	—	—	26.9	0.000675 (J)	—	—	—
RE39-22-254805	39-61803	4.3–5.3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254806	39-61803	6.3–7.3	SOIL	—	—	—	—	—	—	—	—	0.634 (J)	—	—	—	—
RE39-22-254807	39-61803	8.3–9.3	SOIL	—	—	—	—	—	—	—	—	0.612 (J)	—	—	—	—
RE39-22-254808	39-61804	4.8–5.8	SOIL	—	—	—	—	—	19.4 (J)	—	—	1.01 (J)	—	—	1.18	—
RE39-22-254809	39-61804	6.8–7.8	SOIL	—	—	—	—	—	2.1 (J)	—	—	6.51 (J)	—	—	—	—
RE39-22-254810	39-61804	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	6.47 (J)	—	—	—	—
RE39-22-254811	39-61805	4.3–5.3	SOIL	—	—	—	—	—	—	—	—	1.83 (J)	—	—	—	—
RE39-22-254812	39-61805	6.3–7.3	SOIL	—	—	—	—	—	—	—	—	0.812 (J)	—	—	—	—
RE39-22-254813	39-61805	8.3–9.3	SOIL	—	—	—	—	—	—	—	—	0.664 (J)	—	—	—	—
RE39-22-254814	39-61806	4.3–5.3	SOIL	—	—	—	—	—	—	—	—	0.734 (J)	—	—	—	—
RE39-22-254815	39-61806	6.3–7.3	SOIL	—	—	—	—	—	—	—	—	1.62 (J)	—	—	—	—
RE39-22-254816	39-61806	8.3–9.3	SOIL	—	—	—	—	—	—	—	—	3.05	—	—	—	—
RE39-22-254817	39-61807	4.8–5.8	SOIL	—	—	—	—	—	—	—	—	2.66	0.000549 (J)	—	—	—
RE39-22-254818	39-61807	6.8–7.8	SOIL	—	—	—	—	—	—	—	—	3.06	—	—	—	—
RE39-22-254819	39-61807	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	3.84	—	—	—	—
RE39-22-254820	39-61808	5.1–6.1	SOIL	—	—	—	—	—	—	—	—	6.43	—	—	—	—
RE39-22-254821	39-61808	7.1–8.1	SOIL	—	—	—	—	—	—	—	—	3.66	—	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254822	39-61808	9.1–10.1	SOIL	—	—	—	—	—	—	—	—	4.1	—	—	—	—
RE39-22-254823	39-61809	9.5–10.5	SOIL	—	—	—	—	—	—	—	—	5.16	—	—	—	—
RE39-22-254824	39-61809	11.5–12.5	SOIL	—	—	—	—	—	—	—	—	4.72	—	—	—	—
RE39-22-254825	39-61809	13.5–14.5	SOIL	—	—	—	—	—	—	—	—	5.92	—	—	—	—
RE39-22-254826	39-61810	5.75–6.75	SOIL	—	—	—	—	—	—	—	—	6.64	—	—	—	—
RE39-22-254827	39-61810	7.75–8.75	SOIL	—	—	—	—	—	—	—	—	6.21	—	—	—	—
RE39-22-254828	39-61810	9.75–10.75	SOIL	—	—	—	—	—	—	—	—	3.76	—	—	—	—
RE39-22-254829	39-61811	7.66–8.66	SOIL	—	—	—	—	—	—	—	—	1.02 (J)	—	—	—	—
RE39-22-254830	39-61811	9.66–10.66	SOIL	—	—	—	—	—	—	—	—	1.12	—	—	—	—
RE39-22-254831	39-61811	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	1.65	—	—	—	—
RE39-22-254832	39-61812	3.8–4.8	SOIL	—	—	—	—	—	—	—	—	46.1	0.00194 (J)	—	—	—
RE39-22-254833	39-61812	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	24.3	0.00133 (J)	—	—	—
RE39-22-254834	39-61812	7.8–8.8	SOIL	—	—	—	—	—	—	—	—	5.23	0.00097 (J)	—	—	—
RE39-22-254835	39-61813	3.0–4.0	SOIL	—	—	—	—	—	12.4 (J)	—	—	67.4	0.00161 (J)	—	2.27 (J)	—
RE39-22-254836	39-61813	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	39.1	0.000554 (J)	—	—	—
RE39-22-254837	39-61813	9.0–10.0	SOIL	—	—	—	—	—	15.9 (J)	—	—	50.8	0.000655 (J)	—	3.18 (J)	—
RE39-22-254838	39-61813	14.0–15.0	SOIL	—	—	—	—	—	—	—	—	4.9	—	—	—	—
RE39-22-254839	39-61814	1.3–2.3	SOIL	—	—	—	—	—	—	—	—	0.925 (J)	—	—	—	—
RE39-22-254840	39-61814	3.3–4.3	SOIL	0.874 (U)	—	—	—	—	—	—	—	1.29	—	—	—	—
RE39-22-254841	39-61814	5.3–6.3	SOIL	—	—	—	—	—	—	—	—	1.51	—	—	—	—
RE39-22-254842	39-61815	12.9–13.9	SOIL	—	—	—	—	—	—	—	—	1.64	—	—	—	—
RE39-22-254843	39-61815	14.9–15.9	SOIL	—	—	—	—	—	—	—	—	2.09	—	—	—	—
RE39-22-254844	39-61815	16.9–17.9	SOIL	—	—	—	—	—	—	—	—	3.22	—	—	—	50.4 (J+)
RE39-22-254845	39-61816	10–11	SOIL	—	—	—	—	—	—	—	—	7.77	0.001 (J)	—	—	—
RE39-22-254846	39-61816	12–13	SOIL	—	—	—	—	—	—	—	—	5.62	—	1.73	—	—
RE39-22-254847	39-61816	14–15	SOIL	—	—	—	—	—	—	—	—	16.7	0.000535 (J)	2.65	—	—
RE39-22-254848	39-61817	8–9	SOIL	—	—	—	—	—	—	—	—	3.84	0.000829 (J)	—	—	—
RE39-22-254849	39-61817	10–11	SOIL	—	—	—	—	—	—	—	—	2.19	—	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254850	39-61817	12–13	SOIL	—	—	—	—	—	—	—	—	7.32	0.000989 (J)	—	—	—
RE39-22-254851	39-61818	7.25–8.25	SOIL	—	—	—	—	—	—	—	—	1.41	—	—	—	—
RE39-22-254852	39-61818	9.25–10.25	SOIL	—	—	—	—	—	—	—	—	1.55	0.00067 (J)	—	—	—
RE39-22-254853	39-61818	11.25–12.25	SOIL	—	—	—	—	—	—	—	—	2.64	—	—	—	—
RE39-22-254854	39-61819	6.4–7.4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254855	39-61819	8.4–9.4	SOIL	—	—	—	—	—	—	—	—	0.538 (J)	—	—	—	—
RE39-22-254856	39-61819	10.4–11.4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254857	39-61820	5.5–6.5	SOIL	—	—	—	—	—	—	—	—	0.713 (J)	—	—	—	—
RE39-22-254858	39-61820	7.6–8.6	SOIL	—	—	—	—	—	—	—	—	0.747 (J)	—	—	—	—
RE39-22-254859	39-61820	9.6–10.6	SOIL	—	—	—	—	—	—	—	—	0.722 (J)	—	—	—	—
RE39-22-254860	39-61821	4.58–5.58	SOIL	—	—	—	—	—	—	—	—	3.08	—	—	—	—
RE39-22-254861	39-61821	6.58–7.58	SOIL	—	—	—	—	—	—	—	—	2.83	—	—	—	—
RE39-22-254862	39-61821	8.58–9.58	SOIL	—	—	—	—	—	—	—	—	1.48	—	—	—	—
RE39-22-254863	39-61822	3.25–4.25	SOIL	—	—	—	—	—	—	—	—	6.4	0.000929 (J)	—	—	—
RE39-22-254864	39-61822	6.25–7.25	SOIL	—	—	—	—	—	—	—	—	5.89	—	—	—	—
RE39-22-254865	39-61822	8.25–9.25	SOIL	—	—	—	—	—	—	—	—	2.3	—	—	—	—
RE39-22-254866	39-61823	0–1	SOIL	—	2.56 (J)	—	—	—	70 (J-)	—	0.377	1.11	—	—	46.6 (J)	—
RE39-22-254867	39-61823	4–5	SOIL	—	—	—	—	—	3.31 (J-)	—	—	0.61 (J)	—	—	3.59 (J)	—
RE39-22-254868	39-61823	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254869	39-61824	3–4	SOIL	—	—	—	—	—	0.865	—	—	39.3	0.000775 (J)	—	—	—
RE39-22-254870	39-61824	6–7	SOIL	—	—	—	—	—	—	—	—	13.1	—	—	—	—
RE39-22-254871	39-61824	9–10	SOIL	—	—	—	—	—	—	—	—	30.8	0.00218 (J)	—	—	—
RE39-22-254872	39-61824	14–15	SOIL	—	—	—	—	—	—	—	—	38.6	0.00208 (J)	—	—	—
RE39-22-254873	39-61825	0–1	SOIL	—	1.46	—	—	—	42.1 (J)	—	0.272	—	—	—	19.1	50.3 (J+)
RE39-22-254874	39-61825	4–5	SOIL	—	—	—	—	—	4.58 (J)	—	—	—	—	—	3.13	—
RE39-22-254875	39-61825	9–10	SOIL	—	—	—	—	—	5.05 (J)	—	—	4.65 (J+)	—	—	2.19	—
RE39-22-254876	39-61826	0–1	SOIL	—	—	—	—	—	3.88 (J)	—	0.103	0.731 (J)	—	—	5.23	—
RE39-22-254877	39-61826	4.0–5.0	SOIL	—	—	—	—	—	0.525 (U)	—	—	1.28	—	—	1.03	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254878	39-61826	9.0–10.0	SOIL	—	—	—	—	—	1.59 (J)	—	—	4.19	—	—	1.27	—
RE39-22-254879	39-61827	0.0–1.0	SOIL	—	1.85	—	26.9	15.3 (J+)	66.2 (J)	—	0.818	0.791 (J)	—	—	42.4	62.6
RE39-22-254880	39-61827	4.0–5.0	SOIL	—	—	—	38.3	—	8.04 (J)	—	—	1.18	—	—	5.13	—
RE39-22-254881	39-61827	9–10	SOIL	—	—	—	—	—	—	—	—	4.65	—	—	—	—
RE39-22-254882	39-61828	0–1	SOIL	—	1.52	—	—	—	41.9	—	0.267	4.66	0.00169 (J)	1.54	20.2	—
RE39-22-254883	39-61828	4–5	SOIL	—	—	—	—	—	3.22	—	—	1.61	—	—	1.18 (J+)	—
RE39-22-254884	39-61828	9–10	SOIL	—	—	—	—	—	3.55	—	—	6.19	—	—	3.24 (J+)	—
RE39-22-254885	39-61829	0–1	SOIL	—	0.567	—	—	—	4.26	—	—	2.45	0.000847 (J)	—	6.41	—
RE39-22-254886	39-61829	4–5	SOIL	—	—	—	—	—	—	—	—	1.95	—	—	—	—
RE39-22-254887	39-61829	9–10	SOIL	—	—	—	—	—	—	—	—	8.61	—	—	—	—
RE39-22-254888	39-61830	0–1	SOIL	—	—	—	—	—	—	—	—	2.08	0.0013 (J)	—	—	—
RE39-22-254889	39-61830	4–5	SOIL	—	—	—	—	—	—	—	—	1.78	0.000562 (J)	—	—	—
RE39-22-254890	39-61830	9–10	SOIL	—	—	—	—	—	—	—	—	1.94	—	—	—	—
RE39-22-254891	39-61831	0–1	SOIL	—	—	—	—	—	—	—	—	1.28	0.000996 (J)	—	—	—
RE39-22-254892	39-61831	4–5	SOIL	—	—	—	—	—	—	—	—	1.88	—	—	—	—
RE39-22-254893	39-61831	9–10	SOIL	—	—	—	—	—	—	—	—	1.8	—	—	—	—
RE39-22-254894	39-61832	0–1	SOIL	—	—	—	—	—	—	—	—	4.18	0.000756 (J)	—	—	—
RE39-22-254895	39-61832	4–5	SOIL	—	—	—	—	—	—	—	—	1.62	—	—	—	—
RE39-22-254896	39-61832	9–10	SOIL	—	—	—	—	—	—	—	—	2.03	—	—	—	—
RE39-22-254897	39-61833	0–1	SOIL	—	—	—	—	—	—	—	—	0.902 (J)	0.000883 (J)	—	—	—
RE39-22-254898	39-61833	4–5	SOIL	—	—	—	—	—	—	—	—	1.75	—	—	—	—
RE39-22-254899	39-61833	9–10	SOIL	—	—	—	—	—	—	—	—	2.19	—	—	—	—
RE39-22-254900	39-61834	0–1	SOIL	—	—	—	—	—	—	—	—	2.27	0.00073 (J)	—	—	—
RE39-22-254901	39-61834	4–5	SOIL	—	—	—	—	—	—	—	—	2.39	—	—	—	—
RE39-22-254902	39-61834	9–10	SOIL	—	—	—	—	—	—	—	—	2.11	—	—	—	—
RE39-22-254903	39-61835	3–4	SOIL	—	—	—	—	—	32.3	—	—	33.8 (J)	—	—	2.38	—
RE39-22-254904	39-61835	6–7	SOIL	—	—	—	—	—	9.34	—	—	28.1 (J)	0.000509 (J)	—	2.03	—
RE39-22-254905	39-61835	9–10	SOIL	—	—	—	—	—	—	—	—	50.9 (J)	0.000906 (J)	—	1.17 (U)	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nitrate	Perchlorate	Selenium	Silver	Zinc
Soil Background Value[a]				**0.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Sediment Background Value[a]				**0.83**	**0.4**	**4420**	**10.5**	**11.2**	**0.82**	**19.7**	**0.1**	**na**	**na**	**0.3**	**1**	**60.2**
Construction Worker SSL[c]				**142**	**72.1**	**na**	**134**	**14,200**	**12.1**	**800**	**20.7**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**519**	**1110**	**na**	**505**	**51,900**	**63.3**	**800**	**112**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**na**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-254906	39-61835	14–15	SOIL	—	—	—	—	—	—	—	—	20.4 (J)	—	—	—	—
RE39-22-254907	39-61836	0–1	SOIL	—	—	—	—	—	—	—	—	2.87	0.0013 (J)	—	—	—
RE39-22-254908	39-61836	4–5	SOIL	—	—	—	—	—	—	—	—	1.65	—	—	—	—
RE39-22-254909	39-61836	9–10	SOIL	—	—	—	—	—	—	—	—	2	—	—	—	—
RE39-22-254910	39-61837	0–1	SOIL	—	0.536	—	23.7	—	43.4	—	0.105	0.971 (J)	0.000533 (J)	—	12.6	—
RE39-22-254911	39-61837	4–5	SOIL	—	—	—	—	—	—	—	—	1.13	—	—	1.75	—
RE39-22-254912	39-61837	9–10	SOIL	—	—	—	—	—	0.534	—	—	3.23	—	—	—	—
RE39-22-254913	39-61838	0–1	SOIL	—	—	—	—	—	—	—	—	1.15	—	—	—	—
RE39-22-254914	39-61838	4–5	SOIL	0.986 (U)	—	—	—	—	—	—	—	1.11	—	—	—	—
RE39-22-254915	39-61838	9–10	SOIL	—	—	—	—	—	—	—	—	1.95	—	—	—	—
RE39-22-254916	39-61839	3–4	SOIL	—	—	—	—	—	15.8	—	—	8.07	—	0.491 (J)	4 (J)	—
RE39-22-254917	39-61839	6–7	SOIL	—	—	—	—	—	—	—	—	4.93	—	—	—	—
RE39-22-254918	39-61839	9–10	SOIL	—	—	—	—	—	—	—	—	8.42	—	—	—	—
RE39-22-254919	39-61839	14–15	SOIL	—	—	—	—	—	—	—	—	23.3	—	—	—	—
RE39-22-254920	39-61840	3–4	SOIL	—	—	—	—	—	13.6	—	—	14.2 (J)	—	—	2.28	—
RE39-22-254921	39-61840	6–7	SOIL	—	—	—	—	—	11.8	—	0.168	18.1 (J)	—	—	2.64	—
RE39-22-254922	39-61840	9–10	SOIL	—	—	—	—	—	—	—	—	9.07 (J)	—	—	—	—
RE39-22-254923	39-61840	14–15	SOIL	—	—	—	—	—	—	—	—	72.3 (J)	0.000578 (J)	—	1.03 (U)	—
RE39-22-254924	39-61841	3–4	SOIL	—	—	—	—	—	—	—	—	1.95	—	—	—	—
RE39-22-254925	39-61841	6–7	SOIL	—	—	—	—	—	—	—	—	2.26	—	—	—	—
RE39-22-254926	39-61841	9–10	SOIL	—	—	—	—	—	—	—	—	7.56	0.000984 (J)	—	—	—
RE39-22-254927	39-61841	14–15	SOIL	—	—	—	—	—	—	27.2	—	1.06	—	—	—	88.4

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

[e] NA = Not analyzed.

Table 6.5-3
Organic Chemicals Detected at SWMU 39-006(a)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300[b]**	**323**	**3,300,000[d]**	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**37,400**
0239-96-0485	39-01502	8–9	FILL	—[e]	—	—	—	—	—	0.0088	—	—	—	—	—	—	—	—
RE39-09-5389	39-604868	9.5–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
RE39-09-5391	39-604869	9.5–10	SOIL	—	—	0.0099 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5392	39-604869	10–10.5	SOIL	—	—	0.0092 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5393	39-604870	9.5–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2 (J)	—
RE39-09-5397	39-604872	9.5–10	SOIL	—	—	—	—	0.028 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5399	39-604873	9.5–10	SOIL	—	—	0.011 (J)	—	—	—	—	—	—	—	—	—	—	2	—
RE39-09-5400	39-604873	10–10.5	SOIL	—	—	0.013 (J)	—	0.0035 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5401	39-604874	9.5–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5403	39-604875	9.5–10	SOIL	—	—	0.0088 (J)	—	0.014 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5407	39-604877	9.5–10	SOIL	—	—	—	—	0.019 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5408	39-604877	10–10.5	SOIL	—	—	—	—	0.01 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5409	39-604878	10–10.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5412	39-604879	10.5–11	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5413	39-604880	10–10.5	SOIL	—	—	—	—	0.0039 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5414	39-604880	10.5–11	SOIL	—	—	—	—	0.0035 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5415	39-604881	10–10.5	SOIL	—	—	—	—	0.0096 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5419	39-604883	10–10.5	SOIL	—	—	—	—	0.0028 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5423	39-604885	3–4	SOIL	—	—	—	—	0.0042 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5424	39-604885	6–7	SOIL	—	—	—	—	0.011 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5425	39-604886	3–4	SOIL	—	—	—	—	0.0075 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5426	39-604886	6–7	SOIL	—	—	—	—	0.0035 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5428	39-604887	6–7	SOIL	—	—	—	—	0.072	—	—	—	—	—	—	—	—	0.12 (J)	—
RE39-09-5429	39-604888	3–4	SOIL	—	—	—	—	0.0066 (J)	—	—	—	—	—	—	—	—	0.19 (J)	—
RE39-09-5430	39-604888	6–9	SOIL	—	—	—	—	0.054	—	—	—	—	—	—	—	—	0.33 (J)	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300[b]**	**323**	**3,300,000[d]**	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**37,400**
RE39-09-5431	39-604889	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	—
RE39-09-5432	39-604889	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34 (J)	—
RE39-09-5434	39-604890	9–12	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19 (J)	—
RE39-09-5435	39-604891	3–5	SOIL	—	—	—	—	0.048	—	—	—	—	—	—	—	—	—	—
RE39-09-9771	39-604891	3–5	SOIL	NA[f]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5436	39-604891	8–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21 (J)	—
RE39-09-5437	39-604892	2–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34 (J)	—
RE39-09-5438	39-604892	7–9	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19 (J)	—
RE39-09-5439	39-604893	1–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5442	39-604894	3–4.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	—
RE39-22-254724	39-61780	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.325 (J)	—	—
RE39-22-254725	39-61780	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254726	39-61781	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254729	39-61781	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254730	39-61782	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254731	39-61782	6–7	SOIL	—	—	—	—	—	—	—	0.00236 (J)	0.00236 (J)	0.00438	0.00202 (J)	0.00168 (J)	—	—	—
RE39-22-254732	39-61782	9–10	SOIL	—	—	0.00209 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254733	39-61782	14–15	SOIL	—	—	0.00541	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254735	39-61783	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0107 (J)	—
RE39-22-254736	39-61783	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0106 (J)	—
RE39-22-254737	39-61783	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.288 (J)	—	—
RE39-22-254738	39-61784	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.282 (J)	—	—
RE39-22-254739	39-61784	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.279 (J)	—	—
RE39-22-254740	39-61784	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.278 (J)	—	—
RE39-22-254741	39-61784	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.308 (J)	—	—
RE39-22-254742	39-61785	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.296 (J)	—	—
RE39-22-254743	39-61785	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.29 (J)	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300[b]**	**323**	**3,300,000[d]**	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**37,400**
RE39-22-254745	39-61785	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.276 (J)	—	—
RE39-22-254746	39-61786	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254747	39-61786	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254748	39-61786	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254749	39-61786	14–15	SOIL	—	—	—	—	—	—	—	0.0121 (J)	—	—	—	—	0.332 (J)	—	—
RE39-22-254750	39-61787	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254751	39-61787	6–7	SOIL	—	—	0.00537	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254752	39-61787	9–10	SOIL	—	—	0.0065	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254754	39-61788	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254755	39-61788	6–7	SOIL	—	0.00204 (J)	—	—	—	—	—	0.00306 (J)	0.00408 (J)	0.00646 (J)	0.00374 (J)	0.00204 (J)	—	—	—
RE39-22-254756	39-61788	9–10	SOIL	—	—	0.00449 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254757	39-61788	14–15	SOIL	—	—	—	—	—	—	—	—	—	0.00202 (J)	—	—	—	—	—
RE39-22-254758	39-61789	3–4	SOIL	0.00181 (J)	0.0703 (J)	—	0.0703 (J)	0.00476 (J)	0.00202 (J)	—	0.116 (J)	0.117 (J)	0.178 (J)	0.1 (J)	0.0584	—	—	—
RE39-22-254759	39-61789	6–7	SOIL	—	0.0144 (J)	—	0.0131 (J)	0.0123 (J)	0.00489	—	0.0254 (J)	0.0268 (J)	0.0375 (J)	0.0189 (J)	0.012 (J)	—	—	—
RE39-22-254760	39-61789	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254763	39-61790	6–7	SOIL	—	—	0.00226 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254764	39-61790	9–10	SOIL	—	—	0.00457 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254765	39-61790	14–15	SOIL	—	—	0.00829	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254766	39-61791	3–4	SOIL	—	0.05 (J)	—	0.0468 (J)	0.0286 (J)	0.0107	—	0.0921 (J)	0.0917	0.127 (J)	0.063 (J)	0.0414	—	—	—
RE39-22-254767	39-61791	6–7	SOIL	—	0.0443 (J)	—	0.0406 (J)	0.0118 (J)	0.00428 (J)	—	0.0809 (J)	0.0784 (J)	0.117 (J)	0.0595 (J)	0.0421	—	—	—
RE39-22-254768	39-61791	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0118 (J)	—
RE39-22-254771	39-61792	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0143 (J)	—
RE39-22-254774	39-61793	3.8–4.8	SOIL	—	—	—	—	—	—	—	—	—	—	0.00255 (J)	—	—	—	—
RE39-22-254775	39-61793	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254778	39-61794	5.7–6.7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254783	39-61796	3.8–4.8	SOIL	—	—	—	0.00235 (J)	0.00723	0.00484 (J)	—	0.0111 (J)	0.00805	0.0104	0.00772	0.00369	—	—	—
RE39-22-254784	39-61796	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300[b]**	**323**	**3,300,000[d]**	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**37,400**
RE39-22-254786	39-61797	7.66–8.66	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254787	39-61797	9.66–10.66	SOIL	—	—	—	—	—	—	—	—	0.00175 (J)	0.0028 (J)	0.00175 (J)	—	—	—	—
RE39-22-254788	39-61797	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	—	0.00178 (J)	—	—	—	—	—
RE39-22-254789	39-61798	4–5	SOIL	—	—	—	—	—	—	—	0.00219 (J)	0.00219 (J)	0.00255 (J)	0.00182 (J)	—	—	—	—
RE39-22-254790	39-61798	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254792	39-61799	1.95–2.95	SOIL	—	—	—	—	—	—	—	0.0203	0.0185	0.0258	0.0166 (J)	—	—	—	—
RE39-22-254793	39-61799	3.95–4.95	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254796	39-61800	4.2–5.2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.342 (J)	—	—
RE39-22-254798	39-61801	3.3–4.3	SOIL	—	—	—	—	0.0017 (J)	—	—	0.00254 (J)	0.00254 (J)	0.00326 (J)	0.00254 (J)	—	—	—	—
RE39-22-254799	39-61801	5.3–6.3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.00213 (J)	—	—	—
RE39-22-254801	39-61802	3–4	SOIL	—	0.0578 (J)	—	0.0542 (J)	0.0132 (J)	0.00522	—	0.108 (J)	0.117	0.17 (J)	0.0801	0.0531 (J)	—	—	—
RE39-22-254802	39-61802	6–7	SOIL	—	0.00263 (J)	—	0.00226 (J)	—	—	—	0.00489 (J)	0.00451 (J)	0.00564 (J)	0.00301 (J)	0.00301 (J)	—	—	—
RE39-22-254804	39-61802	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254806	39-61803	6.3–7.3	SOIL	—	—	—	0.00205 (J)	—	—	—	0.00717 (J)	0.00683 (J)	0.00888 (J)	0.00581 (J)	0.00307 (J)	—	—	—
RE39-22-254808	39-61804	4.8–5.8	SOIL	0.00286 (J)	—	—	0.00608 (J)	—	—	—	0.0222 (J)	0.0204 (J)	0.0232 (J)	0.0147 (J)	0.00894 (J)	—	—	—
RE39-22-254809	39-61804	6.8–7.8	SOIL	—	—	—	—	0.00624 (J)	0.00244 (J)	—	—	—	—	—	—	—	—	—
RE39-22-254810	39-61804	8.8–9.8	SOIL	—	—	—	—	0.00457 (J)	0.00168 (J)	—	—	—	—	—	—	—	—	0.00248 (J)
RE39-22-254811	39-61805	4.3–5.3	SOIL	0.0157 (J)	0.00643 (J)	—	0.0278 (J)	0.00232 (J)	0.00264 (J)	—	0.095 (J)	0.102 (J)	0.115 (J)	0.0739 (J)	0.0471 (J)	—	—	—
RE39-22-254812	39-61805	6.3–7.3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254813	39-61805	8.3–9.3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254814	39-61806	4.3–5.3	SOIL	—	—	—	—	—	—	—	0.00366 (J)	0.0033 (J)	0.00439 (J)	0.00293 (J)	—	—	—	—
RE39-22-254816	39-61806	8.3–9.3	SOIL	—	—	—	—	—	—	—	0.00252 (J)	0.00216 (J)	0.00252 (J)	—	—	—	—	—
RE39-22-254817	39-61807	4.8–5.8	SOIL	—	—	—	—	0.00167 (J)	0.00153 (J)	—	0.0144 (J-)	—	—	—	—	—	—	—
RE39-22-254818	39-61807	6.8–7.8	SOIL	—	—	—	—	0.00219 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254819	39-61807	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254820	39-61808	5.1–6.1	SOIL	—	—	—	—	—	—	—	0.00213 (J)	0.00213 (J)	0.00284 (J)	0.00213 (J)	—	—	—	—
RE39-22-254821	39-61808	7.1–8.1	SOIL	—	—	—	0.00315 (J)	—	—	—	0.00665 (J)	0.00595 (J)	0.007 (J)	0.00455 (J)	0.0028 (J)	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300[b]**	**323**	**3,300,000[d]**	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**37,400**
RE39-22-254822	39-61808	9.1–10.1	SOIL	—	—	—	—	—	—	—	0.00489 (J)	0.00524 (J)	0.00698 (J)	0.00384 (J)	0.00279 (J)	—	—	—
RE39-22-254823	39-61809	9.5–10.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254826	39-61810	5.75–6.75	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254829	39-61811	7.66–8.66	SOIL	—	—	—	—	—	—	—	0.00252 (J)	—	0.00216 (J)	—	—	—	—	—
RE39-22-254831	39-61811	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254832	39-61812	3.8–4.8	SOIL	—	—	—	—	0.00157 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254833	39-61812	5.8–6.8	SOIL	—	—	—	—	0.00117 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254835	39-61813	3.0–4.0	SOIL	—	0.0525 (J)	—	0.0396 (J)	0.018 (J)	0.00698	—	0.151 (J)	0.168 (J)	0.224 (J)	0.111 (J)	0.0746 (J)	—	0.0165 (J)	—
RE39-22-254836	39-61813	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254837	39-61813	9.0–10.0	SOIL	—	0.0388 (J)	—	0.0285 (J)	0.0239 (J)	0.00803	—	0.104 (J)	0.116 (J)	0.156 (J)	0.0768 (J)	0.0525 (J)	—	—	—
RE39-22-254838	39-61813	14.0–15.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254839	39-61814	1.3–2.3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254840	39-61814	3.3–4.3	SOIL	0.00407	—	—	—	0.00156 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254844	39-61815	16.9–17.9	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0124 (J-)	—
RE39-22-254845	39-61816	10–11	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254846	39-61816	12–13	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0022 (J)
RE39-22-254853	39-61818	11.25–12.25	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254856	39-61819	10.4–11.4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254857	39-61820	5.5–6.5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254858	39-61820	7.6–8.6	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254860	39-61821	4.58–5.58	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254862	39-61821	8.58–9.58	SOIL	—	—	0.0025 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254863	39-61822	3.25–4.25	SOIL	0.0205	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254864	39-61822	6.25–7.25	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254866	39-61823	0–1	SOIL	—	—	—	—	0.249	0.104	—	—	0.00242 (J)	0.00415	0.00277 (J)	—	—	—	—
RE39-22-254867	39-61823	4–5	SOIL	—	—	—	—	0.0251	0.011	—	—	—	—	—	—	—	—	—
RE39-22-254868	39-61823	9–10	SOIL	—	—	—	—	0.00174 (J)	—	—	—	—	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530**[b]	**2310**	**1,100,000**[c]	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300**[b]	**323**	**3,300,000**[d]	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740**[b]	**15.3**	**250,000**[d]	**380**	**37,400**
RE39-22-254869	39-61824	3–4	SOIL	—	0.00436	—	0.004	0.00565	0.0031 (J)	—	0.0113 (J)	0.00691	0.0135 (J)	0.00582	0.00364	—	—	—
RE39-22-254870	39-61824	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254871	39-61824	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.347 (J)	—	—
RE39-22-254872	39-61824	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.366 (J)	—	—
RE39-22-254873	39-61825	0–1	SOIL	—	—	—	—	0.105	0.0476	—	—	—	—	—	—	—	—	—
RE39-22-254874	39-61825	4–5	SOIL	—	—	—	—	0.0201	0.00886	—	—	—	—	—	—	—	—	—
RE39-22-254875	39-61825	9–10	SOIL	—	—	—	—	0.00762	0.00331 (J)	—	—	—	—	—	—	—	—	—
RE39-22-254876	39-61826	0–1	SOIL	—	—	—	—	0.0139	0.00755 (J)	—	—	—	—	—	—	0.327 (J)	—	—
RE39-22-254877	39-61826	4.0–5.0	SOIL	—	—	—	—	0.00218 (J)	0.0012 (J)	—	—	—	—	—	—	—	—	—
RE39-22-254878	39-61826	9.0–10.0	SOIL	—	—	—	—	0.00385	0.00204 (J)	—	—	—	—	—	—	—	—	—
RE39-22-254879	39-61827	0.0–1.0	SOIL	—	—	—	—	0.0867	0.0365 (J)	—	—	—	0.00204 (J)	—	—	0.328 (J)	—	—
RE39-22-254880	39-61827	4.0–5.0	SOIL	—	—	—	—	0.0138	0.00608 (J)	—	—	—	—	—	—	—	—	—
RE39-22-254881	39-61827	9–10	SOIL	—	—	—	—	0.00158 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254882	39-61828	0–1	SOIL	—	—	—	—	0.0542	0.0198	—	—	—	—	—	—	0.343 (J)	—	—
RE39-22-254883	39-61828	4–5	SOIL	—	—	—	—	0.00293 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254884	39-61828	9–10	SOIL	—	—	—	—	0.00213 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254885	39-61829	0–1	SOIL	—	—	—	—	0.0137	0.00803	—	—	—	0.0021 (J)	—	—	—	—	—
RE39-22-254886	39-61829	4–5	SOIL	—	—	—	—	—	—	—	0.00203 (J)	0.00203 (J)	0.00543	0.00237 (J)	0.00237 (J)	—	—	—
RE39-22-254887	39-61829	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254891	39-61831	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254892	39-61831	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	1.47	—
RE39-22-254900	39-61834	0–1	SOIL	—	—	—	—	—	—	—	—	0.00219 (J)	0.00256 (J)	0.00292 (J)	—	—	—	—
RE39-22-254903	39-61835	3–4	SOIL	—	0.0633	—	0.0453	0.0405	0.0156	—	0.151	0.164	0.263	0.128	0.0744	0.32 (J)	—	—
RE39-22-254904	39-61835	6–7	SOIL	—	0.0411	—	0.0312	0.0164	0.00589	—	0.0961	0.1	0.162	0.0777	0.0495	—	—	—
RE39-22-254905	39-61835	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254906	39-61835	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.348 (J)	—	—
RE39-22-254910	39-61837	0–1	SOIL	0.199	—	—	—	0.0175	0.0103	—	—	—	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	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	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**75,300**	**4.91**	**85.3**	**142**	**240**	**15.0**	**240**	**7530[b]**	**2310**	**1,100,000[c]**	**5380**	**91,700**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**253,000**	**11**	**11.1**	**87.2**	**32.3**	**23.6**	**32.3**	**25300[b]**	**323**	**3,300,000[d]**	**1830**	**411,000**
Residential SSL[a]				**3480**	**1740**	**66,300**	**17,400**	**1.14**	**2.43**	**17.8**	**1.53**	**1.12**	**1.53**	**1740[b]**	**15.3**	**250,000[d]**	**380**	**37,400**
RE39-22-254911	39-61837	4–5	SOIL	—	—	—	—	0.00254 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254912	39-61837	9–10	SOIL	—	—	—	—	0.00152 (J)	—	—	—	—	—	—	—	—	—	—
RE39-22-254915	39-61838	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254916	39-61839	3–4	SOIL	0.0029 (J)	0.0543 (J)	—	0.0438	0.027	0.0193	—	0.096	0.113	0.175	0.0652	0.0623	—	—	—
RE39-22-254920	39-61840	3–4	SOIL	—	0.0596	—	0.0459	0.0177	0.00652	—	0.15	0.161	0.249	0.121	0.078	0.32 (J)	—	—
RE39-22-254921	39-61840	6–7	SOIL	—	0.044	—	0.0339	0.0171	0.00635	—	0.111	0.114	0.179	0.0874	0.0563	—	—	—
RE39-22-254922	39-61840	9–10	SOIL	—	—	0.00288 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254923	39-61840	14–15	SOIL	—	—	0.00464 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254924	39-61841	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254925	39-61841	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254926	39-61841	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-254927	39-61841	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
0239-96-0485	39-01502	8–9	FILL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5389	39-604868	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5391	39-604869	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5392	39-604869	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5393	39-604870	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5397	39-604872	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5399	39-604873	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5400	39-604873	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5401	39-604874	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5403	39-604875	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5407	39-604877	9.5–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5408	39-604877	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5409	39-604878	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5412	39-604879	10.5–11	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5413	39-604880	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5414	39-604880	10.5–11	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5415	39-604881	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5419	39-604883	10–10.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5423	39-604885	3–4	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5424	39-604885	6–7	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5425	39-604886	3–4	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5426	39-604886	6–7	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5428	39-604887	6–7	SOIL	—	NA	—	—	0.039 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5429	39-604888	3–4	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5430	39-604888	6–9	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
RE39-09-5431	39-604889	3–4	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5432	39-604889	6–7	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5434	39-604890	9–12	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5435	39-604891	3–5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-9771	39-604891	3–5	SOIL	NA	NA	NA	NA	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5436	39-604891	8–10	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5437	39-604892	2–4	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5438	39-604892	7–9	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5439	39-604893	1–3	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-09-5442	39-604894	3–4.5	SOIL	—	NA	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254724	39-61780	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254725	39-61780	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254726	39-61781	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254729	39-61781	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254730	39-61782	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254731	39-61782	6–7	SOIL	—	—	—	0.00202 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254732	39-61782	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254733	39-61782	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254735	39-61783	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254736	39-61783	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254737	39-61783	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254738	39-61784	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254739	39-61784	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254740	39-61784	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254741	39-61784	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254742	39-61785	3–4	SOIL	—	—	—	—	0.039 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254743	39-61785	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
RE39-22-254745	39-61785	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254746	39-61786	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254747	39-61786	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254748	39-61786	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254749	39-61786	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254750	39-61787	3–4	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	1.46e-006 (J)	3.12e-006	2.45e-007 (J)	7.5e-007	4.01e-007
RE39-22-254751	39-61787	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254752	39-61787	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254754	39-61788	3–4	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254755	39-61788	6–7	SOIL	—	—	—	0.00306 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254756	39-61788	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254757	39-61788	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254758	39-61789	3–4	SOIL	—	—	—	0.117 (J)	—	—	—	—	0.00202 (J)	—	NA	NA	NA	NA	NA
RE39-22-254759	39-61789	6–7	SOIL	—	—	—	0.0251 (J)	0.0118 (J)	—	—	—	0.00209 (J)	—	NA	NA	NA	NA	NA
RE39-22-254760	39-61789	9–10	SOIL	—	—	—	—	0.013 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254763	39-61790	6–7	SOIL	—	—	—	—	0.0171 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254764	39-61790	9–10	SOIL	—	—	—	—	0.0155 (J)	—	—	—	0.00236 (J)	—	NA	NA	NA	NA	NA
RE39-22-254765	39-61790	14–15	SOIL	—	—	—	—	0.0216 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254766	39-61791	3–4	SOIL	—	—	—	0.0874	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254767	39-61791	6–7	SOIL	—	—	—	0.0806 (J)	0.0172 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254768	39-61791	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254771	39-61792	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254774	39-61793	3.8–4.8	SOIL	—	—	—	—	0.0149 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254775	39-61793	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254778	39-61794	5.7–6.7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254783	39-61796	3.8–4.8	SOIL	—	—	—	0.00839	0.0134 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254784	39-61796	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
RE39-22-254786	39-61797	7.66–8.66	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254787	39-61797	9.66–10.66	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254788	39-61797	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254789	39-61798	4–5	SOIL	—	—	—	0.00219 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254790	39-61798	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254792	39-61799	1.95–2.95	SOIL	—	—	—	0.0185	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254793	39-61799	3.95–4.95	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254796	39-61800	4.2–5.2	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254798	39-61801	3.3–4.3	SOIL	—	—	—	0.0029 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254799	39-61801	5.3–6.3	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254801	39-61802	3–4	SOIL	—	—	—	0.116	—	—	—	—	0.00476 (J)	—	NA	NA	NA	NA	NA
RE39-22-254802	39-61802	6–7	SOIL	—	—	—	0.00526 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254804	39-61802	14–15	SOIL	—	—	—	—	—	—	—	—	0.00168 (J)	—	NA	NA	NA	NA	NA
RE39-22-254806	39-61803	6.3–7.3	SOIL	—	—	—	0.00683 (J)	—	—	0.0323 (J)	—	0.3 (J)	0.00218 (J)	NA	NA	NA	NA	NA
RE39-22-254808	39-61804	4.8–5.8	SOIL	—	—	—	0.0193 (J)	—	—	0.00447 (J)	—	0.0712 (J)	—	NA	NA	NA	NA	NA
RE39-22-254809	39-61804	6.8–7.8	SOIL	—	—	—	—	0.0106 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254810	39-61804	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254811	39-61805	4.3–5.3	SOIL	—	0.0157 (J)	—	0.107 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254812	39-61805	6.3–7.3	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254813	39-61805	8.3–9.3	SOIL	—	—	—	—	—	—	0.0165 (J)	—	0.197 (J)	—	NA	NA	NA	NA	NA
RE39-22-254814	39-61806	4.3–5.3	SOIL	—	—	—	0.0033 (J)	0.0217 (J)	—	0.012 (J)	—	0.577 (J)	—	NA	NA	NA	NA	NA
RE39-22-254816	39-61806	8.3–9.3	SOIL	—	—	—	0.00216 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254817	39-61807	4.8–5.8	SOIL	0.0112 (J-)	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254818	39-61807	6.8–7.8	SOIL	—	—	—	—	—	—	—	—	0.00291 (J)	—	NA	NA	NA	NA	NA
RE39-22-254819	39-61807	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254820	39-61808	5.1–6.1	SOIL	—	—	—	0.00213 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254821	39-61808	7.1–8.1	SOIL	—	—	—	0.0063 (J)	—	—	0.00168 (J)	—	0.0201	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
RE39-22-254822	39-61808	9.1–10.1	SOIL	—	—	—	0.00489 (J)	—	—	—	0.0115 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254823	39-61809	9.5–10.5	SOIL	—	—	—	—	0.0253 (J)	—	—	—	0.00285 (J)	—	NA	NA	NA	NA	NA
RE39-22-254826	39-61810	5.75–6.75	SOIL	—	—	—	—	0.0189 (J)	—	—	—	0.00315 (J)	—	NA	NA	NA	NA	NA
RE39-22-254829	39-61811	7.66–8.66	SOIL	—	—	—	0.00216 (J)	0.0289 (J)	—	—	—	0.0025 (J)	—	NA	NA	NA	NA	NA
RE39-22-254831	39-61811	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	0.0051	—	NA	NA	NA	NA	NA
RE39-22-254832	39-61812	3.8–4.8	SOIL	—	—	—	—	—	—	—	—	0.00318 (J)	—	NA	NA	NA	NA	NA
RE39-22-254833	39-61812	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	0.0387	—	NA	NA	NA	NA	NA
RE39-22-254835	39-61813	3.0–4.0	SOIL	—	—	—	0.153 (J)	—	—	—	—	0.00271 (J)	—	NA	NA	NA	NA	NA
RE39-22-254836	39-61813	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254837	39-61813	9.0–10.0	SOIL	—	—	—	0.102 (J)	—	—	—	—	0.00689	—	NA	NA	NA	NA	NA
RE39-22-254838	39-61813	14.0–15.0	SOIL	—	—	—	—	—	—	—	—	0.0032 (J)	—	NA	NA	NA	NA	NA
RE39-22-254839	39-61814	1.3–2.3	SOIL	—	—	—	—	—	—	0.0264 (J)	—	0.235 (J)	—	NA	NA	NA	NA	NA
RE39-22-254840	39-61814	3.3–4.3	SOIL	—	—	—	—	—	—	—	—	0.0105 (J)	—	NA	NA	NA	NA	NA
RE39-22-254844	39-61815	16.9–17.9	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254845	39-61816	10–11	SOIL	—	—	—	—	—	—	—	—	0.015 (J)	—	NA	NA	NA	NA	NA
RE39-22-254846	39-61816	12–13	SOIL	—	—	—	—	—	—	0.00322 (J)	0.0118 (J)	0.0422 (J)	0.00286 (J)	NA	NA	NA	NA	NA
RE39-22-254853	39-61818	11.25–12.25	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254856	39-61819	10.4–11.4	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254857	39-61820	5.5–6.5	SOIL	—	—	—	—	—	—	0.0157 (J)	0.0118 (J)	0.215 (J)	0.0146 (J)	NA	NA	NA	NA	NA
RE39-22-254858	39-61820	7.6–8.6	SOIL	—	—	—	—	—	—	—	0.0115 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254860	39-61821	4.58–5.58	SOIL	—	—	—	—	—	—	—	0.0114 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254862	39-61821	8.58–9.58	SOIL	—	—	—	—	—	—	—	—	0.00696 (J)	—	NA	NA	NA	NA	NA
RE39-22-254863	39-61822	3.25–4.25	SOIL	—	—	—	—	0.0514 (J)	—	—	—	0.00539 (J)	—	NA	NA	NA	NA	NA
RE39-22-254864	39-61822	6.25–7.25	SOIL	—	—	—	—	—	0.0218 (J-)	—	0.0112 (J-)	0.0133 (J-)	—	NA	NA	NA	NA	NA
RE39-22-254866	39-61823	0–1	SOIL	—	—	—	0.00415	0.0267 (J)	—	—	0.0256 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254867	39-61823	4–5	SOIL	—	—	—	—	0.21 (J)	—	—	0.0165 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254868	39-61823	9–10	SOIL	—	—	—	—	0.0114 (J)	—	—	—	0.00461 (J)	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
RE39-22-254869	39-61824	3–4	SOIL	—	—	—	0.00764	0.0399 (J)	—	—	—	0.015 (J)	—	NA	NA	NA	NA	NA
RE39-22-254870	39-61824	6–7	SOIL	—	—	—	—	0.0108 (J)	—	—	—	0.00943 (J)	—	NA	NA	NA	NA	NA
RE39-22-254871	39-61824	9–10	SOIL	—	—	—	—	0.0293 (J)	—	—	0.0378	—	—	NA	NA	NA	NA	NA
RE39-22-254872	39-61824	14–15	SOIL	—	—	—	—	0.0151 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254873	39-61825	0–1	SOIL	—	—	—	—	0.0119 (J)	—	—	—	0.00503 (J)	—	NA	NA	NA	NA	NA
RE39-22-254874	39-61825	4–5	SOIL	—	—	0.0421	—	0.0213 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254875	39-61825	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254876	39-61826	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254877	39-61826	4.0–5.0	SOIL	—	—	—	—	0.0336 (J)	—	0.027 (J)	—	0.329 (J)	0.0021 (J)	NA	NA	NA	NA	NA
RE39-22-254878	39-61826	9.0–10.0	SOIL	—	—	—	—	0.018 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254879	39-61827	0.0–1.0	SOIL	—	—	—	—	0.0285 (J)	—	0.0183 (J)	—	0.216 (J)	—	NA	NA	NA	NA	NA
RE39-22-254880	39-61827	4.0–5.0	SOIL	—	—	—	—	0.012 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254881	39-61827	9–10	SOIL	—	—	—	—	0.0193 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254882	39-61828	0–1	SOIL	—	—	—	—	0.0254 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254883	39-61828	4–5	SOIL	—	—	—	—	0.0132 (J-)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254884	39-61828	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254885	39-61829	0–1	SOIL	—	—	—	—	—	—	—	0.0272 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254886	39-61829	4–5	SOIL	—	—	—	0.00203 (J)	—	—	—	0.011 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254887	39-61829	9–10	SOIL	—	—	—	—	—	—	—	0.0119 (J)	—	—	NA	NA	NA	NA	NA
RE39-22-254891	39-61831	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254892	39-61831	4–5	SOIL	—	—	—	—	0.0129 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254900	39-61834	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254903	39-61835	3–4	SOIL	—	—	—	0.147	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254904	39-61835	6–7	SOIL	—	—	—	0.095	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254905	39-61835	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254906	39-61835	14–15	SOIL	—	—	—	—	—	—	—	—	0.00588	—	NA	NA	NA	NA	NA
RE39-22-254910	39-61837	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Butylbenzylphthalate	Carbazole	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Construction Worker SSL[a]				**99,000[c]**	**85[h]**	**28,300**	**23,100**	**26,900**	**2700[c]**	**24**	**215,000**	**10,000**	**10,000**	**na[h]**	**na**	**na**	**na**	**na**
Industrial SSL[a]				**12,000[d]**	**1200[h]**	**104,000**	**3230**	**91,600**	**8200[d]**	**3.23**	**733,000**	**33,700**	**33,700**	**na**	**na**	**na**	**na**	**na**
Residential SSL[a]				**2900[d]**	**78[g]**	**6260**	**153**	**6160**	**630[d]**	**0.153**	**49,300**	**2320**	**2320**	**na**	**na**	**na**	**na**	**na**
RE39-22-254911	39-61837	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254912	39-61837	9–10	SOIL	—	—	—	—	0.0153 (J)	—	—	—	0.0156	—	NA	NA	NA	NA	NA
RE39-22-254915	39-61838	9–10	SOIL	—	—	—	—	—	—	—	—	0.00213 (J)	—	NA	NA	NA	NA	NA
RE39-22-254916	39-61839	3–4	SOIL	—	—	—	0.112 (J)	0.0136 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254920	39-61840	3–4	SOIL	—	—	—	0.153	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254921	39-61840	6–7	SOIL	—	—	—	0.108	—	—	—	—	0.00342	—	NA	NA	NA	NA	NA
RE39-22-254922	39-61840	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254923	39-61840	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254924	39-61841	3–4	SOIL	—	—	—	—	—	—	—	—	0.00237 (J)	—	NA	NA	NA	NA	NA
RE39-22-254925	39-61841	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254926	39-61841	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE39-22-254927	39-61841	14–15	SOIL	—	—	—	—	0.0725	—	—	—	0.0034	—	NA	NA	NA	NA	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340[c]**	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600[c]**	**798**
Industrial SSL[a]				**1300[d]**	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800[d]**	**4280**
Residential SSL[a]				**200[d]**	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300[d]**	**871**
0239-96-0485	39-01502	8–9	FILL	—	—	—	—	—	NA	—	—	NA	NA	—	0.49	—	—	—	NA
RE39-09-5389	39-604868	9.5–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5391	39-604869	9.5–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5392	39-604869	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5393	39-604870	9.5–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5397	39-604872	9.5–10	SOIL	—	—	0.0009 (J)	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5399	39-604873	9.5–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5400	39-604873	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5401	39-604874	9.5–10	SOIL	—	—	—	0.00059 (J)	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5403	39-604875	9.5–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5407	39-604877	9.5–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5408	39-604877	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5409	39-604878	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	0.00042 (J)	NA
RE39-09-5412	39-604879	10.5–11	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	0.00044 (J)	NA
RE39-09-5413	39-604880	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5414	39-604880	10.5–11	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5415	39-604881	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5419	39-604883	10–10.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	0.00042 (J)	NA
RE39-09-5423	39-604885	3–4	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5424	39-604885	6–7	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5425	39-604886	3–4	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	0.00046 (J)	NA
RE39-09-5426	39-604886	6–7	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	0.00056 (J)	NA
RE39-09-5428	39-604887	6–7	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	0.00048 (J)	—	NA
RE39-09-5429	39-604888	3–4	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5430	39-604888	6–9	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340[c]**	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600[c]**	**798**
Industrial SSL[a]				**1300[d]**	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800[d]**	**4280**
Residential SSL[a]				**200[d]**	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300[d]**	**871**
RE39-09-5431	39-604889	3–4	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5432	39-604889	6–7	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5434	39-604890	9–12	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5435	39-604891	3–5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-9771	39-604891	3–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	7.63e-006 (J)	5.87e-007 (J)	NA	NA	NA	NA	NA	NA
RE39-09-5436	39-604891	8–10	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5437	39-604892	2–4	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5438	39-604892	7–9	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-09-5439	39-604893	1–3	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	0.00047 (J)	—	NA
RE39-09-5442	39-604894	3–4.5	SOIL	—	—	—	—	—	NA	—	—	NA	NA	—	—	—	—	—	NA
RE39-22-254724	39-61780	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254725	39-61780	14–15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.00168 (J)	—	—	—
RE39-22-254726	39-61781	3–4	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254729	39-61781	14–15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254730	39-61782	3–4	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254731	39-61782	6–7	SOIL	—	0.00202 (J)	—	—	—	—	—	—	NA	NA	—	—	0.00202 (J)	—	—	—
RE39-22-254732	39-61782	9–10	SOIL	—	—	—	—	0.00204 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254733	39-61782	14–15	SOIL	—	—	—	—	0.0022 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254735	39-61783	6–7	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254736	39-61783	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254737	39-61783	14–15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254738	39-61784	3–4	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254739	39-61784	6–7	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254740	39-61784	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254741	39-61784	14–15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254742	39-61785	3–4	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254743	39-61785	6–7	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340[c]**	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600[c]**	**798**
Industrial SSL[a]				**1300[d]**	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800[d]**	**4280**
Residential SSL[a]				**200[d]**	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300[d]**	**871**
RE39-22-254745	39-61785	14-15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254746	39-61786	3–4	SOIL	—	—	—	—	0.00278 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254747	39-61786	6–7	SOIL	—	—	—	—	0.00296 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254748	39-61786	9–10	SOIL	—	—	—	—	0.0031 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254749	39-61786	14–15	SOIL	—	—	—	—	0.00363 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254750	39-61787	3–4	SOIL	—	—	—	—	0.00195 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254751	39-61787	6–7	SOIL	—	—	—	—	0.00206 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254752	39-61787	9–10	SOIL	—	—	—	—	0.002 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254754	39-61788	3–4	SOIL	—	—	—	—	0.00192 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254755	39-61788	6–7	SOIL	—	0.00374 (J)	—	—	—	—	—	—	NA	NA	—	—	0.00408 (J)	—	—	—
RE39-22-254756	39-61788	9–10	SOIL	—	—	—	—	0.00191 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254757	39-61788	14–15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254758	39-61789	3–4	SOIL	—	0.106 (J)	—	—	—	—	—	—	NA	NA	0.0232 (J)	—	0.209 (J)	—	—	—
RE39-22-254759	39-61789	6–7	SOIL	—	0.0217 (J)	—	—	—	—	—	—	NA	NA	0.00585 (J)	—	0.0543 (J)	—	—	—
RE39-22-254760	39-61789	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254763	39-61790	6–7	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254764	39-61790	9–10	SOIL	—	—	—	—	0.00206 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254765	39-61790	14–15	SOIL	—	—	—	—	0.00208 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254766	39-61791	3–4	SOIL	—	0.0694	—	—	—	—	—	—	NA	NA	0.0148 (J)	—	0.142 (J)	—	—	—
RE39-22-254767	39-61791	6–7	SOIL	—	0.0621 (J)	—	—	—	—	—	—	NA	NA	0.0156 (J)	—	0.417 (J)	—	—	—
RE39-22-254768	39-61791	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254771	39-61792	6–7	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254774	39-61793	3.8–4.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00182 (J)	—	0.00255 (J)	—	—	—
RE39-22-254775	39-61793	5.8–6.8	SOIL	—	—	—	—	0.00195 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254778	39-61794	5.7–6.7	SOIL	—	—	—	—	0.00248 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254783	39-61796	3.8–4.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.0111 (J)	—	0.0181	—	—	—
RE39-22-254784	39-61796	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	0.000461 (J)	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340**[c]	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600**[c]	**798**
Industrial SSL[a]				**1300**[d]	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800**[d]	**4280**
Residential SSL[a]				**200**[d]	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300**[d]	**871**
RE39-22-254786	39-61797	7.66–8.66	SOIL	—	—	—	—	—	—	0.00392 (J)	0.0025 (J)	NA	NA	0.00357 (J)	—	0.00178 (J)	—	—	—
RE39-22-254787	39-61797	9.66–10.66	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.00245 (J)	—	—	—
RE39-22-254788	39-61797	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.00178 (J)	—	—	—
RE39-22-254789	39-61798	4–5	SOIL	—	0.00182 (J)	—	—	—	—	—	—	NA	NA	0.00328 (J)	—	0.00474	—	—	—
RE39-22-254790	39-61798	6–7	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.00282 (J)	—	—	—
RE39-22-254792	39-61799	1.95–2.95	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.0387	—	—	—
RE39-22-254793	39-61799	3.95–4.95	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00348 (J)	—	0.00232 (J)	—	—	—
RE39-22-254796	39-61800	4.2–5.2	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254798	39-61801	3.3–4.3	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00399	—	0.00652	—	—	—
RE39-22-254799	39-61801	5.3–6.3	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00213 (J)	—	0.00284 (J)	—	—	—
RE39-22-254801	39-61802	3–4	SOIL	—	0.0866	—	—	—	—	—	—	NA	NA	0.0191 (J)	—	0.169 (J)	—	—	—
RE39-22-254802	39-61802	6–7	SOIL	—	0.00413 (J)	—	—	—	—	—	—	NA	NA	—	—	0.00752 (J)	—	—	—
RE39-22-254804	39-61802	14–15	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.00354 (J)	—	—	—
RE39-22-254806	39-61803	6.3–7.3	SOIL	—	0.00581 (J)	—	—	—	—	—	—	NA	NA	0.0082 (J)	—	0.014 (J)	—	—	—
RE39-22-254808	39-61804	4.8–5.8	SOIL	—	0.015 (J)	—	—	—	—	—	—	NA	NA	0.0275 (J)	—	0.0386 (J)	—	—	—
RE39-22-254809	39-61804	6.8–7.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254810	39-61804	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254811	39-61805	4.3–5.3	SOIL	—	0.0771 (J)	—	—	—	0.0025 (J)	0.00178 (J)	0.005 (J)	NA	NA	0.148 (J)	—	0.197 (J)	—	—	—
RE39-22-254812	39-61805	6.3–7.3	SOIL	—	—	—	—	—	0.00612	0.00612	0.00432 (J)	NA	NA	—	—	—	—	—	—
RE39-22-254813	39-61805	8.3–9.3	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254814	39-61806	4.3–5.3	SOIL	—	0.00293 (J)	—	—	—	—	—	—	NA	NA	0.00403 (J)	—	0.00659 (J)	—	—	—
RE39-22-254816	39-61806	8.3–9.3	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00359 (J)	—	0.00467 (J)	—	—	—
RE39-22-254817	39-61807	4.8–5.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	0.013 (J-)	—	—	—
RE39-22-254818	39-61807	6.8–7.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254819	39-61807	8.8–9.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254820	39-61808	5.1–6.1	SOIL	—	0.00213 (J)	—	—	—	—	—	—	NA	NA	0.00248 (J)	—	0.00426 (J)	—	—	—
RE39-22-254821	39-61808	7.1–8.1	SOIL	—	0.0049 (J)	—	—	—	—	—	—	NA	NA	0.0126 (J)	—	0.014 (J)	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340[c]**	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600[c]**	**798**
Industrial SSL[a]				**1300[d]**	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800[d]**	**4280**
Residential SSL[a]				**200[d]**	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300[d]**	**871**
RE39-22-254822	39-61808	9.1–10.1	SOIL	—	0.00419 (J)	—	—	—	—	—	—	NA	NA	0.00419 (J)	—	0.00908 (J)	—	—	—
RE39-22-254823	39-61809	9.5–10.5	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254826	39-61810	5.75–6.75	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254829	39-61811	7.66–8.66	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00324 (J)	—	0.00432 (J)	—	—	—
RE39-22-254831	39-61811	11.66–12.66	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254832	39-61812	3.8–4.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254833	39-61812	5.8–6.8	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254835	39-61813	3.0–4.0	SOIL	—	0.124 (J)	—	—	—	—	—	—	NA	NA	0.0242 (J)	—	0.234 (J)	—	—	—
RE39-22-254836	39-61813	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	NA	NA	-	—	-	—	—	—
RE39-22-254837	39-61813	9.0–10.0	SOIL	—	0.087 (J)	—	—	—	—	—	—	NA	NA	0.0176 (J)	—	0.153 (J)	—	—	—
RE39-22-254838	39-61813	14.0–15.0	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254839	39-61814	1.3–2.3	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254840	39-61814	3.3–4.3	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254844	39-61815	16.9–17.9	SOIL	—	—	—	—	—	—	0.00291 (J+)	—	NA	NA	—	—	—	—	—	—
RE39-22-254845	39-61816	10–11	SOIL	0.00275 (J)	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254846	39-61816	12–13	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254853	39-61818	11.25–12.25	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254856	39-61819	10.4–11.4	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254857	39-61820	5.5–6.5	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	0.0011 (J)
RE39-22-254858	39-61820	7.6–8.6	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254860	39-61821	4.58–5.58	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	0.00113 (J)
RE39-22-254862	39-61821	8.58–9.58	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254863	39-61822	3.25–4.25	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254864	39-61822	6.25–7.25	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	0.000838 (J)
RE39-22-254866	39-61823	0–1	SOIL	—	0.00277 (J)	—	—	—	—	—	—	NA	NA	0.0038	—	0.00622	—	—	—
RE39-22-254867	39-61823	4–5	SOIL	0.0251	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254868	39-61823	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340[c]**	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600[c]**	**798**
Industrial SSL[a]				**1300[d]**	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800[d]**	**4280**
Residential SSL[a]				**200[d]**	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300[d]**	**871**
RE39-22-254869	39-61824	3–4	SOIL	—	0.00691	—	—	0.00226 (J)	—	—	—	NA	NA	0.00218 (J)	—	0.0127 (J)	—	—	—
RE39-22-254870	39-61824	6–7	SOIL	—	—	—	—	0.00205 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254871	39-61824	9–10	SOIL	—	—	—	—	0.0023 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254872	39-61824	14–15	SOIL	—	—	—	—	0.00234 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254873	39-61825	0–1	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00239 (J)	—	0.00273 (J)	—	—	—
RE39-22-254874	39-61825	4–5	SOIL	0.231	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254875	39-61825	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254876	39-61826	0–1	SOIL	—	—	—	0.00816 (J-)	—	—	—	—	NA	NA	—	—	0.00203 (J)	—	—	—
RE39-22-254877	39-61826	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254878	39-61826	9.0–10.0	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254879	39-61827	0.0–1.0	SOIL	—	—	—	0.00169 (J)	—	—	—	—	NA	NA	0.00238 (J)	—	0.00306 (J)	—	—	—
RE39-22-254880	39-61827	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254881	39-61827	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254882	39-61828	0–1	SOIL	—	—	—	—	0.00203 (J)	—	—	—	NA	NA	0.00216 (J)	—	0.00216 (J)	—	—	—
RE39-22-254883	39-61828	4–5	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254884	39-61828	9–10	SOIL	—	—	—	—	0.00241 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254885	39-61829	0–1	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.0021 (J)	—	0.0028 (J)	—	—	—
RE39-22-254886	39-61829	4–5	SOIL	—	0.00305 (J)	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254887	39-61829	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254891	39-61831	0–1	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00289 (J)	—	0.00325 (J)	—	—	—
RE39-22-254892	39-61831	4–5	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254900	39-61834	0–1	SOIL	—	—	—	—	—	—	—	—	NA	NA	0.00183 (J)	—	0.00329 (J)	—	—	—
RE39-22-254903	39-61835	3–4	SOIL	—	0.144	—	—	0.00317 (J)	—	—	—	NA	NA	0.0248 (J)	—	0.224	—	—	—
RE39-22-254904	39-61835	6–7	SOIL	—	0.0884	—	—	0.00374 (J)	—	—	—	NA	NA	0.0198	—	0.16	—	—	—
RE39-22-254905	39-61835	9–10	SOIL	—	—	—	—	0.00369 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254906	39-61835	14–15	SOIL	—	—	—	—	0.00458 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254910	39-61837	0–1	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Phenol	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Construction Worker SSL[a]				**340[c]**	**240**	**na**	**2740**	**1210**	**6060**	**1000**	**159**	**na**	**na**	**8070**	**77,400**	**7530**	**14,000**	**600[c]**	**798**
Industrial SSL[a]				**1300[d]**	**32.3**	**na**	**14,200**	**5130**	**813**	**3370**	**108**	**na**	**na**	**27,500**	**275,000**	**25,300**	**61,300**	**1800[d]**	**4280**
Residential SSL[a]				**200[d]**	**1.53**	**na**	**2360**	**409**	**172**	**232**	**22.6**	**na**	**na**	**1850**	**18,500**	**1740**	**5230**	**300[d]**	**871**
RE39-22-254911	39-61837	4–5	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254912	39-61837	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254915	39-61838	9–10	SOIL	—	—	—	—	—	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254916	39-61839	3–4	SOIL	—	0.083	—	—	—	—	—	—	NA	NA	0.0177 (J)	—	0.155	—	—	—
RE39-22-254920	39-61840	3–4	SOIL	—	0.137	—	—	0.00381 (J)	—	—	—	NA	NA	0.0224 (J)	—	0.229	—	—	—
RE39-22-254921	39-61840	6–7	SOIL	—	0.0971	—	—	0.0034 (J)	—	—	—	NA	NA	0.0213 (J)	—	0.18	—	—	—
RE39-22-254922	39-61840	9–10	SOIL	—	—	—	—	0.00355 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254923	39-61840	14–15	SOIL	—	—	—	—	0.00403 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254924	39-61841	3–4	SOIL	—	—	—	—	0.00348 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254925	39-61841	6–7	SOIL	—	—	—	—	0.00323 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254926	39-61841	9–10	SOIL	—	—	—	—	0.00334 (J)	—	—	—	NA	NA	—	—	—	—	—	—
RE39-22-254927	39-61841	14–15	SOIL	—	—	—	—	0.0035 (J)	—	—	—	NA	NA	—	—	—	—	—	—

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[d] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[e] — = Not detected.

[f] NA = Not analyzed.

[g] Dibenzofuran used as a surrogate based on structural similarity.

[h] na = Not available.

Table 6.5-4
Radionuclides Detected or Detected above BVs/FVs at SWMU 39-006(a)

Sample ID	Location ID	Depth (ft)	Media	Cesium-134	Cesium-137	Tritium	Uranium-238
SOIL Background Value[a]				**na[b]**	**1.65**	**na**	**2.29**
Construction Worker SAL 25[c]				**15**	**37**	**1,600,000**	**470**
Industrial Sal 25[c]				**17**	**41**	**2,400,000**	**710**
Residential SAL 25[c]				**5**	**12**	**1700**	**150**
RE39-09-5398	39-604872	10–10.5	SOIL	—	—[d]	1.84	—
RE39-09-5401	39-604874	9.5–10	SOIL	—	—	1.08	—
RE39-09-5402	39-604874	10–10.5	SOIL	—	—	1.07	—
RE39-09-5407	39-604877	9.5–10	SOIL	—	—	0.62	—
RE39-09-5419	39-604883	10–10.5	SOIL	—	—	0.68	—
RE39-09-5439	39-604893	1–3	SOIL	—	0.308	2.02	—
RE39-22-254745	39-61785	14–15	SOIL	0.117	—	—	—
RE39-22-254755	39-61788	6–7	SOIL	—	0.0982	—	—
RE39-22-254757	39-61788	14–15	SOIL	—	0.0719	—	—
RE39-22-254787	39-61797	9.66–10.66	SOIL	—	0.189	—	—
RE39-22-254797	39-61800	6.2–7.2	SOIL	—	—	56.1 (J)	—
RE39-22-254800	39-61801	7.3–8.3	SOIL	—	—	4.23 (J)	—
RE39-22-254811	39-61805	4.3–5.3	SOIL	—	0.0794	—	—
RE39-22-254819	39-61807	8.8–9.8	SOIL	—	0.14	—	—
RE39-22-254820	39-61808	5.1–6.1	SOIL	—	0.0538	—	—
RE39-22-254821	39-61808	7.1–8.1	SOIL	—	0.0994	—	—
RE39-22-254823	39-61809	9.5–10.5	SOIL	—	0.0832	—	—
RE39-22-254869	39-61824	3–4	SOIL	—	0.33	—	—
RE39-22-254873	39-61825	0–1	SOIL	—	—	—	2.76
RE39-22-254879	39-61827	0.0–1.0	SOIL	—	—	—	2.84
RE39-22-254880	39-61827	4.0–5.0	SOIL	—	0.0719	—	—
RE39-22-254882	39-61828	0–1	SOIL	—	—	—	2.79

Note: Results are in pCi/g.

[a] BVs from LANL (1998, 059730).

[b] na = not available.

[c] SALs from LANL (2015, 600929).

[d] — = Not detected or not detected above BV/FV.

Table 6.6-1
Samples Collected and Analyses Requested at SWMU 39-007(a)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium-241	Isotopic Plutonium	Isotopic Uranium	TAL Metals	TAL Metals Plus Uranium	Perchlorate	Mercury	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RC39-01-0001	39-10018	0–0.5	FILL	—*	—	—	—	—	—	9478R	—	—	9478R	9477R	—	—	—	—	—
RE39-17-139911	39-10019	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2413	—	—	—	—	—
RE39-17-139912	39-10019	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2413	—	—	—	—	—
RC39-01-0003	39-10020	0–0.5	FILL	—	—	—	—	—	—	9478R	—	—	9478R	9477R	—	—	—	—	—
RC39-01-0004	39-10021	0–0.5	FILL	—	—	—	—	—	—	9478R	—	—	9478R	9477R	—	—	—	—	—
RC39-01-0005	39-10022	0–0.5	FILL	—	—	—	—	—	—	9478R	—	—	9478R	9477R	—	—	—	—	—
RE39-09-5326	39-604852	0–1	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5327	39-604852	1–2	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5328	39-604852	2–3	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5386	39-604852	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	—	—	—	09-1664	—	—
RE39-09-5329	39-604853	0–1	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5330	39-604853	1–2	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5331	39-604853	2–3	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-17-139913	39-604854	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2413	—	—	—	—	—
RE39-09-5334	39-604854	2–3	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-17-139914	39-604854	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2413	—	—	—	—	—
RE39-09-5335	39-604855	0–1	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5336	39-604855	1–2	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5337	39-604855	2–3	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5338	39-604856	0–1	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5339	39-604856	1–2	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5340	39-604856	2–3	ALLH	09-1438	09-1439	09-1439	09-1439	09-1439	09-1439	09-1438	09-1438	09-1438	09-1438	09-1437	09-1437	09-1437	—	09-1437	09-1438
RE39-09-5341	39-604857	0–1	ALLH	09-1678	09-1679	09-1679	09-1679	09-1679	09-1679	—	09-1678	09-1678	09-1678	09-1677	09-1677	09-1677	—	09-1677	09-1678
RE39-09-5342	39-604857	1–2	ALLH	09-1678	09-1679	09-1679	09-1679	09-1679	09-1679	—	09-1678	09-1678	09-1678	09-1677	09-1677	09-1677	—	09-1677	09-1678
RE39-09-5343	39-604857	2–3	ALLH	09-1678	09-1679	09-1679	09-1679	09-1679	09-1679	—	09-1678	09-1678	09-1678	09-1677	09-1677	09-1677	—	09-1677	09-1678
RE39-09-5344	39-604858	0–1	ALLH	09-1678	09-1679	09-1679	09-1679	09-1679	09-1679	—	09-1678	09-1678	09-1678	09-1677	09-1677	09-1677	—	09-1677	09-1678
RE39-09-5345	39-604858	1–2	ALLH	09-1678	09-1679	09-1679	09-1679	09-1679	09-1679	—	09-1678	09-1678	09-1678	09-1677	09-1677	09-1677	—	09-1677	09-1678
RE39-09-5346	39-604858	2–3	ALLH	09-1678	09-1679	09-1679	09-1679	09-1679	09-1679	—	09-1678	09-1678	09-1678	09-1677	09-1677	09-1677	—	09-1677	09-1678
RE39-09-5347	39-604859	0–1	ALLH	09-1726	09-1725	09-1725	09-1725	09-1725	09-1725	—	09-1725	09-1726	09-1725	09-1725	09-1725	09-1725	—	09-1726	09-1726
RE39-09-5353	39-604861	0–1	ALLH	09-1726	09-1725	09-1725	09-1725	09-1725	09-1725	—	09-1725	09-1726	09-1725	09-1725	09-1725	09-1725	—	09-1726	09-1726
RE39-17-139856	39-61638	0–1	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139862	39-61638	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—

Table 6.6-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium-241	Isotopic Plutonium	Isotopic Uranium	TAL Metals	TAL Metals Plus Uranium	Perchlorate	Mercury	PCBs	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-17-139868	39-61638	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2084	—	—	—	—	—
RE39-17-139857	39-61639	0–1	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139863	39-61639	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139869	39-61639	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2084	—	—	—	—	—
RE39-17-139858	39-61640	0–1	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139864	39-61640	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139870	39-61640	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2084	—	—	—	—	—
RE39-17-139859	39-61641	0–1	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139865	39-61641	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139871	39-61641	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2084	—	—	—	—	—
RE39-17-139860	39-61642	0–1	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139866	39-61642	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139872	39-61642	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2084	—	—	—	—	—
RE39-17-139861	39-61643	0–1	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139867	39-61643	2–3	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2082	—	—	—	—	—
RE39-17-139873	39-61643	4–5	ALLH	—	—	—	—	—	—	—	—	—	—	2017-2084	—	—	—	—	—

Note: Numbers in analyte columns are request numbers

* — = Analysis not requested.

Table 6.6-2
Inorganic Chemicals above BVs at SWMU 39-007(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Nitrate	Perchlorate	Zinc
SOIL Background Value[a]				**0.83**	**0.4**	**0.5**	**na[b]**	**na**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**12.1**	**566,000**	**248**	**106,000**
Industrial SSL[c]				**519**	**1110**	**63.3**	**2,080,000**	**908**	**389,000**
Residential SSL[c]				**31.3**	**70.5**	**11.2**	**125,000**	**54.8**	**23,500**
RC39-01-0001	39-10018	0–0.5	FILL	—[d]	—	NA[e]	NA	NA	57.6
RE39-17-139911	39-10019	2–3	SOIL	NA	NA	NA	NA	NA	NA
RE39-17-139912	39-10019	4–5	SOIL	NA	NA	NA	NA	NA	NA
RE39-09-5326	39-604852	0–1	SOIL	—	0.591	—	—	—	56
RE39-09-5327	39-604852	1–2	SOIL	1.07 (U)	0.533 (U)	—	—	—	—
RE39-09-5328	39-604852	2–3	SOIL	1.04 (U)	0.522 (U)	—	—	—	—
RE39-09-5329	39-604853	0–1	SOIL	1.16 (U)	0.58 (U)	—	—	—	—
RE39-09-5330	39-604853	1–2	SOIL	1.14 (U)	0.57 (U)	—	—	—	—
RE39-09-5331	39-604853	2–3	SOIL	1.04 (U)	0.519 (U)	—	—	—	—
RE39-09-5334	39-604854	2–3	SOIL	1.06 (U)	0.531 (U)	—	—	—	—
RE39-17-139913	39-604854	2–3	SOIL	NA	NA	NA	NA	NA	NA
RE39-17-139914	39-604854	4–5	SOIL	NA	NA	NA	NA	NA	NA
RE39-09-5335	39-604855	0–1	SOIL	—	0.547 (U)	—	3.57	—	—
RE39-09-5336	39-604855	1–2	SOIL	1.03 (U)	0.516 (U)	—	0.879 (J)	—	—
RE39-09-5337	39-604855	2–3	SOIL	1.04 (U)	0.522 (U)	—	—	—	—
RE39-09-5338	39-604856	0–1	SOIL	—	0.575 (U)	—	1.38	—	—
RE39-09-5339	39-604856	1–2	SOIL	1.06 (U)	0.53 (U)	—	—	—	—
RE39-09-5340	39-604856	2–3	SOIL	1.06 (U)	0.53 (U)	—	—	0.000567 (J)	—
RE39-09-5341	39-604857	0–1	SOIL	—	—	0.69 (UJ)	—	—	108

Table 6.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Nitrate	Perchlorate	Zinc
SOIL Background Value[a]				**0.83**	**0.4**	**0.5**	**na[b]**	**na**	**48.8**
Construction Worker SSL[c]				**142**	**72.1**	**12.1**	**566,000**	**248**	**106,000**
Industrial SSL[c]				**519**	**1110**	**63.3**	**2,080,000**	**908**	**389,000**
Residential SSL[b]				**31.3**	**70.5**	**11.2**	**125,000**	**54.8**	**23,500**
RE39-09-5342	39-604857	1–2	SOIL	—	—	—	—	—	54.5
RE39-09-5343	39-604857	2–3	SOIL	—	—	0.59 (UJ)	—	—	—
RE39-09-5344	39-604858	0–1	SOIL	—	—	—	—	—	—
RE39-09-5345	39-604858	1–2	SOIL	—	—	—	—	—	—
RE39-09-5346	39-604858	2–3	SOIL	—	—	0.54 (UJ)	—	—	—
RE39-09-5347	39-604859	0–1	SOIL	1.2 (U)	—	—	—	—	—
RE39-09-5353	39-604861	0–1	SOIL	—	—	—	—	—	—

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

[e] NA = Not analyzed.

Table 6.6-3
Organic Chemicals Detected at SWMU 39-007(a)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	Dichlorobenzene[1,4-]	Ethylbenzene	Fluoranthene	Phenanthrene	Pyrene	Toluene
Construction Worker SSL[a]				**242,000**	**85.3**	**4.91**	**85.3**	**2310**	**5380**	**99,000[b]**	**23,100**	**24,800**	**1770**	**10,000**	**8070**	**7530**	**14,000**
Industrial SSL[a]				**960,000**	**10.7**	**11**	**11.1**	**323**	**1830**	**12,000[c]**	**3230**	**6730**	**368**	**33,700**	**27,500**	**25,300**	**61,300**
Residential SSL[a]				**66,300**	**2.43**	**1.14**	**2.43**	**15.3**	**380**	**2900[c]**	**153**	**1290**	**75.1**	**2320**	**1850**	**1740**	**5230**
RC39-01-0001	39-10018	0–0.5	FILL	NA [d]	— [e]	—	0.032 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-17-139912	39-10019	4–5	SOIL	NA	—	—	0.0015 (J-)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RC39-01-0003	39-10020	0–0.5	FILL	NA	—	—	0.086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RC39-01-0005	39-10022	0–0.5	FILL	NA	—	—	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5326	39-604852	0–1	SOIL	—	—	0.0438	0.0228	—	0.189 (J)	—	—	—	—	—	—	—	—
RE39-09-5327	39-604852	1–2	SOIL	—	—	0.0094	0.0046	—	—	—	—	—	—	—	—	—	—
RE39-09-5328	39-604852	2–3	SOIL	0.0103 (J)	—	—	—	—	0.163 (J)	—	—	—	—	—	—	—	—
RE39-09-5329	39-604853	0–1	SOIL	—	—	0.0039 (J)	0.0033 (J)	—	0.0872 (J)	—	—	—	—	—	—	—	—
RE39-09-5330	39-604853	1–2	SOIL	—	0.202	—	0.0269 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-5331	39-604853	2–3	SOIL	—	0.00806	0.00605	0.00308 (J)	—	0.18 (J)	—	—	—	—	—	—	—	—
RE39-09-5334	39-604854	2–3	SOIL	—	—	0.268	0.089	—	0.11 (J)	—	—	—	—	—	—	—	—
RE39-17-139913	39-604854	2–3	SOIL	NA	—	—	0.00836	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5335	39-604855	0–1	SOIL	—	—	0.0404	0.0361	—	0.225 (J)	—	—	—	—	—	—	—	—
RE39-09-5336	39-604855	1–2	SOIL	—	—	—	0.0022 (J)	—	0.159 (J)	—	—	—	—	—	—	—	—
RE39-09-5337	39-604855	2–3	SOIL	—	—	—	—	—	0.155 (J)	—	—	—	—	—	—	—	—
RE39-09-5338	39-604856	0–1	SOIL	—	—	0.0341	0.0212	—	—	—	—	—	—	—	—	—	—
RE39-09-5339	39-604856	1–2	SOIL	—	—	0.0024 (J)	0.0016 (J)	—	0.21 (J)	—	—	—	—	—	—	—	—
RE39-09-5340	39-604856	2–3	SOIL	—	—	0.0026 (J)	0.0015 (J)	—	0.163 (J)	—	—	—	—	—	—	—	—
RE39-09-5341	39-604857	0–1	SOIL	—	—	—	—	—	—	—	—	0.00059 (J)	0.00043 (J)	—	—	—	0.00095 (J)
RE39-09-5344	39-604858	0–1	SOIL	—	—	—	—	—	—	0.077 (J)	—	0.00074 (J)	0.00043 (J)	—	—	—	0.00041 (J)
RE39-09-5345	39-604858	1–2	SOIL	—	—	—	—	—	—	—	—	—	0.00033 (J)	—	—	—	—
RE39-09-5347	39-604859	0–1	SOIL	—	—	0.4 (J)	—	—	—	—	—	—	—	—	—	—	—
RE39-09-5353	39-604861	0–1	SOIL	—	0.35 (J)	0.26 (J)	—	0.042 (J)	—	—	0.04 (J)	—	—	0.076 (J)	0.067 (J)	0.08 (J)	—

Table 6.6-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	Dichlorobenzene[1,4-]	Ethylbenzene	Fluoranthene	Phenanthrene	Pyrene	Toluene
Construction Worker SSL[a]				**242,000**	**85.3**	**4.91**	**85.3**	**2310**	**5380**	**99,000 [d]**	**23,100**	**24,800**	**1770**	**10,000**	**8070**	**7530**	**14,000**
Industrial SSL[a]				**960,000**	**10.7**	**11**	**11.1**	**323**	**1830**	**12,000 [e]**	**3230**	**6730**	**368**	**33,700**	**27,500**	**25,300**	**61,300**
Residential SSL[a]				**66,300**	**2.43**	**1.14**	**2.43**	**15.3**	**380**	**2900 [e]**	**153**	**1290**	**75.1**	**2320**	**1850**	**1740**	**5230**
RE39-17-139856	39-61638	0–1	SOIL	NA	—	—	0.0286	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-17-139857	39-61639	0–1	SOIL	NA	—	—	0.00829	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-17-139858	39-61640	0–1	SOIL	NA	0.0491	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-17-139859	39-61641	0–1	SOIL	NA	—	—	0.0102	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-17-139861	39-61643	0–1	SOIL	NA	—	—	0.00923	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[c] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] NA = Not analyzed.

[e] — = Not detected.

Table 6.7-1
Samples Collected and Analyses Requested at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-09-2112	39-604425	0–1	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2113	39-604425	1–2	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2114	39-604425	2–3	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2115	39-604426	0–1	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2116	39-604426	1–2	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-22-253418	39-604426	14–15	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-22-253419	39-604426	19–20	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-09-2117	39-604426	2–3	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-22-253415	39-604426	4–5	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253416	39-604426	6–7	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-22-253417	39-604426	9–10	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-09-2118	39-604427	0–1	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2119	39-604427	1–2	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2120	39-604427	2–3	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2121	39-604428	0–1	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2122	39-604428	1–2	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2123	39-604428	2–3	ALLH	09-1219	09-1220	09-1220	09-1220	09-1220	09-1220	09-1219	09-1219
RE39-09-2124	39-604429	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2125	39-604429	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2126	39-604429	2–3	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2127	39-604430	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2128	39-604430	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2129	39-604430	2–3	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2130	39-604431	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2131	39-604431	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2132	39-604431	2–3	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2133	39-604432	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-09-2134	39-604432	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-22-253423	39-604432	14–15	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-22-253424	39-604432	19–20	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-09-2135	39-604432	2–3	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-22-253420	39-604432	4–5	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-22-253421	39-604432	6–7	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-22-253422	39-604432	9–10	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103
RE39-09-2136	39-604433	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2137	39-604433	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-22-253428	39-604433	14–15	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253429	39-604433	19–20	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-09-2138	39-604433	2–3	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-22-253425	39-604433	4–5	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253426	39-604433	6–7	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253427	39-604433	9–10	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-09-2139	39-604434	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2140	39-604434	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2141	39-604434	2–3	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2142	39-604435	0–1	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2143	39-604435	1–2	ALLH	09-1227	09-1228	09-1228	09-1228	09-1228	09-1228	09-1227	09-1227
RE39-09-2144	39-604435	2–3	ALLH	09-1230	09-1231	09-1231	09-1231	09-1231	09-1231	09-1230	09-1230
RE39-09-2145	39-604436	0–1	ALLH	09-1230	09-1231	09-1231	09-1231	09-1231	09-1231	09-1230	09-1230
RE39-09-2146	39-604436	1–2	ALLH	09-1230	09-1231	09-1231	09-1231	09-1231	09-1231	09-1230	09-1230
RE39-09-2147	39-604436	2–3	ALLH	09-1230	09-1231	09-1231	09-1231	09-1231	09-1231	09-1230	09-1230
RE39-09-2148	39-604437	0–1	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2149	39-604437	1–2	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2150	39-604437	2–3	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2151	39-604438	0–1	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2152	39-604438	1–2	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-09-2153	39-604438	2–3	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2154	39-604439	0–1	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2155	39-604439	1–2	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2156	39-604439	2–3	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2157	39-604440	0–1	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2158	39-604440	1–2	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2159	39-604440	2–3	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2160	39-604441	0–1	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2161	39-604441	1–2	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2162	39-604441	2–3	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2163	39-604442	0–1	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-09-2164	39-604442	1–2	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-22-253433	39-604442	14–15	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253434	39-604442	19–20	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-09-2165	39-604442	2–3	ALLH	09-1800	09-1802	09-1802	09-1802	09-1802	09-1802	09-1800	09-1800
RE39-22-253430	39-604442	4–5	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253431	39-604442	6–7	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253432	39-604442	9–10	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253435	39-61707	0–1	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253436	39-61707	2–3	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253437	39-61707	4–5	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253438	39-61707	6–7	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253439	39-61707	9–10	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253440	39-61708	0–1	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182
RE39-22-253441	39-61708	2–3	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182
RE39-22-253442	39-61708	4–5	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182
RE39-22-253443	39-61708	6–7	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182
RE39-22-253444	39-61708	9–10	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182
RE39-22-253445	39-61709	0-1	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253446	39-61709	2–3	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182
RE39-22-253447	39-61709	4–5	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253448	39-61709	6–7	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253449	39-61709	9–10	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253450	39-61710	0-1	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253451	39-61710	2–3	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253452	39-61710	4–5	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253453	39-61710	6–7	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266
RE39-22-253454	39-61710	9–10	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284
RE39-22-253455	39-61711	0-1	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253456	39-61711	2–3	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253457	39-61711	4–5	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253458	39-61711	6–7	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253459	39-61711	9–10	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253460	39-61712	0-1	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253461	39-61712	2–3	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253462	39-61712	4–5	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253463	39-61712	6–7	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253464	39-61712	9–10	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253465	39-61713	0–1	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253466	39-61713	2–3	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253467	39-61713	4–5	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253468	39-61713	6–7	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253469	39-61713	9–10	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253470	39-61714	0–1	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253471	39-61714	2–3	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253472	39-61714	4–5	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253473	39-61714	6–7	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253474	39-61714	9–10	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253475	39-61715	0–1	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253476	39-61715	2–3	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253477	39-61715	4–5	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253478	39-61715	6–7	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253479	39-61715	9–10	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253480	39-61716	0–1	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253481	39-61716	2–3	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253482	39-61716	4–5	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253483	39-61716	6–7	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253484	39-61716	9–10	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102
RE39-22-253485	39-61717	0-1	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253486	39-61717	2–3	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253487	39-61717	4–5	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253488	39-61717	6–7	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253489	39-61717	9–10	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253490	39-61718	0–1	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253491	39-61718	2–3	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253492	39-61718	4–5	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253493	39-61718	6–7	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253494	39-61718	9–10	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322
RE39-22-253495	39-61719	0–1	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322
RE39-22-253496	39-61719	2–3	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322
RE39-22-253497	39-61719	4–5	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322
RE39-22-253498	39-61719	6–7	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253499	39-61719	9–10	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253500	39-61720	0–1	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253501	39-61720	2–3	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253502	39-61720	4–5	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253503	39-61720	6–7	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253504	39-61720	9–10	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321
RE39-22-253505	39-61721	0–1	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253506	39-61721	2–3	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253507	39-61721	4–5	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253508	39-61721	6–7	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253509	39-61721	9–10	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253510	39-61722	0–1	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284
RE39-22-253511	39-61722	2–3	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284
RE39-22-253512	39-61722	4–5	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284
RE39-22-253513	39-61722	6–7	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253514	39-61722	9–10	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253515	39-61723	0–1	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253516	39-61723	2–3	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253517	39-61723	4–5	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253518	39-61723	6–7	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253519	39-61723	9–10	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253520	39-61724	0–1	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253521	39-61724	2–3	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253522	39-61724	4–5	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253523	39-61724	6–7	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253524	39-61724	9–10	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253525	39-61725	0–1	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253526	39-61725	2–3	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253527	39-61725	4–5	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253528	39-61725	6–7	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253529	39-61725	9–10	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253530	39-61726	0–1	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253531	39-61726	2–3	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253532	39-61726	4–5	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253533	39-61726	6–7	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253534	39-61726	9–10	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80
RE39-22-253535	39-61727	0–1	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253536	39-61727	2–3	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253537	39-61727	4–5	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253538	39-61727	6–7	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253539	39-61727	9–10	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81
RE39-22-253540	39-61728	0–1	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253541	39-61728	2–3	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253542	39-61728	4–5	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253543	39-61728	6–7	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253544	39-61728	9–10	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253545	39-61729	0–1	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253546	39-61729	2–3	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253547	39-61729	4–5	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253548	39-61729	6–7	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253549	39-61729	9–10	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253550	39-61730	0–1	ALLH	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349
RE39-22-253555	39-61730	14–15	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253556	39-61730	19–20	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253551	39-61730	2–3	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253552	39-61730	4–5	ALLH	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349
RE39-22-253553	39-61730	6–7	ALLH	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349
RE39-22-253554	39-61730	9–10	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253557	39-61731	0–1	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253562	39-61731	14–15	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253563	39-61731	19–20	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253558	39-61731	2–3	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253559	39-61731	4–5	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253560	39-61731	6–7	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253561	39-61731	9–10	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253564	39-61732	0–1	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253569	39-61732	14–15	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253570	39-61732	19–20	QBT2	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253565	39-61732	2–3	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253566	39-61732	4–5	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253567	39-61732	6–7	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253568	39-61732	9–10	QBT3	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104
RE39-22-253571	39-61733	0–1	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253576	39-61733	14–15	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253577	39-61733	19–20	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253572	39-61733	2–3	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253573	39-61733	4–5	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253574	39-61733	6–7	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253575	39-61733	9–10	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98
RE39-22-253578	39-61734	0–1	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253583	39-61734	14–15	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253584	39-61734	19–20	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253579	39-61734	2–3	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253580	39-61734	4–5	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253581	39-61734	6–7	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253582	39-61734	9–10	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101
RE39-22-253585	39-61735	0–1	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253590	39-61735	14–15	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253591	39-61735	19–20	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253586	39-61735	2–3	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253587	39-61735	4–5	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253588	39-61735	6–7	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253589	39-61735	9–10	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255
RE39-22-253592	39-61736	0–1	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253597	39-61736	14-15	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253593	39-61736	2–3	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253594	39-61736	4–5	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253595	39-61736	6–7	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253596	39-61736	9–10	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129
RE39-22-253599	39-61737	0–1	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253600	39-61737	2–3	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253601	39-61737	4–5	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253602	39-61737	6–7	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253603	39-61737	9–10	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24
RE39-22-253604	39-61738	0–1	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284
RE39-22-253605	39-61738	2–3	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284
RE39-22-253606	39-61738	4–5	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253607	39-61738	6–7	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253608	39-61738	9–10	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303
RE39-22-253609	39-61739	0–1	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253610	39-61739	2–3	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253611	39-61739	4–5	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253612	39-61739	6–7	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253613	39-61739	9–10	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4
RE39-22-253614	39-61740	0–1	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253615	39-61740	2–3	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253616	39-61740	4–5	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253617	39-61740	6–7	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253618	39-61740	9–10	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63
RE39-22-253619	39-61741	0–1	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256
RE39-22-253620	39-61741	2–3	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Nitrate	Gamma-Emitting Radionuclides	Tritium	Americium	Isotopic Plutonium	Isotopic Uranium	TAL Metals	Perchlorate
RE39-22-253621	39-61741	4–5	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256
RE39-22-253622	39-61741	6–7	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256
RE39-22-253623	39-61741	9–10	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256
RE39-22-253624	39-61742	0–1	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253625	39-61742	2–3	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253626	39-61742	4–5	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253627	39-61742	6–7	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335
RE39-22-253628	39-61742	9–10	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-09-2112	39-604425	0–1	ALLH	09-1219	09-1218	*—	09-1218	—	09-1218	09-1219
RE39-09-2113	39-604425	1–2	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-09-2114	39-604425	2–3	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-09-2115	39-604426	0–1	ALLH	09-1219	09-1218	—	09-1218	—	09-1218	09-1219
RE39-09-2116	39-604426	1–2	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-22-253418	39-604426	14–15	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-22-253419	39-604426	19–20	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-09-2117	39-604426	2–3	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-22-253415	39-604426	4–5	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253416	39-604426	6–7	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-22-253417	39-604426	9–10	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-09-2118	39-604427	0–1	ALLH	09-1219	09-1218	—	09-1218	—	09-1218	09-1219
RE39-09-2119	39-604427	1–2	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-09-2120	39-604427	2–3	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-09-2121	39-604428	0–1	ALLH	09-1219	09-1218	—	09-1218	—	09-1218	09-1219
RE39-09-2122	39-604428	1–2	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-09-2123	39-604428	2–3	ALLH	09-1219	09-1218	09-1218	09-1218	—	09-1218	09-1219
RE39-09-2124	39-604429	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227
RE39-09-2125	39-604429	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2126	39-604429	2–3	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2127	39-604430	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227
RE39-09-2128	39-604430	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2129	39-604430	2–3	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2130	39-604431	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227
RE39-09-2131	39-604431	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2132	39-604431	2–3	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2133	39-604432	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-09-2134	39-604432	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-22-253423	39-604432	14–15	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-22-253424	39-604432	19–20	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-09-2135	39-604432	2–3	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-22-253420	39-604432	4–5	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-22-253421	39-604432	6–7	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-22-253422	39-604432	9–10	ALLH	N3B-2023-103	N3B-2023-103	N3B-2023-103	N3B-2023-103	—	N3B-2023-103	N3B-2023-103
RE39-09-2136	39-604433	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227
RE39-09-2137	39-604433	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-22-253428	39-604433	14–15	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253429	39-604433	19–20	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-09-2138	39-604433	2–3	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-22-253425	39-604433	4–5	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253426	39-604433	6–7	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253427	39-604433	9–10	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-09-2139	39-604434	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227
RE39-09-2140	39-604434	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2141	39-604434	2–3	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2142	39-604435	0–1	ALLH	09-1227	09-1226	—	09-1226	—	09-1226	09-1227
RE39-09-2143	39-604435	1–2	ALLH	09-1227	09-1226	09-1226	09-1226	—	09-1226	09-1227
RE39-09-2144	39-604435	2–3	ALLH	09-1230	09-1229	09-1229	09-1229	—	09-1229	09-1230
RE39-09-2145	39-604436	0–1	ALLH	09-1230	09-1229	—	09-1229	—	09-1229	09-1230
RE39-09-2146	39-604436	1–2	ALLH	09-1230	09-1229	09-1229	09-1229	—	09-1229	09-1230
RE39-09-2147	39-604436	2–3	ALLH	09-1230	09-1229	09-1229	09-1229	—	09-1229	09-1230
RE39-09-2148	39-604437	0–1	ALLH	09-1800	09-1801	09-1801	09-1801	09-1804	09-1801	09-1800
RE39-09-2149	39-604437	1–2	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2150	39-604437	2–3	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2151	39-604438	0–1	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2152	39-604438	1–2	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-09-2153	39-604438	2–3	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2154	39-604439	0–1	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2155	39-604439	1–2	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2156	39-604439	2–3	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2157	39-604440	0–1	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2158	39-604440	1–2	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2159	39-604440	2–3	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2160	39-604441	0–1	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2161	39-604441	1–2	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2162	39-604441	2–3	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2163	39-604442	0–1	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-09-2164	39-604442	1–2	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-22-253433	39-604442	14–15	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253434	39-604442	19–20	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-09-2165	39-604442	2–3	ALLH	09-1800	09-1801	09-1801	09-1801	—	09-1801	09-1800
RE39-22-253430	39-604442	4–5	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253431	39-604442	6–7	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253432	39-604442	9–10	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253435	39-61707	0–1	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253436	39-61707	2–3	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253437	39-61707	4–5	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253438	39-61707	6–7	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253439	39-61707	9–10	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253440	39-61708	0–1	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182
RE39-22-253441	39-61708	2–3	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182
RE39-22-253442	39-61708	4–5	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182
RE39-22-253443	39-61708	6–7	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182
RE39-22-253444	39-61708	9–10	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182
RE39-22-253445	39-61709	0–1	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253446	39-61709	2–3	ALLH	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	N3B-2022-3182	—	N3B-2022-3182	N3B-2022-3182
RE39-22-253447	39-61709	4–5	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253448	39-61709	6–7	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253449	39-61709	9–10	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253450	39-61710	0-1	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253451	39-61710	2–3	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253452	39-61710	4–5	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253453	39-61710	6–7	ALLH	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	N3B-2022-3266	—	N3B-2022-3266	N3B-2022-3266
RE39-22-253454	39-61710	9–10	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	—	N3B-2022-3284	N3B-2022-3284
RE39-22-253455	39-61711	0-1	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253456	39-61711	2–3	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253457	39-61711	4–5	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253458	39-61711	6–7	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253459	39-61711	9–10	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253460	39-61712	0-1	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253461	39-61712	2–3	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253462	39-61712	4–5	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253463	39-61712	6–7	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253464	39-61712	9–10	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253465	39-61713	0–1	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253466	39-61713	2–3	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253467	39-61713	4–5	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253468	39-61713	6–7	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253469	39-61713	9–10	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253470	39-61714	0–1	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253471	39-61714	2–3	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253472	39-61714	4–5	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253473	39-61714	6–7	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253474	39-61714	9–10	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253475	39-61715	0–1	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253476	39-61715	2–3	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253477	39-61715	4–5	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253478	39-61715	6–7	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253479	39-61715	9–10	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253480	39-61716	0–1	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253481	39-61716	2–3	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253482	39-61716	4–5	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253483	39-61716	6–7	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253484	39-61716	9–10	ALLH	N3B-2023-102	N3B-2023-102	N3B-2023-102	N3B-2023-102	—	N3B-2023-102	N3B-2023-102
RE39-22-253485	39-61717	0-1	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253486	39-61717	2–3	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253487	39-61717	4–5	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253488	39-61717	6–7	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253489	39-61717	9–10	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253490	39-61718	0–1	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253491	39-61718	2–3	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253492	39-61718	4–5	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253493	39-61718	6–7	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253494	39-61718	9–10	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	—	N3B-2022-3322	N3B-2022-3322
RE39-22-253495	39-61719	0–1	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	—	N3B-2022-3322	N3B-2022-3322
RE39-22-253496	39-61719	2–3	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	—	N3B-2022-3322	N3B-2022-3322
RE39-22-253497	39-61719	4–5	ALLH	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	N3B-2022-3322	—	N3B-2022-3322	N3B-2022-3322
RE39-22-253498	39-61719	6–7	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253499	39-61719	9–10	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253500	39-61720	0–1	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253501	39-61720	2–3	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253502	39-61720	4–5	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253503	39-61720	6–7	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253504	39-61720	9–10	ALLH	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	N3B-2022-3321	—	N3B-2022-3321	N3B-2022-3321
RE39-22-253505	39-61721	0–1	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253506	39-61721	2–3	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253507	39-61721	4–5	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253508	39-61721	6–7	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253509	39-61721	9–10	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253510	39-61722	0–1	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	—	N3B-2022-3284	N3B-2022-3284
RE39-22-253511	39-61722	2–3	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	—	N3B-2022-3284	N3B-2022-3284
RE39-22-253512	39-61722	4–5	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	—	N3B-2022-3284	N3B-2022-3284
RE39-22-253513	39-61722	6–7	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253514	39-61722	9–10	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253515	39-61723	0–1	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253516	39-61723	2–3	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253517	39-61723	4–5	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253518	39-61723	6–7	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253519	39-61723	9–10	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253520	39-61724	0–1	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253521	39-61724	2–3	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253522	39-61724	4–5	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253523	39-61724	6–7	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253524	39-61724	9–10	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253525	39-61725	0–1	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253526	39-61725	2–3	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253527	39-61725	4–5	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253528	39-61725	6–7	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253529	39-61725	9–10	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253530	39-61726	0–1	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253531	39-61726	2–3	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253532	39-61726	4–5	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253533	39-61726	6–7	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253534	39-61726	9–10	ALLH	N3B-2023-80	N3B-2023-80	N3B-2023-80	N3B-2023-80	—	N3B-2023-80	N3B-2023-80
RE39-22-253535	39-61727	0–1	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253536	39-61727	2–3	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253537	39-61727	4–5	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253538	39-61727	6–7	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253539	39-61727	9–10	ALLH	N3B-2023-81	N3B-2023-81	N3B-2023-81	N3B-2023-81	—	N3B-2023-81	N3B-2023-81
RE39-22-253540	39-61728	0–1	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253541	39-61728	2–3	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253542	39-61728	4–5	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253543	39-61728	6–7	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253544	39-61728	9–10	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253545	39-61729	0–1	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253546	39-61729	2–3	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253547	39-61729	4–5	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253548	39-61729	6–7	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253549	39-61729	9–10	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253550	39-61730	0–1	ALLH	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	—	N3B-2022-3349	N3B-2022-3349
RE39-22-253555	39-61730	14–15	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253556	39-61730	19–20	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253551	39-61730	2–3	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253552	39-61730	4–5	ALLH	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	—	N3B-2022-3349	N3B-2022-3349
RE39-22-253553	39-61730	6–7	ALLH	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	N3B-2022-3349	—	N3B-2022-3349	N3B-2022-3349
RE39-22-253554	39-61730	9–10	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253557	39-61731	0–1	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253562	39-61731	14–15	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253563	39-61731	19–20	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253558	39-61731	2–3	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253559	39-61731	4–5	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253560	39-61731	6–7	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253561	39-61731	9–10	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253564	39-61732	0–1	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253569	39-61732	14–15	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253570	39-61732	19–20	QBT2	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253565	39-61732	2–3	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253566	39-61732	4–5	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253567	39-61732	6–7	ALLH	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253568	39-61732	9–10	QBT3	N3B-2023-104	N3B-2023-104	N3B-2023-104	N3B-2023-104	—	N3B-2023-104	N3B-2023-104
RE39-22-253571	39-61733	0–1	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253576	39-61733	14–15	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253577	39-61733	19–20	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253572	39-61733	2–3	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253573	39-61733	4–5	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253574	39-61733	6–7	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253575	39-61733	9–10	ALLH	N3B-2023-98	N3B-2023-98	N3B-2023-98	N3B-2023-98	—	N3B-2023-98	N3B-2023-98
RE39-22-253578	39-61734	0–1	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253583	39-61734	14–15	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253584	39-61734	19–20	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253579	39-61734	2–3	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253580	39-61734	4–5	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253581	39-61734	6–7	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253582	39-61734	9–10	ALLH	N3B-2023-101	N3B-2023-101	N3B-2023-101	N3B-2023-101	—	N3B-2023-101	N3B-2023-101
RE39-22-253585	39-61735	0–1	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253590	39-61735	14–15	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253591	39-61735	19–20	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253586	39-61735	2–3	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253587	39-61735	4–5	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253588	39-61735	6–7	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253589	39-61735	9–10	ALLH	N3B-2023-255	N3B-2023-255	N3B-2023-255	N3B-2023-255	—	N3B-2023-255	N3B-2023-255
RE39-22-253592	39-61736	0–1	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253597	39-61736	14-15	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253593	39-61736	2–3	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253594	39-61736	4–5	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253595	39-61736	6–7	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253596	39-61736	9–10	ALLH	N3B-2023-129	N3B-2023-129	N3B-2023-129	N3B-2023-129	—	N3B-2023-129	N3B-2023-129
RE39-22-253599	39-61737	0–1	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253600	39-61737	2–3	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253601	39-61737	4–5	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253602	39-61737	6–7	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253603	39-61737	9–10	ALLH	N3B-2023-24	N3B-2023-24	N3B-2023-24	N3B-2023-24	—	N3B-2023-24	N3B-2023-24
RE39-22-253604	39-61738	0–1	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	—	N3B-2022-3284	N3B-2022-3284
RE39-22-253605	39-61738	2–3	ALLH	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	N3B-2022-3284	—	N3B-2022-3284	N3B-2022-3284
RE39-22-253606	39-61738	4–5	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253607	39-61738	6–7	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253608	39-61738	9–10	ALLH	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	N3B-2022-3303	—	N3B-2022-3303	N3B-2022-3303
RE39-22-253609	39-61739	0–1	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253610	39-61739	2–3	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253611	39-61739	4–5	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253612	39-61739	6–7	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253613	39-61739	9–10	ALLH	N3B-2023-4	N3B-2023-4	N3B-2023-4	N3B-2023-4	—	N3B-2023-4	N3B-2023-4
RE39-22-253614	39-61740	0–1	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253615	39-61740	2–3	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253616	39-61740	4–5	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253617	39-61740	6–7	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253618	39-61740	9–10	ALLH	N3B-2023-63	N3B-2023-63	N3B-2023-63	N3B-2023-63	—	N3B-2023-63	N3B-2023-63
RE39-22-253619	39-61741	0–1	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	—	N3B-2023-256	N3B-2023-256
RE39-22-253620	39-61741	2–3	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	—	N3B-2023-256	N3B-2023-256

Table 6.7-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Mercury	PCB Aroclors	VOCs	SVOCs	Dioxins/Furans	Explosive Compounds	Cyanide
RE39-22-253621	39-61741	4–5	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	—	N3B-2023-256	N3B-2023-256
RE39-22-253622	39-61741	6–7	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	—	N3B-2023-256	N3B-2023-256
RE39-22-253623	39-61741	9–10	ALLH	N3B-2023-256	N3B-2023-256	N3B-2023-256	N3B-2023-256	—	N3B-2023-256	N3B-2023-256
RE39-22-253624	39-61742	0–1	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253625	39-61742	2–3	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253626	39-61742	4–5	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253627	39-61742	6–7	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335
RE39-22-253628	39-61742	9–10	ALLH	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	N3B-2022-3335	—	N3B-2022-3335	N3B-2022-3335

Note: Numbers in analyte columns are request numbers.

* — = Analysis not requested.

Table 6.7-2
Inorganic Chemicals above BVs at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**780,00**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,,500**
RE39-09-2112	39-604425	0–1	SOIL	—[d]	—	—	—	—	—	55.6	—	—	0.308 (J)	—	3.8	—	—	—	—
RE39-09-2113	39-604425	1–2	SOIL	—	—	—	—	—	—	14.8	0.58 (U)	—	0.157 (U)	—	0.35	—	—	—	—
RE39-09-2114	39-604425	2–3	SOIL	—	—	—	—	—	—	—	—	—	0.137 (U)	—	0.29	—	—	—	—
RE39-09-2115	39-604426	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.587 (J)	—	10.1	—	—	—	—
RE39-09-2116	39-604426	1–2	SOIL	—	—	—	—	—	—	—	—	—	1.95	—	3.7	—	—	—	—
RE39-09-2117	39-604426	2–3	SOIL	—	—	—	3.9	—	—	58.7	—	35.7	2.47	—	2.7	—	—	—	89
RE39-22-253415	39-604426	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	44.7	0.00118 (J)	—	—	—
RE39-22-253416	39-604426	6–7	SOIL	—	—	—	—	—	—	16.2	—	—	0.438	—	10.9 (J)	0.00111 (J)	—	—	71.4 (J+)
RE39-22-253417	39-604426	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	4.58 (J)	—	—	—	—
RE39-22-253418	39-604426	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	6.68 (J)	—	—	—	—
RE39-22-253419	39-604426	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	6.63 (J)	—	—	—	—
RE39-09-2118	39-604427	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	3.7	—	—	—	—
RE39-09-2119	39-604427	1–2	SOIL	—	—	—	—	—	—	—	0.55 (U)	—	—	—	1.3	—	—	—	—
RE39-09-2120	39-604427	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.49	—	—	—	—
RE39-09-2121	39-604428	0–1	SOIL	—	—	—	—	—	—	241	—	33.6	—	—	2.8	—	—	—	138
RE39-09-2122	39-604428	1–2	SOIL	—	—	—	—	—	—	15.8	—	25.5	—	—	0.18 (J)	—	—	—	55.3
RE39-09-2123	39-604428	2–3	SOIL	—	—	—	—	—	38.8	—	—	—	—	18.7	2.4	—	—	—	—
RE39-09-2124	39-604429	0–1	SOIL	—	1.16 (U)	—	—	0.582 (U)	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2125	39-604429	1–2	SOIL	—	1.17 (U)	—	—	0.587 (U)	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2126	39-604429	2–3	SOIL	—	1.06 (U)	—	—	0.531 (U)	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2127	39-604430	0–1	SOIL	—	1.13 (U)	—	—	0.566 (U)	—	—	—	—	—	—	3.22 (J-)	0.000738 (J)	—	—	—
RE39-09-2128	39-604430	1–2	SOIL	—	1.13 (U)	—	—	0.566 (U)	—	—	—	—	—	—	7.78 (J-)	—	—	—	—
RE39-09-2129	39-604430	2–3	SOIL	—	1.14 (U)	—	—	0.569 (U)	—	—	—	—	—	—	3.11 (J-)	0.00102 (J)	—	—	—
RE39-09-2130	39-604431	0–1	SOIL	—	1.11 (U)	—	—	0.557 (U)	—	—	—	—	0.128	—	1.91 (J-)	—	—	—	—
RE39-09-2131	39-604431	1–2	SOIL	—	1.15 (U)	—	—	0.573 (U)	—	—	—	—	—	—	1.12 (J-)	—	—	—	—
RE39-09-2132	39-604431	2–3	SOIL	—	1.07 (U)	—	—	0.537 (U)	—	—	—	—	—	—	1.29 (J-)	—	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-2133	39-604432	0–1	SOIL	—	1.08 (U)	—	—	0.538 (U)	—	1100	—	43.8	0.294	—	1.01 (J-)	—	—	—	—
RE39-09-2134	39-604432	1–2	SOIL	—	1.12 (U)	—	—	0.561 (U)	—	1060	—	53.4	0.579	—	0.733 (J-)	—	—	—	49.5 (J)
RE39-09-2135	39-604432	2–3	SOIL	—	1.14 (U)	—	—	0.569 (U)	—	92.2	—	51.2	0.338	—	0.717 (J-)	—	—	—	—
RE39-22-253420	39-604432	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	18.2	—	—	—	—
RE39-22-253421	39-604432	6–7	SOIL	—	—	—	—	—	—	—	—	23.2 (J-)	—	—	7.3	—	—	—	—
RE39-22-253422	39-604432	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	15.5	—	—	—	—
RE39-22-253423	39-604432	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	20.1	—	—	—	—
RE39-22-253424	39-604432	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	51.1 (J+)	0.00185 (J)	—	—	—
RE39-09-2136	39-604433	0–1	SOIL	—	1.08 (U)	—	—	0.538 (U)	—	—	—	—	—	—	3.41 (J-)	0.000595 (J)	—	—	—
RE39-09-2137	39-604433	1–2	SOIL	—	1.08 (U)	—	—	0.541 (U)	—	—	—	23.6	—	—	2.54 (J-)	0.000583 (J)	—	—	—
RE39-09-2138	39-604433	2–3	SOIL	—	—	—	—	0.543 (U)	—	27.4	—	62	—	—	2.28 (J-)	0.000572 (J)	—	—	—
RE39-22-253425	39-604433	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	29.5	0.000939 (J)	—	—	—
RE39-22-253426	39-604433	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	6.64	0.00264	—	—	—
RE39-22-253427	39-604433	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.36 (J)	—	—	—	—
RE39-22-253428	39-604433	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.6 (J)	—	—	—	—
RE39-22-253429	39-604433	19–20	SOIL	—	—	—	—	—	—	—	—	28.1 (J)	—	—	7.52	0.00104 (J)	—	—	—
RE39-09-2139	39-604434	0–1	SOIL	—	1.19	—	—	0.567 (U)	—	43.9	—	55.4	—	—	1.17 (J-)	—	—	—	54.4 (J)
RE39-09-2140	39-604434	1–2	SOIL	—	1.08 (U)	—	—	0.538 (U)	—	—	—	—	—	—	1.03 (J-)	—	—	—	—
RE39-09-2141	39-604434	2–3	SOIL	—	1.01 (U)	—	—	0.506 (U)	—	—	—	—	—	—	0.748 (J-)	—	—	—	—
RE39-09-2142	39-604435	0–1	SOIL	—	1.08 (U)	—	—	0.541 (U)	—	—	—	—	0.12	—	4.29 (J-)	—	—	—	—
RE39-09-2143	39-604435	1–2	SOIL	—	1.04 (U)	—	—	0.522 (U)	—	—	—	—	—	—	1.79 (J-)	—	—	—	—
RE39-09-2144	39-604435	2–3	SOIL	—	1.01 (U)	—	—	0.505 (U)	—	—	—	—	—	—	1.4	—	—	—	—
RE39-09-2145	39-604436	0–1	SOIL	—	1.14 (U)	—	—	0.569 (U)	—	20.2 (J+)	—	—	—	—	23.1	0.00486	—	—	—
RE39-09-2146	39-604436	1–2	SOIL	—	1.04 (U)	—	—	0.522 (U)	—	—	—	—	—	—	3.97	0.00169 (J)	—	—	—
RE39-09-2147	39-604436	2–3	SOIL	—	1.03 (U)	—	—	0.514 (U)	—	—	—	—	—	—	1.62	0.0016 (J)	—	—	—
RE39-09-2148	39-604437	0–1	SOIL	—	—	—	—	—	—	29.7	0.53 (U)	—	0.459 (J+)	—	0.93 (J+)	—	—	—	—
RE39-09-2149	39-604437	1–2	SOIL	—	—	—	—	0.54 (J-)	—	2530	0.54 (U)	—	0.272 (J+)	—	0.44 (J+)	—	—	—	—
RE39-09-2150	39-604437	2–3	SOIL	—	—	—	2.1	—	—	38.9	0.52 (U)	—	—	—	0.63 (J+)	—	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-2151	39-604438	0–1	SOIL	—	—	—	—	—	—	—	0.54 (U)	—	—	—	1.2 (J+)	—	—	—	—
RE39-09-2152	39-604438	1–2	SOIL	—	—	—	—	—	—	—	0.54 (U)	—	—	—	0.36 (J+)	—	—	—	—
RE39-09-2153	39-604438	2–3	SOIL	—	—	—	—	—	—	—	0.54 (U)	—	—	—	5 (J+)	—	—	—	—
RE39-09-2154	39-604439	0–1	SOIL	—	—	—	—	—	—	15.6	0.55 (U)	—	—	—	—	—	—	—	—
RE39-09-2155	39-604439	1–2	SOIL	—	—	—	—	—	—	27.9	0.55 (U)	—	0.178 (J+)	—	—	—	—	—	—
RE39-09-2156	39-604439	2–3	SOIL	—	—	—	—	—	—	66.7	0.55 (U)	—	0.111 (J+)	—	0.65 (J+)	—	—	—	—
RE39-09-2157	39-604440	0–1	SOIL	—	—	—	—	—	—	—	0.54 (U)	—	0.17 (J+)	—	1.2 (J+)	—	—	—	—
RE39-09-2158	39-604440	1–2	SOIL	—	—	—	—	—	—	—	0.55 (U)	—	0.521 (J+)	—	4.7 (J+)	—	—	—	—
RE39-09-2159	39-604440	2–3	SOIL	—	—	—	—	—	—	—	0.55 (U)	—	—	—	1.1 (J+)	—	—	—	—
RE39-09-2160	39-604441	0–1	SOIL	—	—	—	—	—	—	—	0.54 (U)	—	0.363 (J+)	—	—	—	—	—	—
RE39-09-2161	39-604441	1–2	SOIL	—	—	—	—	—	—	31.9	0.56 (U)	—	0.202 (J+)	—	1 (J+)	—	—	—	—
RE39-09-2162	39-604441	2–3	SOIL	—	—	—	—	—	—	15.2	0.54 (U)	—	0.201 (J+)	—	1.5 (J+)	—	—	—	—
RE39-09-2163	39-604442	0–1	SOIL	—	—	—	3.6	—	—	58.2	0.54 (U)	—	1.06 (J+)	—	1.2 (J+)	—	—	—	—
RE39-09-2164	39-604442	1–2	SOIL	—	—	—	2.3	—	—	101	0.54 (U)	—	0.902 (J+)	—	2.9 (J+)	—	—	—	—
RE39-09-2165	39-604442	2–3	SOIL	—	—	—	2.3	—	—	56	0.52 (U)	—	0.662 (J+)	—	3 (J+)	—	—	—	—
RE39-22-253430	39-604442	4–5	SOIL	—	—	—	—	—	—	—	—	—	0.123	—	—	—	—	—	—
RE39-22-253431	39-604442	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253432	39-604442	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253433	39-604442	14–15	SOIL	—	—	—	2.14	—	—	—	—	—	0.26	—	—	—	1.69	—	—
RE39-22-253434	39-604442	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253435	39-61707	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.74	0.000732 (J)	—	—	53.2 (J)
RE39-22-253436	39-61707	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.849 (J)	0.000522 (J)	—	—	—
RE39-22-253437	39-61707	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.92 (J)	0.000696 (J)	—	—	52 (J)
RE39-22-253438	39-61707	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.54	0.00114 (J)	—	—	49.8 (J)
RE39-22-253439	39-61707	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00107 (J)	—	—	—
RE39-22-253440	39-61708	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.75	0.00121 (J)	—	—	—
RE39-22-253441	39-61708	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	3.91	0.000626 (J)	—	—	—
RE39-22-253442	39-61708	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.78	0.000718 (J)	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253443	39-61708	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.49	0.000936 (J)	—	—	—
RE39-22-253444	39-61708	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.43	0.000723 (J)	—	—	—
RE39-22-253445	39-61709	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.618 (J)	—	—	—	—
RE39-22-253446	39-61709	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253447	39-61709	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.0014 (J)	—	—	—
RE39-22-253448	39-61709	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00165 (J)	—	—	—
RE39-22-253449	39-61709	9.0–10.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253450	39-61710	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00105 (J)	—	—	—
RE39-22-253451	39-61710	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00213	—	—	—
RE39-22-253452	39-61710	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.24	0.00211	—	—	—
RE39-22-253453	39-61710	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.973 (J)	0.00232	—	—	—
RE39-22-253454	39-61710	9.0–10.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00314	—	—	—
RE39-22-253455	39-61711	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.27	0.00448	—	1.01 (U)	—
RE39-22-253456	39-61711	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	11.9	0.00134 (J)	—	—	—
RE39-22-253457	39-61711	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	6.16	0.00174 (J)	—	—	—
RE39-22-253458	39-61711	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	4.42	0.00223	—	—	—
RE39-22-253459	39-61711	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	9.77	0.00128 (J)	—	—	—
RE39-22-253460	39-61712	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.81	0.000737 (J)	—	—	—
RE39-22-253461	39-61712	2–3	SOIL	—	—	—	—	—	—	15.4 (J-)	—	—	—	—	1.05	—	—	—	—
RE39-22-253462	39-61712	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.32	—	—	—	—
RE39-22-253463	39-61712	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.79	—	—	—	—
RE39-22-253464	39-61712	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.72	—	—	1.03 (U)	—
RE39-22-253465	39-61713	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.631 (J)	—	—	—	—
RE39-22-253466	39-61713	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	1.76	—	—
RE39-22-253467	39-61713	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253468	39-61713	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253469	39-61713	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253470	39-61714	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.681 (J)	—	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253471	39-61714	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.000529 (J)	—	—	—
RE39-22-253472	39-61714	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253473	39-61714	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.684 (J)	—	—	—	—
RE39-22-253474	39-61714	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253475	39-61715	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.219	—	21.9	0.00107 (J)	1.71	—	—
RE39-22-253476	39-61715	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.697 (J)	—	—	—	—
RE39-22-253477	39-61715	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.734 (J)	—	—	—	—
RE39-22-253478	39-61715	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.647 (J)	—	—	—	—
RE39-22-253479	39-61715	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253480	39-61716	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.162	—	—	—	—	—	—
RE39-22-253481	39-61716	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253482	39-61716	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253483	39-61716	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253484	39-61716	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253485	39-61717	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.21	—	—	—	—
RE39-22-253486	39-61717	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253487	39-61717	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253488	39-61717	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.723 (J)	—	—	—	—
RE39-22-253489	39-61717	9.0–10.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.31	—	—	—	—
RE39-22-253490	39-61718	0.0–1.0	SOIL	—	—	—	—	—	—	16.8	—	—	0.802	—	1.63	0.00183 (J)	—	—	—
RE39-22-253491	39-61718	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.952 (J)	0.00103 (J)	—	—	—
RE39-22-253492	39-61718	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.61 (J)	0.000575 (J)	—	—	—
RE39-22-253493	39-61718	6–7	SOIL	—	—	—	—	—	—	—	—	—	0.298	—	0.746 (J)	0.000589 (J)	—	—	—
RE39-22-253494	39-61718	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.635 (J)	—	—	—	—
RE39-22-253495	39-61719	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	0.312	—	1.77	—	—	—	—
RE39-22-253496	39-61719	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.23	—	—	—	—
RE39-22-253497	39-61719	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.36	—	—	—	—
RE39-22-253498	39-61719	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.43	—	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253499	39-61719	9–10	SOIL	—	3.19 (U)	—	—	—	—	—	—	—	—	—	0.826 (J)	—	—	—	52.9 (J)
RE39-22-253500	39-61720	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.295	—	1.58	0.000886 (J)	—	—	—
RE39-22-253501	39-61720	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.718 (J)	0.000762 (J)	—	—	—
RE39-22-253502	39-61720	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.61 (J)	—	—	—	—
RE39-22-253503	39-61720	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.743 (J)	—	—	—	—
RE39-22-253504	39-61720	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.638 (J)	—	—	—	—
RE39-22-253505	39-61721	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.14	—	—	0.00155 (J)	—	—	—
RE39-22-253506	39-61721	2–3	SOIL	—	—	—	—	—	—	—	—	—	0.188	—	1.56	—	—	—	—
RE39-22-253507	39-61721	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	6.18	—	2.22	—	—
RE39-22-253508	39-61721	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	12.8	0.000803 (J)	—	—	—
RE39-22-253509	39-61721	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	76.1	0.00242	1.63	—	—
RE39-22-253510	39-61722	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.636 (J)	0.0015 (J)	—	—	—
RE39-22-253511	39-61722	2.0–3.0	SOIL	—	2.09 (J)	—	—	0.508 (U)	—	—	—	—	—	—	—	0.00126 (J)	—	—	—
RE39-22-253512	39-61722	4.0–5.0	SOIL	—	1.68 (U)	—	—	0.511 (U)	—	—	—	—	—	—	0.904 (J)	0.000776 (J)	—	—	51.7 (J+)
RE39-22-253513	39-61722	6–7	SOIL	—	—	—	—	—	—	280	—	—	0.189	—	1.94	0.00102 (J)	1.76	—	—
RE39-22-253514	39-61722	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	16	—	2.07	—	—
RE39-22-253515	39-61723	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.05	—	—	—	—
RE39-22-253516	39-61723	2–3	SOIL	—	—	—	—	—	—	—	—	23.6 (J)	—	—	0.922 (J)	—	—	—	—
RE39-22-253517	39-61723	4–5	SOIL	—	—	—	—	—	—	—	—	44.3 (J)	—	—	1.2	—	—	—	—
RE39-22-253518	39-61723	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.19	—	—	—	—
RE39-22-253519	39-61723	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.35	—	—	—	—
RE39-22-253520	39-61724	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.76	0.00664 (J+)	—	—	—
RE39-22-253521	39-61724	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.876 (J)	—	1.63	—	—
RE39-22-253522	39-61724	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.47	0.00289 (J+)	—	—	—
RE39-22-253523	39-61724	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.585 (J)	—	—	—	—
RE39-22-253524	39-61724	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.759 (J)	—	—	—	—
RE39-22-253525	39-61725	0–1	SOIL	—	2.35 (J+)	—	—	—	—	—	—	48.7	—	—	—	0.00257	—	—	—
RE39-22-253526	39-61725	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	4.46	—	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253527	39-61725	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	39.1	0.00224	1.68	—	—
RE39-22-253528	39-61725	6–7	SOIL	—	—	—	—	—	—	—	—	—	0.14	—	8.04	0.00121 (J)	—	—	—
RE39-22-253529	39-61725	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.7	—	—	—	—
RE39-22-253530	39-61726	0–1	SOIL	—	2.56 (J+)	—	—	—	—	15.6	—	58.9	—	—	2.06	0.00192 (J)	1.54	—	—
RE39-22-253531	39-61726	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.758 (J)	—	—	—	—
RE39-22-253532	39-61726	4–5	SOIL	—	—	—	—	—	—	—	—	24.9	—	—	1.66	0.00113 (J)	—	—	—
RE39-22-253533	39-61726	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.626 (J)	—	—	—	—
RE39-22-253534	39-61726	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.659 (J)	—	—	—	—
RE39-22-253535	39-61727	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00102 (J+)	—	—	—
RE39-22-253536	39-61727	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	3.02	0.00134 (J+)	—	—	—
RE39-22-253537	39-61727	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	5.99	—	—	—	—
RE39-22-253538	39-61727	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.744 (J)	—	—	—	—
RE39-22-253539	39-61727	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.79	—	—	—	—
RE39-22-253540	39-61728	0–1	SOIL	—	—	—	—	—	—	—	—	23.2 (J-)	0.436 (J)	—	7.06 (J)	0.00209 (J)	—	—	—
RE39-22-253541	39-61728	2–3	SOIL	—	—	—	—	—	—	45.5	—	—	—	—	6.69 (J)	0.000734 (J)	1.83	—	—
RE39-22-253542	39-61728	4–5	SOIL	—	—	—	—	—	—	—	—	—	0.172 (J)	—	3.08 (J)	0.00238 (J)	—	—	—
RE39-22-253543	39-61728	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	13.7 (J)	0.00132 (J)	—	—	—
RE39-22-253544	39-61728	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	10.6 (J)	0.00119 (J)	—	—	—
RE39-22-253545	39-61729	0–1	SOIL	—	—	—	—	—	—	22.4 (J)	—	—	0.439 (J)	—	0.643 (J)	0.000573 (J)	—	—	—
RE39-22-253546	39-61729	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.595 (J)	—	—	—	—
RE39-22-253547	39-61729	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.925 (J)	—	—	—	—
RE39-22-253548	39-61729	6–7	SOIL	—	—	—	3.34	—	—	40.9 (J)	—	—	11.1 (J)	—	—	0.000649 (J)	—	—	—
RE39-22-253549	39-61729	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	16.8	0.000775 (J)	—	—	—
RE39-22-253550	39-61730	0–1	SOIL	—	—	—	—	—	—	17.2	—	—	—	—	—	—	—	—	—
RE39-22-253551	39-61730	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.22	—	—	—	—
RE39-22-253552	39-61730	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	63.6	0.000513 (J)	—	—	—
RE39-22-253553	39-61730	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	42.2	0.0015 (J)	—	—	—
RE39-22-253554	39-61730	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	5.99	0.000925 (J)	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253555	39-61730	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	4.74	—	—	—	—
RE39-22-253556	39-61730	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	8.19	0.00115 (J)	1.69	1.19 (U)	—
RE39-22-253557	39-61731	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.945 (J)	—	2.01	—	—
RE39-22-253558	39-61731	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.686 (J)	—	2.13	—	—
RE39-22-253559	39-61731	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.000853 (J)	2.12	—	—
RE39-22-253560	39-61731	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00118 (J)	2.14	—	—
RE39-22-253561	39-61731	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00461	—	—	—
RE39-22-253562	39-61731	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00121 (J)	—	—	—
RE39-22-253563	39-61731	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	1.96	—	—
RE39-22-253564	39-61732	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.382	—	1.21	0.000855 (J)	1.98	—	—
RE39-22-253565	39-61732	2–3	SOIL	—	—	—	—	—	—	25.2	—	29.7	0.415	—	5.79	0.00351	1.92	—	—
RE39-22-253566	39-61732	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.34	0.00108 (J)	2.12	—	—
RE39-22-253567	39-61732	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.99	0.00121 (J)	2.05	—	—
RE39-22-253568	39-61732	9–10	Qbt3	—	—	—	—	—	—	—	—	—	—	—	0.639 (J)	0.00137 (J)	2.26	—	—
RE39-22-253569	39-61732	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.988 (J)	0.000991 (J)	2.32	—	—
RE39-22-253570	39-61732	19–20	Qbt2	11100 (J)	1.54 (U)	70.7	1.75	—	—	—	—	13.2	—	—	0.731 (J)	—	4.11	—	—
RE39-22-253571	39-61733	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.165	—	2.8	0.00893 (J+)	1.78	—	—
RE39-22-253572	39-61733	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.88	—	1.66	—	—
RE39-22-253573	39-61733	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	7.32	0.00171 (J+)	1.67	—	—
RE39-22-253574	39-61733	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.92	—	1.63	—	—
RE39-22-253575	39-61733	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.26	—	—	—	—
RE39-22-253576	39-61733	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.47	—	1.65	—	51.2
RE39-22-253577	39-61733	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	4.07	—	—	—	—
RE39-22-253578	39-61734	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.587 (J)	—	1.53	0.000783 (J)	—	—	—
RE39-22-253579	39-61734	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.05 (J)	—	—	—	—
RE39-22-253580	39-61734	4–5	SOIL	—	—	—	—	—	—	—	—	—	0.366 (J)	—	1.39	—	—	—	—
RE39-22-253581	39-61734	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253582	39-61734	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.000566 (J)	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253583	39-61734	14–15	SOIL	—	—	—	—	—	—	—	—	—	0.408 (J)	—	1.23	—	—	—	—
RE39-22-253584	39-61734	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253585	39-61735	0–1	SOIL	—	—	—	—	—	—	—	—	—	0.344 (J)	—	1.77 (J)	—	—	—	—
RE39-22-253586	39-61735	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.79 (J)	—	—	—	—
RE39-22-253587	39-61735	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.04 (J)	0.000498 (J)	—	—	—
RE39-22-253588	39-61735	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00105 (J)	—	—	—
RE39-22-253589	39-61735	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.27	—	—	—	—
RE39-22-253590	39-61735	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253591	39-61735	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	1.74	—	—
RE39-22-253592	39-61736	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.956 (J)	0.00108 (J)	1.65	—	—
RE39-22-253593	39-61736	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.97 (J)	0.000501 (J)	1.55	—	—
RE39-22-253594	39-61736	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.001 (J)	1.94	—	—
RE39-22-253595	39-61736	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	—	—
RE39-22-253596	39-61736	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	13.8 (J)	0.00111 (J)	1.66	—	—
RE39-22-253597	39-61736	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	44.8 (J)	0.00122 (J)	1.54	—	—
RE39-22-253599	39-61737	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.79	0.00108 (J)	—	—	—
RE39-22-253600	39-61737	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.29	0.000788 (J)	—	1.04 (U)	—
RE39-22-253601	39-61737	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.1	—	—	—	—
RE39-22-253602	39-61737	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.922 (J)	—	—	—	—
RE39-22-253603	39-61737	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.889 (J)	—	—	—	—
RE39-22-253604	39-61738	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.941 (J)	0.00165 (J)	—	—	—
RE39-22-253605	39-61738	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.787 (J)	0.000757 (J)	—	—	—
RE39-22-253606	39-61738	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.917 (J)	0.000848 (J)	—	—	—
RE39-22-253607	39-61738	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.561 (J)	0.000763 (J)	—	—	—
RE39-22-253608	39-61738	9.0–10.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253609	39-61739	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.768 (J)	—	—	—	—
RE39-22-253610	39-61739	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	71.4	0.00107 (J)	—	—	—
RE39-22-253611	39-61739	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	41	0.00103 (J)	—	—	—

Table 6.7-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Barium	Beryllium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
SOIL Background Value[a]				**29,200**	**0.83**	**295**	**1.83**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[b]**	**na**	**1.52**	**1**	**48.8**
Qbt 2, 3, 4 Background Value				**7340**	**0.5**	**46**	**1.21**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
Construction Worker SSL[c]				**41,400**	**142**	**4390**	**148**	**72.1**	**134**	**14,200**	**12.1**	**800**	**20.7**	**753**	**566,000**	**248**	**1750**	**1770**	**106,000**
Industrial SSL[c]				**1,290,000**	**519**	**255,000**	**2580**	**1110**	**505**	**51,900**	**63.3**	**800**	**112**	**25,700**	**2,080,000**	**908**	**6490**	**6490**	**389,000**
Residential SSL[c]				**78,000**	**31.3**	**15,600**	**156**	**70.5**	**96.6**	**3130**	**11.2**	**400**	**23.8**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-22-253612	39-61739	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	15.2	—	—	—	—
RE39-22-253613	39-61739	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	4.35	—	1.74	1.05 (U)	—
RE39-22-253614	39-61740	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253615	39-61740	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253616	39-61740	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253617	39-61740	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253618	39-61740	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.612 (J)	—	—	—	—
RE39-22-253619	39-61741	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.49	0.000545 (J)	—	—	—
RE39-22-253620	39-61741	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.6	—	—	—	—
RE39-22-253621	39-61741	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.943 (J)	—	—	—	—
RE39-22-253622	39-61741	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.38	—	—	—	—
RE39-22-253623	39-61741	9–10	SOIL	—	0.832 (U)	—	—	—	—	—	—	—	—	—	0.701 (J)	—	—	—	—
RE39-22-253624	39-61742	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.16	—	—	—	—
RE39-22-253625	39-61742	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	9.07	—	—	—	—
RE39-22-253626	39-61742	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	2.06	—	—	—	—
RE39-22-253627	39-61742	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	3.78	—	—	—	—
RE39-22-253628	39-61742	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	1.54	—	—	—	—

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2022, 702484) unless otherwise noted.

[d] — = Not detected or not detected above BV.

Table 6.7-3
Organic Chemicals Detected at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530[c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300[c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740[c]**	**15.3**
RE39-09-2113	39-604425	1–2	SOIL	—[d]	—	—	NA[e]	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2116	39-604426	1–2	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2117	39-604426	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253415	39-604426	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253416	39-604426	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253417	39-604426	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253418	39-604426	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2121	39-604428	0–1	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2122	39-604428	1–2	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2123	39-604428	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2133	39-604432	0–1	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2134	39-604432	1–2	SOIL	—	—	—	NA	—	—	—	—	0.0032 (J)	—	—	—	—	—	—
RE39-09-2135	39-604432	2–3	SOIL	—	—	—	NA	—	—	—	—	0.0147	0.0041	—	—	—	—	—
RE39-22-253420	39-604432	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253421	39-604432	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253422	39-604432	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253423	39-604432	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253424	39-604432	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2137	39-604433	1–2	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2138	39-604433	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253425	39-604433	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253426	39-604433	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253427	39-604433	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253428	39-604433	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253429	39-604433	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2139	39-604434	0–1	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2142	39-604435	0–1	SOIL	—	—	NA	NA	—	—	—	—	0.0015 (J)	—	—	—	—	—	—
RE39-09-2148	39-604437	0–1	SOIL	—	—	—	NA	—	—	—	—	—	0.0049 (J)	—	—	—	—	—
RE39-09-2149	39-604437	1–2	SOIL	—	—	—	NA	—	—	—	—	—	0.0051 (J)	—	—	—	—	—
RE39-09-2150	39-604437	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2153	39-604438	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2154	39-604439	0–1	SOIL	—	—	—	NA	0.0064 (J)	0.0099 (J)	—	—	—	—	—	—	—	—	—
RE39-09-2156	39-604439	2–3	SOIL	—	—	—	NA	0.016 (J)	—	—	—	—	—	—	—	—	—	—
RE39-09-2157	39-604440	0–1	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2160	39-604441	0–1	SOIL	—	—	—	NA	—	—	—	—	—	—	0.094 (J)	0.12 (J)	0.097 (J)	0.072 (J)	0.1 (J)
RE39-09-2161	39-604441	1–2	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2162	39-604441	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	0.059 (J)	0.066 (J)	0.06 (J)	—	0.056 (J)
RE39-09-2163	39-604442	0–1	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2164	39-604442	1–2	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-09-2165	39-604442	2–3	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253430	39-604442	4–5	SOIL	0.00303 (J)	0.00876	—	—	—	—	0.0202 (J+)	—	—	0.00191 (J)	0.0405 (J+)	0.0428	0.0462	0.0273	0.0196 (J)
RE39-22-253432	39-604442	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253434	39-604442	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253435	39-61707	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253437	39-61707	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253438	39-61707	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253439	39-61707	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253440	39-61708	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253442	39-61708	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253443	39-61708	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253444	39-61708	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253447	39-61709	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253448	39-61709	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253449	39-61709	9.0–10.0	SOIL	—	—	—	—	—	—	—	0.00494 (J)	—	—	—	—	—	—	—
RE39-22-253450	39-61710	0.0–1.0	SOIL	0.0373	—	—	—	—	—	—	—	—	—	0.00719	0.00924	0.0168 (J)	0.0089	0.00445
RE39-22-253453	39-61710	6.0–7.0	SOIL	0.311	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253455	39-61711	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	0.00894	0.0144 (J)	0.0138	0.00963	0.00516
RE39-22-253456	39-61711	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253457	39-61711	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253458	39-61711	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253459	39-61711	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253460	39-61712	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	0.00526 (J)	—	—	—	0.00526 (J)
RE39-22-253461	39-61712	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253462	39-61712	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253463	39-61712	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253464	39-61712	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253475	39-61715	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253476	39-61715	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253477	39-61715	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253478	39-61715	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253479	39-61715	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253480	39-61716	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253481	39-61716	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253482	39-61716	4–5	SOIL	—	—	0.0195 (J+)	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253483	39-61716	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253484	39-61716	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253485	39-61717	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253486	39-61717	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253487	39-61717	4–5	SOIL	—	—	3.16 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253488	39-61717	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253491	39-61718	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253492	39-61718	4.0–5.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253493	39-61718	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253494	39-61718	9–10	SOIL	0.00273 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253496	39-61719	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253497	39-61719	4.0–5.0	SOIL	0.00342	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253498	39-61719	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253499	39-61719	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253500	39-61720	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253501	39-61720	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253502	39-61720	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253503	39-61720	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253504	39-61720	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253505	39-61721	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253506	39-61721	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.00174 (J)	0.00243 (J)	—	—
RE39-22-253507	39-61721	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253508	39-61721	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253509	39-61721	9–10	SOIL	—	—	0.00227 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253510	39-61722	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	—	—	0.00822 (J)	0.00925 (J)	0.0123	0.00925 (J)	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253511	39-61722	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	0.00207 (J)	0.00275 (J)	0.00344	0.00241 (J)	—
RE39-22-253513	39-61722	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	0.00402 (J)	0.00469 (J)	0.00636 (J)	0.00435 (J)	0.00234 (J)
RE39-22-253514	39-61722	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253515	39-61723	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	0.00723 (J)	0.00723 (J)	0.0103	0.00723 (J)	—
RE39-22-253516	39-61723	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253517	39-61723	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253518	39-61723	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253519	39-61723	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253520	39-61724	0–1	SOIL	—	—	0.00198 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253521	39-61724	2–3	SOIL	—	—	0.273 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253522	39-61724	4–5	SOIL	—	—	0.249 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253523	39-61724	6–7	SOIL	—	—	0.0033 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253524	39-61724	9–10	SOIL	—	—	0.00409 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253525	39-61725	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253528	39-61725	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253529	39-61725	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253530	39-61726	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253531	39-61726	2–3	SOIL	0.0497	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253532	39-61726	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00549	0.0048	—
RE39-22-253533	39-61726	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253535	39-61727	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253536	39-61727	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253538	39-61727	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253539	39-61727	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253540	39-61728	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.0121 (J)	0.011 (J)	—	0.011 (J)

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253542	39-61728	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253543	39-61728	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253544	39-61728	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253545	39-61729	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253546	39-61729	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253547	39-61729	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253548	39-61729	6–7	SOIL	—	—	0.0121 (J+)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253549	39-61729	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253550	39-61730	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253551	39-61730	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253552	39-61730	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	0.00191 (J)	—	0.00191 (J)	—	—
RE39-22-253554	39-61730	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253555	39-61730	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253556	39-61730	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253558	39-61731	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253561	39-61731	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253563	39-61731	19–20	SOIL	—	—	—	0.0147 (J)	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253564	39-61732	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253565	39-61732	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253566	39-61732	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253567	39-61732	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253568	39-61732	9–10	Qbt3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253569	39-61732	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253570	39-61732	19–20	Qbt2	—	—	0.0027 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253571	39-61733	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253573	39-61733	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253575	39-61733	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	0.00368	0.00603	0.00201 (J)	—
RE39-22-253577	39-61733	19–20	SOIL	0.00624 (J)	0.0052 (J)	—	—	—	—	0.00624 (J)	—	—	—	0.00832 (J)	0.00624 (J)	0.00624 (J)	0.00624 (J)	0.00832 (J)
RE39-22-253578	39-61734	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253579	39-61734	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253580	39-61734	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253581	39-61734	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253582	39-61734	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253583	39-61734	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253584	39-61734	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253585	39-61735	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253589	39-61735	9-10	SOIL	—	—	—	0.00951 (J)	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253591	39-61735	19–20	SOIL	—	—	—	0.0172 (J)	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253592	39-61736	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253593	39-61736	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253594	39-61736	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253595	39-61736	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253596	39-61736	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253597	39-61736	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253599	39-61737	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.00207 (J)	—	—
RE39-22-253600	39-61737	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253601	39-61737	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253602	39-61737	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253603	39-61737	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253605	39-61738	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Acetonitrile	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Construction Worker SSL[a]				**15,100**	**7530**	**242,000**	**na[b]**	**17.3**	**17.3**	**75,300**	**85.3**	**4.91**	**85.3**	**240**	**15.0**	**240**	**7530 [c]**	**2310**
Industrial SSL[a]				**50,500**	**25,300**	**960,000**	**na**	**125**	**127**	**253,000**	**10.9**	**11**	**11.1**	**32.3**	**23.6**	**32.3**	**25,300 [c]**	**323**
Residential SSL[a]				**3480**	**1740**	**66,300**	**na**	**7.64**	**7.7**	**17,400**	**2.43**	**1.14**	**2.43**	**1.53**	**1.12**	**1.53**	**1740 [c]**	**15.3**
RE39-22-253607	39-61738	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253610	39-61739	2–3	SOIL	—	—	—	—	—	—	—	—	—	0.0203	—	—	—	—	—
RE39-22-253611	39-61739	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253612	39-61739	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253613	39-61739	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253615	39-61740	2–3	SOIL	—	—	0.0193 (J+)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253616	39-61740	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253619	39-61741	0–1	SOIL	—	—	—	—	—	—	—	—	0.00185 (J)	—	—	—	—	—	—
RE39-22-253620	39-61741	2–3	SOIL	—	—	0.00195 (J)	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253621	39-61741	4–5	SOIL	—	—	0.006	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253622	39-61741	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253623	39-61741	9–10	SOIL	—	—	—	—	—	—	—	—	0.00688 (J)	—	—	—	—	—	—
RE39-22-253624	39-61742	0–1	SOIL	0.00241 (J)	—	—	—	—	—	—	—	—	—	0.011	0.0155 (J)	0.0172 (J)	0.0107	0.00585
RE39-22-253626	39-61742	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE39-22-253627	39-61742	6–7	SOIL	—	—	—	—	—	—	0.00526 (J)	—	—	—	0.00631 (J)	0.00526 (J)	0.00526 (J)	0.00631 (J)	0.00631 (J)
RE39-22-253628	39-61742	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-09-2113	39-604425	1–2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-09-2116	39-604426	1–2	SOIL	—	0.11 (J)	—	—	—	—	—	—	—	—	—	—	0.087 (J)	NA	NA	NA
RE39-09-2117	39-604426	2–3	SOIL	—	0.84	—	—	—	—	—	—	—	—	—	—	2.6 (J)	NA	NA	NA
RE39-22-253415	39-604426	4–5	SOIL	—	—	—	—	—	—	0.0148 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253416	39-604426	6–7	SOIL	0.338 (J)	—	—	—	—	—	—	—	—	—	—	—	0.216 (J)	NA	NA	NA
RE39-22-253417	39-604426	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253418	39-604426	14–15	SOIL	—	—	—	—	—	—	0.0282 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2121	39-604428	0–1	SOIL	—	—	—	NA	—	—	1.3	—	—	—	—	—	—	NA	NA	NA
RE39-09-2122	39-604428	1–2	SOIL	—	—	0.24 (J)	—	—	—	0.14 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2123	39-604428	2–3	SOIL	—	—	—	—	—	—	0.073 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2133	39-604432	0–1	SOIL	—	—	—	NA	—	—	2.76	—	—	—	—	—	—	NA	NA	NA
RE39-09-2134	39-604432	1–2	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	1.47	NA	NA	NA
RE39-09-2135	39-604432	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.75	NA	NA	NA
RE39-22-253420	39-604432	4–5	SOIL	—	—	—	—	—	—	0.0159 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253421	39-604432	6–7	SOIL	—	0.0713	—	—	—	—	0.0268 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253422	39-604432	9–10	SOIL	—	—	—	—	—	—	0.0654 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253423	39-604432	14–15	SOIL	—	—	—	—	—	—	0.0305 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253424	39-604432	19–20	SOIL	—	0.0948 (J)	—	—	—	—	0.0915 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2137	39-604433	1–2	SOIL	—	—	—	—	—	—	0.0501 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2138	39-604433	2–3	SOIL	—	—	—	—	—	—	0.0421 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253425	39-604433	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253426	39-604433	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253427	39-604433	9–10	SOIL	—	—	—	—	—	—	0.0953 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253428	39-604433	14–15	SOIL	—	—	—	—	—	—	0.0778 (J)	—	—	—	—	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253429	39-604433	19–20	SOIL	—	—	—	—	—	—	0.253	—	—	—	—	—	—	NA	NA	NA
RE39-09-2139	39-604434	0–1	SOIL	—	—	—	NA	—	—	0.0446 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2142	39-604435	0–1	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-09-2148	39-604437	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	9.47e-005	0.000167	9.72e-006
RE39-09-2149	39-604437	1–2	SOIL	—	—	—	—	—	—	0.085 (J)	—	—	—	—	—	0.034 (J-)	NA	NA	NA
RE39-09-2150	39-604437	2–3	SOIL	—	0.049 (J)	—	—	—	—	3.8	—	—	—	—	—	—	NA	NA	NA
RE39-09-2153	39-604438	2–3	SOIL	—	—	—	—	—	—	0.19 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2154	39-604439	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-09-2156	39-604439	2–3	SOIL	—	0.059 (J)	—	—	—	—	0.89	—	—	—	—	—	0.01 (J-)	NA	NA	NA
RE39-09-2157	39-604440	0–1	SOIL	—	—	—	—	—	—	0.053 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2160	39-604441	0–1	SOIL	—	—	—	—	—	0.12 (J)	—	—	—	—	0.19 (J)	—	0.01 (J-)	NA	NA	NA
RE39-09-2161	39-604441	1–2	SOIL	—	—	—	—	—	—	0.041 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-09-2162	39-604441	2–3	SOIL	—	—	—	—	—	0.067 (J)	—	—	—	—	0.12 (J)	—	—	NA	NA	NA
RE39-09-2163	39-604442	0–1	SOIL	—	—	—	0.00053 (J)	—	—	—	—	—	—	—	—	0.036 (J-)	NA	NA	NA
RE39-09-2164	39-604442	1–2	SOIL	—	—	—	—	—	—	0.036 (J)	—	—	—	—	—	0.66 (J-)	NA	NA	NA
RE39-09-2165	39-604442	2–3	SOIL	—	—	—	—	—	—	0.09 (J)	—	—	—	—	—	0.14 (J-)	NA	NA	NA
RE39-22-253430	39-604442	4–5	SOIL	—	0.44	—	—	—	0.0398	0.0233 (J)	—	0.00674	—	0.0819 (J+)	—	—	NA	NA	NA
RE39-22-253432	39-604442	9–10	SOIL	—	0.0316 (J)	—	—	—	—	0.0217 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253434	39-604442	19–20	SOIL	—	0.0371	—	—	—	—	0.0246 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253435	39-61707	0–1	SOIL	—	0.133	—	—	—	—	0.0633	—	—	—	—	—	—	NA	NA	NA
RE39-22-253437	39-61707	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253438	39-61707	6–7	SOIL	—	0.144	—	—	—	—	0.0549 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253439	39-61707	9–10	SOIL	—	0.0868	—	—	—	—	0.0509	—	—	—	—	—	—	NA	NA	NA
RE39-22-253440	39-61708	0–1	SOIL	—	—	—	—	—	—	0.144	—	—	—	—	—	—	NA	NA	NA
RE39-22-253442	39-61708	4–5	SOIL	—	0.108	—	—	—	—	0.0547 (J)	—	—	—	—	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253443	39-61708	6–7	SOIL	—	—	—	—	—	—	0.0106 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253444	39-61708	9–10	SOIL	—	0.0919 (J)	—	—	—	—	0.0433 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253447	39-61709	4.0–5.0	SOIL	—	—	—	—	—	0.0369 (J)	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253448	39-61709	6.0–7.0	SOIL	—	0.0311 (J)	—	—	—	—	0.0145 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253449	39-61709	9.0–10.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253450	39-61710	0.0–1.0	SOIL	—	—	—	—	—	0.0127 (J)	—	—	—	—	0.0164 (J)	—	—	NA	NA	NA
RE39-22-253453	39-61710	6.0–7.0	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253455	39-61711	0–1	SOIL	—	—	—	—	—	0.0103 (J)	—	—	0.00206 (J)	—	0.0165 (J)	—	—	NA	NA	NA
RE39-22-253456	39-61711	2–3	SOIL	—	—	—	—	—	—	0.0239 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253457	39-61711	4–5	SOIL	—	—	—	—	—	—	0.0337 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253458	39-61711	6–7	SOIL	—	—	—	—	—	—	0.0156 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253459	39-61711	9–10	SOIL	—	—	—	—	—	—	0.0447 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253460	39-61712	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	0.00631 (J)	—	—	NA	NA	NA
RE39-22-253461	39-61712	2–3	SOIL	0.293 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253462	39-61712	4–5	SOIL	—	—	—	—	—	—	0.012 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253463	39-61712	6–7	SOIL	—	—	—	—	—	—	0.0106 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253464	39-61712	9–10	SOIL	—	—	—	—	—	—	0.0118 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253475	39-61715	0–1	SOIL	—	—	—	—	—	—	0.16	—	—	—	—	—	—	NA	NA	NA
RE39-22-253476	39-61715	2–3	SOIL	—	—	—	—	—	—	0.107 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253477	39-61715	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253478	39-61715	6–7	SOIL	—	—	—	—	—	—	0.098 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253479	39-61715	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253480	39-61716	0–1	SOIL	—	—	—	—	—	—	0.075 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253481	39-61716	2–3	SOIL	—	—	—	—	—	—	0.0282 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253482	39-61716	4–5	SOIL	—	—	—	—	—	—	0.0605 (J)	—	—	—	—	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253483	39-61716	6–7	SOIL	—	—	—	—	—	—	0.0606 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253484	39-61716	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253485	39-61717	0.0–1.0	SOIL	—	—	—	0.00154	—	—	0.0236 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253486	39-61717	2.0–3.0	SOIL	—	—	—	—	—	—	0.0214 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253487	39-61717	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253488	39-61717	6.0–7.0	SOIL	—	—	—	—	—	—	0.0243 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253491	39-61718	2.0–3.0	SOIL	—	0.0529 (J)	—	—	—	—	0.0448 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253492	39-61718	4.0–5.0	SOIL	—	0.0194 (J)	—	—	—	—	0.15 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253493	39-61718	6–7	SOIL	—	—	—	—	—	—	0.0133 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253494	39-61718	9–10	SOIL	—	—	—	—	—	—	0.0239 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253496	39-61719	2–3	SOIL	—	—	—	—	—	—	0.0178 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253497	39-61719	4.0–5.0	SOIL	—	—	—	—	—	—	0.0247 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253498	39-61719	6–7	SOIL	—	—	—	—	—	—	0.025 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253499	39-61719	9–10	SOIL	—	0.0879 (J)	—	—	—	—	0.0347 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253500	39-61720	0–1	SOIL	—	0.0846	—	—	—	—	0.0545	—	—	—	—	—	—	NA	NA	NA
RE39-22-253501	39-61720	2–3	SOIL	—	—	—	—	—	—	0.0302 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253502	39-61720	4–5	SOIL	—	0.065	—	—	—	—	0.0412	—	—	—	—	—	—	NA	NA	NA
RE39-22-253503	39-61720	6–7	SOIL	—	—	—	—	—	—	0.0272 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253504	39-61720	9–10	SOIL	—	0.153	—	—	—	—	0.0764 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253505	39-61721	0–1	SOIL	—	—	—	—	—	—	0.02 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253506	39-61721	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	0.00382 (J)	—	—	NA	NA	NA
RE39-22-253507	39-61721	4–5	SOIL	—	—	—	—	—	—	0.0214 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253508	39-61721	6–7	SOIL	0.279 (J)	0.0119 (J-)	—	—	—	—	2.19 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253509	39-61721	9–10	SOIL	—	—	—	—	—	—	0.0144 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253510	39-61722	0.0–1.0	SOIL	—	0.129	—	—	—	0.00925 (J)	0.103	—	—	0.0462 (J)	0.0164	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253511	39-61722	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	—	—	0.00344	—	—	NA	NA	NA
RE39-22-253513	39-61722	6–7	SOIL	—	0.0115 (J-)	—	—	—	0.00435 (J)	0.0276 (J-)	—	—	—	0.00737 (J)	—	—	NA	NA	NA
RE39-22-253514	39-61722	9–10	SOIL	—	—	—	—	—	—	0.0136 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253515	39-61723	0–1	SOIL	—	—	—	—	—	0.00619 (J)	—	—	—	—	0.0114	—	—	NA	NA	NA
RE39-22-253516	39-61723	2–3	SOIL	—	—	—	—	—	—	0.103 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253517	39-61723	4–5	SOIL	—	—	—	—	—	—	0.115 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253518	39-61723	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253519	39-61723	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253520	39-61724	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253521	39-61724	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253522	39-61724	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253523	39-61724	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253524	39-61724	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253525	39-61725	0–1	SOIL	—	—	—	—	—	—	3.67	—	—	—	—	—	—	NA	NA	NA
RE39-22-253528	39-61725	6–7	SOIL	—	0.0904	—	—	—	—	0.203	—	—	—	—	—	—	NA	NA	NA
RE39-22-253529	39-61725	9–10	SOIL	—	0.0366	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253530	39-61726	0–1	SOIL	—	—	—	—	—	—	0.112	—	—	—	—	—	—	NA	NA	NA
RE39-22-253531	39-61726	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253532	39-61726	4–5	SOIL	—	—	—	—	—	—	0.108	—	—	—	—	—	—	NA	NA	NA
RE39-22-253533	39-61726	6–7	SOIL	—	0.0332 (J)	—	—	—	—	0.0193 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253535	39-61727	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253536	39-61727	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253538	39-61727	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253539	39-61727	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253540	39-61728	0–1	SOIL	—	—	—	—	—	0.0117 (J)	0.0155 (J)	—	—	—	0.0117 (J)	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253542	39-61728	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253543	39-61728	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.204 (J)	NA	NA	NA
RE39-22-253544	39-61728	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253545	39-61729	0–1	SOIL	—	—	—	—	—	—	0.0191 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253546	39-61729	2–3	SOIL	—	0.0105 (J)	—	—	—	—	0.0254 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253547	39-61729	4–5	SOIL	—	0.155	—	—	—	—	0.0181 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253548	39-61729	6–7	SOIL	—	0.0176 (J)	—	—	—	—	0.0183 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253549	39-61729	9–10	SOIL	—	0.0247 (J)	—	—	—	—	0.0254 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253550	39-61730	0–1	SOIL	0.304 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253551	39-61730	2–3	SOIL	—	—	—	—	—	—	0.0166 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253552	39-61730	4–5	SOIL	0.364 (J)	—	—	—	—	—	—	—	—	—	0.00382	—	—	NA	NA	NA
RE39-22-253554	39-61730	9–10	SOIL	—	—	—	—	—	—	0.0231 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253555	39-61730	14–15	SOIL	—	—	—	—	—	—	0.0157 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253556	39-61730	19–20	SOIL	—	—	—	—	—	—	0.0278 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253558	39-61731	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253561	39-61731	9–10	SOIL	—	0.059 (J)	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253563	39-61731	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253564	39-61732	0–1	SOIL	0.303 (J)	—	—	—	—	—	0.0125 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253565	39-61732	2–3	SOIL	—	—	—	—	—	—	0.0238 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253566	39-61732	4–5	SOIL	—	—	—	—	—	—	0.0134 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253567	39-61732	6–7	SOIL	—	0.0247 (J-)	—	—	—	—	0.0275 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253568	39-61732	9–10	Qbt3	—	—	—	—	—	—	0.0122 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253569	39-61732	14–15	SOIL	—	—	—	—	—	—	0.0127 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253570	39-61732	19–20	Qbt2	—	0.0344 (J)	—	—	—	—	0.0202 (J-)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253571	39-61733	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000**[f]	**5380**	**99,000**[f]	**235**	**28,300**	**23100**	**26,900**	**2700**[f]	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na**[b]	**na**	**na**
Industrial SSL[a]				**3,300,000**[g]	**1830**	**12,000**[g]	**201**	**104,000**	**3230**	**91,600**	**8200**[g]	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000**[g]	**380**	**2900**[g]	**41.1**	**6260**	**153**	**6160**	**630**[g]	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253573	39-61733	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253575	39-61733	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253577	39-61733	19–20	SOIL	—	—	—	—	0.00624 (J)	0.00624 (J)	—	—	0.00728 (J)	—	0.00728 (J)	0.00728 (J)	—	NA	NA	NA
RE39-22-253578	39-61734	0–1	SOIL	—	0.023 (J)	—	—	—	—	0.0312 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253579	39-61734	2–3	SOIL	—	0.0121 (J)	—	—	—	—	0.0178 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253580	39-61734	4–5	SOIL	—	0.0322 (J)	—	—	—	—	0.0447 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253581	39-61734	6–7	SOIL	—	0.0587 (J)	—	—	—	—	0.0689 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253582	39-61734	9–10	SOIL	—	—	—	—	—	—	0.071 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253583	39-61734	14–15	SOIL	—	0.693	—	—	—	—	0.0808	—	—	—	—	—	—	NA	NA	NA
RE39-22-253584	39-61734	19–20	SOIL	—	—	—	—	—	—	0.0649 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253585	39-61735	0–1	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253589	39-61735	9-10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253591	39-61735	19–20	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253592	39-61736	0–1	SOIL	—	—	—	—	—	—	0.0602 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253593	39-61736	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253594	39-61736	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253595	39-61736	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253596	39-61736	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253597	39-61736	14–15	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253599	39-61737	0–1	SOIL	—	—	—	—	—	—	0.0194 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253600	39-61737	2–3	SOIL	—	—	—	—	—	—	0.0201 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253601	39-61737	4–5	SOIL	—	—	—	—	—	—	0.017 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253602	39-61737	6–7	SOIL	—	—	—	—	—	—	0.0758	0.0214 (J)	—	—	—	—	—	NA	NA	NA
RE39-22-253603	39-61737	9–10	SOIL	—	—	—	—	—	—	0.0115 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253605	39-61738	2.0–3.0	SOIL	—	—	—	—	—	—	0.0774 (J)	—	—	—	—	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloromethane	Chloronaphthalene[2-]	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	HMX	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]
Construction Worker SSL[a]				**1,100,000[f]**	**5380**	**99,000[f]**	**235**	**28,300**	**23100**	**26,900**	**2700[f]**	**24**	**215,000**	**10,000**	**10,000**	**17,400**	**na[b]**	**na**	**na**
Industrial SSL[a]				**3,300,000[g]**	**1830**	**12,000[g]**	**201**	**104,000**	**3230**	**91,600**	**8200[g]**	**3.23**	**733,000**	**33,700**	**33,700**	**63,300**	**na**	**na**	**na**
Residential SSL[a]				**250,000[g]**	**380**	**2900[g]**	**41.1**	**6260**	**153**	**6160**	**630[g]**	**0.153**	**49,300**	**2320**	**2320**	**3850**	**na**	**na**	**na**
RE39-22-253607	39-61738	6.0–7.0	SOIL	—	—	—	—	—	—	0.0133 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253610	39-61739	2–3	SOIL	0.312 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253611	39-61739	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253612	39-61739	6–7	SOIL	0.297 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253613	39-61739	9–10	SOIL	—	—	—	—	—	—	0.0241 (J)	—	—	—	—	—	—	NA	NA	NA
RE39-22-253615	39-61740	2–3	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253616	39-61740	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253619	39-61741	0–1	SOIL	0.332 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253620	39-61741	2–3	SOIL	0.316 (J)	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253621	39-61741	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253622	39-61741	6–7	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253623	39-61741	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253624	39-61742	0–1	SOIL	—	—	—	—	—	0.0127 (J)	—	—	0.00172 (J)	—	0.0265 (J)	—	—	NA	NA	NA
RE39-22-253626	39-61742	4–5	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA
RE39-22-253627	39-61742	6–7	SOIL	—	—	—	—	—	0.00631 (J)	—	—	0.00526 (J)	—	0.00631 (J)	—	—	NA	NA	NA
RE39-22-253628	39-61742	9–10	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	NA	NA

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-09-2113	39-604425	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2116	39-604426	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2117	39-604426	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253415	39-604426	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253416	39-604426	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253417	39-604426	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253418	39-604426	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2121	39-604428	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE39-09-2122	39-604428	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2123	39-604428	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2133	39-604432	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE39-09-2134	39-604432	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2135	39-604432	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253420	39-604432	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253421	39-604432	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253422	39-604432	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253423	39-604432	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253424	39-604432	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2137	39-604433	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2138	39-604433	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253425	39-604433	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253426	39-604433	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253427	39-604433	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253428	39-604433	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-22-253429	39-604433	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2139	39-604434	0-1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE39-09-2142	39-604435	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE39-09-2148	39-604437	0–1	SOIL	8.3e-007 (J)	3.39e-005	6.82e-007 (J)	2.19e-006 (J)	1.3e-006 (J)	1.49e-005	1.12e-006 (J)	5.66e-007 (J)	5.58e-007 (J)	8.69e-007 (J)	2.44e-005	—	—	—
RE39-09-2149	39-604437	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2150	39-604437	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2153	39-604438	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2154	39-604439	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2156	39-604439	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0038 (J)	—	—
RE39-09-2157	39-604440	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2160	39-604441	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.065 (J)	—
RE39-09-2161	39-604441	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2162	39-604441	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2163	39-604442	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2164	39-604442	1–2	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-09-2165	39-604442	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253430	39-604442	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.0256	—
RE39-22-253432	39-604442	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253434	39-604442	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253435	39-61707	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253437	39-61707	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253438	39-61707	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253439	39-61707	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253440	39-61708	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253442	39-61708	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na**[b]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340**[f]	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300**[g]	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200**[g]	**1.53**	**2360**
RE39-22-253443	39-61708	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253444	39-61708	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253447	39-61709	4.0–5.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253448	39-61709	6.0–7.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253449	39-61709	9.0–10.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253450	39-61710	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00753	—
RE39-22-253453	39-61710	6.0–7.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253455	39-61711	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.0086	—
RE39-22-253456	39-61711	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253457	39-61711	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253458	39-61711	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253459	39-61711	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253460	39-61712	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253461	39-61712	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253462	39-61712	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253463	39-61712	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253464	39-61712	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253475	39-61715	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253476	39-61715	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253477	39-61715	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253478	39-61715	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253479	39-61715	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253480	39-61716	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253481	39-61716	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253482	39-61716	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-22-253483	39-61716	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253484	39-61716	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253485	39-61717	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253486	39-61717	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253487	39-61717	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253488	39-61717	6.0–7.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253491	39-61718	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253492	39-61718	4.0–5.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253493	39-61718	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253494	39-61718	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253496	39-61719	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253497	39-61719	4.0–5.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253498	39-61719	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253499	39-61719	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253500	39-61720	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253501	39-61720	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253502	39-61720	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253503	39-61720	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253504	39-61720	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253505	39-61721	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253506	39-61721	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253507	39-61721	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253508	39-61721	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253509	39-61721	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253510	39-61722	0.0–1.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00822 (J)	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-22-253511	39-61722	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00207 (J)	—
RE39-22-253513	39-61722	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00402 (J)	—
RE39-22-253514	39-61722	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253515	39-61723	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00619 (J)	—
RE39-22-253516	39-61723	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253517	39-61723	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253518	39-61723	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253519	39-61723	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253520	39-61724	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253521	39-61724	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253522	39-61724	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253523	39-61724	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253524	39-61724	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253525	39-61725	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253528	39-61725	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253529	39-61725	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253530	39-61726	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253531	39-61726	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253532	39-61726	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00446	—
RE39-22-253533	39-61726	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253535	39-61727	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253536	39-61727	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253538	39-61727	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253539	39-61727	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253540	39-61728	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-22-253542	39-61728	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253543	39-61728	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253544	39-61728	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253545	39-61729	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253546	39-61729	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253547	39-61729	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253548	39-61729	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.000921 (J)
RE39-22-253549	39-61729	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253550	39-61730	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253551	39-61730	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253552	39-61730	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253554	39-61730	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253555	39-61730	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253556	39-61730	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253558	39-61731	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253561	39-61731	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253563	39-61731	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253564	39-61732	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253565	39-61732	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253566	39-61732	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253567	39-61732	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253568	39-61732	9–10	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253569	39-61732	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253570	39-61732	19–20	QBT2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253571	39-61733	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-22-253573	39-61733	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253575	39-61733	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253577	39-61733	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00624 (J)	—
RE39-22-253578	39-61734	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253579	39-61734	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253580	39-61734	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253581	39-61734	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253582	39-61734	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253583	39-61734	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253584	39-61734	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253585	39-61735	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253589	39-61735	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253591	39-61735	19–20	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253592	39-61736	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253593	39-61736	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253594	39-61736	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.000664 (J)
RE39-22-253595	39-61736	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253596	39-61736	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253597	39-61736	14–15	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253599	39-61737	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253600	39-61737	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253601	39-61737	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253602	39-61737	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253603	39-61737	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253605	39-61738	2.0–3.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	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-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Hexanone[2-]	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Construction Worker SSL[a]				**na[b]**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**340[f]**	**240**	**2740**
Industrial SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1300[g]**	**32.3**	**14,200**
Residential SSL[a]				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**200[g]**	**1.53**	**2360**
RE39-22-253607	39-61738	6.0–7.0	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253610	39-61739	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253611	39-61739	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253612	39-61739	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253613	39-61739	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253615	39-61740	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	0.00241
RE39-22-253616	39-61740	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253619	39-61741	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253620	39-61741	2–3	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253621	39-61741	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253622	39-61741	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253623	39-61741	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253624	39-61742	0–1	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00998	—
RE39-22-253626	39-61742	4–5	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—
RE39-22-253627	39-61742	6–7	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00526 (J)	—
RE39-22-253628	39-61742	9–10	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-09-2113	39-604425	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2116	39-604426	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2117	39-604426	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253415	39-604426	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253416	39-604426	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253417	39-604426	9–10	SOIL	—	—	—	0.00203 (J)	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253418	39-604426	14-15	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2121	39-604428	0–1	SOIL	NA	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2122	39-604428	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2123	39-604428	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2133	39-604432	0–1	SOIL	NA	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2134	39-604432	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2135	39-604432	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253420	39-604432	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253421	39-604432	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253422	39-604432	9–10	SOIL	0.0267 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253423	39-604432	14–15	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253424	39-604432	19–20	SOIL	0.021 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2137	39-604433	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2138	39-604433	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253425	39-604433	4–5	SOIL	0.00605	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253426	39-604433	6–7	SOIL	0.00634	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253427	39-604433	9–10	SOIL	0.00284 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253428	39-604433	14–15	SOIL	0.00313 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253429	39-604433	19–20	SOIL	0.00914	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2139	39-604434	0–1	SOIL	NA	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2142	39-604435	0–1	SOIL	NA	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2148	39-604437	0–1	SOIL	—	NA	—	—	0.000989	2.1e-005	1.7e-006	2.57e-007 (J)	6.93e-007 (J)	6.26e-006	—	—
RE39-09-2149	39-604437	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2150	39-604437	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2153	39-604438	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2154	39-604439	0–1	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2156	39-604439	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2157	39-604440	0–1	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2160	39-604441	0–1	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	0.064 (J)	0.18 (J)
RE39-09-2161	39-604441	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2162	39-604441	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	0.05 (J)	0.1 (J)
RE39-09-2163	39-604442	0–1	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2164	39-604442	1–2	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-09-2165	39-604442	2–3	SOIL	—	NA	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253430	39-604442	4–5	SOIL	—	—	—	0.00202 (J)	NA	NA	NA	NA	NA	NA	0.0438	0.0708 (J+)
RE39-22-253432	39-604442	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253434	39-604442	19–20	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253435	39-61707	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253437	39-61707	4–5	SOIL	0.00431 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253438	39-61707	6–7	SOIL	0.00285 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253439	39-61707	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253440	39-61708	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253442	39-61708	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na**[b]	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253443	39-61708	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253444	39-61708	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253447	39-61709	4.0–5.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253448	39-61709	6.0–7.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253449	39-61709	9.0–10.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253450	39-61710	0.0–1.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.00376	0.0154 (J)
RE39-22-253453	39-61710	6.0–7.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253455	39-61711	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.00516	0.0175 (J)
RE39-22-253456	39-61711	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253457	39-61711	4–5	SOIL	0.0143	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253458	39-61711	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253459	39-61711	9–10	SOIL	0.00324 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253460	39-61712	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	0.00631 (J)
RE39-22-253461	39-61712	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253462	39-61712	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253463	39-61712	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253464	39-61712	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253475	39-61715	0–1	SOIL	—	0.0207	0.0304	0.0984 (J)	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253476	39-61715	2–3	SOIL	0.00196 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253477	39-61715	4–5	SOIL	0.00659	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253478	39-61715	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253479	39-61715	9–10	SOIL	0.00756	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253480	39-61716	0–1	SOIL	0.0029 (J)	0.0081 (J)	0.00912 (J)	0.0304 (J)	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253481	39-61716	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253482	39-61716	4–5	SOIL	0.00305 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253483	39-61716	6–7	SOIL	0.0139	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253484	39-61716	9–10	SOIL	0.0144	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253485	39-61717	0.0–1.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253486	39-61717	2.0–3.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253487	39-61717	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253488	39-61717	6.0–7.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253491	39-61718	2.0–3.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253492	39-61718	4.0–5.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253493	39-61718	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253494	39-61718	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253496	39-61719	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253497	39-61719	4.0–5.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253498	39-61719	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253499	39-61719	9–10	SOIL	0.00224 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253500	39-61720	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253501	39-61720	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253502	39-61720	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253503	39-61720	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253504	39-61720	9–10	SOIL	0.00395 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253505	39-61721	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253506	39-61721	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.00243 (J)	0.00278 (J)
RE39-22-253507	39-61721	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253508	39-61721	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253509	39-61721	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253510	39-61722	0.0–1.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.00617 (J)	0.0175

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253511	39-61722	2.0–3.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	0.00344
RE39-22-253513	39-61722	6–7	SOIL	—	0.00603 (J)	0.00502 (J)	0.00536 (J)	NA	NA	NA	NA	NA	NA	0.00201 (J)	0.00737 (J)
RE39-22-253514	39-61722	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253515	39-61723	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	0.0114
RE39-22-253516	39-61723	2–3	SOIL	0.00244 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253517	39-61723	4–5	SOIL	-	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253518	39-61723	6–7	SOIL	0.00296 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253519	39-61723	9–10	SOIL	0.00347 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253520	39-61724	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253521	39-61724	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253522	39-61724	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253523	39-61724	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253524	39-61724	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253525	39-61725	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253528	39-61725	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253529	39-61725	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253530	39-61726	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253531	39-61726	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253532	39-61726	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253533	39-61726	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253535	39-61727	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253536	39-61727	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253538	39-61727	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253539	39-61727	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253540	39-61728	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.011 (J)	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253542	39-61728	4–5	SOIL	0.00169 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253543	39-61728	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253544	39-61728	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253545	39-61729	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253546	39-61729	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253547	39-61729	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253548	39-61729	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253549	39-61729	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253550	39-61730	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253551	39-61730	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253552	39-61730	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.00343 (J)	0.00305 (J)
RE39-22-253554	39-61730	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253555	39-61730	14–15	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253556	39-61730	19–20	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253558	39-61731	2–3	SOIL	0.0161 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253561	39-61731	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253563	39-61731	19–20	SOIL	0.00879 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253564	39-61732	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253565	39-61732	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253566	39-61732	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253567	39-61732	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253568	39-61732	9–10	Qbt3	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253569	39-61732	14–15	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253570	39-61732	19–20	Qbt2	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253571	39-61733	0–1	SOIL	—	—	0.00931 (J)	0.0286 (J)	NA	NA	NA	NA	NA	NA	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253573	39-61733	4–5	SOIL	—	—	0.00657 (J)	0.00865 (J)	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253575	39-61733	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253577	39-61733	19–20	SOIL	—	—	0.00624 (J)	0.00728 (J)	NA	NA	NA	NA	NA	NA	0.00832 (J)	0.00624 (J)
RE39-22-253578	39-61734	0–1	SOIL	—	—	0.00206 (J)	0.00446	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253579	39-61734	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253580	39-61734	4–5	SOIL	0.00376 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253581	39-61734	6–7	SOIL	0.00333 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253582	39-61734	9–10	SOIL	0.00227 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253583	39-61734	14–15	SOIL	—	0.00315 (J)	0.0049	0.0056	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253584	39-61734	19–20	SOIL	0.00255 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253585	39-61735	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253589	39-61735	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253591	39-61735	19–20	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253592	39-61736	0–1	SOIL	0.00206 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253593	39-61736	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253594	39-61736	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253595	39-61736	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253596	39-61736	9–10	SOIL	0.00199 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253597	39-61736	14–15	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253599	39-61737	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253600	39-61737	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253601	39-61737	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253602	39-61737	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253603	39-61737	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253605	39-61738	2.0–3.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[1-]	Methylnaphthalene[2-]	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-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene
Construction Worker SSL[a]				**1210**	**6060**	**1000**	**159**	**na[b]**	**na**	**na**	**na**	**na**	**na**	**8070**	**7530**
Industrial SSL[a]				**5130**	**813**	**3370**	**108**	**na**	**na**	**na**	**na**	**na**	**na**	**27,500**	**25,300**
Residential SSL[a]				**409**	**172**	**232**	**22.6**	**na**	**na**	**na**	**na**	**na**	**na**	**1850**	**1740**
RE39-22-253607	39-61738	6.0–7.0	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253610	39-61739	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253611	39-61739	4–5	SOIL	0.00401 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253612	39-61739	6–7	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253613	39-61739	9–10	SOIL	0.00219 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253615	39-61740	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253616	39-61740	4–5	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253619	39-61741	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253620	39-61741	2–3	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253621	39-61741	4–5	SOIL	0.0253	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253622	39-61741	6–7	SOIL	0.0177	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253623	39-61741	9–10	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253624	39-61742	0–1	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA	0.0131 (J)	0.0244 (J)
RE39-22-253626	39-61742	4–5	SOIL	0.0046 (J)	—	—	—	NA	NA	NA	NA	NA	NA	—	—
RE39-22-253627	39-61742	6–7	SOIL	0.0444	—	—	—	NA	NA	NA	NA	NA	NA	0.00736 (J)	0.00631 (J)
RE39-22-253628	39-61742	9–10	SOIL	0.0464	—	—	—	NA	NA	NA	NA	NA	NA	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-09-2113	39-604425	1–2	SOIL	0.028 (J)	—	—	—	—	—
RE39-09-2116	39-604426	1–2	SOIL	3.7	—	—	—	—	—
RE39-09-2117	39-604426	2–3	SOIL	—	—	—	—	—	—
RE39-22-253415	39-604426	4–5	SOIL	—	—	0.000477 (J)	—	—	—
RE39-22-253416	39-604426	6–7	SOIL	—	—	0.000745 (J)	—	—	—
RE39-22-253417	39-604426	9–10	SOIL	—	—	—	—	—	—
RE39-22-253418	39-604426	14-15	SOIL	—	—	—	—	—	—
RE39-09-2121	39-604428	0–1	SOIL	—	—	NA	NA	NA	—
RE39-09-2122	39-604428	1–2	SOIL	—	—	—	—	—	—
RE39-09-2123	39-604428	2–3	SOIL	—	—	—	—	—	—
RE39-09-2133	39-604432	0–1	SOIL	—	—	NA	NA	NA	—
RE39-09-2134	39-604432	1–2	SOIL	25.3	—	—	—	—	—
RE39-09-2135	39-604432	2–3	SOIL	8.49	—	—	—	—	0.293 (J)
RE39-22-253420	39-604432	4–5	SOIL	—	—	0.000414 (J)	—	—	—
RE39-22-253421	39-604432	6–7	SOIL	—	—	0.000449 (J)	—	—	—
RE39-22-253422	39-604432	9–10	SOIL	—	—	—	—	—	—
RE39-22-253423	39-604432	14–15	SOIL	—	—	—	—	—	—
RE39-22-253424	39-604432	19–20	SOIL	—	—	—	—	—	—
RE39-09-2137	39-604433	1–2	SOIL	—	—	—	—	—	—
RE39-09-2138	39-604433	2–3	SOIL	—	—	—	—	—	—
RE39-22-253425	39-604433	4–5	SOIL	—	—	—	—	—	—
RE39-22-253426	39-604433	6–7	SOIL	—	—	—	—	—	—
RE39-22-253427	39-604433	9–10	SOIL	—	—	—	—	—	—
RE39-22-253428	39-604433	14–15	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253429	39-604433	19–20	SOIL	—	—	0.000404 (J)	—	—	—
RE39-09-2139	39-604434	0–1	SOIL	—	—	NA	NA	NA	—
RE39-09-2142	39-604435	0–1	SOIL	—	—	NA	NA	NA	—
RE39-09-2148	39-604437	0–1	SOIL	—	—	—	—	—	—
RE39-09-2149	39-604437	1–2	SOIL	0.16	—	—	—	—	—
RE39-09-2150	39-604437	2–3	SOIL	—	—	—	—	—	—
RE39-09-2153	39-604438	2–3	SOIL	—	—	—	—	0.0005 (J)	—
RE39-09-2154	39-604439	0–1	SOIL	—	—	—	—	—	0.033 (J)
RE39-09-2156	39-604439	2–3	SOIL	—	—	—	—	—	0.0066 (J)
RE39-09-2157	39-604440	0–1	SOIL	—	—	—	—	—	—
RE39-09-2160	39-604441	0–1	SOIL	—	—	—	—	—	—
RE39-09-2161	39-604441	1–2	SOIL	—	—	—	—	—	—
RE39-09-2162	39-604441	2–3	SOIL	—	—	—	—	—	—
RE39-09-2163	39-604442	0–1	SOIL	—	—	—	—	—	—
RE39-09-2164	39-604442	1–2	SOIL	—	—	—	—	—	—
RE39-09-2165	39-604442	2–3	SOIL	—	—	—	—	0.00046 (J)	—
RE39-22-253430	39-604442	4–5	SOIL	—	—	—	—	—	—
RE39-22-253432	39-604442	9–10	SOIL	—	—	—	—	—	—
RE39-22-253434	39-604442	19–20	SOIL	—	—	—	—	—	—
RE39-22-253435	39-61707	0–1	SOIL	—	—	—	—	—	—
RE39-22-253437	39-61707	4–5	SOIL	—	—	—	—	—	—
RE39-22-253438	39-61707	6–7	SOIL	—	—	—	—	—	—
RE39-22-253439	39-61707	9–10	SOIL	—	—	—	—	—	—
RE39-22-253440	39-61708	0–1	SOIL	—	—	—	—	—	—
RE39-22-253442	39-61708	4–5	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253443	39-61708	6–7	SOIL	—	—	—	—	—	—
RE39-22-253444	39-61708	9–10	SOIL	—	—	—	—	—	—
RE39-22-253447	39-61709	4.0–5.0	SOIL	—	—	—	—	—	—
RE39-22-253448	39-61709	6.0–7.0	SOIL	—	—	—	—	—	—
RE39-22-253449	39-61709	9.0–10.0	SOIL	—	—	—	—	—	—
RE39-22-253450	39-61710	0.0–1.0	SOIL	—	—	—	—	—	—
RE39-22-253453	39-61710	6.0–7.0	SOIL	—	—	—	—	—	—
RE39-22-253455	39-61711	0–1	SOIL	—	0.401 (J)	—	—	—	—
RE39-22-253456	39-61711	2–3	SOIL	—	—	0.00053 (J)	—	—	—
RE39-22-253457	39-61711	4–5	SOIL	—	—	—	—	—	—
RE39-22-253458	39-61711	6–7	SOIL	—	—	0.000459 (J)	—	—	—
RE39-22-253459	39-61711	9–10	SOIL	—	—	—	—	—	—
RE39-22-253460	39-61712	0–1	SOIL	—	—	—	—	—	—
RE39-22-253461	39-61712	2–3	SOIL	—	—	—	—	—	—
RE39-22-253462	39-61712	4–5	SOIL	—	—	—	—	—	—
RE39-22-253463	39-61712	6–7	SOIL	—	—	—	—	—	—
RE39-22-253464	39-61712	9–10	SOIL	—	—	—	—	—	—
RE39-22-253475	39-61715	0–1	SOIL	—	—	—	0.00666	0.000857 (J)	—
RE39-22-253476	39-61715	2–3	SOIL	—	—	—	—	—	—
RE39-22-253477	39-61715	4–5	SOIL	—	—	—	—	—	—
RE39-22-253478	39-61715	6–7	SOIL	—	—	—	—	—	—
RE39-22-253479	39-61715	9–10	SOIL	—	—	—	—	—	—
RE39-22-253480	39-61716	0–1	SOIL	—	—	—	—	—	—
RE39-22-253481	39-61716	2–3	SOIL	—	—	—	—	—	—
RE39-22-253482	39-61716	4–5	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253483	39-61716	6–7	SOIL	—	—	—	—	—	—
RE39-22-253484	39-61716	9–10	SOIL	—	—	—	—	—	—
RE39-22-253485	39-61717	0.0–1.0	SOIL	—	—	—	—	—	—
RE39-22-253486	39-61717	2.0–3.0	SOIL	—	—	—	—	—	—
RE39-22-253487	39-61717	4–5	SOIL	—	—	—	—	—	—
RE39-22-253488	39-61717	6.0–7.0	SOIL	—	—	—	—	—	—
RE39-22-253491	39-61718	2.0–3.0	SOIL	—	—	—	—	—	—
RE39-22-253492	39-61718	4.0–5.0	SOIL	—	—	—	—	—	—
RE39-22-253493	39-61718	6–7	SOIL	—	—	—	—	—	—
RE39-22-253494	39-61718	9–10	SOIL	—	—	—	—	—	—
RE39-22-253496	39-61719	2–3	SOIL	—	—	—	—	—	—
RE39-22-253497	39-61719	4.0–5.0	SOIL	—	—	—	—	—	—
RE39-22-253498	39-61719	6–7	SOIL	—	—	—	—	—	—
RE39-22-253499	39-61719	9–10	SOIL	—	—	—	—	—	—
RE39-22-253500	39-61720	0–1	SOIL	—	—	—	—	—	—
RE39-22-253501	39-61720	2–3	SOIL	—	—	—	—	—	—
RE39-22-253502	39-61720	4–5	SOIL	—	—	—	—	—	—
RE39-22-253503	39-61720	6–7	SOIL	—	—	—	—	—	—
RE39-22-253504	39-61720	9–10	SOIL	—	—	—	—	—	—
RE39-22-253505	39-61721	0–1	SOIL	—	—	0.000497 (J)	—	—	—
RE39-22-253506	39-61721	2–3	SOIL	—	—	—	—	—	—
RE39-22-253507	39-61721	4–5	SOIL	—	—	—	—	—	—
RE39-22-253508	39-61721	6–7	SOIL	—	—	—	—	—	—
RE39-22-253509	39-61721	9–10	SOIL	—	—	—	—	—	—
RE39-22-253510	39-61722	0.0–1.0	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253511	39-61722	2.0–3.0	SOIL	—	0.513 (J)	—	—	—	—
RE39-22-253513	39-61722	6–7	SOIL	—	—	0.000425 (J)	—	—	—
RE39-22-253514	39-61722	9–10	SOIL	—	—	—	—	—	—
RE39-22-253515	39-61723	0–1	SOIL	—	—	—	—	—	—
RE39-22-253516	39-61723	2–3	SOIL	—	—	—	—	—	—
RE39-22-253517	39-61723	4–5	SOIL	—	—	—	—	—	—
RE39-22-253518	39-61723	6–7	SOIL	—	—	—	—	—	—
RE39-22-253519	39-61723	9–10	SOIL	—	—	—	—	—	—
RE39-22-253520	39-61724	0–1	SOIL	—	—	0.0015	—	—	—
RE39-22-253521	39-61724	2–3	SOIL	—	—	—	—	—	—
RE39-22-253522	39-61724	4–5	SOIL	—	—	—	—	—	—
RE39-22-253523	39-61724	6–7	SOIL	—	—	0.00114	—	—	—
RE39-22-253524	39-61724	9–10	SOIL	—	—	0.00125	—	—	—
RE39-22-253525	39-61725	0–1	SOIL	—	—	—	—	—	—
RE39-22-253528	39-61725	6–7	SOIL	—	—	—	—	—	—
RE39-22-253529	39-61725	9–10	SOIL	—	—	—	—	—	—
RE39-22-253530	39-61726	0–1	SOIL	—	—	—	—	—	—
RE39-22-253531	39-61726	2–3	SOIL	—	—	—	—	—	—
RE39-22-253532	39-61726	4–5	SOIL	—	—	—	—	—	—
RE39-22-253533	39-61726	6–7	SOIL	—	—	—	—	—	—
RE39-22-253535	39-61727	0–1	SOIL	—	—	0.000968 (J)	—	—	—
RE39-22-253536	39-61727	2–3	SOIL	—	—	0.00101 (J)	—	—	—
RE39-22-253538	39-61727	6–7	SOIL	—	—	0.000956 (J)	—	—	—
RE39-22-253539	39-61727	9–10	SOIL	—	—	0.000939 (J)	—	—	—
RE39-22-253540	39-61728	0–1	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253542	39-61728	4–5	SOIL	—	—	—	—	—	—
RE39-22-253543	39-61728	6–7	SOIL	—	—	0.00127	—	—	—
RE39-22-253544	39-61728	9–10	SOIL	—	0.314 (J)	—	—	—	—
RE39-22-253545	39-61729	0–1	SOIL	—	—	0.00104	—	—	—
RE39-22-253546	39-61729	2–3	SOIL	—	—	0.000427 (J)	—	—	—
RE39-22-253547	39-61729	4–5	SOIL	—	—	0.000462 (J)	—	—	—
RE39-22-253548	39-61729	6–7	SOIL	—	—	0.00258	—	—	—
RE39-22-253549	39-61729	9–10	SOIL	—	—	0.000372 (J)	—	—	—
RE39-22-253550	39-61730	0–1	SOIL	—	—	—	—	—	—
RE39-22-253551	39-61730	2–3	SOIL	—	—	—	—	—	—
RE39-22-253552	39-61730	4–5	SOIL	—	—	—	—	—	—
RE39-22-253554	39-61730	9–10	SOIL	—	—	—	—	—	—
RE39-22-253555	39-61730	14–15	SOIL	—	—	—	—	—	—
RE39-22-253556	39-61730	19–20	SOIL	—	—	—	—	—	—
RE39-22-253558	39-61731	2–3	SOIL	—	—	—	—	—	—
RE39-22-253561	39-61731	9–10	SOIL	—	—	—	—	—	—
RE39-22-253563	39-61731	19–20	SOIL	—	—	—	—	—	—
RE39-22-253564	39-61732	0–1	SOIL	—	—	—	—	—	—
RE39-22-253565	39-61732	2–3	SOIL	0.156 (J)	—	—	—	—	—
RE39-22-253566	39-61732	4–5	SOIL	—	—	—	—	—	—
RE39-22-253567	39-61732	6–7	SOIL	—	—	—	—	—	—
RE39-22-253568	39-61732	9–10	Qbt3	—	—	0.000408 (J)	—	—	—
RE39-22-253569	39-61732	14–15	SOIL	3.84	—	—	—	—	—
RE39-22-253570	39-61732	19–20	Qbt2	—	—	—	—	—	—
RE39-22-253571	39-61733	0–1	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253573	39-61733	4–5	SOIL	—	—	—	—	—	—
RE39-22-253575	39-61733	9–10	SOIL	—	—	—	—	—	—
RE39-22-253577	39-61733	19–20	SOIL	—	—	0.0391 (J)	—	—	—
RE39-22-253578	39-61734	0–1	SOIL	—	—	0.000392 (J)	—	—	—
RE39-22-253579	39-61734	2–3	SOIL	—	—	—	—	—	—
RE39-22-253580	39-61734	4–5	SOIL	—	—	—	—	—	—
RE39-22-253581	39-61734	6–7	SOIL	—	—	—	—	—	—
RE39-22-253582	39-61734	9–10	SOIL	—	—	—	—	—	—
RE39-22-253583	39-61734	14–15	SOIL	—	—	0.000384 (J)	—	—	—
RE39-22-253584	39-61734	19–20	SOIL	—	—	—	—	—	—
RE39-22-253585	39-61735	0–1	SOIL	—	—	0.00121	—	—	—
RE39-22-253589	39-61735	9–10	SOIL	—	—	0.000391 (J)	—	—	—
RE39-22-253591	39-61735	19–20	SOIL	—	—	—	—	—	—
RE39-22-253592	39-61736	0–1	SOIL	—	—	—	—	—	—
RE39-22-253593	39-61736	2–3	SOIL	—	—	0.00115	—	—	—
RE39-22-253594	39-61736	4–5	SOIL	—	—	0.00101 (J)	—	—	—
RE39-22-253595	39-61736	6–7	SOIL	—	—	0.000763 (J)	—	—	—
RE39-22-253596	39-61736	9–10	SOIL	—	—	—	—	—	—
RE39-22-253597	39-61736	14–15	SOIL	—	—	0.000403 (J)	—	—	—
RE39-22-253599	39-61737	0–1	SOIL	—	—	—	—	—	—
RE39-22-253600	39-61737	2–3	SOIL	—	—	—	—	—	—
RE39-22-253601	39-61737	4–5	SOIL	—	—	—	—	—	—
RE39-22-253602	39-61737	6–7	SOIL	—	—	—	—	—	—
RE39-22-253603	39-61737	9–10	SOIL	—	—	—	—	—	—
RE39-22-253605	39-61738	2.0–3.0	SOIL	—	—	—	—	—	—

Table 6.7-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	RDX	TATB	Toluene	Trimethylbenzene[1,2,4-]	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Construction Worker SSL[a]				**1350**	**10,000[h]**	**14,000**	**600[f]**	**570[f]**	**161**
Industrial SSL[a]				**428**	**32,000[h]**	**61,300**	**1800[g]**	**1500[g]**	**573**
Residential SSL[a]				**83.1**	**2200[h]**	**5230**	**300[g]**	**270[g]**	**36**
RE39-22-253607	39-61738	6.0–7.0	SOIL	—	—	—	—	—	—
RE39-22-253610	39-61739	2–3	SOIL	—	—	—	—	—	—
RE39-22-253611	39-61739	4–5	SOIL	—	—	—	—	—	—
RE39-22-253612	39-61739	6–7	SOIL	—	—	—	—	—	—
RE39-22-253613	39-61739	9–10	SOIL	—	—	—	—	—	—
RE39-22-253615	39-61740	2–3	SOIL	—	—	0.000836 (J)	—	—	—
RE39-22-253616	39-61740	4–5	SOIL	—	—	0.00083 (J)	—	—	—
RE39-22-253619	39-61741	0–1	SOIL	—	—	0.000642 (J)	—	—	—
RE39-22-253620	39-61741	2–3	SOIL	—	—	0.000434 (J)	—	—	—
RE39-22-253621	39-61741	4–5	SOIL	—	—	—	—	—	—
RE39-22-253622	39-61741	6–7	SOIL	—	—	—	—	—	—
RE39-22-253623	39-61741	9–10	SOIL	—	—	—	—	—	—
RE39-22-253624	39-61742	0–1	SOIL	—	—	—	—	—	—
RE39-22-253626	39-61742	4–5	SOIL	—	—	—	—	—	—
RE39-22-253627	39-61742	6–7	SOIL	—	—	—	—	—	—
RE39-22-253628	39-61742	9–10	SOIL	—	—	—	—	—	—

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] na = Not available.

[c] Pyrene used as a surrogate based on structural similarity.

[d] — = Not detected.

[e] NA = Not analyzed.

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484).

[g] SSL from EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[h] (1,3,5-TNB) used as a surrogate based on structural similarity.

Table 6.7-4
Radionuclides Detected or Detected above BVs/FVs at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Cobalt-60	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
SOIL Background Value[a]				**0.013**	**1.65**	**na[b]**	**0.023**	**0.054**	**na**	**2.59**	**0.2**	**2.29**
Qbt 2, 3, 4 Background Value				**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
Construction Worker SAL 25[c]				**230**	**37**	**8.1**	**230**	**200**	**1,600,000**	**1000**	**130**	**470**
Industrial SAL 25[c]				**1000**	**41**	**9**	**1300**	**1200**	**2,400,000**	**3100**	**160**	**710**
Residential SAL 25[c]				**83**	**12**	**2.6**	**84**	**79**	**1700**	**290**	**42**	**150**
RE39-09-2112	39-604425	0–1	SOIL	—[d]	—	—	—	—	—	2.68	0.223	9.42
RE39-09-2113	39-604425	1–2	SOIL	—	—	—	—	—	—	12.7	1.93 (J)	90
RE39-09-2114	39-604425	2–3	SOIL	—	—	—	—	—	—	—	0.266	—
RE39-09-2115	39-604426	0–1	SOIL	—	—	—	—	—	—	3.86	0.45	19.4
RE39-09-2116	39-604426	1–2	SOIL	—	0.205	—	—	—	—	6.83	0.74	42.9
RE39-09-2117	39-604426	2–3	SOIL	—	—	—	—	—	—	55	10.5	344
RE39-22-253415	39-604426	4–5	SOIL	—	—	—	—	—	3.87	—	—	5.4 (J)
RE39-22-253416	39-604426	6–7	SOIL	—	—	—	—	—	—	2.86 (J)	0.224 (J)	10.1 (J)
RE39-09-2119	39-604427	1–2	SOIL	—	—	—	—	—	—	—	0.78 (J)	—
RE39-09-2121	39-604428	0–1	SOIL	—	—	—	—	—	—	—	—	4.98
RE39-09-2122	39-604428	1–2	SOIL	—	—	—	—	—	—	—	—	2.45
RE39-09-2123	39-604428	2–3	SOIL	—	—	—	—	—	3.91	—	—	2.8
RE39-09-2127	39-604430	0–1	SOIL	—	—	—	—	—	—	3.75	0.207	5.64
RE39-09-2128	39-604430	1–2	SOIL	—	0.201	—	—	—	—	4.37	0.302	9.37
RE39-09-2129	39-604430	2–3	SOIL	—	—	—	—	—	—	4.03	0.224	7.27
RE39-09-2130	39-604431	0–1	SOIL	—	—	—	—	—	—	—	—	3.64
RE39-09-2131	39-604431	1–2	SOIL	—	0.127	—	—	—	—	—	—	2.97
RE39-09-2133	39-604432	0–1	SOIL	—	—	—	—	—	—	5.01	0.428	17.7
RE39-09-2134	39-604432	1–2	SOIL	—	—	—	—	—	—	5.23	0.475	21.2
RE39-09-2135	39-604432	2–3	SOIL	—	—	—	—	—	—	6.46	0.592	32.6
RE39-22-253421	39-604432	6–7	SOIL	—	—	—	—	—	—	—	0.257	10.5 (J)
RE39-09-2136	39-604433	0–1	SOIL	—	—	—	—	—	—	—	—	3.22
RE39-09-2137	39-604433	1–2	SOIL	—	—	—	—	—	—	2.78	—	4.47
RE39-09-2138	39-604433	2–3	SOIL	—	—	—	—	—	—	5.24	0.282	11.1
RE39-22-253428	39-604433	14–15	SOIL	—	—	0.724	—	—	—	—	—	—

Table 6.7-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Cobalt-60	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
Soil Background Value[a]				**0.013**	**1.65**	**na[b]**	**0.023**	**0.054**	**na**	**2.59**	**0.2**	**2.29**
Qbt2, 3, 4 Background Value				**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
Construction Worker SAL 25[c]				**230**	**37**	**8.1**	**230**	**200**	**1,600,000**	**1000**	**130**	**470**
Industrial SAL 25[c]				**1000**	**41**	**9**	**1300**	**1200**	**2,400,000**	**3100**	**160**	**710**
Residential SAL 25[c]				**83**	**12**	**2.6**	**84**	**79**	**1700**	**290**	**42**	**150**
RE39-22-253429	39-604433	19–20	SOIL	—	—	—	—	—	—	—	—	4.6
RE39-09-2139	39-604434	0–1	SOIL	—	—	—	—	—	—	5.54	0.487	16.3
RE39-09-2140	39-604434	1–2	SOIL	—	—	—	—	—	—	2.6	—	5.86
RE39-09-2142	39-604435	0–1	SOIL	—	—	—	—	—	—	—	—	4.35 (J-)
RE39-09-2145	39-604436	0–1	SOIL	—	—	—	—	—	0.0369507	—	—	2.63
RE39-09-2146	39-604436	1–2	SOIL	—	0.119	—	—	—	—	—	—	—
RE39-09-2147	39-604436	2–3	SOIL	—	—	—	—	—	0.0122848	—	—	—
RE39-09-2148	39-604437	0–1	SOIL	—	—	—	—	—	—	7.3 (J)	0.9	56.2 (J)
RE39-09-2149	39-604437	1–2	SOIL	—	—	—	—	—	—	—	—	11 (J)
RE39-09-2150	39-604437	2–3	SOIL	—	—	—	—	—	—	3.43 (J)	0.296	12.5 (J)
RE39-09-2151	39-604438	0–1	SOIL	—	—	—	—	—	—	—	—	4.44 (J)
RE39-09-2152	39-604438	1–2	SOIL	—	—	—	—	—	—	—	—	2.33 (J)
RE39-09-2154	39-604439	0–1	SOIL	—	—	—	—	—	—	—	—	3.48 (J)
RE39-09-2155	39-604439	1–2	SOIL	—	—	—	—	—	2.35	—	—	4.62 (J)
RE39-09-2156	39-604439	2–3	SOIL	—	—	—	—	—	—	3.76 (J)	0.275	9.06 (J)
RE39-09-2157	39-604440	0–1	SOIL	—	—	—	—	—	—	2.81 (J)	0.283	11.4 (J)
RE39-09-2158	39-604440	1–2	SOIL	—	—	—	—	—	—	—	—	3.09 (J)
RE39-09-2159	39-604440	2–3	SOIL	—	—	—	—	—	—	—	—	3.4 (J)
RE39-09-2160	39-604441	0–1	SOIL	—	—	—	—	—	—	—	—	6.6 (J)
RE39-09-2161	39-604441	1–2	SOIL	—	—	—	—	—	—	3.28 (J)	0.264	9.24 (J)
RE39-09-2162	39-604441	2–3	SOIL	—	—	—	—	—	—	3.09 (J)	—	9.14 (J)
RE39-09-2163	39-604442	0–1	SOIL	—	—	—	—	—	—	4.86 (J)	0.627	26.7 (J)
RE39-09-2164	39-604442	1–2	SOIL	—	—	—	—	—	—	10.2 (J)	1.12	58.6 (J)
RE39-09-2165	39-604442	2–3	SOIL	—	—	—	—	—	—	7.08 (J)	1.08	48 (J)
RE39-22-253430	39-604442	4–5	SOIL	—	—	—	—	—	—	—	—	3.24
RE39-22-253437	39-61707	4–5	SOIL	—	—	—	—	—	—	8.66	—	—

Table 6.7-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Cobalt-60	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
Soil Background Value[a]				**0.013**	**1.65**	**na[b]**	**0.023**	**0.054**	**na**	**2.59**	**0.2**	**2.29**
Qbt2, 3, 4 Background Value				**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
Construction Worker SAL 25[c]				**230**	**37**	**8.1**	**230**	**200**	**1,600,000**	**1000**	**130**	**470**
Industrial SAL 25[c]				**1000**	**41**	**9**	**1300**	**1200**	**2,400,000**	**3100**	**160**	**710**
Residential SAL 25[c]				**83**	**12**	**2.6**	**84**	**79**	**1700**	**290**	**42**	**150**
RE39-22-253450	39-61710	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	2.88
RE39-22-253451	39-61710	2.0–3.0	SOIL	—	—	—	—	—	—	—	—	3.23
RE39-22-253460	39-61712	0–1	SOIL	—	—	—	—	—	—	—	—	6.29
RE39-22-253473	39-61714	6–7	SOIL	—	0.0528	—	—	—	—	—	—	—
RE39-22-253477	39-61715	4–5	SOIL	—	—	—	3.25	—	—	—	—	—
RE39-22-253480	39-61716	0–1	SOIL	—	—	—	—	—	—	—	—	3.94
RE39-22-253481	39-61716	2–3	SOIL	—	—	—	—	13.8	—	—	—	—
RE39-22-253485	39-61717	0.0–1.0	SOIL	—	—	—	0.0577	0.0577	—	—	—	—
RE39-22-253490	39-61718	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	7.3
RE39-22-253491	39-61718	2.0–3.0	SOIL	—	0.119	—	—	—	—	—	—	—
RE39-22-253493	39-61718	6–7	SOIL	—	0.117	—	—	—	—	—	—	—
RE39-22-253495	39-61719	0.0–1.0	SOIL	—	—	—	—	—	—	—	—	3.61
RE39-22-253500	39-61720	0–1	SOIL	—	—	—	—	—	—	—	—	3.63
RE39-22-253505	39-61721	0–1	SOIL	—	—	—	—	—	—	3.82 (J)	0.256	9.67 (J)
RE39-22-253506	39-61721	2–3	SOIL	—	—	—	—	—	—	5.58 (J)	0.517	24.6 (J)
RE39-22-253507	39-61721	4–5	SOIL	—	—	—	—	—	—	3.52 (J)	0.311	9.26 (J)
RE39-22-253508	39-61721	6–7	SOIL	—	—	—	—	—	—	5.71 (J)	0.51	20.1 (J)
RE39-22-253511	39-61722	2.0–3.0	SOIL	—	—	—	—	—	—	—	0.226	7.51
RE39-22-253513	39-61722	6–7	SOIL	—	—	—	—	—	—	—	0.218 (J)	4.94 (J)
RE39-22-253514	39-61722	9–10	SOIL	—	—	—	—	—	4.28	—	—	3.32 (J)
RE39-22-253515	39-61723	0–1	SOIL	—	—	—	—	—	—	5.36	—	—
RE39-22-253516	39-61723	2–3	SOIL	—	—	—	—	—	—	10.1	—	3.93
RE39-22-253517	39-61723	4–5	SOIL	—	—	—	—	—	—	3.91 (J)	0.296 (J)	13.3 (J)
RE39-22-253518	39-61723	6–7	SOIL	—	—	—	—	—	—	15.7	—	—
RE39-22-253525	39-61725	0–1	SOIL	—	—	—	—	—	—	5.2	—	12.6
RE39-22-253528	39-61725	6–7	SOIL	—	—	—	—	—	—	4.16	0.231	10.7

Table 6.7-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Cobalt-60	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
Soil Background Value[a]				**0.013**	**1.65**	**na[b]**	**0.023**	**0.054**	**na**	**2.59**	**0.2**	**2.29**
Qbt2, 3, 4 Background Value				**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
Construction Worker SAL 25[c]				**230**	**37**	**8.1**	**230**	**200**	**1,600,000**	**1000**	**130**	**470**
Industrial SAL 25[c]				**1000**	**41**	**9**	**1300**	**1200**	**2,400,000**	**3100**	**160**	**710**
Residential SAL 25[c]				**83**	**12**	**2.6**	**84**	**79**	**1700**	**290**	**42**	**150**
RE39-22-253530	39-61726	0–1	SOIL	—	—	—	—	—	—	6.46	—	8.64
RE39-22-253532	39-61726	4–5	SOIL	—	0.108 (J)	—	—	—	—	4.97	0.419	11.2
RE39-22-253540	39-61728	0–1	SOIL	—	—	—	—	—	—	5.05	0.547	20
RE39-22-253541	39-61728	2–3	SOIL	—	—	—	—	—	—	11.9 (J)	1.75 (J)	93.8 (J)
RE39-22-253543	39-61728	6–7	SOIL	—	—	—	—	—	—	—	—	6.08
RE39-22-253545	39-61729	0–1	SOIL	—	—	—	—	—	—	6.31	0.734	26.6
RE39-22-253546	39-61729	2–3	SOIL	—	—	—	—	—	—	4.67	0.347	14.2
RE39-22-253547	39-61729	4–5	SOIL	—	—	—	—	—	—	4.74	0.46	19.3
RE39-22-253548	39-61729	6–7	SOIL	—	—	—	—	—	—	3.75	0.316 (J)	12.7
RE39-22-253564	39-61732	0–1	SOIL	—	—	—	—	—	4.97	3.66 (J)	0.301 (J)	16.8 (J)
RE39-22-253565	39-61732	2–3	SOIL	—	0.15	—	—	—	—	4.03 (J)	0.422	14.9 (J)
RE39-22-253566	39-61732	4–5	SOIL	—	—	—	—	—	—	—	0.252	8.43 (J)
RE39-22-253567	39-61732	6–7	SOIL	—	—	—	—	—	—	—	—	4.07 (J)
RE39-22-253568	39-61732	9–10	Qbt3	—	—	—	—	—	—	—	0.102	2.05 (J)
RE39-22-253569	39-61732	14–15	SOIL	—	—	—	—	—	—	—	—	7.62 (J)
RE39-22-253570	39-61732	19–20	Qbt2	—	—	—	—	—	4.62	—	—	—
RE39-22-253571	39-61733	0–1	SOIL	—	—	—	—	—	—	2.68	—	4.48
RE39-22-253572	39-61733	2–3	SOIL	—	—	—	—	—	—	6.84	0.494	21.9
RE39-22-253573	39-61733	4–5	SOIL	—	—	—	—	—	—	—	—	3.87
RE39-22-253578	39-61734	0–1	SOIL	—	—	—	—	—	—	—	—	5.87
RE39-22-253580	39-61734	4–5	SOIL	—	0.117	—	—	—	—	—	—	—
RE39-22-253583	39-61734	14–15	SOIL	—	—	—	—	—	—	—	—	2.72
RE39-22-253584	39-61734	19–20	SOIL	—	—	—	—	—	136	—	—	—
RE39-22-253585	39-61735	0–1	SOIL	—	—	—	—	—	—	—	—	4.54
RE39-22-253592	39-61736	0–1	SOIL	1.43	—	—	—	—	—	—	—	—
RE39-22-253596	39-61736	9–10	SOIL	—	—	1.86 (J)	—	—	—	—	—	—

Table 6.7-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Cobalt-60	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
Soil Background Value[a]				**0.013**	**1.65**	**na[b]**	**0.023**	**0.054**	**na**	**2.59**	**0.2**	**2.29**
Qbt2, 3, 4 Background Value				**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
Construction Worker SAL 25[c]				**230**	**37**	**8.1**	**230**	**200**	**1,600,000**	**1000**	**130**	**470**
Industrial SAL 25[c]				**1000**	**41**	**9**	**1300**	**1200**	**2,400,000**	**3100**	**160**	**710**
Residential SAL 25[c]				**83**	**12**	**2.6**	**84**	**79**	**1700**	**290**	**42**	**150**
RE39-22-253599	39-61737	0–1	SOIL	—	—	—	—	—	—	3.24	0.295	14.5
RE39-22-253610	39-61739	2–3	SOIL	—	0.144	—	—	—	—	—	—	—
RE39-22-253615	39-61740	2–3	SOIL	—	—	—	—	—	—	—	—	2.4
RE39-22-253616	39-61740	4–5	SOIL	—	0.108	—	—	—	—	—	—	2.42

Note: Results are in pCI/g.

[a] BVs from LANL (1998, 059730).

[b] na = not available.

[c] SALs from LANL (2015, 600929).

[d] — = Not detected or not detected above BV/FV.

Table 8.1-1
Summary of Investigation Results and Recommendations

SWMU/AOC	Brief Description	Extent Defined or No Further Sampling Warranted?	Potential Unacceptable Risk/Dose?	Recommendation
SWMU 39-001(a)	Inactive Landfill	Yes	No	Corrective Action Complete without Controls
SWMU 39-002(a)	Inactive Storage Areas	Yes	Yes	Corrective Action Complete with Controls
AOC 39-002(b)	Inactive Storage Area	Yes	Yes	Corrective Action Complete with Controls
SWMU 39-006(a)	Septic System	Yes	No	Corrective Action Complete without Controls
SWMU 39-007(a)	Storage Area	Yes	No	Corrective Action Complete without Controls
SWMU 39-010	SOIL Stockpile	Yes	Yes	Corrective Action Complete with Controls

Appendix A

Acronyms and Abbreviations,
Metric Conversion Table, and Data Qualifier Definitions

A-1.0 ACRONYMS AND ABBREVIATIONS

%R	percent recovery
%RSD	percent relative standard deviation
ACA	accelerated corrective action
ADR	Automated Data Review
AES	atomic emission spectroscopy
AK	acceptable knowledge
ALARA	as low as reasonably achievable
ALLH	all soil horizons (media code)
AOC	area of concern
AS	alpha spectroscopy
ATSDR	Agency for Toxic Substances and Disease Registry
AUF	area use factor
BCA	bias-corrected and accelerated (bootstrapping)
bgs	below ground surface
BMP	best management practice
BV	background value
CCV	continuing calibration verification
CD	compact disc
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
COC	chain of custody
Consent Order	Compliance Order on Consent
COPEC	chemical of potential ecological concern
COPC	chemical of potential concern
cpm	counts per minute
CSM	conceptual site model
D&D	decontamination and decommissioning
DAF	dilution attenuation factor
DDE	dichlorodiphenyldichloroethylene
DDT	dichloro-diphenyl-trichloroethane
DGPS	differential global positioning system
DL	detection limit
DOE	Department of Energy (U.S.)

DOT	Department of Transportation (U.S.)
DP	direct push
dpm	disintegrations per minute
DRO	diesel range organics
DU	depleted uranium
EcoPRG	ecological preliminary remediation goal
EDD	electronic data deliverable
EDL	estimated detection limit
Eh	redox potential
EIM	Environment Information Management
EPA	Environmental Protection Agency (U.S.)
EPC	exposure point concentration
EQL	estimated quantitation limit
ESL	ecological screening level
eV	electronvolt
FD	field duplicate
FILL	fill material (media code)
FR	field rinsate
FS	field split
FTB	field trip blank
FV	fallout value
FWHM	full width at half maximum
GC	gas chromatography
GIS	geographic information system
GPS	global positioning system
HDX	octogen
HE	high explosives
HI	hazard index
HMX	octogen
HPLC	high-performance liquid chromatography
HQ	hazard quotient
HR	home range
HSDB	Hazardous Substances Data Bank (National Institutes of Health)
IA	interim action
IC	ion chromatography

ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
IDW	investigation-derived waste
Intellus	Intellus New Mexico
IS	internal standard
IWP	investigation work plan
KM-H-UCL	Kaplan Meier UCL based upon Land’s H-statistic
K_d	soil-water partition coefficient
K_{oc}	organic-carbon partition coefficient
K_{ow}	octanol-water partition coefficient
KPA	kinetic phosphorescence analysis
LAL	lower acceptance limit
LANL	Los Alamos National Laboratory
LCS	laboratory control sample
LLW	low-level waste
LOAEL	lowest observed adverse effect level
Ma	mega-annum (one million years)
MB	method blank
MDA	material disposal area
MDC	minimum detectable concentration
MDL	method detection limit
MLLW	mixed low-level waste
MS	matrix spike
MSD	matrix spike duplicate
MSW	municipal solid waste
N3B	Newport News Nuclear BWXT-Los Alamos, LLC
NM	New Mexico
NMED	New Mexico Environment Department
NMOSE	New Mexico Office of the State Engineer
NMSA	New Mexico Statutes Annotated
NOAEL	no observed adverse effect level
NQ	non-qualified
PAH	polycyclic aromatic hydrocarbon
PAUF	population area use factor

PCB	polychlorinated biphenyl
PCS	petroleum-contaminated soil
PETN	pentaerythritol tetranitrate
PID	photoionization detector
PPE	personal protective equipment
PQL	practical quantitation limit
PRG	preliminary remediation goal
QA	quality assurance
QC	quality control
RCL	radionuclide critical level
RCRA	Resource Conservation and Recovery Act
RCT	radiological control technician
RDX	Royal Demolition Explosive (hexahydro-1,3,5-trinitro-1,3,5-triazine)
RESRAD	Residual Radioactivity (DOE computer code)
RfD	reference dose
RFI	RCRA facility investigation
RL	reporting limit
RP-SVS	(LANL) Radiation Protection Services
RPD	relative percent difference
RRF	relative response factor
RSL	risk-screening level
SAA	satellite accumulation area
SAL	screening action level
SCL	sample collection log
SED	alluvial sediment (media code)
SF	slope factor
SMO	Sample Management Office
SOIL	all soil horizons (media code)
SOP	standard operating procedure
SOW	statement of work
SQL	Structured Query Language
SSL	soil-screening level
SVOC	semivolatile organic compound
SWMU	solid waste management unit
t	test

T&E	threatened and endangered
TA	technical area
TAL	target analyte list
TATB	1,3,5-Triamino-2,4,6-trinitrobenzene
TCE	trichloroethene
TCDD	tetrachlorodibenzo-p-dioxin
TEC	toxicity equivalence concentration
TEF	toxicity equivalence factor
TNT	trinitrotoluene[2,4,6-]
TPH	total petroleum hydrocarbons
TPU	total propagated uncertainty
Triad	Triad National Security, LLC
TRV	toxicity reference value
TSDF	treatment, storage, and disposal facility
UAL	upper acceptance limit
UCL	upper confidence limit
UTL	upper tolerance limit
VCA	voluntary corrective action
VCP	vitrified-clay pipe
VOC	volatile organic compound
WCSF	waste characterization strategy form
WPF	waste profile form
XRF	x-ray fluorescence

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 above the reported estimated quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, but likely to have a high bias.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, but likely to have a low bias.
UJ	The analyte was analyzed for but not detected. The associated value is an estimate.
R	The data is unusable. (Note: Analyte may or may not be present.)
NQ	The analyte was detected at or above the required detection level, no qualification is necessary.

Appendix B

Field Methods

B-1.0 INTRODUCTION

This appendix summarizes the field methods used during the 2022–2023 investigation of the North Ancho Canyon Aggregate Area at Los Alamos National Laboratory (LANL or the Laboratory). Table B-1.0-1 presents a summary of the field methods used, and the following sections provide more detailed descriptions of these methods. All activities were conducted in accordance with standard operating procedures (SOPs) listed in Table B-1.0-2.

B-2.0 EXPLORATORY DRILLING CHARACTERIZATION

No exploratory drilling characterization was conducted. All drilling was conducted to collect investigation samples.

B-3.0 FIELD-SCREENING METHODS

This section summarizes the field-screening methods used during the investigation activities. Field screening for radioactivity and volatile organic compounds (VOCs) was performed on each sample collected. Field-screening results are presented in Appendix E of the investigation report.

B-3.1 Field-Screening for Organic Vapors

Field screening for organic vapors was conducted using an ION Science, Ltd., PhoCheck Tiger photoionization detector (PID) and a RAE Systems MiniRAE 3000 PID equipped with 11.7-electronvolt (eV) lamps. Screening was performed in accordance with the manufacturer's specifications. Screening was performed on each sample collected using the headspace method, and screening measurements were recorded on the field sample collection logs (SCLs) and chain-of-custody (COC) forms provided in Appendix E (on DVD included with this document). The field-screening results are presented in Table 3.2-2 of the investigation report.

B-3.2 Field-Screening for Radioactivity

Surface and subsurface samples and excavated environmental media were screened for gross-alpha and gross-beta radioactivity by a Newport News Nuclear BWXT-Los Alamos, LLC (N3B) radiological control technician (RCT) using appropriately calibrated instruments. Field response checks of radiological instruments were performed and documented by the RCTs. All calibration checks were performed in accordance with N3B-P330-2, "Control of Measuring and Test Equipment." Screening was performed using a Radeye SX with 43-93 probe for alpha/beta radiological surveys. The probe was held less than 1 in. 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 levels of gross-alpha and gross-beta radioactivity.

After field-screening measurements were established, samples were collected from the soil and tuff material and logged. The RCT collected and recorded background-level measurements for gross-alpha and gross-beta radioactivity daily. All samples from solid waste management unit (SWMU) 39-010 were screened for gross-alpha, gross-beta, and gross-gamma radioactivity by on-site RCTs before transport to the N3B Sample Management Office (SMO). Samples from the other units from the 2022–2023 investigation were not screened because prior site knowledge and prior site data indicated that elevated activities were not present.

Screening measurements were recorded on the SCLs and COC forms and are provided in Appendix E (on DVD included with this document).

Before leaving Technical Area 39 (TA-39), N3B RCTs performed and documented a free-release survey of the exterior of the sample containers and coolers, and a U.S. Department of Transportation (DOT) shipping survey was performed and documented before transportation to the SMO.

All equipment and tools were screened for free-release and documented by the RCTs prior to removal from TA-39.

B-3.3 Field-Screening for High Explosives

Field screening for high explosives was conducted using an Expray explosive field test kit. Prior to collecting any sample media from the sample tube or hand auger, a test paper was swiped over the sample media and checked for explosives. Screening was performed using an aerosol-based colorimetric test, in accordance with the manufacturer’s specifications. Screening results were recorded on the field SCLs and COC forms provided in Appendix E (on DVD included with this document). The field-screening results are presented in Appendix E of the investigation report.

B-4.0 FIELD INSTRUMENT CALIBRATION

All instruments were calibrated before use. Calibration of the RadEye SX was conducted by the Laboratory’s Radiation Protection Services (RP-SVS) group according to the manufacturers’ specifications and requirements with approved operating procedures.

B-4.1 Eberline E-600 and RadEye SX Calibration and Response Check

Response checks of the RadEye SX were conducted daily by an N3B RCT before use. All response checks were performed according to approved operating procedures, and were recorded in daily functional check logs. The Laboratory’s RP-SVS group calibrated the instrument using americium-241 and chloride-36 sources for alpha and beta emissions, respectively. Calibration records are maintained by RP-SVS.

B-4.2 Photoionization Detector Calibration

Calibration of the ION Science, Ltd., PhoCheck Tiger and the RAE Systems MiniRAE 3000 PID MiniRAE 3000+ PID ppm VOC detectors was conducted by a qualified N3B Environment, Safety and Health professional or representative, according to the manufacturer’s specifications and requirements. The PID ppm VOC detectors were zeroed using ambient air, and were bump-checked daily using 100-ppm isobutylene reference gas and evaluated within 5% of the stated value. If the bump check was outside the 5% tolerance, then a complete calibration was conducted using the 100-ppm isobutylene reference gas. Calibration records were maintained on-site using field instrumentation environmental monitoring forms.

B-5.0 SURFACE AND SUBSURFACE SAMPLING

This section summarizes the methods used to collect surface and subsurface samples of soil, fill, tuff, and sediment, in accordance with the approved investigation work plan (IWP) (LANL 2011, 201561; NMED 2010, 108675).

B-5.1 Surface Sampling Methods

Surface samples were collected within TA-39 using either hand-auger or spade-and-scoop methods, in accordance with approved N3B procedure N3B-SOP-ER-2001, "Soil Tuff and Sediment Sampling." A hand auger or stainless-steel scoop was used to collect material in approximately 6-in. increments. Samples for VOC analysis were transferred immediately from the sampler to the sample container to minimize the loss of VOCs. Containers for VOC samples were filled as completely as possible, leaving minimal headspace, and sealed with a Teflon-lined cap. The remaining sample material was placed in a stainless-steel bowl with a stainless-steel scoop, after which it was transferred to sterile sample-collection jars or bags. Samples were preserved using insulated containers with ice packs to maintain the required temperature, in accordance with N3B procedure N3B-SOP-SDM-1100, "Sample Containers, Preservation, and Field Quality Control."

Samples were appropriately labeled, sealed with custody seals, and documented, before being transported to the SMO. Samples were managed according to approved N3B procedure N3B-SOP-SDM-1101, "Sample Control and Field Documentation."

Sample collection tools were decontaminated (see section B-5.7) immediately before use, in accordance with N3B procedure N3B-SOP-ER-2002, "Field Decontamination of Equipment."

B-5.2 Borehole Logging

Borehole logs were not generated for hand-auger or direct-push (DP) sampling. Only the target sample intervals were described in the SCLs. No hollow-stem auger boreholes, which may have required borehole logging, were drilled in this phase of the investigation.

B-5.3 Subsurface Sampling Methods

Subsurface samples were collected using either a stainless-steel hand auger or track-mounted Geoprobe 7822DT direct-push drill rig. The samples were collected in accordance with approved N3B procedure N3B-SOP-ER-2001.

Samples for VOC analysis were collected immediately upon retrieval of the sample-tube hand auger to minimize the loss of VOCs. Containers for VOC samples were filled as completely as possible, leaving minimal headspace, and sealed with a Teflon-lined cap. If necessary, pieces small enough to fit into the sample container were removed from the core using a decontaminated rock hammer or stainless-steel spoon. The remaining material was then field screened for radioactivity, visually inspected, and logged. After the VOC samples were collected and field screened, the remaining sample material was placed in a stainless-steel bowl. If necessary, the material was broken into smaller pieces with a decontaminated rock hammer or stainless-steel spoon to fit into the sample containers.

A stainless-steel scoop and bowl were used to transfer samples to sterile sample collection jars for transport to the SMO. The sample-collection tools were decontaminated immediately before each sample was collected (see section B-5.7) in accordance with N3B procedure N3B-SOP-ER-2002.

B-5.4 Quality Assurance/Quality Control Samples

Quality assurance/quality control (QA/QC) samples were collected in accordance with N3B procedure N3B-SOP-SDM-1100. The QA/QC samples included field duplicates, field equipment rinsate blanks, and field trip blanks.

Field duplicate samples were collected from the same material as the regular investigation samples and submitted for the same analyses. Field duplicate samples were collected at a frequency of at least 1 per 10 samples (10%) in each SWMU.

Field equipment rinsate blanks were collected to evaluate field decontamination procedures. Rinsate blanks were collected by rinsing sampling equipment (i.e., hand-auger buckets, sample tubes, sampling bowls, and scoops) with deionized water after decontamination. The rinsate water was collected in pre-preserved sample containers and submitted to the SMO. Field rinsate blank samples were collected from sampling equipment at a frequency of 1 per 10 samples (10%) in each SWMU, and were analyzed for inorganic chemicals (target analyte list metals, perchlorate, nitrate-nitrite nitrogen and total cyanide).

Field trip blanks were collected at a frequency of 1 per day to determine contamination during storage and transport during VOC sample collection. Field trip blanks were containers of certified clean sand, unopened and kept with the sample containers during sampling and transport.

B-5.5 Sample Documentation and Handling

Field personnel completed an SCL/COC form for each sample. Sample containers were sealed with custody seals and placed in insulated containers at approximately 4°C, in accordance with N3B-SOP-SDM-1101 and N3B-SOP-SDM-1100. Samples were transported to the SMO in sealed coolers containing ice packs, and shipped from the SMO to the analytical laboratories. The SMO personnel reviewed and approved the SCL/COC forms before taking custody of the samples. The SCL/COC forms are provided in Appendix E (on DVD included with this document).

B-5.6 Borehole and Well Abandonment

All sample boreholes were abandoned in accordance with N3B-SOP-ER-6005, “Monitoring Well and Borehole Abandonment.” Hand-auger borings less than 10 ft below ground surface (bgs) were abandoned by filling the boreholes with clean base course. Pavement and concrete cuts were patched as necessary depending on existing site conditions. Hand-auger and direct-push boreholes greater than 10 ft deep were plugged using hydrated bentonite chips

Monitoring wells and angled boreholes at SWMUs 39-001(a) and 39-001(b) were abandoned in accordance with N3B-SOP-ER-6005 and the revised Well Plugging Plan of Operations Forms for the Plugging and Abandonment of Monitoring Wells and Angled Geophysical Boreholes at TA-39 North Ancho Canyon Aggregate Area (N3B 2022, 702491; NMOSE 2023, 702820). At each well/borehole, the casing was grouted with cement/bentonite slurry to 20 ft bgs and the casing was removed if possible. The well/borehole was then over-drilled to approximately 20 ft bgs and grouted from the bottom up using cement slurry with 2% bentonite. The top 2 ft of the wells/boreholes were completed with a concrete plug, with a survey pin to ground surface. Well abandonment forms are provided in Attachment B-1. All cuttings from over-drilling, well materials, and wellhead debris were managed as investigation-derived waste (IDW) as described in Appendix C. The only well casing that was completely removed was well DM-4. Also, well ASC-3 was previously cut and plugged and, therefore, was only over-drilled to 2 ft bgs to allow for proper surface completion and restoration.

B-5.7 Decontamination of Sampling Equipment

All sampling equipment, including hand augers, scoops, bowls, and direct-push sample tubes, was decontaminated using dry decontamination methods immediately before sample collection to avoid outside contamination and cross-contamination between samples. New acetate sample-tube liners were used for each sample run for direct-push sampling. Decontamination activities were performed in accordance with N3B procedure N3B-SOP-ER-2002. To evaluate decontamination activities, field equipment rinsate blank samples were collected in accordance with procedures N3B-SOP-SDM-1100 and N3B-SOP-ER-2002.

B-6.0 REMEDIATION WORK

This section summarizes the methods used for activities associated with soil remediation. These activities were performed in accordance with the approved North Ancho Canyon Phase II IWP (LANL 2011, 201561; NMED 2010, 108675).

B-6.1 SWMU 39-002(a) Area 2 Soil Remediation

Excavation of contaminated environmental media (soil) was performed at one site during the Phase II investigation: SWMU 39-002(a), Area 2. Approximately 9 yd^3 of contaminated soil was removed to address potential unacceptable human health risk. Soil with elevated Aroclor-1254 concentrations was removed at sample location 39-61760.

The excavation was performed using a track excavator and the excavated soil was placed in 3.5-yd^3 type IP-1 bags. The excavation was backfilled with clean fill material and topped with base course from an off-site source to restore the area to the approximate original grade.

B-6.2 Waste Loading and Staging

Waste streams include contact IDW, municipal solid waste, environmental media, liquid waste, and industrial waste. All project waste was managed in accordance with the North Ancho Canyon Aggregate Area TA-39 Waste Characterization Strategy Form (WCSF) (Attachment C-1 [on CD included with this document]) and staged in designated waste storage areas pending characterization. Project waste was separated by form (e.g., soils, debris), type (e.g., industrial, hazardous, low-level waste soils and debris, mixed waste), and potential disposition pathway (e.g., off-site treatment, storage, and disposal facility). When appropriate, compatible waste forms with different densities were packaged together to minimize void space and maximize load-out efficiency while maintaining package weights below the road weight limit of 39,000 lb.

Environmental media were packaged in N3B-supplied IP-1-rated containers. All waste containers, liners, and bins were closed and secured in accordance with the manufacturer’s procedures, and made ready for transport according to N3B waste packaging and shipping procedures and the appropriate disposal facility’s waste acceptance criteria. Containers and their contents were concurrently tracked and managed using a container ID system and waste accumulation log.

B-6.3 IDW Storage and Disposal

All IDW was managed in accordance with the project WCSF (Attachment C-1 [on CD included with this document) and N3B-P409-0, “N3B Waste Management.” These procedures incorporate the requirements of all applicable U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) regulations, U.S. Department of Energy orders, and N3B implementation requirements. Details of IDW management for the North Ancho Canyon Aggregate Area Phase II investigation are presented in Appendix C.

B-6.4 Waste Sampling

Waste sampling of the environmental media containers was performed using hand-auger sampling methods to collect soil samples for waste characterization and analytical confirmation purposes, as specified in the associated IWP (LANL 2011, 201561; NMED 2010, 108675). Section B-5.0, “Surface and Subsurface Sampling,” addresses methods and SOPs that were used to collect these samples. QC samples associated with the waste characterization sampling are field trip blanks.

B-6.5 Implementation of Storm Water Controls

The North Ancho Canyon Aggregate Area did not have a stormwater pollution prevention plan, but stormwater pollution prevention controls were installed in denuded areas at completion of the investigation sampling, in accordance with the “Storm Water Best Management Practices Manual” (N3B-GDE-ER-5015).

B-7.0 GEODETIC SURVEYING

Geodetic surveys of sampling locations, drainlines, and outfall locations were performed utilizing real-time kinematic global positioning system (GPS) surveying. The specific equipment used was Javad Navigation Systems, Inc., TRIUMPH-1 receivers, coupled with a Juniper Systems, Inc., Allegro 2 controller. Horizontal accuracy of the GPS unit is within 0.1 ft. During sampling, if the planned location could not be sampled due to surface or subsurface obstruction or other unanticipated field conditions, the relocated sampling location was resurveyed.

The surveyed sample location coordinates are presented in Table 3.2-1 of the investigation report. All coordinates are expressed as State Plane Coordinate System 83, New Mexico Central, U.S. All surveyed coordinates for sampling locations were uploaded to the Environmental Information Management database.

B-8.0 DEVIATIONS FROM WORK PLAN

There were no deviations to the proposed sampling or remediation in the North Ancho Canyon Aggregate Area Phase II approved IWP (LANL 2011, 201561; NMED 2010, 108675) for the sites included in this investigation report.

B-9.0 REFERENCES

The following reference list includes documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. ERIDs were assigned by Los Alamos National Laboratory’s (the Laboratory’s) Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory’s Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B.

LANL (Los Alamos National Laboratory), March 2011. “Phase II Investigation Work Plan for North Ancho Canyon Aggregate Area Revision 1,” Los Alamos National Laboratory document LA-UR-11-1817, Los Alamos, New Mexico. (LANL 2011, 201561)

N3B (Newport News Nuclear BWXT-Los Alamos, LLC), December 21, 2022. "Revised Well Plugging Plan of Operations Forms for the Plugging and Abandonment of Monitoring Wells and Angled Geophysical Boreholes at Technical Area 39 North Ancho Canyon Aggregate Area," Los Alamos, New Mexico. (N3B 2022, 702491)

NMED (New Mexico Environment Department), January 28, 2010. "Approval, Investigation Report for North Ancho Canyon Aggregate Area, Revision 1," New Mexico Environment Department letter to G.J. Rael (DOE-LASO) and M.J. Graham (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2010, 108675)

NMOSE (New Mexico Office of the State Engineer), March 31, 2023. "Re: Plugging Plan of Operations," NMOSE letter to J. Chandler (DOE) from L.A. Garcia (NMOSE), Santa Fe, New Mexico. (NMOSE 2023, 702820)

Table B-1.0-1
Summary of Field Investigation Methods

Method	Summary
Field-Screening and Instrument Calibration	The response check and calibration of instruments used to screen for radioactivity and VOCs (volatile organic compounds) was conducted by a qualified representative. All response checks and calibrations were performed daily, according to the manufacturers' specifications and requirements with approved operating procedures, and recorded on the appropriate forms.
Spade-and-Scoop Collection of Soil Samples	This method was used to collect shallow (i.e., approximately 0−1.0 ft) soil or sediment samples. The spade-and-scoop method involved digging a hole to the desired depth, as prescribed in the approved investigation work plan, and collecting a discrete grab sample. Samples for VOC analysis were transferred immediately into sample containers. Containers for VOC analysis were filled as completely as possible and sealed with Teflon-lined caps. Remaining sample material was placed in a clean stainless-steel bowl for transfer 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 in some cases may be used to collect samples of weathered or nonwelded tuff. A stainless-steel bucket auger (typically 3–4 in. inside diameter [I.D.]) was hand turned, creating a vertical hole that could be advanced to the desired sample depth. When the desired depth was reached, the auger was decontaminated before advancing the hole through the sampling depth. Samples for VOC analysis were transferred immediately to sample containers. Containers for VOC analysis were filled as completely as possible and sealed with Teflon-lined caps. The remaining sample material was transferred from the auger bucket to a stainless-steel sampling bowl before the various required sample containers were filled.
Direct-Push Sampling	A stainless-steel sample tube (typically 3–4 in. I.D. and 5 ft long) was advanced using a Geoprobe direct-push drilling rig. The sample tube extracts a continuous length of soil and/or rock that can be examined as a unit. A new acetate liner was placed in the sample tube before each 5-ft run. Once the sample tube liner was extracted and cut open, a sample for VOC analysis was transferred immediately to a sample container. If necessary, pieces small enough to fit into the sample container were removed from the core using a decontaminated rock hammer (for sizing, if necessary) or stainless-steel spoon. Containers for VOC analysis were filled as completely as possible and sealed with Teflon-lined caps. The section of core in the sample tube was screened for radioactivity, high explosives, and organic vapors. A portion of the core was then collected as a discrete sample from the desired depth for remaining analyses.
Handling, Packaging, and Shipping of Samples	Field team members sealed and labeled samples before packing to ensure that the samples and the transport containers were free of external contamination. The samples were packaged to minimize the possibility of breakage during transport. Newport News Nuclear BWXT-Los Alamos, LLC (N3B) radiological control technicians performed and documented a free-release survey of the exterior of the sample containers, and a U.S. Department of Transportation shipping survey was performed and documented before transportation to SMO. After all environmental samples were collected, packaged, and preserved a field team member transported them to the SMO, which arranged to ship the samples to the analytical laboratories.
Sample Control and Field Documentation	The collection, screening, and transport of samples were documented on standard forms generated by the N3B Sample Management Office (SMO). These included sample collection logs (SCLs), chain of custody (COC) forms, and sample container labels. SCLs were completed at the time of sample collection, and the logs 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 each sample container. COC forms were completed and signed to verify that the samples had not been left unattended.

Table B-1.0-1 (continued)

Method	Summary
Field Quality Control Samples	Field quality control samples were collected as follows: Field Duplicates – collected at a frequency of 10% at the same time as the corresponding regular sample and submitted for the same analyses. Equipment Rinsate Blank – collected at a frequency of 10% by rinsing sampling equipment with deionized water, which was then collected in a sample container and submitted for laboratory analysis for inorganic constituents. Trip Blanks – required for all field events that included the collection of samples for VOC analysis. Trip-blank containers of certified clean sand were unopened and kept with the other sample containers during the sampling process.
Field Decontamination of Drilling and Sampling Equipment	Dry decontamination was used to minimize the generation of liquid waste. Dry decontamination consisted of using a wire brush or other tool to remove soil or other material adhering to the sampling equipment, followed by use of a commercial cleaning agent (nonacid, waxless cleaners) and paper wipes.
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 quality assurance. Specific requirements for each sample were printed on the SCL provided by the SMO (size and type of container, e.g., glass, amber glass, or polyethylene). All samples were preserved by placement in insulated containers with ice to maintain a temperature of 4ºC.
Management of Environmental Remediation Program Waste, Waste Characterization	Investigation-derived waste (IDW) was managed, characterized, and stored in accordance with an approved waste characterization strategy form that documents site history, field activities, and characterization approach for each waste stream managed. During the investigation, waste characterization complied with on- 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. A waste storage area was established before waste was generated. Waste storage areas were located in controlled areas of the Los Alamos National Laboratory and were monitored 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 level of radioactivity (if applicable) immediately following containerization. All waste was segregated by classification and compatibility to prevent cross-contamination. Management of IDW is described in Appendix F.
Coordinating and Evaluating Geodetic Surveys	Geodetic surveys obtained survey data of acceptable quality to use during project investigations. All coordinates were expressed as State Plane Coordinate System 83, NM Central, U.S. feet. All elevation data were reported relative to the National Geodetic Vertical Datum of 1983.

Table B-1.0-2
Standard Operating Procedures Used for the
Phase II Investigation Activities at North Ancho Canyon Aggregate Area

N3B-AP-ER-1002	Environmental Remediation (ER) Field Work Requirements
N3B-AP-TRU-2150	Waste Characterization Strategy Form
N3B-GDE-ER-5015	N3B Storm Water Best Management Practices Manual
N3B-SOP-ER-2001	Soil, Tuff, and Sediment Sampling
N3B-SOP-ER-2002	Field Decontamination of Equipment
N3B-SOP-ER-6005	Monitoring Well and Borehole Abandonment
N3B-SOP-SDM-1100	Sample Containers, Preservation, and Field Quality Control
N3B-SOP-SDM-1101	Sample Control and Field Documentation

Attachment B-1

Well Abandonment Forms

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD29 / DMB-1

Well owner: Joseph Chandler Phone No.: ________

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/12/23 Date well plugging concluded: 5/12/23

5) GPS Well Location: Latitude: 35 deg, 47 min, 27.48 sec
Longitude: -106 deg, 15 min, 05.19 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 25 ft below ground level (bgl),
by the following manner: Tremie

7) Static water level measured at initiation of plugging: 5 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout	65.66 GAL	65.66 GAL	Tremie Pipe	
	5% Bentonite				

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc.

Signature of Well Driller

5/18/2023

Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD30 / DM-2

Well owner: Joseph Chandler Phone No.: ______

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 4/29/23 Date well plugging concluded: 4/29/23

5) GPS Well Location: Latitude: 35 deg, 47 min, 27.48 sec
Longitude: -106 deg, 15 min, 06.16 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 25 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 1 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	65.66 GAL	65.66 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc

Signature of Well Driller

5/18/2023

Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD31 / DM-4

Well owner: Joseph Chandler Phone No.: ______

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 4/26/23 Date well plugging concluded: 4/26/23

5) GPS Well Location: Latitude: 35 deg, 47 min, 31.16 sec
Longitude: -106 deg, 15 min, 06.98 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 23 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	60.41 Gal	60.41 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/23 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD32 / DM-6

Well owner: Joseph Chandler　　Phone No.: ______

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos　　State: NM　　Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458　　Expiration Date: 10/31/23

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/4/23　　Date well plugging concluded: 5/4/23

5) GPS Well Location:
   Latitude: 35 deg, 48 min, 07.56 sec
   Longitude: -106 deg, 15 min, 40.17 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 58.5 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	153.64 GAL	153.64 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc. 5/18/2023

Signature of Well Driller Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD33 / UM-3

Well owner: Joseph Chandler Phone No.: ________

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/1/23 Date well plugging concluded: 5/1/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 11.86 sec
Longitude: -106 deg, 15 min, 41.12 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 28 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement GRout 5% Bentonite	50.27 GAL	50.27GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc

Signature of Well Driller

5/18/2023

Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD33 / UM-3

Well owner: Joseph Chandler Phone No.: ____________

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/2/23 Date well plugging concluded: 5/2/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 11.86 sec
Longitude: -106 deg, 15 min, 41.12 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 16 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement GRout 5% Bentonite	50.27 GAL	28.73GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc (signature) — 5/18/2023

Signature of Well Driller — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD34 / ASC-0

Well owner: Joseph Chandler Phone No.:

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 4/27/23 Date well plugging concluded: 4/27/23

5) GPS Well Location: Latitude: 35 deg, 47 min, 48 sec
Longitude: -106 deg, 15 min, 07.12 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 81.5 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	214.04 GAL	214.04 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD35 / ASC - 2

Well owner: Joseph Chandler   Phone No.: ____________

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos   State: NM   Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458   Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 4/28/23   Date well plugging concluded: 4/28/23

5) GPS Well Location: Latitude: 35 deg, 47 min, 31.48 sec
Longitude: -106 deg, 15 min, 06.91 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 27.5 ft below ground level (bgl),
by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout	72.22 GAL	72.22 GAL	Tremie Pipe	
	5% Bentonite				

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD37 / ASC-4

Well owner: Joseph Chandler Phone No.:

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 4/29/23 Date well plugging concluded: 4/29/23

5) GPS Well Location: Latitude: 35 deg, 47 min, 33.14 sec
Longitude: -106 deg, 15 min, 07.52 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 28 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	73.54 GAL	73.54 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc , say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD38 / ASC-11

Well owner: Joseph Chandler Phone No.:

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/1/23 Date well plugging concluded: 5/1/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 07.27 sec
Longitude: -106 deg, 15 min, 40.78 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 81 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	212.73 GAL	212.73 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc. 5/18/2023

Signature of Well Driller Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD39 / ASC-12

Well owner: Joseph Chandler Phone No.:

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/23

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/4/23 Date well plugging concluded: 5/4/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 07.71 sec
Longitude: -106 deg, 15 min, 40.36 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 81.5 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	214.04 GAL	214.04 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc

Signature of Well Driller

5/18/2023

Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD40 / ASC-13

Well owner: Joseph Chandler Phone No.: ____

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/23

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/14/23 Date well plugging concluded: 5/14/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 07.92 sec
Longitude: -106 deg, 15 min, 41.34 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 28 ft below ground level (bgl),
by the following manner: Tremie

7) Static water level measured at initiation of plugging: 2 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	73.54 GAL	73.54 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc. — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD41 / ASC-14

Well owner: Joseph Chandler Phone No.:

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/3/23 Date well plugging concluded: 5/3/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 07.92 sec
Longitude: -106 deg, 15 min, 41.35 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 80 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 1 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	210.10 GAL	210.10 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — 5/18/2023

Signature of Well Driller — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD42 / ASC-15

Well owner: Joseph Chandler   Phone No.: ________

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos   State: NM   Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458   Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/3/23   Date well plugging concluded: 5/3/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 08.87 sec
Longitude: -106 deg, 15 min, 40.65 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 82 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 2 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	215.36 GAL	215.36 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD43 / ASC-16

Well owner: Joseph Chandler Phone No.:

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/2/23 Date well plugging concluded: 5/2/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 09.25 sec
Longitude: -106 deg, 15 min, 40.25 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 80 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	210.10 GAL	210.10 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD44 / ASC-17

Well owner: Joseph Chandler Phone No.: ______

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/14/23 Date well plugging concluded: 5/14/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 09.38 sec
Longitude: -106 deg, 15 min, 41.71 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 28 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 4 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	73.54 GAL	73.54 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc — Signature of Well Driller

5/18/2023 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD45 / ASC-18

Well owner: Joseph Chandler Phone No.: ______

Mailing address: 1200 Trinity Dr Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/14/23 Date well plugging concluded: 5/14/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 10.12 sec
Longitude: -106 deg, 15 min, 41.80 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 28 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 1 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	73.54 GAL	73.54 GAL	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

[signature] 5/18/2023

Signature of Well Driller Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: RG-96831-POD46 / ASC-19

Well owner: Joseph Chandler Phone No.: ______

Mailing address: 1200 Trinity Dr. Suite 150

City: Los Alamos State: NM Zip code: 87544

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Yellow Jacket Drilling Services, LLC

2) New Mexico Well Driller License No.: 1458 Expiration Date: 10/31/24

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Stiefel

4) Date well plugging began: 5/2/23 Date well plugging concluded: 5/2/23

5) GPS Well Location: Latitude: 35 deg, 48 min, 10.56 sec
Longitude: -106 deg, 15 min, 40.49 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 81 ft below ground level (bgl), by the following manner: Tremie

7) Static water level measured at initiation of plugging: 0 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/31/23

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	Cement Grout 5% Bentonite	212.73 GAL	212.73 Gal	Tremie Pipe	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Richard LeBlanc, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

R. LeBlanc 5/18/2023

Signature of Well Driller Date

Appendix C

Investigation-Derived Waste Management

C-1.0 INTRODUCTION

This appendix contains the waste management records for the investigation-derived waste (IDW) generated during the implementation of the Phase II Investigation Work Plan for the North Ancho Canyon Aggregate Area ((N3B 2021, 701355; NMED 2021, 701546) at Technical Area 39 of Los Alamos National Laboratory (LANL or the Laboratory).

All IDW generated during the field investigation was managed in accordance with N3B-P409-0, "N3B Waste Management." This procedure incorporates the requirements of applicable U.S. Environmental Protection Agency and New Mexico Environment Department (NMED) regulations, U.S. Department of Energy orders, and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) implementation requirements.

Consistent with N3B procedures, N3B prepared a waste characterization strategy form (WCSF) (N3B 2022, 702246) to address characterization approaches, on-site management, and final disposition options for wastes. Information from wastes generated in previous investigations, analytical data, and/or acceptable knowledge (AK) were used to complete the WCSF. The WCSF is included in this appendix as Attachment C-1 (on CD included with this document).

The selection of waste containers was based on appropriate U.S. Department of Transportation requirements, waste types, and estimated volumes of IDW. Immediately following containerization, each waste container was individually labeled with a unique identification number and with information regarding waste classification, contents, radioactivity, other potential constituents of concern (e.g., beryllium, asbestos), waste generator, and date generated.

Wastes were staged in clearly marked and appropriately constructed registered staging areas. Container and storage requirements were detailed in the WCSF and were approved before waste was generated. Investigation activities were conducted in a manner that minimized the generation of waste.

C-2.0 WASTE STREAMS

The IDW streams that were generated and managed during the Phase II investigation of North Ancho Canyon Aggregate Area are described below and summarized in Table C-2.0-1.

- *WCSF Waste #1 – Contact IDW*: This waste stream consists of solid waste generated during investigation and removal activities that have come into contact with contaminated environmental media and equipment. This includes, but is not limited to, personal protective equipment (e.g., gloves), plastic sheeting (e.g., tarps, liners), plastic and glass sample bottles, disposable sampling supplies (e.g., filters, tubing, plastic bags), and dry decontamination wastes (e.g., paper items). The total amount of contact IDW generated was approximately 1.6 yd^3 and consisted of ~0.08 yd^3 low-level waste (LLW), approximately 0.02 yd^3 polychlorinated biphenyl (PCB), approximately 0.4 yd^3 PCB LLW, and approximately 1.1 yd^3 industrial waste.
- *WCSF Waste #2 – Municipal Solid Waste:* This waste stream consists primarily of noncontact trash including, but not limited to, paper, cardboard, wood, plastic, food and beverage containers, empty solution containers, and other noncontact trash.
- *WCSF Waste #3 – Environmental Media:* This waste stream consists of contaminated soil, sediment, and tuff that has been excavated to remove media that exceeds risk-based cleanup objectives. This waste stream also includes borehole cuttings from surface and subsurface sampling, and excess environmental sample media. Environmental media from all identified solid-waste management units and areas of concern were combined per waste-management

coordinator guidance. The total amount of environmental media generated was approximately 12 yd^3 and consisted of ~0.5 yd^3 LLW, ~1.8 yd^3 PCB LLW, ~9 yd^3 PCB, and ~2.5 yd^3 industrial waste.

- *WCSF Waste #4 – Purge Water:* This waste stream consists of water that is purged from monitoring wells. Prior to abandonment, any water present was purged, containerized, sampled for waste characterization purposes, and stored in a centralized location. A total of 11 gallons of purge water was generated, characterized, and disposed at an appropriate off-site treatment, storage, and disposal facility (TSDF).
- *WCSF Waste # 5 – Petroleum-Contaminated Soils (PCS):* This waste stream is composed of soils contaminated because of the accidental release of commercial products such as hydraulic fluid, motor oil, unleaded gasoline, or diesel fuel (e.g., from the rupture of hydraulic or fuel hoses, or spills during maintenance). The waste stream may also include adsorbent padding, paper towels, spill pillows, or other adsorbent material that was used to contain the released material and added to the containerized PCS waste for storage and disposal. Approximately 0.05 yd^3 of PCS was generated. This waste was categorized as New Mexico Special Waste.
- *WCSF Waste #6 – Excavated Debris:* This waste stream consists of residual man-made debris encountered during soil excavation and well abandonment. If possible, the debris was segregated from the soil and managed appropriately based on AK of the soil. Debris was to contain less than 1% associated soil. The total amount of excavated debris generated was approximately 21.6 yd^3, which was characterized and subsequently disposed at an appropriate off-site TSDF.

C-3.0 REFERENCES

The following reference list includes documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. ERIDs were assigned by Los Alamos National Laboratory's (the Laboratory's) Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory's Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B (IDs 700000 and above).

N3B (Newport News Nuclear BWXT-Los Alamos, LLC), March 2021. "Phase II Investigation Work Plan for Chaquehui Canyon Aggregate Area," Newport News Nuclear BWXT-Los Alamos, LLC, document EM2021-0038, Los Alamos, New Mexico. (N3B 2021, 701355)

N3B (Newport News Nuclear BWXT-Los Alamos, LLC), August 4, 2022. "Waste Characterization Strategy Form (WCSF) North Ancho, Revision 2," Newport News Nuclear BWXT-Los Alamos, LLC, document EM2022-0575, Los Alamos, New Mexico. (N3B 2022, 702246)

NMED (New Mexico Environment Department), July 26, 2021. "Approval, Phase II Investigation Work Plan for Chaquehui Canyon Aggregate Area," New Mexico Environment Department letter to A. Duran (EM-LA) from R. Maestas (NMED-HWB), Santa Fe, New Mexico. (NMED 2021, 701546)

Table C-2.0-1
Summary of Investigation-Derived Waste Generation and Management

Waste Stream	Waste Type	Volume	Characterization Method	On-Site Management	Disposition
Contact Waste	LLW, PCB LLW, PCB, Industrial	LLW: ~0.08 yd^3 PCB LLW: ~0.4 yd^3 PCB: ~0.02 yd^3 Industrial: ~1.1 yd^3	AK and analytical results of site characterization	3.5/5-yd^3 type IP-1 bags DOT[a]-rated containers	*PCB:* Veolia Henderson Facility, Henderson, Colorado *LLW & PCB LLW:* Energy Solutions, Clive, Utah *Industrial:* Clean Harbors Environmental Services Deer Trail Landfill Facility, Deer Trail, Colorado
Environmental Media	LLW, PCB LLW, PCB, Industrial	LLW: ~0.5 yd^3 PCB LLW: ~1.8 yd^3 PCB: ~9 yd^3 Industrial: ~2.5 yd^3	AK and analytical results of site characterization	3.5/5-yd^3 type IP-1 bags DOT-rated containers	*PCB:* Veolia Henderson Facility, Henderson, Colorado *LLW & PCB LLW*: Energy Solutions, Clive, Utah *Industrial:* Clean Harbors Environmental Services Deer Trail Landfill Facility, Deer Trail, Colorado
Purge Water	Determination Pending	~11 gallons	AK and analytical results of site characterization	55-gal. poly drums	Off-site TSDF[b]
Petroleum-Contaminated Soils	New Mexico Special Waste	~0.05 yd^3	AK and analytical results of site characterization	DOT-rated containers	Veolia Henderson Facility, Henderson, Colorado
Excavated Debris	Industrial	21.6 yd^3	AK and analytical results of site characterization	20-yd^3 IP-1 rolloff bin	Off-site TSDF

[a] DOT = (U.S.) Department of Transportation.

[b] TSDF = treatment, storage, and disposal facility.

Attachment C-1

Waste Characterization Strategy Form

Waste Characterization Strategy Form

Project Title:	WCSF: North Ancho, Revision 2
Project Location:	North Ancho Canyon Aggregate Area TA-39
Solid Waste Management Unit or Area of Concern #	SWMUs 39-001(a), 39-001(b), 39-002(a), 39-006(a), 39-010, AOC 39-002(b)
PRID/EXID:	TBD
Activity Type:	Investigation, sampling, plug and abandon wells and boreholes
Due Diligence Document(s) #:	TBD
Project Manager:	Dwight Hollon
Waste Technical Services Representative:	Vivian Valencia
Waste Management Coordinator:	Philip Babicz
Waste Generator:	Jon Roberson
Completed by:	Ron DeSotel
Date:	August 4, 2022

The SUBCONTRACTOR shall implement the requirements under this CONTRACTOR-prepared Waste Characterization Strategy Form (WCSF).

Description of Activity:

Newport News Nuclear BWXT-Los Alamos, LLC (N3B) is participating in a national effort by the U.S. Department of Energy (DOE) to clean up sites and facilities formerly involved in weapons research and development. The goal of Los Alamos National Laboratory's (the Laboratory's or LANL's) efforts 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, the Laboratory is currently investigating sites potentially contaminated by past Laboratory operations. These sites are designated as either solid waste management units (SWMUs) or areas of concern (AOCs).

The SWMUs and AOC addressed in the "Phase II Investigation Work Plan for North Ancho Canyon Aggregate Area Revision 1" (LANL 2011) are potentially contaminated with both hazardous and radioactive components. Corrective actions at the Laboratory are subject to the 2016 Compliance Order on Consent (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.

The following activities are planned:

- Complete the determination of the extent of contamination via sampling at five sites: SWMUs 39-001(a), 39-002(a), 39-006(a), 39-010, and AOC 39-002(b).
- Plug and abandon 18 shallow and angled wells at SWMUs 39-001(a) and 39-001(b).

The investigation results for SWMU 39-002(a), Area 1, were reevaluated in 2018 in accordance with an updated process for determining the extent of contamination. The evaluation determined that additional remediation at SWMU 39-002(a), Area 1, was not warranted. However, additional sampling for vertical and lateral extent is necessary. Sampling was proposed at Area 2 to complete the investigation at the three areas of SWMU 39-002(a) because building 39-2 was demolished.

A reassessment of the SWMU 39-002(a), Area 2, indicated that additional sampling will be necessary to better characterize the subsurface for lateral and vertical extent for contamination. Results from this investigation and the “Field Completion Letter Report for Aggregate Area Known Cleanup Sites Campaign: SWMU 39-002(a), SWMU 46-004(q), SWMU 15-008(b), and SWMU 15-007(c)” (N3B 2019) will be presented in the Phase II investigation report.

An assessment of the ecological risk at the SWMU 39-010 site indicates additional sampling is necessary to fully characterize the site. Remediation at SWMU 39-010 will be necessary.

All wastes will be managed in accordance with N3B procedure N3B-P409-0, “N3B Waste Management,” (and approved work packages.

This WCSF will be implemented before any waste-generating activity is undertaken. An amendment to this WCSF will be prepared and submitted for review and approval if any of the waste streams change in description or characterization approach or unanticipated waste streams are generated. The generation of no-path-forward waste must be approved by DOE before waste generation.

Relevant Site History and Description:

Site Location

The North Ancho Canyon Aggregate Area encompasses the area drained by North Ancho Canyon and includes Technical Area 39 (TA-39) and portions of TA-49. The TA-49 sites are addressed in separate work plans and investigation reports. The North Ancho Canyon Aggregate Area that encompasses TA-39 consists of 26 sites. Of these 26 sites, 20 have been previously investigated and/or remediated, deferred, delayed, or approved for no further action or corrective action complete. Historical details of previous investigations and data for these sites are provided in the historical investigation report for the North Ancho Canyon Aggregate Area (LANL 2007) and the approved investigation report (LANL 2010, NMED 2010). This Phase II Investigation Work Plan identifies and describes the activities needed to complete the investigations of the remaining six sites (five SWMUs and one AOC) and uses the information from previous field investigations or removal actions to evaluate current conditions at each site. The Phase II Investigation Work Plan also identifies shallow wells and angled boreholes at SWMUs 39-001(a) and 39-001(b) that will be plugged and abandoned and describes final removal of waste and contaminated environmental media at SWMUs 39-001(a) and 39-001(b).

Historical Information

SWMU 39-001(a) is a former landfill north of the Light Gas-Gun Facility (building 39-69) at TA-39. The 1990 SWMU report identified the site as consisting of two 80- × 20- × 10-ft-deep rectangular trenches (LANL 1990). Materials disposed of in this area include firing-site debris, empty chemical containers, and office waste. Interviews of site workers indicated that the landfill was used for disposal from 1953 to 1979 (LANL 1993, LANL 1997). SWMU 39-001(a) was excavated during the 2009 investigation (LANL 2010).

AOC 39-002(b) is the former location of a satellite accumulation area (SAA) on a 5- × 5-ft concrete pad adjacent to a firing site support building (structure 39-6) at SWMU 39-004(c) at TA-39. AOC 39-002(b) was used for storage before it became an SAA. The date the storage area began operating as an SAA is not known; however, the SAA was removed from service in 1993. The concrete pad is intact; no staining is visible on the pad.

SWMU 39-010 is an area used for staging soil excavated during the 1978 construction of a firing site [SWMU 39-004(e)] at TA-39. During construction of the firing site, large quantities of soil were removed and deposited in the canyon east of the firing site, forming SWMU 39-010 (LANL 1993). The site has been inactive since 1978.

SWMUs 39-001(a) and 39-001(b) contain wells and angled boreholes. There are 18 wells and angled boreholes that were installed in 1994 as part of the field investigation for TA-39, Potential Release Sites 39-001(a,b), 39-004(a-e), and 39-008. There are 13 angled boreholes and 5 vertical wells to be plugged.

Proposed Activities:

SWMU 39-001(a) (Sampling Only)

Subsurface samples could be collected at five previously sampled locations (locations 39-01387, 39-604349, 39-604362, 39-608121, and AN-607964), extending the depth at each sample location to define the vertical extent of contamination. Samples will be collected from one depth interval, 2.0 ft below, and one depth interval, 10.0 ft below the deepest interval previously sampled at these five sample locations. Some locations could be as deep as 28 ft below ground surface (bgs).

A recent risk analysis review on the 2010 North Ancho Canyon Aggregate Area Investigation data indicated that there is no human health or ecological risk for the SWMU 39-001(a) site. However, sampling could occur due to any subsequent evaluations.

AOC 39-002(b) (Sampling Only)

Soil/tuff samples will be collected east of the concrete pad to determine if contaminants were released from the former storage area. Samples will be collected from three depths (0.0 to 1.0 ft, 2.0 to 3.0 ft, and 6.0 to 7.0 ft bgs) at eight sample locations (2b-1 through 2b-8) adjacent to the east side of the concrete pad and at two sample locations downgradient of the pad (2b-9 and 2b-10) along the access road east of the site.

Wells at SWMU 39-001(a) and 39-001(b) (Abandonment)

The wells are not being used, and they are potential conduits for subsurface contamination. Before abandonment, the wells and boreholes will be measured to determine whether water is present within the casing and at what depth. If water is present, the well and/or borehole will be purged and the purge water will be containerized and sampled for waste characterization purposes.

SWMU 39-006(a)

Subsurface sampling to characterize SWMU 39-006(a) will occur at the inactive septic system component locations, including the chemical seepage pit, drainlines, former outfalls, and septic tank. To determine the nature and extent of contamination for the inactive septic system, approximately 218 samples are estimated be collected from 68 locations. Each borehole will be drilled to a depth that will range from 0 to approximately 20 ft bgs.

Excavation at the site is not currently expected; however, it may become necessary as a result of investigation sampling results.

SWMU 39-010

Subsurface samples will be collected at nine previously sampled locations (39-604426, 39-604428, 39-604430, 39-604432, 39-604433, 39-604437, 39-604439, 39-604441, and 39-604442), extending the depth at each sample location to define the vertical extent of contamination. Additional sampling locations are required to characterize the site. Samples will be collected from depth intervals of 2.0 to 3.0 ft and 9.0 to 10.0 ft below the interface of fill and alluvium at the existing sample locations. Soil and debris removal/waste generation will occur at this site.

Site characterization for SWMU 39-010 is to determine the nature and extent of contamination. An estimate of 214 samples will be collected from 40 locations. Each borehole will be drilled to a depth that will range from 0 to approximately 20 ft bgs. Soil and debris removal/waste generation will occur at this site.

SWMU 39-002(a)

Area 1: No remediation is expected at this site. However, to determine the nature and extent of contamination, 111 samples will be collected from 37 locations. Each borehole will be drilled to a depth that will range from 0 to 3 ft below the base course at the site. Characterization samples will be collected from a depth of 0–1 ft, 1–2 ft, and 2–3 ft below the base course.

Area 2: To determine the nature and extent of contamination, 76 samples will be collected from 25 locations. Each location will be drilled to a depth that will range from 0 to 5 ft bgs. Characterization samples will be collected from a depth of 0–1 ft, 2–3 ft and 4–5 ft bgs.

Characterization Strategy:

The Subcontractor shall furnish qualified personnel, equipment, materials, and facilities to remove, package, label, and transport to the staging area all waste generated under this activity. The Subcontractor will coordinate and work with N3B-assigned personnel to ensure that all N3B requirements, DOE orders, and state and federal regulations are met.

The characterization strategy for waste generated for the identified activities in this WCSF will be based on proposed Nature and Extent sampling associated with site-specific sampling, direct sampling of waste containers, and approved acceptable knowledge (AK) data/documentation. AK includes (1) a review of existing historical documentation associated with the site and (2) source-term/process identification to identify whether listed hazardous waste may be present (i.e., due diligence review). Waste storage area postings, regulated storage duration, and inspection requirements will be based on the waste type and its regulatory classification.

If analyses indicate the presence of listed constituents, due diligence may be performed to identify whether these constituents meet the listing description. If there is no or inconclusive documentation that the contaminants are from a listed source, the waste will not be considered listed hazardous waste. If the waste is listed hazardous waste and the contaminant levels are below screening levels and Land Disposal Restriction Treatment Standards, a no-longer-contained-in request may be submitted to NMED. A copy of either the N3B Resource Conservation and Recovery Act- (RCRA-) approved due diligence or themed no-longer-contained-in approval must accompany all waste profiles prepared for the subject waste(s).

Required sampling and documentation will be performed in accordance with the Environmental Protection Agency's (EPA's) "RCRA Waste Sampling Draft Technical Guidance, Planning, Implementation, and Assessment" (EPA 2002) and EPA publication "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846" (https://www.epa.gov/hw-sw846).

Sampling personnel must record waste sampling information in accordance with EPA's "RCRA Waste Sampling Draft Technical Guidance, Planning, Implementation, and Assessment," section 7.2.3, "Documentation of Field Activities" (EPA 2002). Sampling personnel must also record field conditions, problems encountered, local sources of contamination (e.g., operating generators or vehicles), the personnel involved, equipment and supplies used, waste generated, and field observations.

Samples shall be delivered to the N3B Sample Management Office in accordance with N3B procedure N3B-SOP-SDM-1102, "Sample Receiving and Shipping by the N3B Sample Management Office," (N3B 2022b).

The implementation of this WCSF complies with the requirements in Chapter Nine "Sampling Plans" found in SW-846, "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846" (https://www.epa.gov/hw-sw846).

The selection of waste containers is based on U.S. Department of Transportation requirements, waste types, estimated volumes of waste to be generated, transportation, and the disposal facility waste acceptance criteria (WAC).

All containers shall be approved by the Contractor. The subcontractor will be responsible for providing compliant waste containers; pallets; a covering for filled bags, if required; a bag loading frame, if required; a bag lifting device attachment, if required; establishing staging/storage areas; required staging/storage area inspections; loading for transportation for disposal; and final disposal of wastes. Note: The Subcontractor is responsible for the closure of waste containers per manufactures' instructions to ensure no spillage of material during on-site movement of filled waste containers to the staging/storage area.

The Subcontractor shall visually inspect waste packages before filling for any holes, tears, or other damage to the package that could affect the integrity of the package. Immediately following containerization, the Subcontractor shall ensure each waste container is individually labeled with a unique container identification number for tracking and inventory purpose. N3B Waste Management personnel will be responsible for ensuring waste containers are labeled with the appropriate information regarding waste classification, contents, date generated, and responsible generator (individual responsible for the management of the waste container). Waste containers will need to be covered (protected from precipitation) if they are determined to be hazardous, mixed low-level waste (MLLW), Toxic Substances Control Act (TSCA), or polychlorinated biphenyl (PCB), as well as on pallets. The Subcontractor shall place waste containers in a Contractor-designated staging/storage area. Containerized waste (bags) will be stored on pallets (to be provided by the Contractor). The Subcontractor shall provide a daily waste inventory to the Contractor.

The Waste Disposition Group will ensure the following tasks are performed:

- The waste container information will be uploaded into the Waste Compliance and Tracking System (WCATS) in a timely manner.

- Waste containers are labeled with the appropriate information regarding waste classification, contents, date generated, and responsible generator (individual responsible for the management of the waste container).

- Waste storage area postings, regulated storage duration, and inspection requirements will be based on the waste type and its regulatory classification.

Expected Waste Streams:

Waste Stream #1 – Contact Investigation-Derived Waste: This waste stream is composed of solid waste generated during investigation and removal activities that has come into contact with contaminated environmental media and equipment. This includes, but is not limited to, personal protective equipment (PPE) (e.g., gloves), plastic sheeting (e.g., tarps, liners), plastic and glass sample bottles, disposable sampling supplies (e.g., filters, tubing, plastic bags), and dry decontamination wastes (e.g., paper items). An estimated less than 5 yd^3 of contact investigation-derived waste (IDW) will be generated.

Anticipated Regulatory Status: Radioactive low-level waste (LLW)/MLLW, TSCA, PCB, Hazardous, Industrial.

Characterization Approach: Contact IDW will be managed based upon the regulatory classification of the waste with which it came into contact. For example, PPE will be characterized based on the soil laboratory analysis results.

Storage and Disposal Method: Contact IDW may be containerized in N3B-provided drums or placed into the same N3B-provided containers as the media with which it is contaminated, or it may be stored separately from the environmental media until the waste determination is made. At that time, the contact waste may be combined with the media for disposal if appropriate (the waste profile form will document the decision to combine the waste streams). These wastes will be stored in secure, designated waste staging areas. Wastes will be treated and/or disposed in authorized facilities.

Waste #2 – Municipal Solid Waste: This waste stream primarily consists of noncontact trash including, but not limited to, paper, cardboard, wood, plastic, food and beverage containers, empty solution containers, and other noncontact trash. This waste stream may also include vegetation from sites with no radioactive contamination. An estimated less than 2 yd^3 of municipal solid waste (MSW) will be generated.

Anticipated Regulatory Status: MSW

Characterization Approach: MSW will be characterized based on AK of the waste materials and the methods of generation or safety data sheets (SDS).

Management and Disposal Method: MSW will be segregated from all other waste streams. The wastes are anticipated to be stored in plastic trash bags or other appropriate containers and disposed of at the Los Alamos County Eco Station or other authorized solid waste facility.

Waste # 3 – Environmental Media: This waste stream consists of remediated soil and excess environmental sample media. Environmental media from all identified SWMUs and AOCs in this WCSF may be combined once historical data has been reviewed and a determination has been made this is appropriate to minimize MLLW generation. Man-made debris may be encountered during soil removal and, if possible, will be segregated from the soil and managed appropriately based upon AK of the soil. Small amounts of manmade debris and vegetation may be present in the excavated material waste stream; however, it must be reported in the profile. The total amount of media generated is estimated to be 3000 yd^3.

Anticipated Regulatory Status: Radioactive LLW/MLLW, TSCA, Industrial

Characterization Approach: Characterization will be based upon direct sampling and approved AK data/documentation. A representative sample must be collected at minimum of at least one sample for every 50 cubic yards of excavated environmental media. A representative sample will be collected from each waste container for sites where only characterization sampling occurs. A hand-auger or thin-wall tube sampler will be used to collect waste material from each container, auguring from the surface to the bottom of the waste in a sufficient number of locations to obtain a representative sample. In addition to collecting samples directly from a waste container, a representative composite sample may be collected by diverting media to a composite drum/container during excavation and/or drilling activities. A sample will then be collected out of the composite drum. Characterization of excess cuttings/sample media generated between sample collection depths may be characterized by direct sampling of waste containers or by the site characterization samples. Direct samples will be analyzed for toxicity characteristic leaching procedure (TCLP) metals, RCRA, gamma-emitting radionuclides, isotopic plutonium, americium-241, tritium, isotopic uranium, and total uranium. Other constituents may be analyzed as necessary to meet the WAC for a receiving facility or if process knowledge or visual observations indicate other contaminants may be present (e.g., PCBs or asbestos).

If process knowledge, odors, or staining indicates the media may be contaminated with petroleum products, the materials will be analyzed for total petroleum hydrocarbons (TPH) diesel range organics/gasoline range organics (DRO/GRO).

Storage and Disposal Method: The excavated media will be containerized at the point of generation and stored in a secure, designated registered radioactive waste storage or staging area pending analytical results. The containers will be appropriate for the quantity of wastes generated. Excavated environmental media will be treated and/or disposed of in authorized facilities appropriate for the waste regulatory classification.

<u>Waste #4 – Purge Water</u>: This waste stream consists of water that is purged from monitoring wells. The wells are not being used, and they are potential conduits for subsurface contamination. Prior to abandonment, the wells and boreholes will be measured to determine whether water is present within the casing and at what depth. If water is present, the well and/or borehole will be purged and the purge water will be containerized and sampled for waste characterization purposes. It is anticipated that approximately 100 gal. of purge water will be generated during this process. On-site containerization of sampling purge water at the time of generation will be required.

Anticipated Regulatory Status LLW, MLLW, or Industrial waste.

Characterization Approach: The purge water will be characterized by direct sampling of the containerized fluids within 10 days after final generation or by AK. Representative waste characterization samples will be collected with a 21-day analytical data turnaround to ensure that wastes can be dispositioned within 90 days, if necessary.

If the existing data are highly variable and/or contain analytical outliers, then the purge water will be characterized by reviewing multiple data sources, such as analytical results from the associated historical groundwater monitoring results (AK), by analyzing a representative sample of the purge water (direct sample), or by a combination of the two. If it is determined that the purge water is nonhazardous, then the water will be evaluated for treatment and disposal at one of the LANL wastewater treatment facilities or for off-site disposal.

Purge water is stored in a centralized location with purge water from multiple wells and will be sampled to assure the required data are obtained for proper characterization and disposal. Separate samples will be collected from each of the segregated waste streams (i.e., nonhazardous, LLW, and high explosives-[HE-] contaminated). AK from previous sampling efforts will be utilized for initial segregation and storage determinations and may be used for characterization.

The particular analyses used to characterize purge water are listed in the characterization table. The analytical suite is based on the Interim Monitoring Plan for each watershed and Table 1.7-2 of the Interim Facility-Wide Groundwater Monitoring Plan (N3B 2021b). If purge water must undergo additional analyses to determine if it meets the WAC of an appropriate disposal facility, then these will be performed.

The results of analyses, along with AK of the sources of constituents identified in the purge water, will be used to determine whether the water is hazardous waste in accordance with 40 Code of Federal Regulations 262.11, "Hazardous Waste Determination."

Storage and Disposal Method: The disposal-path determination for purge water will be based on the direct sampling and/or AK. Purge water will be managed in an appropriate storage area and disposed of at an authorized on-site or off-site facility, based on whether it meets the facility's WAC requirements. The water will be stored at the well site of origin or at a centralized location and managed conservatively in the appropriate accumulation area until complete characterization is achieved.

<u>Waste # 5 – Petroleum-Contaminated Soils (potential):</u> This waste stream is composed of soils contaminated because of the accidental release of commercial products such as hydraulic fluid, motor oil, unleaded gasoline, or diesel fuel (e.g., from the rupture of hydraulic or fuel hoses, or spills during maintenance, etc.). The waste stream may also include adsorbent padding, paper towels, spill pillows, or other adsorbent material used to contain the released material and added to the containerized petroleum-contaminated soil (PCS) waste for storage and disposal. The amount of potential PCS is expected to be less than 1 yd^3.

Anticipated Regulatory Status: New Mexico special waste (NMSW); hazardous, LLW/MLLW, TSCA

Characterization Approach: PCS will be characterized based upon either AK or direct waste sampling. If the material spilled is known and the spill occurs on known material (historical site sample data, clean base course), AK can be used to characterize the waste. If the spill is of an unknown material/origin or occurs in an area with no historical sampling data, characterization will be based upon the analytical results from direct sampling either performed in place (same day as spill/containerization) or from the containerized waste within 10 days of generation.

Storage and Disposal Method: PCS will be containerized at the point of generation on the same day that the spill occurred. If AK for the site indicates that the soil will not be contaminated with radioactive or hazardous materials, the PCS will be managed as NMSW, in a registered NMSW storage area, and the NMSW start date will be the date the container is completely full or the date on which no additional NMSW will be added to the container. If AK for the site indicates that the soil could be contaminated with hazardous materials, the PCS will be stored in a clearly marked and constructed waste accumulation area appropriate to the anticipated waste type. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based upon the waste classification.

PCS will be characterized and disposed of per the corresponding treatment, storage, and disposal facility WAC.

Waste# 6 - Excavated Debris: This waste stream consists of residual man-made debris encountered during soil excavation. If possible, the debris will be segregated from the soil and managed appropriately based upon AK of the soil. Debris will contain less than 1% associated soil. The total amount of debris to be generated is estimated to be less than 100 yd^3.

Anticipated Regulatory Status: Radioactive LLW/MLLW, TSCA, Industrial

Characterization Approach: Characterization of the excavated debris will be based on AK of the waste materials, the methods of generation, the extent of contamination, and analysis of the material contacted (e.g., excavated soil) and visual verification.

Storage and Disposal Method: The excavated debris will be containerized at the point of generation and stored in secure, designated registered radioactive waste storage or staging area. The containers will be appropriate for the quantity of wastes generated. Excavated environmental debris will be treated and/or disposed of in authorized facilities appropriate for the waste regulatory classification.

Waste Characterization Table

Waste Description	Waste #1 Contact IDW	Waste #2 MSW	Waste #3 Environmental Media	Waste #4 Purge Water	Waste #5 PCS	Waste #6 Excavated Debris
Estimated Volume	5 yd^3	2 yd^3	3000 yd^3	100 gal.	1 yd^3	100 yd^3
Packaging	TBD[a]	TBD	TBD	TBD	TBD	TBD
Regulatory Classification						
Radioactive Low-Level Waste (LLW)	X		X	X	X	X
Municipal Solid Waste (MSW)		X				
Toxic Substance Control Act (TSCA)	X		X		X	X
Hazardous Waste	X				X	
Mixed Low-Level Waste (MLLW)	X		X	X	X	X
Material for recycle						
Universal						
New Mexico special waste (NMSW)					X	
Industrial Waste	X		X	X		X
Characterization Method						
AK: Existing Data/Documentation	X	X	X	X	X	X
AK: Site Characterization	X	X	X	X	X	X
Direct Sampling of Waste			As needed	X[b]	As needed	As needed
Analytical Testing						
Asbestos (EPA 600)			As needed			
Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)					As needed	
TCLP Organics						
VOCs[c] (EPA 8260)						X
SVOCs[d] (EPA 8270)						X
Organic Pesticides (EPA 8081)						
Organic Herbicides (EPA 8151)						
PCBs-Aroclors (EPA 8082)			As needed			
Total Metals (EPA 6010/7471 or EPA 6020)			X			

Waste Characterization Table

Waste Description	Waste #1 Contact IDW	Waste #2 MSW	Waste #3 Environmental Media	Waste #4 Purge Water	Waste #5 PCS	Waste #6 Excavated Debris
Total Cyanide (EPA 9012)						
HE Constituents (EPA 8330/8321)			As needed			
Beryllium			As needed			
TPH-GRO (EPA 8015)					X[b]	
TPH-DRO (EPA 8015)					X[b]	
TCLP Metals (EPA 1311/6010-B)			As needed			
Moisture (SW-846)			As needed			
TCLP Pest. & Herb. (EPA 1311/8081/1311/8151)						
Gross Alpha (alpha counting) (EPA 900)						
Gross Beta (beta counting) (EPA 900)						
Tritium (liquid scintillation) (EPA 906.0)			X			
Gamma spectroscopy (EPA 901.1)			X	X		X
Isotopic plutonium (HASL-300)			X	X		X
Isotopic uranium			X	X		X
Americium-241 (HASL-300)			X	X		X
Strontium-90 (EPA 905)						
Isotopic Thorium (HASL-300)						
Total Uranium (EPA 6020)			X	X		X
Perchlorates (EPA 6850)						
Nitrates/Nitrites (EPA 353.2)						
Technetium-99 (HASL-300)						
TTO (EPA 8260-B and EPA 8270-C)[e]	**Request VOCs and SVOCs above**					
TSS and TDS (EPA 160.1 and 160.2)[f]						
COD (EPA 410.4)						
pH (EPA 904c)				X		X

Waste Characterization Table

Waste Description	Waste #1 Contact IDW	Waste #2 MSW	Waste #3 Environmental Media	Waste #4 Purge Water	Waste #5 PCS	Waste #6 Excavated Debris
Microtox or BOD[g]						
Dioxins/Furans (SW-846:8290)						
Waste Stream Profile	TBD	TBD	TBD	TBD	TBD	TBD

[a] TBD = To be determined.

[b] If diesel or gasoline is spilled, direct sampling of contaminated soil MUST be sampled for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) and TPH at a minimum to meet requirements for PCS. If these analyses are not sampled, this waste cannot be PCS and must be managed as hazardous waste.

[c] VOC = volatile organic compound

[d] SVOC = volatile organic compound

[e] TTO is the total of VOC and SVOC contaminants. Request methods EPA 8260-B (VOCs) and EPA 8270-C (SVOCs).

[f] In addition to other analytes needed to characterize the waste (e.g., VOC, SVOC, total metals), analyze for total suspended solids (TSS), total dissolved solids (TDS), oil and grease, gross alpha, gross beta, tritium, and pH for liquids destined for the LANL Sanitary Waste Water System (SWWS). For wastes destined for the Radioactive Liquid Waste Treatment Facility (RLWTF), additional constituents include total toxic organics (TTO), TSS, chemical oxygen demand (COD), pH, total nitrates/nitrites, and gross alpha, gross beta (not including tritium), and gross gamma **or** the sum of individual alpha-, beta-, and gamma-emitting nuclides.

[g] If Microtox analysis is not available, request biological oxygen demand (BOD).

References:

EPA (Environmental Protection Agency), August 2002, "RCRA Waste Sampling Draft Technical Guidance, Planning, Implementation, and Assessment," Environmental Protection Agency, document EPA-530-D-02-002, Washington, D.C. (EPA 2002)

LANL (Los Alamos National Laboratory), 1990. "Solid Waste Management Units Report," Vol. III of IV (TA-26 through TA-50), document LA-UR-90-3400, Los Alamos, New Mexico. (LANL 1990)

LANL (Los Alamos National Laboratory), June 1993. "RFI Work Plan for Operable Unit 1132," document LA-UR-93-768, Los Alamos, New Mexico. (LANL 1993)

LANL (Los Alamos National Laboratory), March 1997, "RFI Report for Potential Release Sites at TA-39, 39-001(a,b), 39-004(a-e), and 39-008 (located in former Operable Unit 1132)," document LA-UR-97-1408, Los Alamos, New Mexico. (LANL 1997)

LANL (Los Alamos National Laboratory), September 2007, "Historical Investigation Report for North Ancho Canyon Aggregate Area," document LA-UR-07-5948. (LANL 2007)

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Signatures		Date
Project Manager (Print name and then sign below.) Dwight Hollon	Dwight Hollon — Digitally signed by Dwight Hollon Date: 2022.08.04 11:24:58 -06'00'	
Waste Generator (Print name and then sign below.) Jon Roberson	Jon Roberson — Digitally signed by Jon Roberson Date: 2022.08.04 11:01:09 -06'00'	
Waste Management Coordinator/Field Coordinator (Print name and then sign below.) Philip Babicz	Philip Babicz — Digitally signed by Philip Babicz Date: 2022.08.04 12:45:09 -06'00'	
Sample Management Office (Print and then sign below.) JP Garrett	John P. Garrett — Digitally signed by John P. Garrett Date: 2022.08.04 13:13:42 -06'00'	
N3B RCRA Representative (Print name and then sign below.) Christian Maupin	Christian Maupin — Digitally signed by Christian Maupin Date: 2022.08.04 14:27:03 -06'00'	
Waste Acceptance Representative (Print name and then sign below.) Ovide Morin	Ovide Morin — Digitally signed by Ovide Morin Date: 2022.08.04 14:54:43 -06'00'	
Waste Certification Program Representative (Print name and then sign below.) Vivian Valencia	Vivian Valencia — Digitally signed by Vivian Valencia Date: 2022.08.04 16:13:31 -06'00'	

Appendix D

Analytical Program

D-1.0 INTRODUCTION

This appendix discusses the analytical methods and data-quality review for samples collected during the North Ancho Canyon Aggregate Area investigation at Technical Area 39 at Los Alamos National Laboratory (LANL or the Laboratory).

Newport News Nuclear BWXT-Los Alamos, LLC (N3B) uses the Environmental Information Management (EIM) database for data management. This is a cloud-based data management platform used for managing sampling events, tracking the packaging and transportation of samples, and storing the resultant data. In addition to N3B, Triad National Security, LLC, and the U.S. Department of Energy (DOE) Oversight Bureau of the New Mexico Environment Department (NMED) share EIM for all LANL environmental analytical data. EIM interfaces with Intellus New Mexico (Intellus), a fully-searchable database available to the public through the Intellus website (http://www.intellusnm.com).

The system, written and maintained by Locus Technologies, consists of a cloud-based Structured Query Language (SQL) server database platform coupled with a web-based user interface. It is a comprehensive sample- and data-management application, designed to manage the process from sample planning through data review and reporting. It includes modules for sample planning, sample tracking, manual and electronic field data upload, electronic data deliverables (EDDs) upload, automated data review (ADR) routines, notification emails, and reporting tools.

Laboratory data packages and EDDs adhere to the requirements specified in N3B's Exhibit D: Scope of Work and Technical Specifications for Off-Site Analytical Laboratory Services.

N3B ensures that reported external analytical laboratory data are of sufficient quality to fulfill their intended purpose and that the condition of the data is documented so that future users of analytical laboratory results produced for the Los Alamos Legacy Cleanup Contract can use the data. The data collected must have sufficient quality and quantity to support defensible decision-making, as described in U.S. Environmental Protection Agency (EPA) guidance (https://www.epa.gov/quality). The data quality objectives in the N3B Sample Data Management Program detail minimum quality assurance (QA)/quality control (QC) requirements.

Data examination, verification, and validation include application of data qualifiers and reason codes to analytical results and modification of detection status based on outcome of specific laboratory QC sample analyses (e.g., spikes, duplicates, surrogates, method blanks [MBs], laboratory control samples [LCSs], and tracers), holding times, proper preservation, and field QC samples as applicable. The process also includes a best-selection evaluation to determine the best value for multiple analytical results of the same analyte from the same sample. Qualification of 100% of analytical data occurs during verification using the EIM ADR module, and a minimum of 10% of analytical data is also subjected to a more in-depth validation by an N3B chemist.

The entire data-validation process includes a description of the reasons for any failure to meet method, procedural, or contractual requirements, and an evaluation of the impact of such failure on the associated data or data set.

During this process, individual sample results are qualified as accepted or rejected. Data that are accepted per the validation criteria are classified as follows: not detected (U), estimated but not detected (UJ), estimated (J), or detected without data qualification (NQ). Accepted data can then be used as needed, assuming that no problems occurred during the sampling events. Data that are rejected (R) per the validation criteria are unusable. In addition, the analytical results can also be further labeled with data-validation reason codes that explain the reason for the qualification. (See Appendix A of this document, which includes data qualifier definitions.)

The analytical data, instrument printouts, and data validation reports are provided in Appendix E (on DVD included with this document). In addition to the laboratory analytical data, sample collection logs (SCLs) and chain of custody forms (COCs) are also provided in Appendix E.

N3B data validation is performed externally by the analytical laboratory and end users of the data. This data-validation process applies a defined set of performance-based criteria to analytical data, which may result in qualification of that data. Data validation provides a level of assurance of the data quality, based on this technical evaluation. N3B validation of chemistry data includes a technical review of the analytical data package that covers the evaluation of both field and laboratory QA/QC samples, the identification and quantitation of analytes, and the effect of QA/QC deficiencies on analytical data, as well as other factors affecting the data quality.

Sampling and data validation were conducted using standard operating procedures (SOPs) and other documents that are part of N3B's comprehensive QA/QC program. Procedures and other documents include the most current version of the following:

- N3B-SOP-ER-2001, "Soil, Tuff, and Sediment Sampling"
- N3B-SOP-SDM-1100, "Sample Containers, Preservation, and Field Quality Control"
- N3B-SOP-SDM-1101, "Sample Control and Field Documentation"
- N3B-SOP-SDM-1102, "Sample Receiving and Shipping by the N3B Sample Management Office"
- N3B-AP-SDM-3001, "Validation of Volatile Organic Compounds Analytical Data"
- N3B-AP-SDM-3003, "Validation of Organochlorine Pesticides and Herbicides and Polychlorinated Biphenyls Analytical Data"
- N3B-AP-SDM-3005, "Validation of Metals Analytical Data"
- N3B-AP-SDM-3006, "Validation of Radiochemical Analytical Data"
- N3B-AP-SDM-3007, "Validation of General Chemistry Analytical Data"
- N3B-AP-SDM-3008, "Validation of High Explosives Analytical Data"
- N3B-AP-SDM-3012, "Validation of Analytical Data by Liquid Chromatography and Liquid Chromatography/Tandem Mass Spectrometry"

After the sampling event is planned using the EIM Sample Request module, sample collection logs are created and printed to serve as COC documents and analytical request forms.

The sampling events included collection of field trip blank (FTB), field rinsate (FR) blank, and field duplicate (FD) field QA/QC samples. Detection of analytes in FTBs may indicate contamination resulting from sample collection, transportation, or the analytical laboratory processes. Differences in analytical results between an FD and its regular sample may indicate that the samples were not uniform or that significant variation in analysis occurred between the two samples. Detection of analytes in FR blanks may indicate contamination from inadequately decontaminated field equipment or from the analytical laboratory process.

- The FTBs are septum amber glass containers, prefilled with soil, that are subjected to the same conditions as regular samples. FTBs are collected when volatile organic compound (VOC) samples are collected at a minimum rate of 1 per day. FTBs are collected from locations where the regular samples are collected.

- FR blanks are collected at a minimum rate of 1 per 10 investigation samples to confirm decontamination of the sampling equipment.
- FDs are collected at a minimum rate of 1 per 10 investigation samples collected. FDs are split samples collected from locations where the regular samples are collected.

Following sample collection, sampling personnel deliver the samples and the field collection log to sample management personnel at the N3B Sample Management Office (SMO). An analytical COC, which includes the field sample identification number, the date and time of field sample collection, the analytical parameters group code, and the number of bottles for each analytical parameter group, is then created. The N3B SMO ships the samples to the appropriate laboratory for analysis.

The laboratory QA/QC process is defined in the appropriate analytical method and the external analytical laboratory statement of work (SOW).

The external laboratory uploads the EDD and its corresponding analytical data data package to EIM. The data are then validated both manually and in the EIM autovalidation process, reviewed by an N3B chemist at the appropriate level, and then fully transferred into EIM.

D-2.0 ANALYTICAL DATA ORGANIZATION

A portion of the organic analytical results were rejected and are not usable for the purpose of this report. The rejected results for each site are discussed in section D-4.2.15. The remaining data, including qualified data, are usable for evaluation and interpretive purposes.

Summaries of the analytical methods for inorganic, organic, and radionuclide chemicals are provided in the following sections.

D-3.0 INORGANIC CHEMICAL ANALYSES

North Ancho Canyon Aggregate Area samples collected during this investigation were analyzed for one or more of the following inorganic chemicals: nitrate, perchlorate, total cyanide, mercury, and target analyte list (TAL) metals. Samples were analyzed:

- for nitrate using EPA SW-846 Methods 9056 and 9056A and EPA Method 300.0,
- for perchlorate using SW-846 Method 6850,
- for cyanide using SW-846 Method 9012A and 9012B,
- for mercury using SW-846 Methods 7470, 7471, 7470A, and 7471A, and
- for TAL metals using SW-846 Methods 6010, 6010B, 6010C, 6010D, 6020, and 6020B.

The analytical methods used for inorganic chemicals are listed in Table D-3.0-1.

A total of 773 samples (plus 73 FDs and 75 FR blanks) were submitted for analysis of nitrate; 773 samples (plus 73 FDs and 75 FR blanks) were submitted for analysis of perchlorate; 777 samples (plus 76 FDs and 76 FR blanks) were submitted for analysis of total cyanide; and 910 samples (plus 89 FDs and 70 FR blanks) were submitted for analysis of TAL metals.

All decision-level analytical data are included in Appendix E (on DVD included with this document) and can also be found in the public Intellus database at https://www.intellusnm.com.

D-3.1 Inorganic Chemical QA/QC Analyses

The use of QA/QC samples is designed to produce quantitative measures of the reliability of specific parts of an analytical procedure. The results of the QA/QC analyses performed on a sample provide confidence about whether the analyte is present and whether the concentration reported is accurate. Calibration verifications, LCSs, MBs, matrix spike (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 defined in the analytical services SOWs (LANL 1995, 049738; LANL 2000, 071233) and is described briefly below.

Calibration verification is the establishment of a quantitative relationship between the concentration of the target analyte and the response of the analytical procedure. There are two aspects of calibration verification: initial and continuing. The initial calibration verifies the accuracy of the calibration curve and of the individual calibration standards used to perform the calibration. The continuing calibration ensures that 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, are being met.

The LCS serves as a monitor of the overall performance of each step during the analysis, including sample digestion. For inorganic chemicals in soil/tuff, LCS percent recoveries (%R) should fall between the lower acceptance limit (LAL) and upper acceptance limit (UAL).

An MB 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. MBs are used to assess the potential for sample contamination during extraction and analysis. All target analytes in the MB should be below the contract-required detection limit.

MS samples assess the accuracy of inorganic chemical analyses. These samples are designed to provide information about the effect of the sample matrix on the sample preparation procedures and analytical technique. The MS should be between the LAL and UAL, inclusive, for all spiked analytes.

Laboratory duplicate samples assess the precision of inorganic chemical analyses. All relative percent differences (RPDs) between the sample and laboratory duplicate should be ±35% for soil (LANL 1995, 049738; LANL 2000, 071233).

The ICSs assess the accuracy of the analytical laboratory's interelement and background correction factors used for inductively coupled plasma emission spectroscopy. The ICS %R should be between the LAL and UAL.

Serial dilution samples measure potential physical or chemical interferences and correspond to a sample dilution ratio of 1:5. For valid comparison, the chemical concentration in the undiluted sample must be at least 50 times the method detection limit (MDL) and 100 times the MDL for inductively coupled plasma mass spectroscopy. For sufficiently high concentrations, the RPD should be within 10%.

Details regarding the quality of the inorganic chemical analytical data included in the data set are summarized in the following subsections.

D-3.2 Data Quality Results for Inorganic Chemicals

The majority of the analytical results were qualified as not detected (U) because the analytes were not detected by the respective analytical methods, or not qualified (NQ) because they were detected without data qualification. These data have no quality issues associated with the values presented.

D-3.2.1 Chain of Custody

COC forms were maintained properly for all samples analyzed for inorganic chemicals (see Appendix E [on DVD included with this document]).

D-3.2.2 Sample Documentation

All samples analyzed for inorganic chemicals were properly documented in the field in the SCLs (see Appendix E [on DVD included with this document]).

D-3.2.3 Sample Dilutions

Some samples were diluted for inorganic chemical analyses. No qualifiers were applied to any inorganic chemical analytical results because of dilutions.

D-3.2.4 Sample Preservation

Preservation criteria were met for all samples analyzed for inorganic chemicals.

D-3.2.5 Holding Times

Holding time criteria were met for all inorganic samples analyzed, except for 16 cyanide results which were qualified as rejected (R) because the holding time was >2 times the applicable holding time requirement (see Section D-3.2.14).

D-3.2.6 Initial and Continuing Calibration Verifications

Two TAL metal results and 9 cyanide results were qualified as estimated (J), and 10 TAL metal results were qualified as estimated and potentially biased high (J+), because the initial calibration verification (ICV) or continuing calibration verification (CCV) blank result was above the MDL and the detected sample result was greater than or equal to 5 times, and less than 100 times, the blank result.

A total of 205 TAL metal results, 19 cyanide results, and 4 nitrate results were qualified as not detected (U) because the sample result was less than or equal to the concentration of the related analyte in the instrument blank and continuing calibration blank.

Six TAL metal results were qualified as estimated and potentially biased high (J+), 1 nitrate result qualified as estimated (J), and 2 nitrate results were qualified as estimated not detected (UJ), because the initial or continuing calibration verification percent recovery was above the method-specific or laboratory control limits.

Five TAL metal results were qualified as estimated not detected (UJ) because the initial or continuing calibration verification percent recovery was below the method-specific or laboratory control limits.

D-3.2.7 Interference Check Sample and/or Serial Dilutions

A total of 38 TAL metal results were qualified as estimated (J), and 9 TAL metal results were qualified as estimated and potentially biased high (J+), because the RPD was greater than the acceptance limits.

D-3.2.8 Laboratory Duplicate Samples

A total of 396 TAL metal results and 28 cyanide results were qualified as estimated (J), 3 TAL metal results were qualified as estimated potential biased low (J-), 2 cyanide results were qualified as not detected (U), and 28 TAL metal and 23 cyanide results were qualified as estimated not detected (UJ) because the sample and duplicates were greater than or equal to 5 times the reporting limit and the duplicate RPD was greater than 35%.

A total of 25 TAL metal results and 4 cyanide results were qualified as estimated (J) because the sample or laboratory duplicate result was less than 5 times the reporting limit and the absolute difference between sample and duplicate result exceeded the limits.

D-3.2.9 Method Blanks

A total of 102 TAL metal results and 11 nitrate results were qualified estimated (J); 7 TAL metal results were qualified as estimate potentially biased low (J-); 302 TAL metals results and 2 nitrate results were qualified as not detected potentially biased high (J+); and 25 TAL metal results were qualified as not detected (U), because the detected sample result was greater than or equal to 5 times the detected concentration of the same analyte in the MB.

A total of 172 TAL metal results, 14 cyanide results, and 41 nitrate results were qualified as not detected (U), and two TAL metals results were qualified as not detected potentially biased high (J+), because the sample result was less than or equal to 5 times the concentration of the related analyte in the MB.

D-3.2.10 MS Samples

A total of 54 TAL metal results were qualified estimated (J); 314 TAL metal results, 23 cyanide results, and 17 nitrate results were qualified as estimate potentially biased low (J-); 64 TAL metals results, 48 cyanide results, and 3 nitrate results were qualified as estimated not detected; and 4 TAL metal results were qualified as not detected (U), because the associated MS recovery was below the LAL.

A total of 157 TAL metal results were qualified as estimated (J); 1047 TAL metal results and 15 nitrate results were qualified as estimated and potentially biased high (J+); and 54 TAL metal results and

3 nitrate results were qualified as estimated not detected (UJ), because the associated MS recovery was above the UAL.

D-3.2.11 LCS Recoveries

Four TAL metal results were qualified estimated potentially biased low (J-) and 11 TAL metals results were qualified as estimated not detected (UJ) because the spike percent recovery value was greater than 30% and less than the lower acceptance limit (75%), and the sample result was a nondetect, which indicates a potential for false negatives being reported.

A total of 12 TAL metal results were qualified estimated potentially biased high (J+) because the spike percent recovery value was less than 30%, and the result was a nondetect, which increases the potential for false negatives being reported. This could be caused by analytical interferences.

D-3.2.12 Method Detection Limits

A total of 11,477 TAL metal results, 29 cyanide results, 161 mercury results, 113 nitrate results, and 163 perchlorate results were qualified as estimated (J) because the result was less than the practical quantitation limit (PQL) but greater than the MDL.

D-3.2.13 Field Trip Blanks and Rinsate Blanks

The majority of the FTB and FR blank analytical results were qualified as not detected (U) or not qualified (NQ) because the analytes were not detected by the respective analytical methods or were not qualified. These data have no quality issues associated with the values presented.

One cyanide result was qualified as not detected (U) because the initial or continuing calibration blank result was greater than the method detection limit and the detected sample result was less than 5 times the blank result.

Two cyanide results, 3 nitrate results, and 2 perchlorate results were qualified as estimated not detected (UJ) because the associated MS percent recovery was less than the LAL.

Two cyanide results were qualified as estimated not detected (UJ) because the holding time was greater than the applicable holding time requirement and was less than or equal to twice the applicable holding time requirement.

One TAL metal result was qualified as estimated (J) because the sample or laboratory duplicate result was less than 5 times the reporting limit and the absolute difference between sample and duplicate result exceeded the limits.

One TAL metal result was qualified as estimated (J) because the associated MS percent recovery was less than the LAL.

Four TAL metal results were qualified as estimated potentially biased high (J+) because the detected sample result was greater than or equal to 5 times the detected concentration of the same analyte in the method blank.

Two TAL metal results, 1 nitrate result, and 1 perchlorate result were qualified as estimated potentially biased high (J+) because the associated MS percent recovery was greater than the UAL.

A total of 22 TAL metal results were qualified as not detected (U) because the detected sample result was less than 5 times the detected concentration of the same analyte in the method blank.

One nitrate result and 2 perchlorate results were qualified as not detected (U) because the detected sample result was less than 5 times the detected concentration of the same analyte in the method blank.

A total of 334 TAL metal results, 9 nitrate results, and 6 perchlorate results were qualified as estimated (J) because the result was less than the PQL but greater than the MDL.

Four perchlorate results were qualified as estimated not detected (UJ) because the laboratory-spiked sample and duplicate relative percent difference exceeded the acceptance limit.

One perchlorate result was qualified as estimated not detected (UJ) because the internal standard area count was less than 70% but greater than 25% of the average of that obtained from the calibration standard.

D-3.2.14 Rejected Results

A total of 16 cyanide results from solid waste management unit (SWMU) 39-010 were rejected because the holding time was >2 times the applicable holding time requirement.

The rejected data were not used to characterize the extent of contamination. However, sufficient data of good quality were available to characterize the site(s). The results of other qualified data were used as reported and did not affect the usability of the sample results.

D-4.0 ORGANIC CHEMICAL ANALYSES

Soil, tuff, and sediment samples were analyzed for one or more of the following organic chemicals: explosive compounds, polychlorinated biphenyls (PCBs), semivolatile organic compounds (SVOCs), VOCs, total petroleum hydrocarbons (TPH), and dioxins/furans. Samples were analyzed:

- for explosive compounds using EPA SW-846 Methods 8321A, 8330, and 8330B,
- for PCBs using SW-846 Methods 8080, 8082, and 8082A; for TPH using SW-846 Methods 8015M and 9071B,
- for dioxins/furans using SW-846 Methods 8290 and 8290A; for SVOCs using SW-846 Methods 8270, 8270B, 8270C, 8270D, and 8270E, and
- for VOCs using SW-846 Methods 8240, 8260, 8260A, 8260B, and 8260D.

The analytical methods used for organic chemicals are listed in Table D-4.0-1.

A total of 807 samples (plus 78 FDs) were submitted for analysis of high explosives; 1007 samples (plus 99 FDs and 2 FRs) were submitted for analysis of PCBs; 812 samples (plus 79 FDs) were submitted for analysis of SVOCs; 796 samples (plus 76 FDs and 81 FTBs) were submitted for analysis of VOCs; 35 samples (plus 3 FDs) were submitted for analysis of dioxins/furans; and 14 samples (plus 2 FDs) were submitted for analysis of total petroleum hydrocarbons.

All organic chemical analytical results are included in Appendix E (on DVD included with this document) and can also be found in the public Intellus database at https://www.intellusnm.com.

D-4.1 Organic Chemical QA/QC Samples

The use of QA/QC samples is designed to produce quantitative measures of the reliability of specific parts of an analytical procedure. The results of the QA/QC analyses performed on a sample provide confidence about whether the analyte is present and whether the concentration reported is accurate. Calibration verifications, LCSs, MBs, MS samples, laboratory duplicate samples, surrogates, and internal standards (ISs) were analyzed to assess the accuracy and precision of organic chemical analyses. Each of these QA/QC sample types is defined in the analytical services SOW (LANL 1995, 049738; LANL 2000, 071233) and described briefly below.

Calibration verification is the establishment of a quantitative relationship between the response of the analytical procedure and the concentration of the target analyte. Calibration verification consists of two aspects: initial and continuing. The initial calibration verifies the accuracy of the calibration curve as well as the individual calibration standards used to perform the calibration. The continuing calibration ensures that 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, are being met.

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 overall performance on a “controlled” sample. The LCS is the primary demonstration, on a daily basis, of the ability to analyze samples with good qualitative and quantitative accuracy. The LCS recoveries should fall between the LAL and UAL.

An MB 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. MBs 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 MB (LANL 1995, 049738; LANL 2000, 071233).

MS samples are used to measure the ability to recover prescribed analytes from a native sample matrix. They consist of 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 between the LAL and UAL.

Laboratory duplicate samples assess the precision of organic chemical analyses. All RPDs between the sample and laboratory duplicate should be ±35% for soil (LANL 1995, 049738; LANL 2000, 071233).

A surrogate compound (surrogate) is an organic compound, used in the analyses of target analytes, that is similar in composition and behavior to the target analytes but normally is not found in environmental samples. Surrogates are added to every blank sample to evaluate the efficiency with which analytes are recovered during extraction and analysis. The recovery percentage of the surrogates must be within specified ranges, or the sample may be rejected or assigned a qualifier.

ISs are chemical compounds added to every blank, sample, and standard extract at a known concentration. They are used to compensate for analyte concentration changes that might occur during storage of the extract, and for quantitation variations that can occur during analysis. ISs are used as the basis for quantitation of target analytes. The %R for ISs should be within the range of 50% to 200%.

Details regarding the quality of the organic chemical analytical data included in the data sets are summarized in the following subsections.

D-4.2 Data Quality Results for Organic Chemicals

The majority of the analytical results were qualified as not detected (U) or not qualified (NQ) because the analytes were not detected by the respective analytical methods or were detected without data qualification. These data have no quality issues associated with the values presented.

A total of 26 dioxin/furan results were qualified as estimated not detected (UJ), 213 results were qualified as estimated (J), and 4 results were qualified as estimated and potentially biased low (J-); no results were qualified as rejected (R).

A total of 1836 explosives results were qualified as estimated not detected (UJ), 21 results were qualified as estimated (J), 9 results were qualified as estimated and potentially biased low (J-), 2 results were qualified as estimated and potentially biased high (J+), and 90 results were qualified as rejected (R).

A total of 65 PCB results were qualified as estimated not detected (UJ), 243 results were qualified as estimated (J), 5 results were qualified as estimated and potentially biased low (J-), and 1 result was qualified as estimated and potentially biased high (J+); no results were qualified as rejected (R).

A total of 7101 SVOC results were qualified as estimated not detected (UJ), 2077 results were qualified as estimated (J), 61 results were qualified as estimated and potentially biased low (J-), 41 results were qualified as estimated and potentially biased high (J+), and 113 results were qualified as rejected (R).

A total of 3115 VOC results were qualified as estimated not detected (UJ), 182 results were qualified as estimated (J), 1 result was qualified as estimated and potentially biased low (J-), 3 results were qualified as estimated and potentially biased high (J+), and 201 results were qualified as rejected (R).

D-4.2.1 Maintenance of Chain of Custody

COC forms were properly maintained for all samples analyzed for organic chemicals (see Appendix E [on DVD included with this document]).

D-4.2.2 Sample Documentation

All samples analyzed for organic chemicals were properly documented in the SCLs in the field (see Appendix E [on DVD included with this document]).

D-4.2.3 Sample Dilutions

Some samples were diluted for organic chemical analyses. One explosive result was qualified as estimated not detected (UJ) due to duplicate, dilution, or reanalysis.

D-4.2.4 Sample Preservation

Preservation criteria were met for all samples analyzed for organic chemicals.

D-4.2.5 Holding Times

A total of 198 explosives results were qualified as estimated not detected (UJ), and 3 SVOC results were qualified as estimated and potentially biased low (J-), because the holding time was greater than, and less than or equal to 2 times, the applicable holding-time requirement.

A total of 826 SVOC results were qualified as estimated not detected (UJ), and 22 SVOC results were qualified as estimated and potentially biased low (J-), because the holding time was greater than, and less than or equal to 2 times, the applicable holding-time requirement.

A total of 124 VOC results were qualified as estimated not detected (UJ), and 2 VOC results were qualified as not detected (U), because the holding time was greater than, and less than or equal to 2 times, the applicable holding-time requirement.

D-4.2.6 ICVs and CCVs

Five dioxin/furan results were qualified as estimated (J) because the ICVs and/or CCVs were recovered outside the method-specific limits.

A total of 532 explosive compound results were qualified as estimated not detected (UJ), and 1 result was qualified as estimated (J), because the affected analytes were analyzed with a relative response factor (RRF) of less than 0.05 in the initial calibration and/or CCV.

D-4.2.7 Surrogate Recoveries

A total of 42 explosive compound results and 26 PCB results were qualified as estimated not detected (UJ) because at least one surrogate %R exceeded the UAL and one surrogate %R was less than the LAL.

A total of 1382 SVOC results and 12 PCB results were qualified as estimated not detected (UJ); 27 SVOC results and 5 PCB results were qualified as estimated and potentially biased low (J-); and 1 SVOC result was qualified as estimated (J) because the surrogate was less than the LAL but greater than or equal to 10%R.

One SVOC result was qualified as estimated and potentially biased high (J+) because the surrogate %R value exceeded the UAL.

D-4.2.8 Internal Standard Responses

A total of 54 SVOC results were qualified as estimated (J), and 1 SVOC result was qualified as estimated not detected (UJ), because the IS area count for the quantitating IS falls outside the -50% to +10% window in relation to the previous continuing calibration.

D-4.2.9 Method Blanks

Three dioxin/furan results were qualified as not detected (U) because the sample result was less than or equal to 5 times the concentration of the related analyte in the MB.

Four dioxin/furan results were qualified as estimated and potentially biased high (J+) because the analyte was identified in the MB but was greater than 5 times the associated sample result.

A total of 142 SVOC results were qualified as not detected (U) because the sample result was less than or equal to 5 times (or 10 times for common phthalates) the concentration of the related analyte in the MB.

A total of 23 SVOC results were qualified as estimated and potentially biased high (J+), and 31 SVOC results were qualified as estimated (J), because the sample result was greater than or equal to 5 times (≥10 times for common phthalates) the concentration of the related analyte in the MB.

A total of 316 VOC results were qualified as not detected (U) because the sample result was less than or equal to 5 times (or 10 times for common contaminants) the concentration of the related analyte in the MB.

Three VOC results were qualified as estimated and potentially biased high (J+) because the sample result was greater than or equal to 5 times (≥10 times for common phthalates) the concentration of the related analyte in the MB.

D-4.2.10 Laboratory Duplicate Samples

A total of 61 explosive results were qualified as estimated not detected (UJ) because the sample or duplicate precision criteria were not met.

Five PCB results were qualified as estimated (J) because the sample and duplicate precision criteria were not met.

Five VOC results were qualified as estimated (J) because the sample and duplicate precision criteria were not met.

A total of 638 SVOC results were qualified as estimated (J), and 47 SVOC results were qualified as not detected (U), because the sample or duplicate precision criteria were not met.

D-4.2.11 Laboratory Control Sample Recoveries

A total of 635 SVOC results, 108 explosive compound results, and 23 VOC results were qualified as estimated not detected (UJ), and 4 SVOC results were qualified as estimated and potentially biased low (J-), because the LCS %R was less than the LAL but greater than 10%.

A total of 13 SVOC results were qualified as estimated and potentially biased high (J+) because the LCS %R was greater than the UAL.

D-4.2.12 MS Samples

A total of 177 explosive compound results and 1 dioxin/furan result were qualified as estimated not detected (UJ) because the MS %R was less than the LAL.

A total of 13 dioxin/furan results were qualified as estimated (J) because the MS %R was less than the LAL.

A total of 498 SVOC results and 1 PCB result were qualified as estimated not detected (UJ), and 1 PCB result was qualified as estimated and potentially biased low (J-), because the MS/MSD %R was below the lower limit.

Four SVOC results and 4 PCB results were qualified as estimated and potentially biased high (J+), and 76 SVOC results were qualified as estimated (J), because the MS %R was above the upper acceptance limit.

A total of 3388 SVOC results were qualified as estimated not detected (UJ), 224 were qualified as estimated (J), 8 were qualified as estimated and potentially biased low (J-), and 24 were qualified as not detected (U) because the MS %R was below the lower acceptance limit.

A total of 189 SVOC results were qualified as estimated not detected (UJ) and 2 were qualified as estimated (J) because the MS/MSD %R was below the lower limit and the MS/MSD RPD acceptance limit was exceeded.

D-4.2.13 Method Detection Limits

A total of 159 dioxin/furan, 892 SVOC, 167 VOC, 119 PCB, and 15 explosive compound results were qualified as estimated (J) because the result was less than the PQL but greater than the MDL. One explosive compound result was qualified as estimated not detected (UJ) because the contract-required detection limit check standard sample did not pass method acceptance criteria.

A total of 159 SVOC results were qualified as estimated not detected (UJ) because the sample was diluted without any target analytes identified because of matrix interference; as a result, the affected analytes have elevated detection limits and may not meet project data quality objectives.

D-4.2.14 Field Trip Blanks and Rinsate Blanks

The majority of the FTB and FR blank analytical results were qualified as not detected (U) or not qualified (NQ) because the analytes were not detected by the respective analytical methods or were not qualified. These data have no quality issues associated with the values presented.

A total of 25 VOC results were qualified as estimated not detected (UJ) because the LANL project chemist identified quality deficiencies in the reported data that require further qualifications.

A total of 57 VOC results were qualified as estimated (J) because the result was less than the PQL but exceeded the MDL.

Four VOC results were qualified as not detected (U) because the sample results were less than 5 times the detected concentration of the same analyte in the method blank.

One VOC result was qualified as estimated (J) because the sample or field duplicate result was less than, or equal to, 5 times the reporting limit, and the absolute difference between sample and duplicate result exceeded the limits.

One VOC result was qualified as estimated (J) because the sample and field duplicate results were less than, or equal to, 5 times the reporting limit and the relative percent difference exceeded the limits.

One VOC result was qualified as estimated (J) because the laboratory-spiked sample and duplicate relative percent difference exceeded the acceptance limit.

One VOC result was qualified as estimated (J) because the initial or continuing calibration verification relative response factor was less than the laboratory's lower limit.

One VOC result was qualified as estimated (J) because the initial or continuing calibration verification recovery was outside the appropriate limits.

One VOC result was qualified as estimated potentially biased low (J-) because the post-spike percent recovery was less than the lower acceptance limit.

Nine VOC results were qualified as rejected (R) because the initial or continuing calibration verification relative response factor was less than the laboratory's lower limit.

A total of 33 VOCs results were qualified as not detected (U) because the detected sample result was less than 5 times (<10 for common contaminants) the detected concentration of the same analyte in the method blank.

One VOC result was qualified as estimated not detected (UJ) because the sample or field duplicate result was less than 5 times the reporting limit and the absolute difference between sample and duplicate result exceeded the limits.

Three VOC results were qualified as estimated not detected (UJ) because the laboratory control sample percent recovery was less than the LAL and greater than or equal to the rejection limit.

A total of 150 VOC results were qualified as estimated not detected (UJ) because the post-spike percent recovery was less than the LAL.

Six VOC results were qualified as estimated not detected (UJ) because the initial calibration curve exceeded the percent relative standard deviation criteria, or the associated coefficient of determination was <0.99.

A total of 13 VOC results were qualified as estimated not detected (UJ) because the initial or continuing calibration verification relative response factor was less than the laboratory's lower limit.

A total of 30 VOC results were qualified as estimated not detected (UJ) because the initial or continuing calibration verification recovery was outside the appropriate limits.

D-4.2.15 Rejected Data

A total of 47 SVOC results [32 from Area 1 of SWMU 39-002(a) and 15 from SWMU 39-010] were rejected because the LCS %R was less than the rejection limit.

A total of 66 SVOC results [34 from Area 1 of SWMU 39-002(a), 14 from area of concern (AOC) 39-002(b), and 18 from SWMU 39-006(a)] were rejected because the LCS %R was less than the rejection limit and the MS/MSD %R was below the LAL.

A total of 15 explosive results from SWMU 39-001(a) were rejected because the initial or continuing calibration verification recovery was outside the appropriate limits.

A total of 229 explosive results from SWMU 39-001(a) and 24 results from SWMU 39-010 were rejected because the internal standard retention time and qualitative criteria for target compound identification were not met.

A total of 15 explosive results from Area 1 of SWMU 39-002(a) were rejected because the laboratory control sample percent recovery was less than the rejection limit.

A total of 20 explosive results from SWMU 39-006(a) and 6 results from SWMU 39-007(a) were rejected because the MS/MSD percent recovery was less than the LAL.

One VOC result from SWMU 39-006(a) was rejected because the post-spike percent recovery was less than the LAL.

A total of 144 VOC results [28 from SWMU 39-001(a), 15 from Area 1 of SWMU 39-002(a), 16 from Area 3 of SWMU 39-002(a), 59 from SWMU 39-006(a), and 26 from SWMU 39-101] were rejected because the initial or continuing calibration verification relative response factor was less than the laboratory's lower limit.

A total of 91 VOC results from SWMU 39-006(a) were rejected because the holding time was greater than the applicable holding time requirement.

The rejected data were not used to characterize the extent of contamination. However, sufficient data of good quality were available to characterize the site(s). The results of other qualified data were used as reported and did not affect the usability of the sample results.

D-5.0 RADIONUCLIDE ANALYSES

Samples were analyzed for radionuclides by gamma spectroscopy using EPA Method 901.1, or by the generic gamma spectroscopy method for tritium by liquid scintillation using EPA Method 906.0. Samples were also analyzed for americium-241, isotopic uranium, isotopic plutonium, and isotopic thorium by alpha spectroscopy (HASL-300 methods AM-241, ISOU, ISOPU, and ISOTH, respectively). All QC procedures were followed as required by the analytical laboratories SOWs (LANL 1995, 049738; LANL 2000, 071233). The methods used for analyzing radionuclides are listed in Table D 5.0-1.

A total of 808 samples collected within the North Ancho Canyon Aggregate Area were analyzed for radionuclides. Radionuclide analyses included americium-241 (770 samples and 72 FDs), gamma-emitting radionuclides (778 samples and 74 FDs), isotopic plutonium (771 samples and 72 FDs), isotopic thorium (8 samples and 2 FDs), isotopic uranium (802 samples and 76 FDs), and tritium (770 samples and 72 FDs).

All radionuclide results are included in Appendix E (on DVD included with this document) and can also be found in the public Intellus database at https://www.intellusnm.com.

D-5.1 Radionuclide QA/QC Samples

The use of QA/QC samples is designed to produce quantitative measures of the reliability of specific parts of an analytical procedure. The results of the QA/QC analyses performed on a sample provide confidence about whether the analyte is present and whether the concentration reported is accurate.

To assess the accuracy and precision of radionuclide analyses, LCSs, MBs, MS samples, laboratory duplicate samples, and tracers were analyzed. Each of these QA/QC sample types is defined in the analytical services SOWs (LANL 1995, 049738; LANL 2000, 071233) and is described briefly below.

The LCS serves as a monitor of the overall performance of each step during the analysis, including sample digestion. For radionuclides in soil/tuff, LCS %Rs should fall between the LAL and UAL.

An MB 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 analyzed in the same manner as the corresponding environmental samples. MBs are used to assess the potential for sample contamination during analysis. All radionuclide results should be above the minimum detectable concentration (MDC).

MS samples assess the accuracy of radionuclide chemical analyses. These samples are designed to provide information about the effect of the sample matrix on the sample preparation procedures and analytical technique. The MS acceptance criterion is between the LAL and UAL.

Tracers are radioisotopes added to a sample for the purposes of monitoring losses of the target analyte. The tracer is assumed to behave in the same manner as the target analytes. The tracer recoveries should fall between the LAL and UAL.

Laboratory duplicate samples assess the precision of radionuclide chemical analyses. All RPDs between the sample and laboratory duplicate should be ±35% for soil (LANL 1995, 049738; LANL 2000, 071233).

Details regarding the quality of the radionuclide analytical data included in the data set are summarized in the following subsections.

D-5.2 Data Quality Results for Radionuclides

The majority of radionuclide results were qualified as not detected (U) because the associated sample concentration was less than or equal to the MDC, or as not qualified (NQ) because the analytes were detected without data qualification. These data have no quality issues associated with the values presented.

D-5.2.1 Chain of Custody

COC forms were properly maintained for all samples (see Appendix E [on DVD included with this document]).

D-5.2.2 Sample Documentation

All samples were properly documented on the SCL in the field (see Appendix E [on DVD included with this document]).

D-5.2.3 Sample Dilutions

Some samples were diluted for radionuclide analyses. No qualifiers were applied to any radionuclide sample results because of dilutions.

D-5.2.4 Sample Preservation

Preservation criteria were met for all samples analyzed for radionuclides.

D-5.2.5 Holding Times

Holding-time criteria were met for all samples analyzed for radionuclides.

D-5.2.6 Method Blanks

Two gamma spectroscopy results and 19 isotopic uranium results were qualified as estimated potentially biased high (J+) because the analyte was detected in the MB and the sample result was greater than or equal to 5 times the blank activity.

Two gamma spectroscopy results were qualified as not detected (U) because the analyte was detected in the MB and sample activity was less than 5 times the MB activity.

D-5.2.7 MS Samples

A total of 28 gamma spectroscopy results were qualified as estimated not detected (UJ) because the associated MS recovery was less than the LAL but greater than 10%.

D-5.2.8 Tracer Recoveries

Five isotopic uranium results were estimated and potentially biased low (J-), and 6 isotopic uranium results were qualified as estimated (J), because the tracer was below the LAL but greater than or equal to 10%R.

A total of 7 americium-241 results, 14 isotopic plutonium results, and 1 isotopic uranium result were qualified as estimated not detected (UJ) because the tracer was below the LAL but greater than or equal to 10%R.

D-5.2.9 LCS Recoveries

The LCS recoveries were within acceptable limits for all samples analyzed for radionuclides.

D-5.2.10 Laboratory Duplicate Samples

A total of 40 gamma spectroscopy results, 3 tritium results, 3 americium-241 results, and 6 isotopic uranium results were qualified as estimated not detected (UJ); and 2 gamma spectroscopy results and 15 isotopic uranium results were qualified as estimated (J), because the sample count duration and the duplicate count durations were not equal.

Two isotopic plutonium results were qualified as estimated not detected (UJ) because the duplicate sample was not prepared and/or analyzed with the samples for an unspecified reason. The duplicate information was missing.

A total of 36 isotopic uranium results were qualified as estimated (J) because the associated duplicate sample has a duplicate error ratio or replicate error ratio greater than the analytical laboratory's acceptance limits.

D-5.2.11 Quantitation and Method Detection Limits

A total of 1464 gamma spectroscopy results, 488 tritium results, 344 americium-241 results, 801 isotopic plutonium results, and 111 isotopic uranium results were qualified as not detected (U) because the results were below the radionuclide critical level (RCL). A total of 46 gamma spectroscopy results, 55 tritium results, 175 americium-241 results, 253 isotopic plutonium results, and 267 isotopic uranium results were qualified as estimated not detected (UJ) for the same reason.

A total of 323 gamma spectroscopy results, 52 tritium results, 39 americium-241 results, 58 isotopic plutonium results and 231 isotopic uranium results were qualified as estimated not detected (UJ) because the lab result was greater than the RCL but below the MDC.

D-5.2.12 Rejected Data

A total of 26 gamma spectroscopy results [6 from Area 2 of SWMU 39-002(a), 6 from SWMU 39-007(a), and 14 from SWMU 39-010] were rejected due to uncertainty in the identification of the radionuclide.

The rejected data were not used to characterize the extent of contamination. However, sufficient data of good quality were available to characterize the site(s). The results of other qualified data were used as reported and did not affect the usability of the sample results.

D-6.0 REFERENCES

The following reference list includes documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. ERIDs were assigned by Los Alamos National Laboratory’s (the Laboratory’s) Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory’s Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B (IDs 700000 and above).

LANL (Los Alamos National Laboratory), July 1995. “Statement of Work (Formerly Called "Requirements Document") - Analytical Support, (RFP number 9-XS1-Q4257), (Revision 2 - July, 1995),” Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 1995, 049738)

LANL (Los Alamos National Laboratory), December 2000. “University of California, Los Alamos National Laboratory (LANL), I8980SOW0-8S, Statement of Work for Analytical Laboratories,” Rev. 1, Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 2000, 071233)

Table D-3.0-1
Inorganic Chemical Analytical Methods for
Samples Collected from the North Ancho Canyon Aggregate Area

Analytical Method	Analytical Description	Analytical Suite
SW-846:6010/6010B	Inductively coupled plasma atomic emission spectroscopy (ICP AES)	Aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, sodium, thallium, vanadium, zinc
SW-846:6010C	ICP AES	Aluminum, antimony, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, potassium, silver, sodium, vanadium, zinc
SW-846:6010D	ICP AES	Antimony, barium, calcium, iron, magnesium, manganese, potassium, silver, sodium, vanadium, aluminum, cadmium, chromium, cobalt, copper, lead, zinc
SW-846:6020	ICP AES	Aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, sodium, thallium, vanadium, zinc, uranium
SW-846:6020B	Inductively coupled plasma – mass spectrometry (ICP MS)	Aluminum, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, thallium, zinc
SW-846:6850	Perchlorate by liquid chromatography/mass spectrometry	Perchlorate
SW-846: 7470/7471/7471A/7471B	Manual cold-vapor	Mercury
SW-846:9012A/9012B	Colorimetric distillation	Cyanide (Total)
SW-846:9045C	Electrometric	Acidity or alkalinity of a solution
EPA:300.0	Ion chromatography (IC)	Nitrate
SW-846:9056/9056A	IC	Nitrate

Table D-4.0-1
Organic Chemical Analytical Methods for
Samples Collected from the North Ancho Canyon Aggregate Area

Analytical Method	Analytical Description	Target Compound List
SW-846:8015M_EXTRACTABLE	Solvent extraction and gas chromatography (GC)	Total petroleum hydrocarbons diesel range organics
SW-846:8080	GC	Organochlorine pesticides and PCBs
SW-846:8082/8082A	GC	PCB aroclors
SW-846:8240/8260/8260B/8260D	Gas chromatography / mass spectrometry (GC/MS)	VOCs
SW-846:8270/8270C/8270D/8270E/8270_SIM	GC/MS	SVOCs
SW-846:8290/8290A	High res – GC/MS	Dioxins/furans
SW-846:8321A_MOD	High performance – liquid chromatography (HPLC) mass spectroscopy	Explosives
SW-846:8330	HPLC	Explosives/nitroaromatics/ nitramines
SW-846:8330B	HPCL MS	Explosives/nitroaromatics/ nitramines

Table D-5.0-1
Radionuclide Analytical Methods for
Samples Collected from the North Ancho Canyon Aggregate Area

Analytical Method	Analytical Description	Target Compound List
EPA:901.1	Gamma spectroscopy	Cesium-134, Cesium-137, Cobalt-60, Sodium-22
EPA:906.0	Liquid scintillation	Tritium
Gamma Spec.	Gamma spectroscopy	Cesium-137, Cobalt-60, Sodium-22, Cesium-134
HASL-300:AM-241	Alpha spectroscopy (AS)	Americium-241
HASL-300:ISOPU	AS	Plutonium-238, Plutonium-239/240
HASL-300:ISOTH	AS	Thorium-228, Thorium-230, Thorium-232
HASL-300:ISOU	AS	Uranium-234, Uranium-235/236, Uranium-238

Appendix E

Analytical Suites and Results and Analytical Reports
(on DVD included with this document)

N3B RECORDS	
Media Information Page	
This is a placeholder page for a record that cannot be uploaded or would lose meaning or content if uploaded. The record can be requested through regdocs@em-la.doe.gov	
Document Date: 8/30/2023	**EM ID number:** 702880-01
Document Title: Appendix E Submittal of the Phase II Investigation Report for North Ancho Canyon Aggregate Area	☒ **No restrictions** ☐ **UCNI** ☐ **Copyrighted**
Media type and quantity: 1 CD 1 DVD	**Software and version required to read media:** Adobe Acrobat 9.0
Other document numbers or notes: Files are too numerous and large to upload.	

Appendix F

Box Plots and Statistical Results

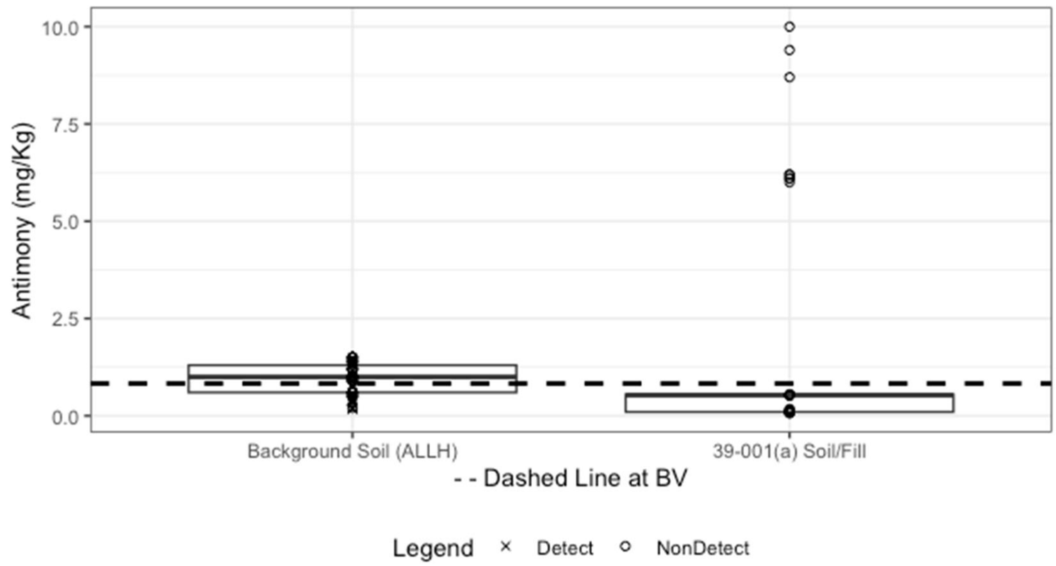

Figure F-1 Box plot for antimony in soil at SWMU 39-001(a)

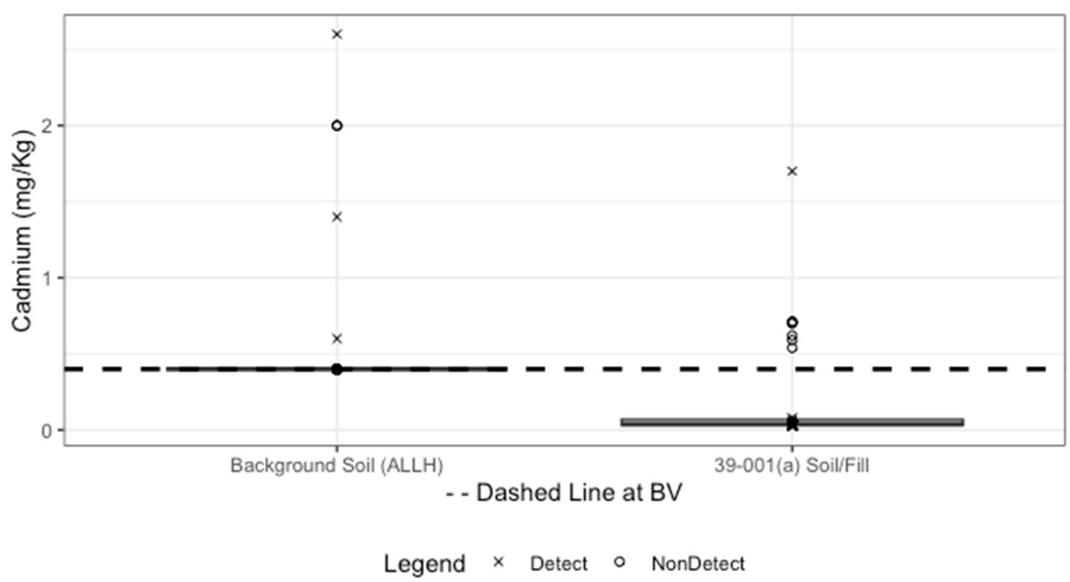

Figure F-2 Box plot for cadmium in soil at SWMUs 39-001(a)

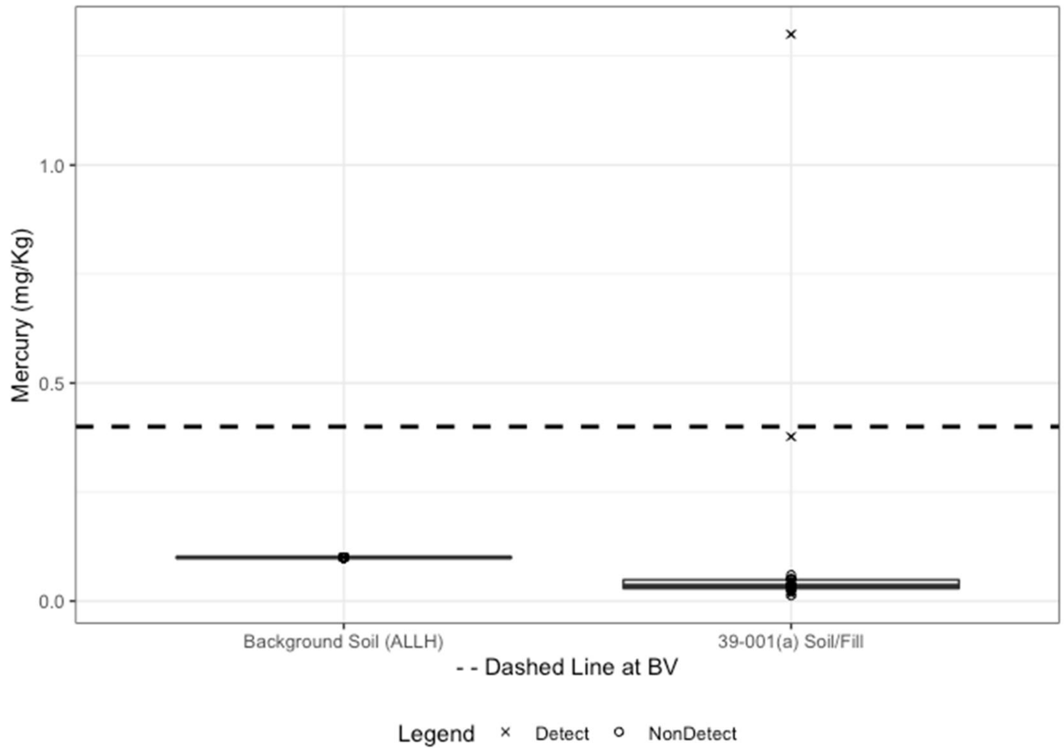

Figure F-3 Box plot for mercury in soil at SWMU 39-001(a)

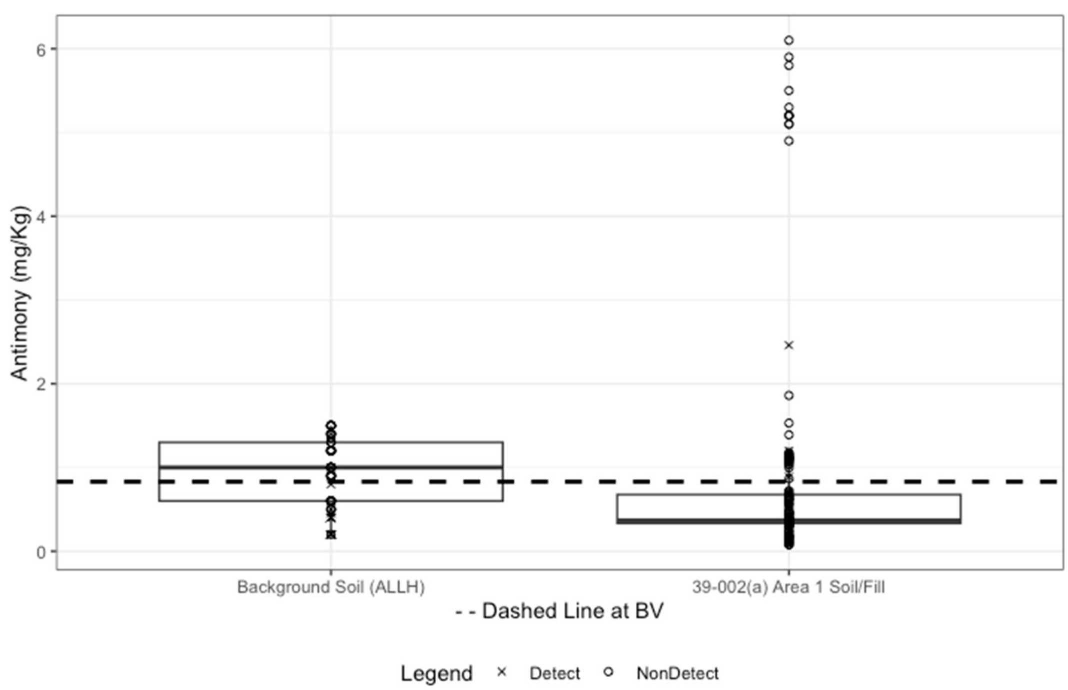

Figure F-4 Box plot for antimony in soil at SWMU 39-002(a) Area 1

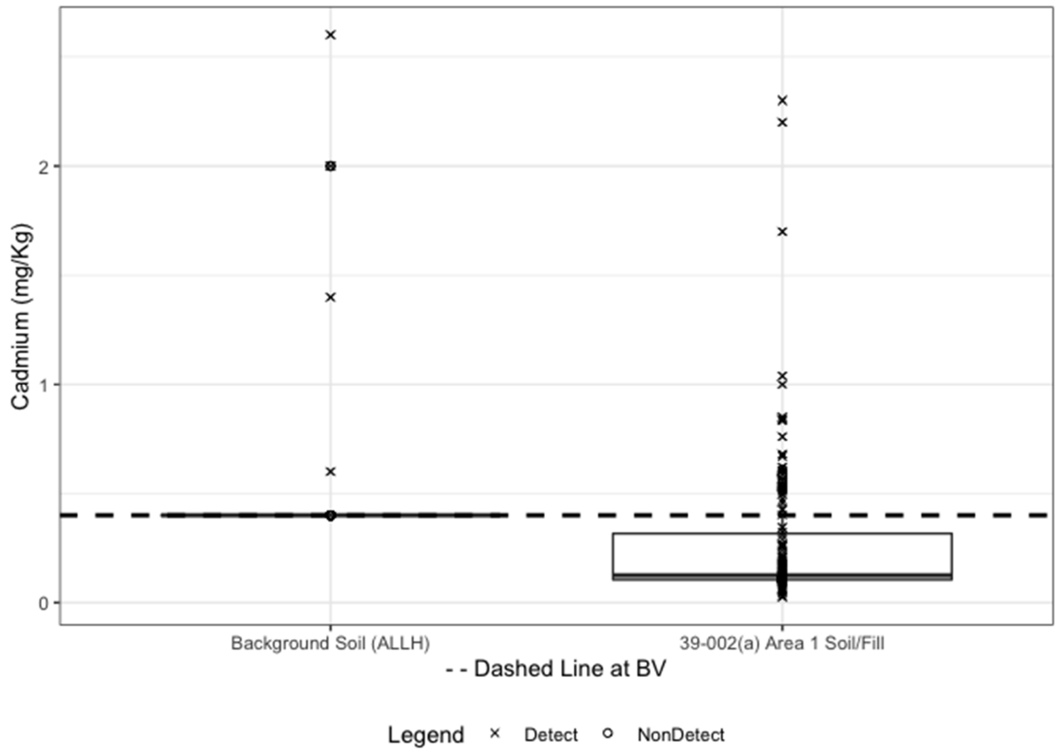

Figure F-5 Box plot for cadmium in soil at SWMU 39-002(a) Area 1

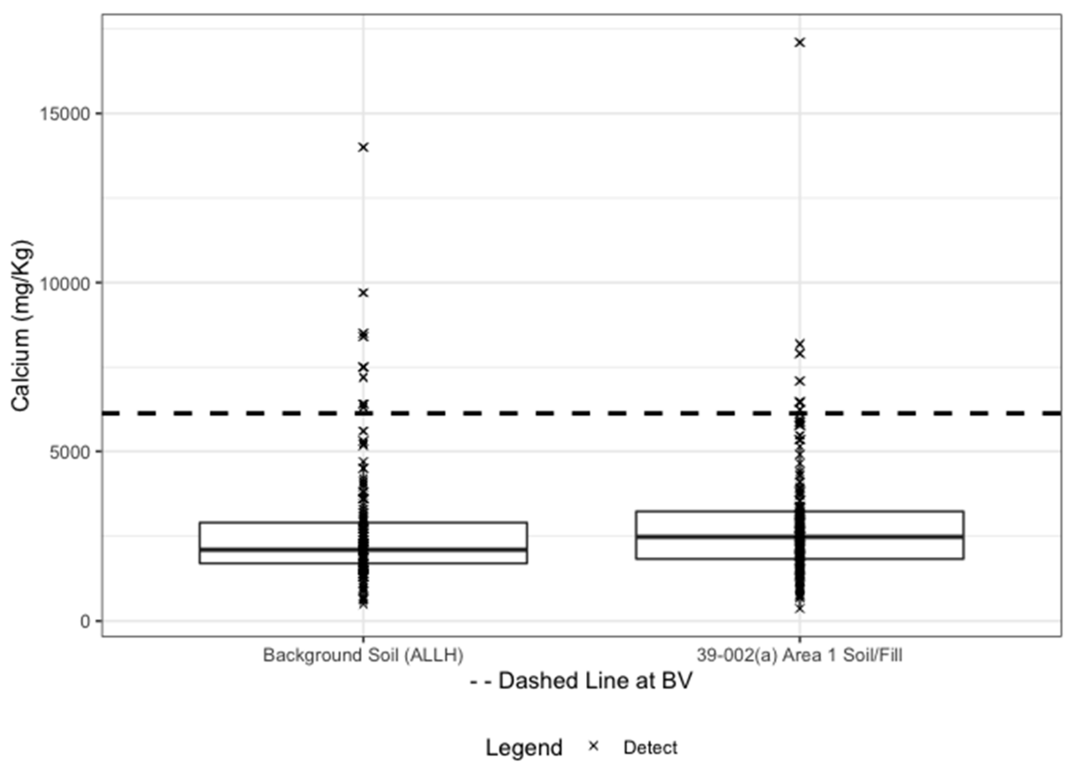

Figure F-6 Box plot for calcium in soil at SWMU 39-002(a) Area 1

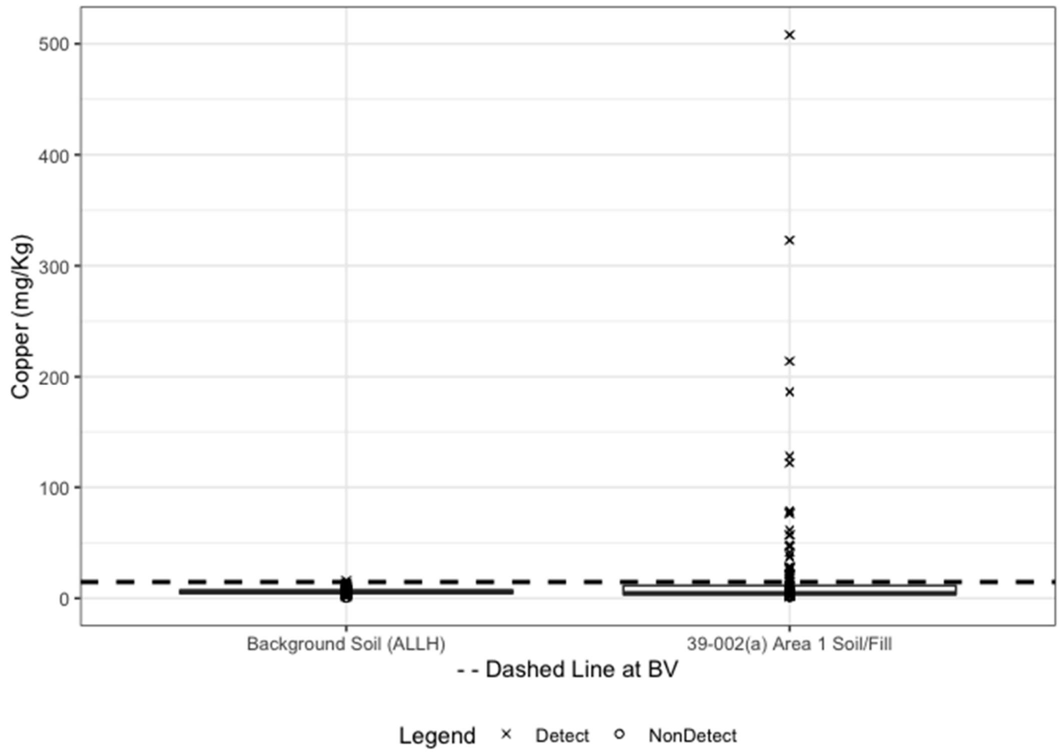

Figure F-7 Box plot for copper in soil at SWMU 39-002(a) Area 1

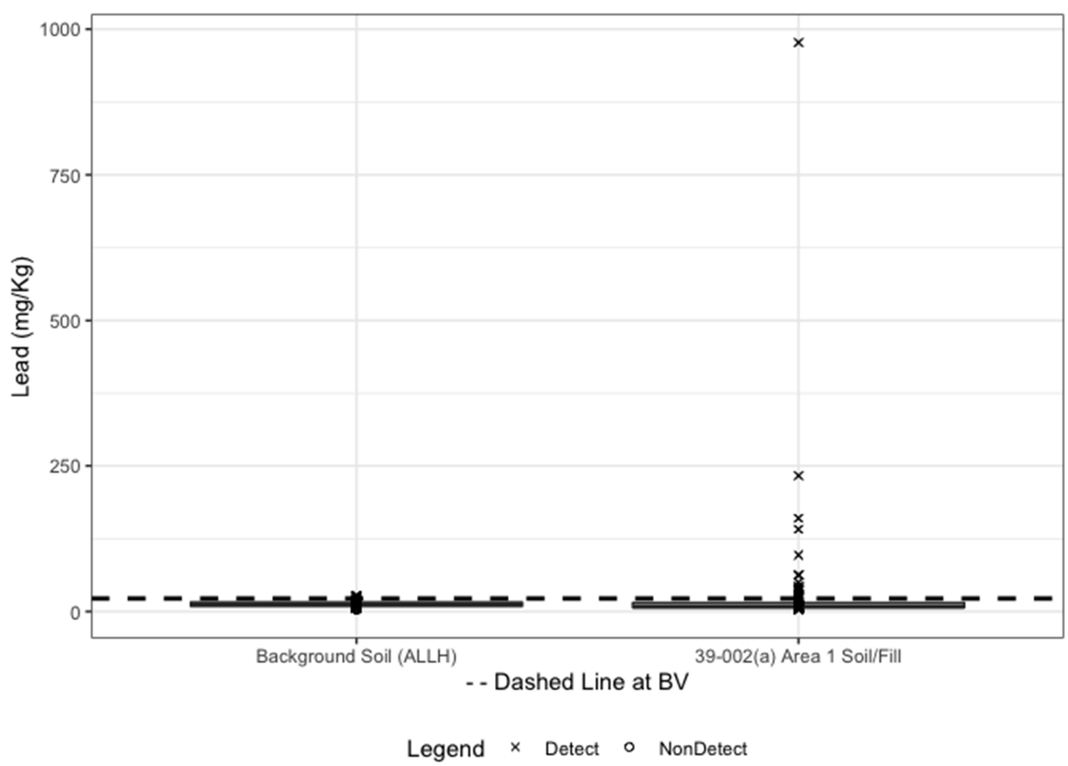

Figure F-8 Box plot for lead in soil at SWMU 39-002(a) Area 1

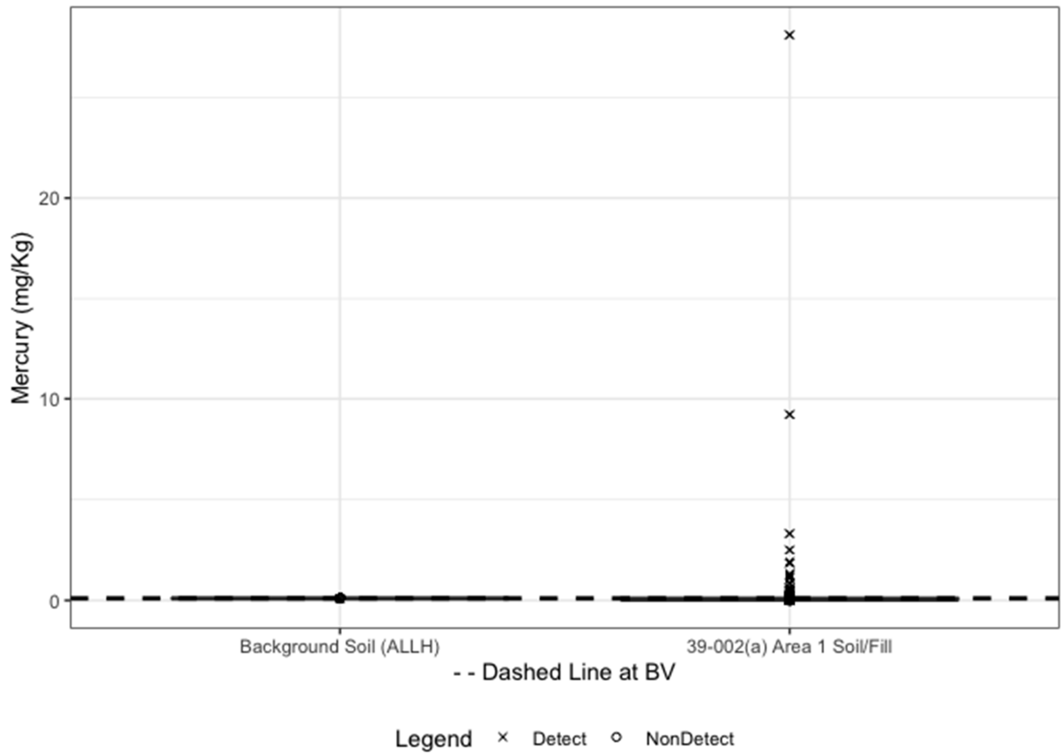

Figure F-9 Box plot for mercury in soil at SWMU 39-002(a) Area 1

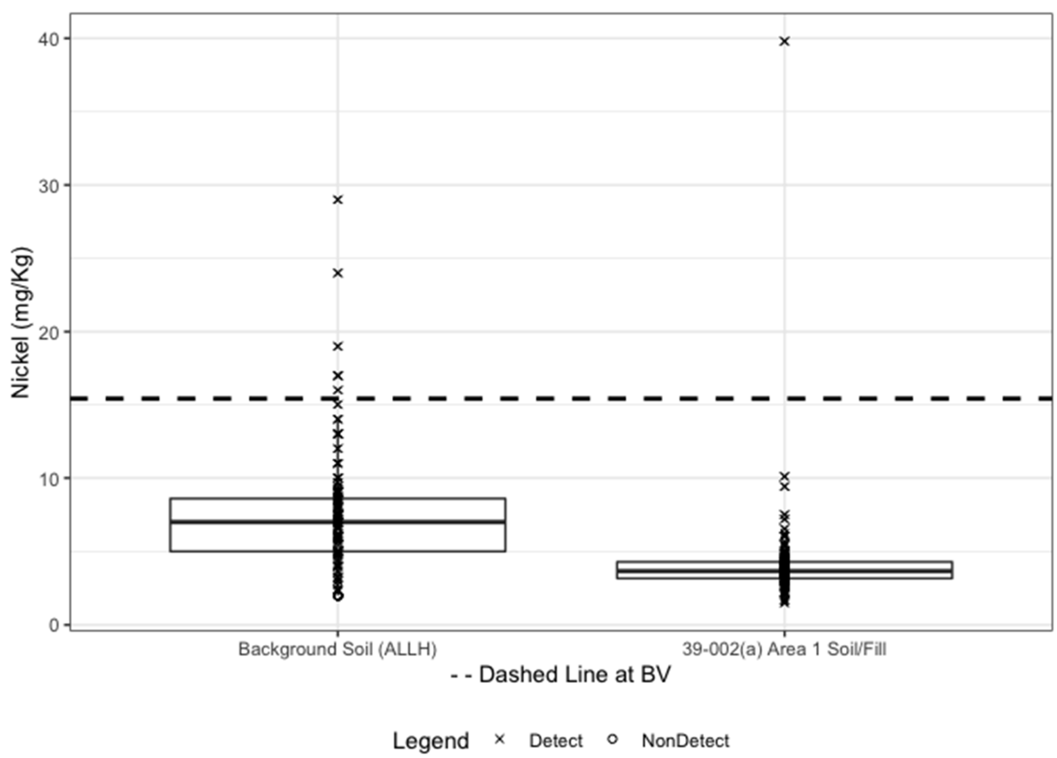

Figure F-10 Box plot for nickel in soil at SWMU 39-002(a) Area 1

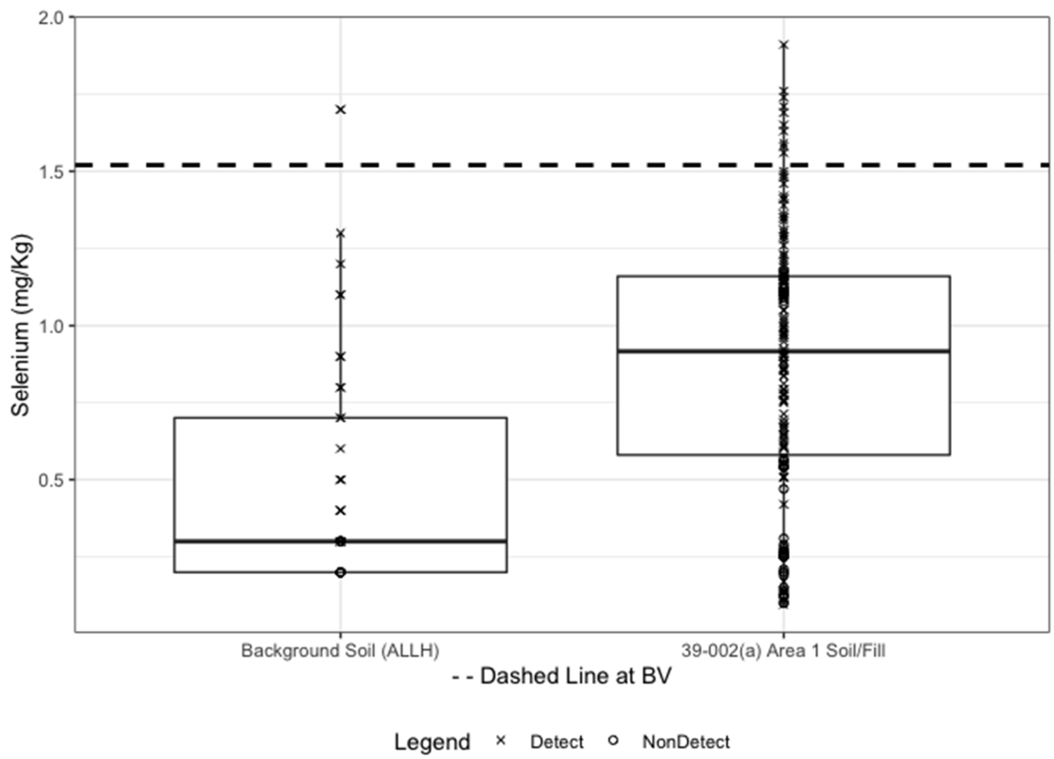

Figure F-11 Box plot for selenium in soil at SWMU 39-002(a) Area 1

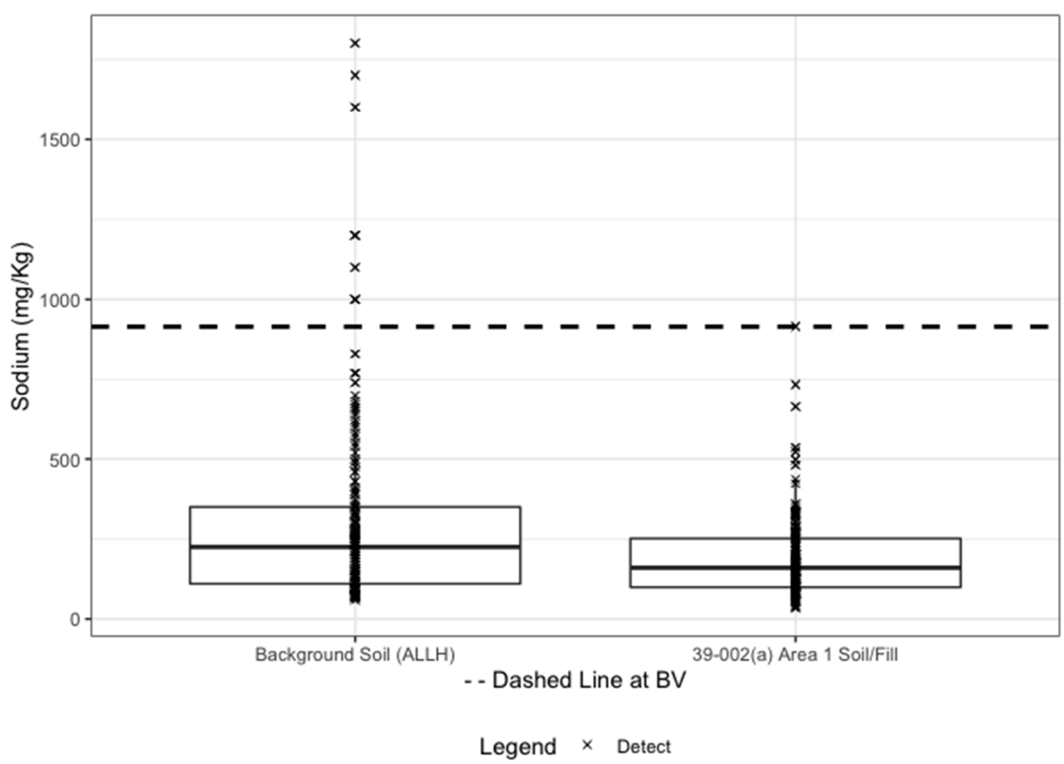

Figure F-12 Box plot for sodium in soil at SWMU 39-002(a) Area 1

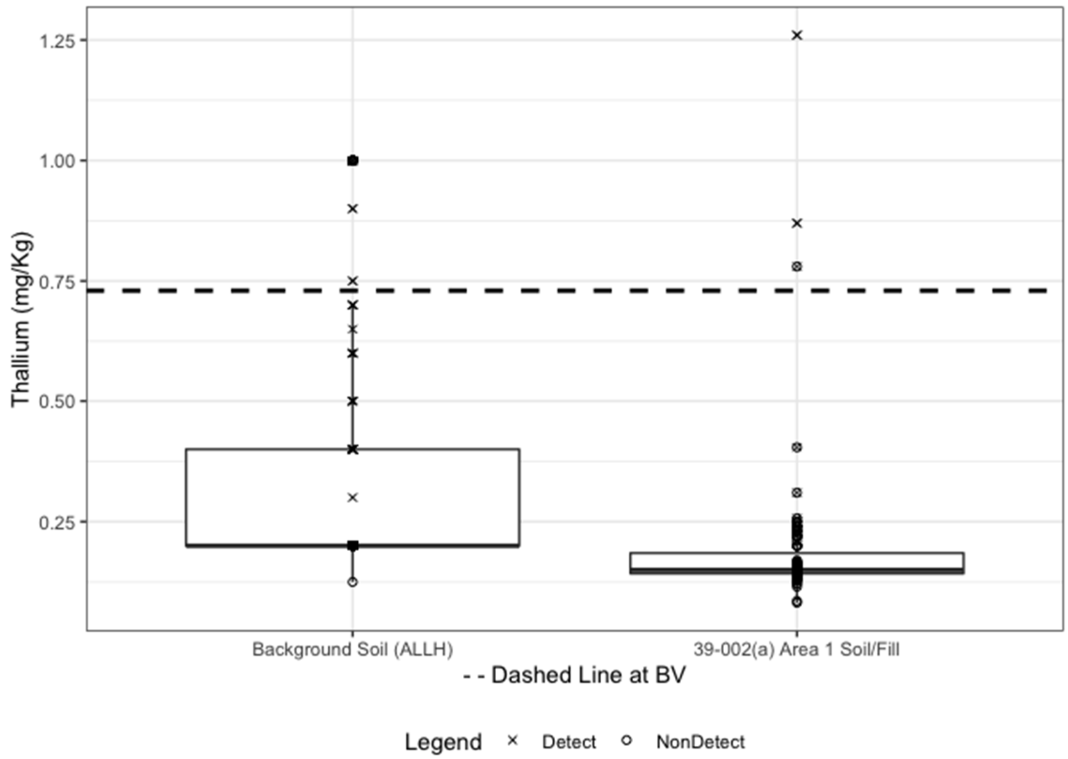

Figure F-13 Box plot for thallium in soil at SWMU 39-002(a) Area 1

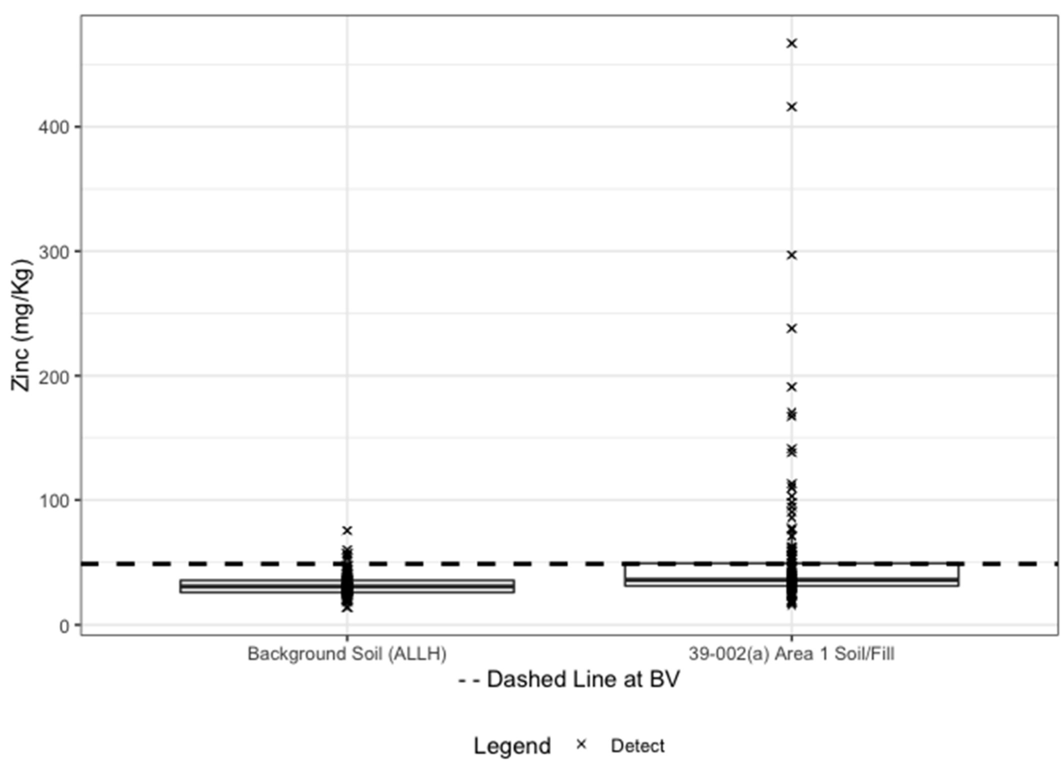

Figure F-14 Box plot for zinc in soil at SWMU 39-002(a) Area 1

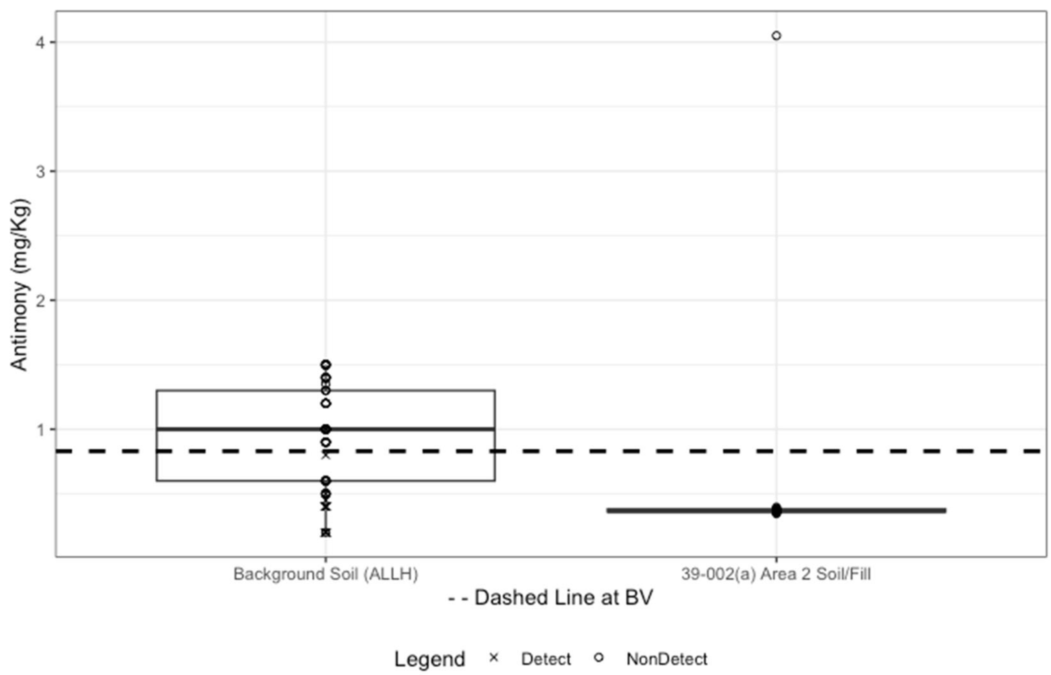

Figure F-15 Box plot for antimony in soil at SWMU 39-002(a) Area 2

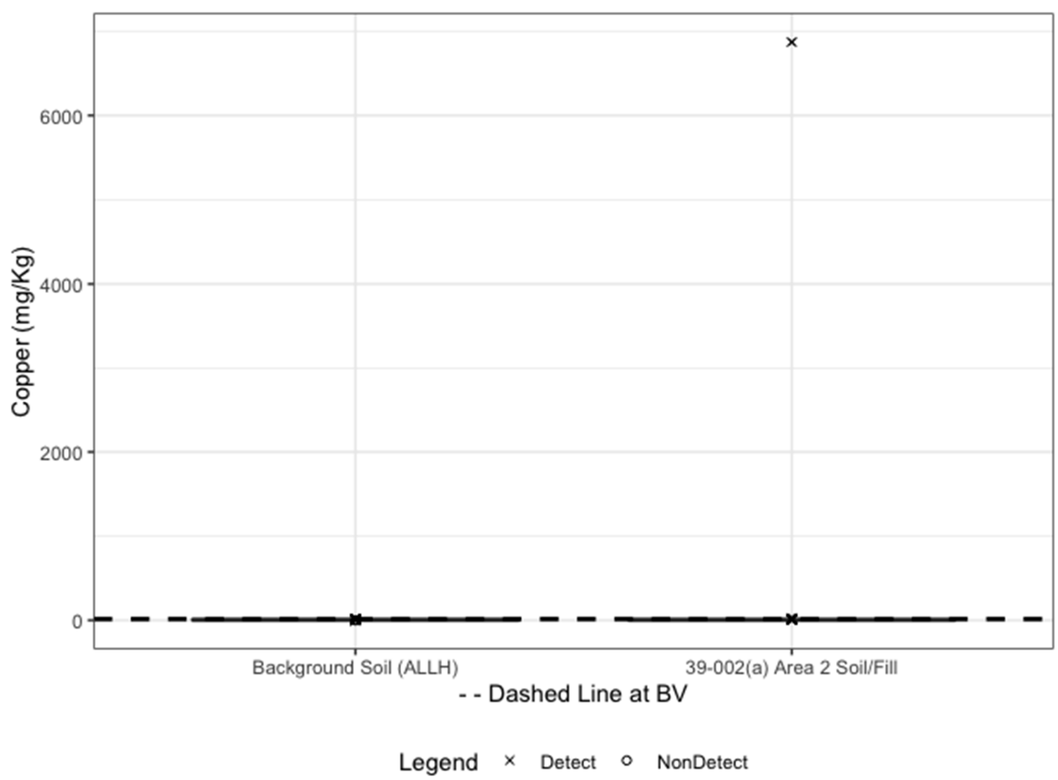

Figure F-16 Box plot for copper in soil at SWMU 39-002(a) Area 2

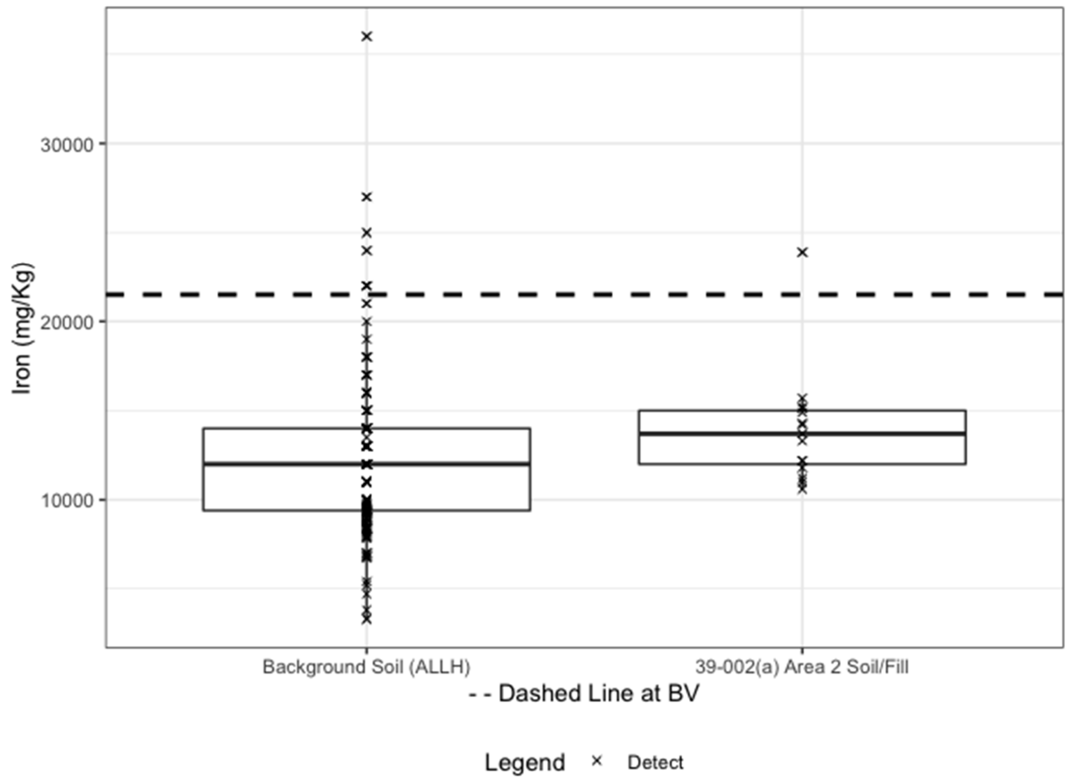

Figure F-17 **Box plot for iron in soil at SWMU 39-002(a) Area 2**

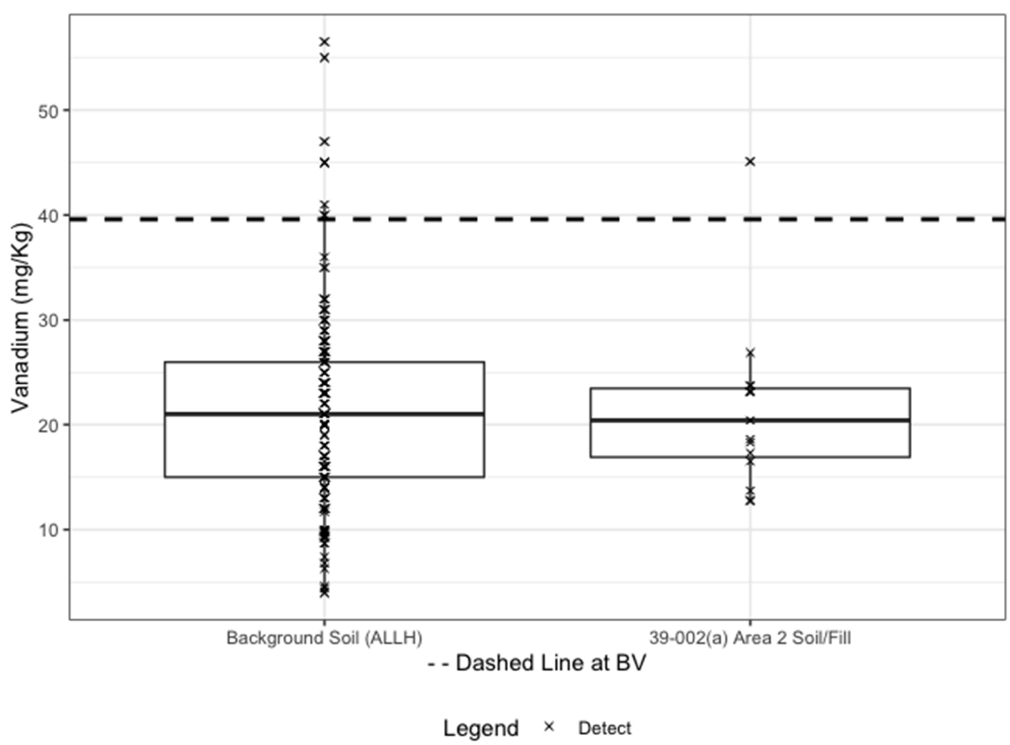

Figure F-18 **Box plot for vanadium in soil at SWMU 39-002(a) Area 2**

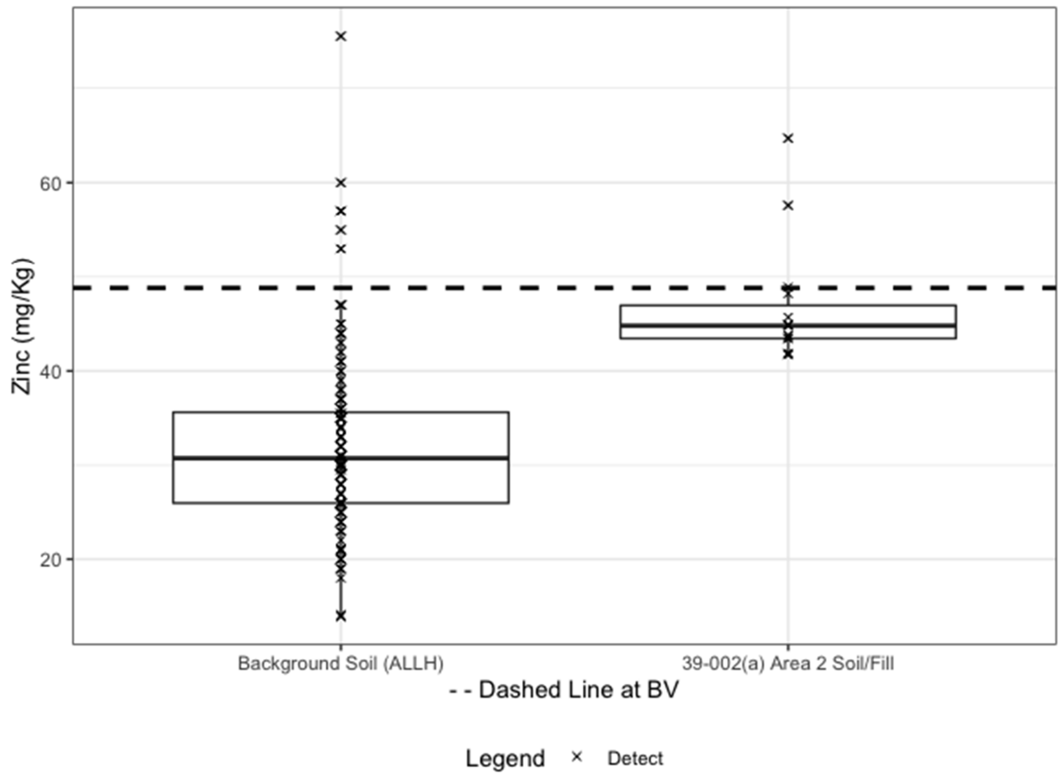

Figure F-19 Box plot for zinc in soil at SWMU 39-002(a) Area 2

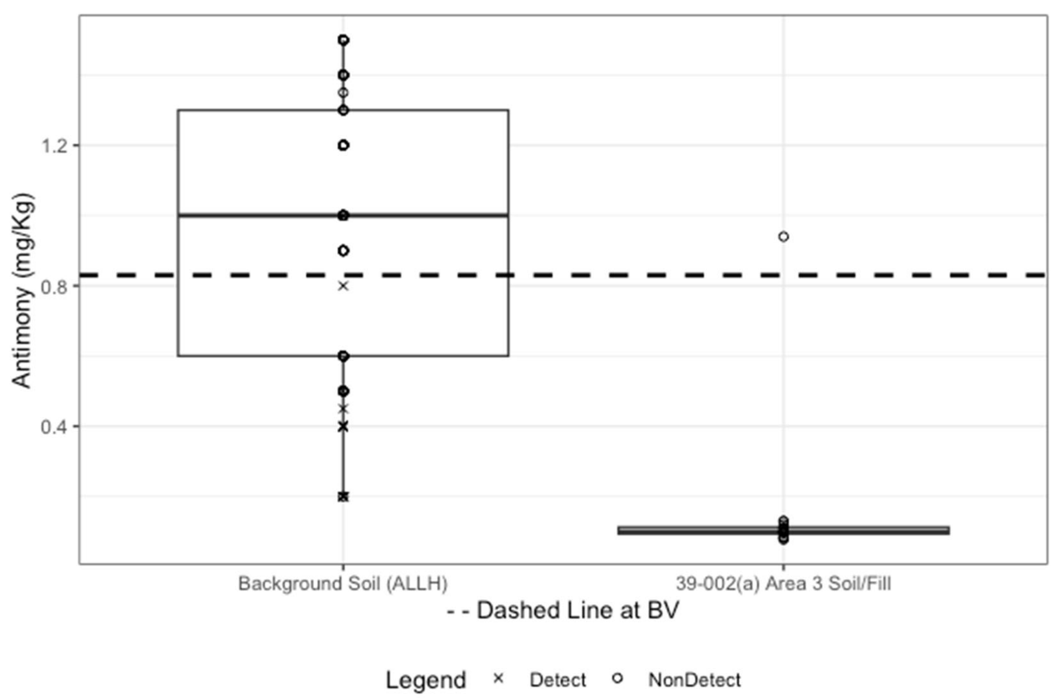

Figure F-20 Box plot for antimony in soil at SWMU 39-002(a) Area 3

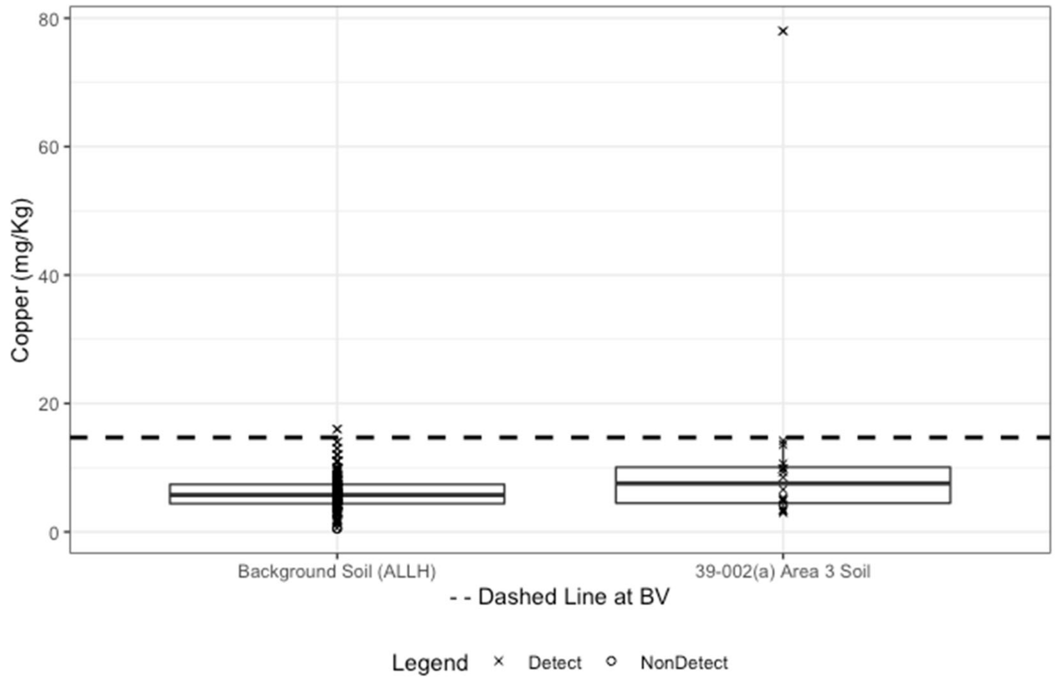

Figure F-21 Box plot for copper in soil at SWMU 39-002(a) Area 3

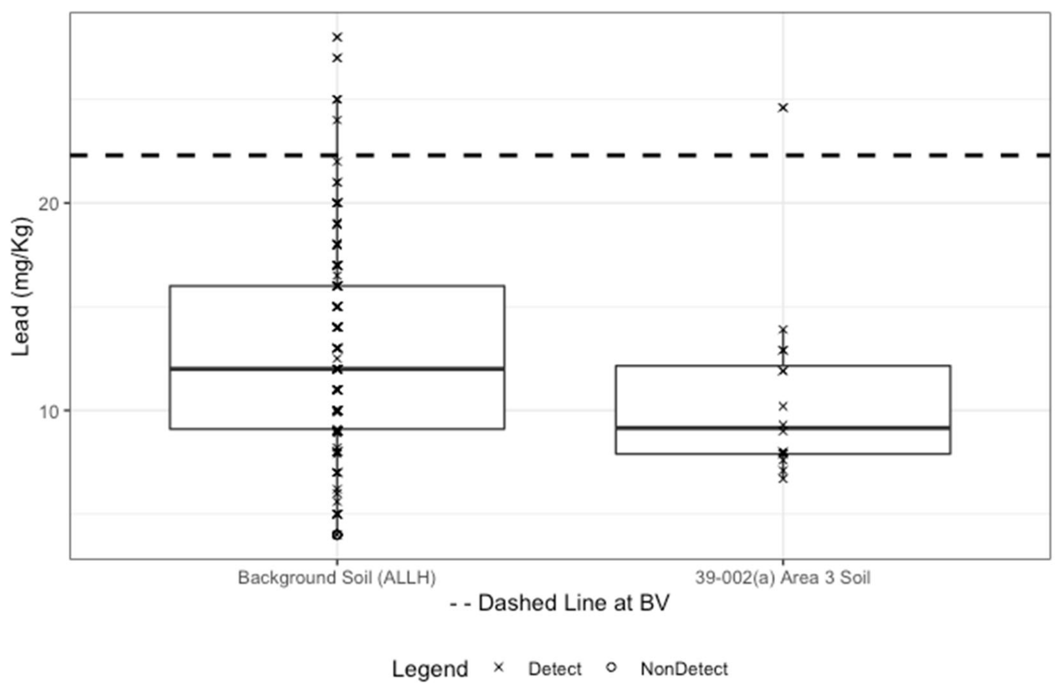

Figure F-22 Box plot for lead in soil at SWMU 39-002(a) Area 3

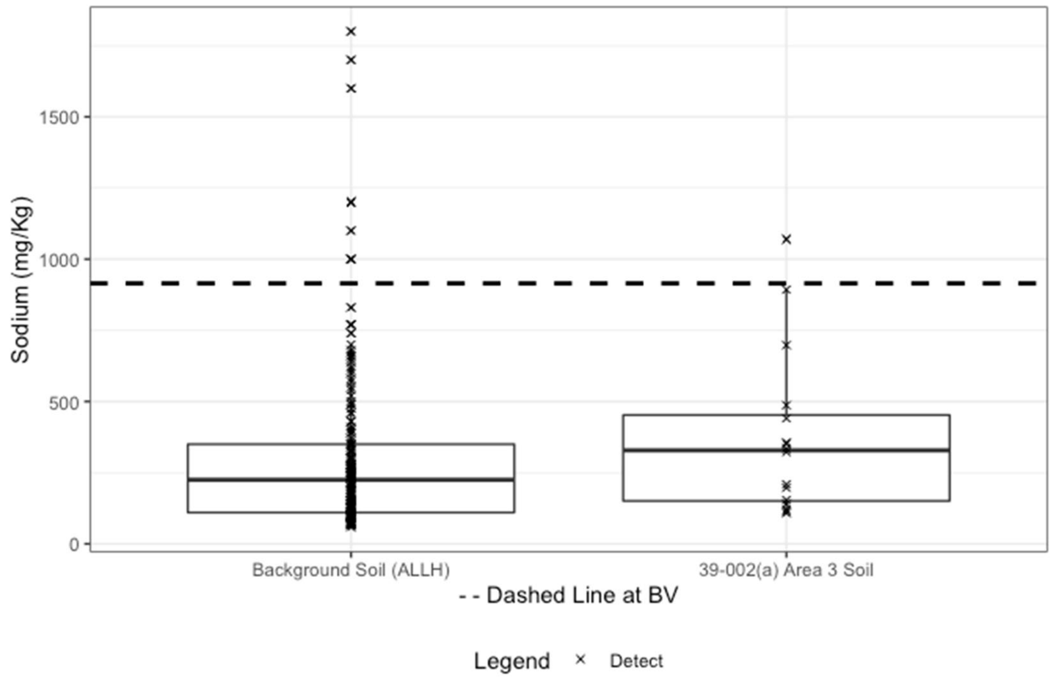

Figure F-23 Box plot for sodium in soil at SWMU 39-002(a) Area 3

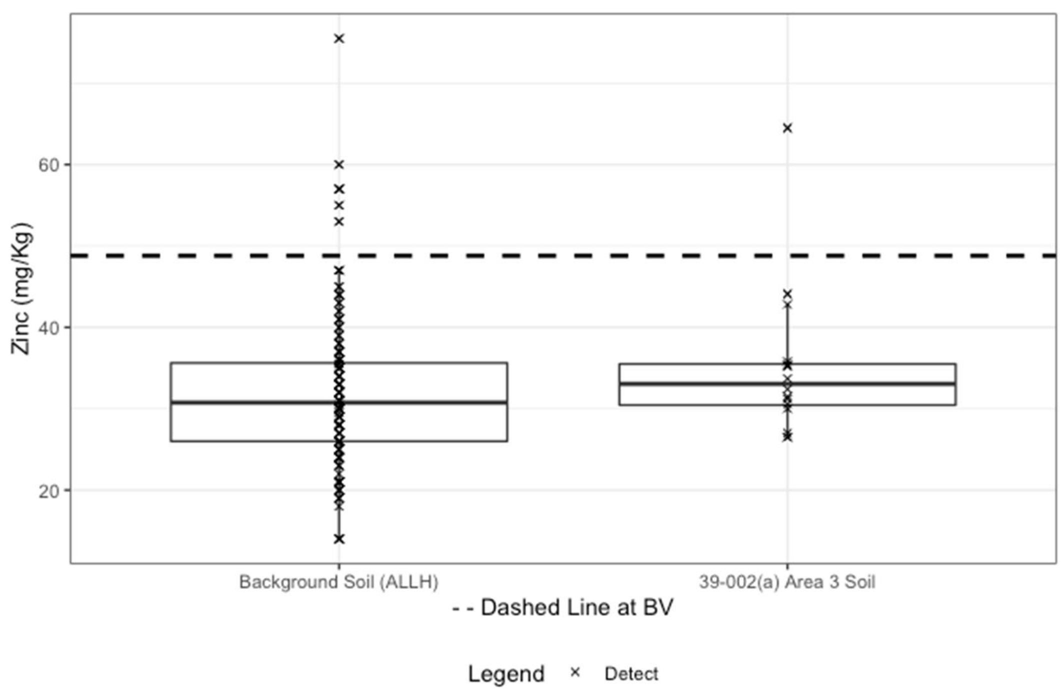

Figure F-24 Box plot for zinc in soil at SWMU 39-002(a) Area 3

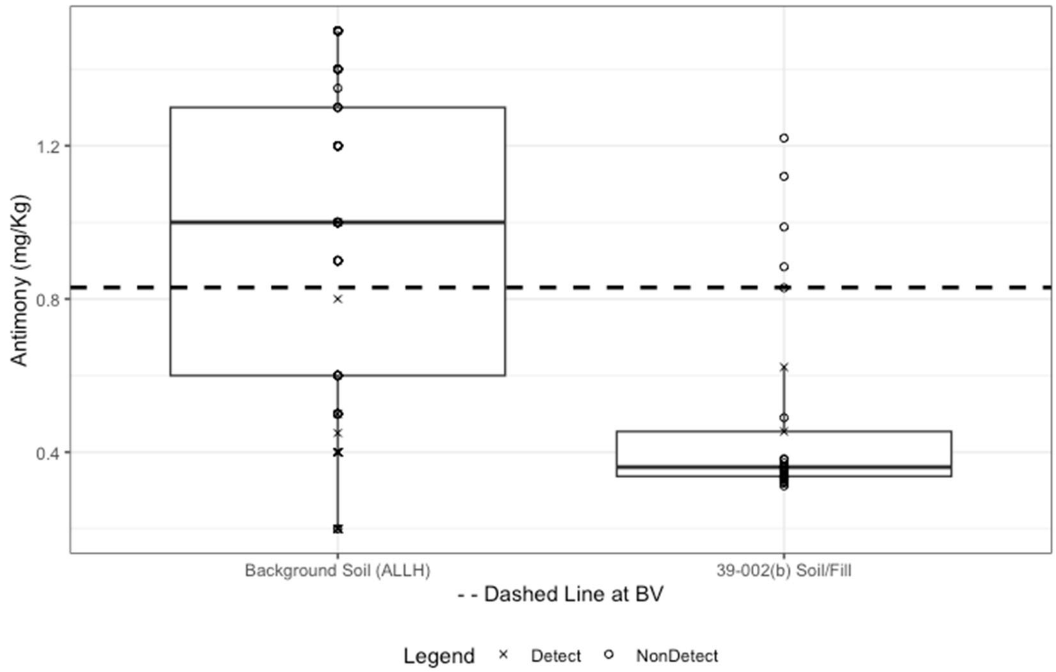

Figure F-25 Box plot for antimony in soil at AOC 39-002(b)

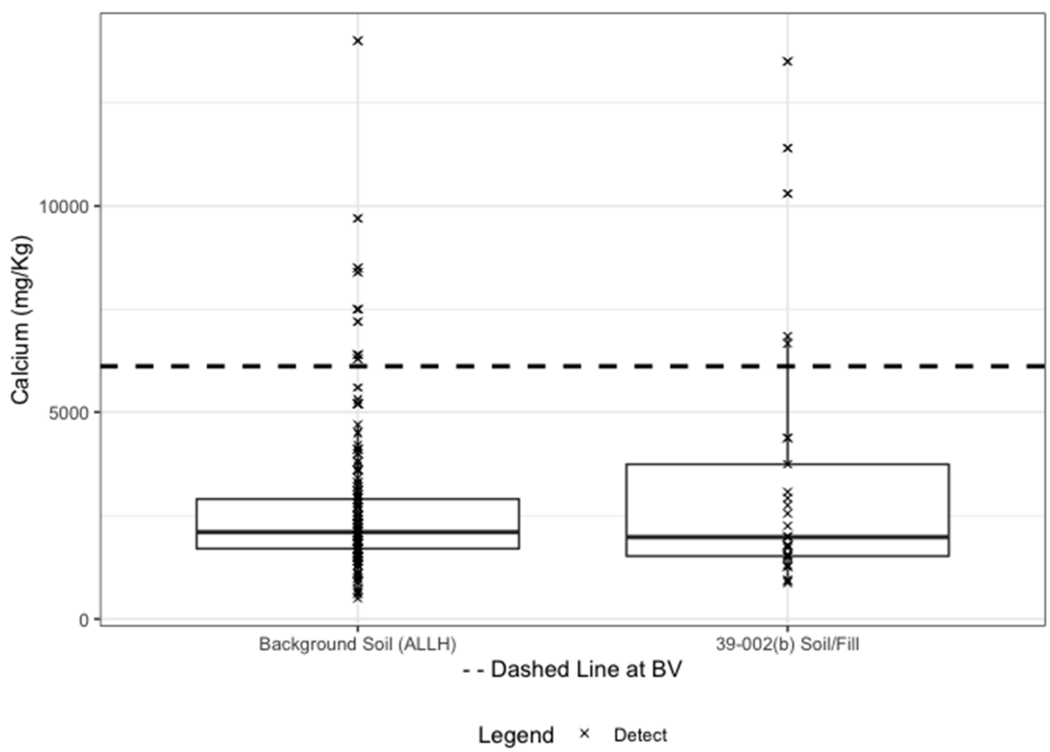

Figure F-26 Box plot for calcium in soil at AOC 39-002(b)

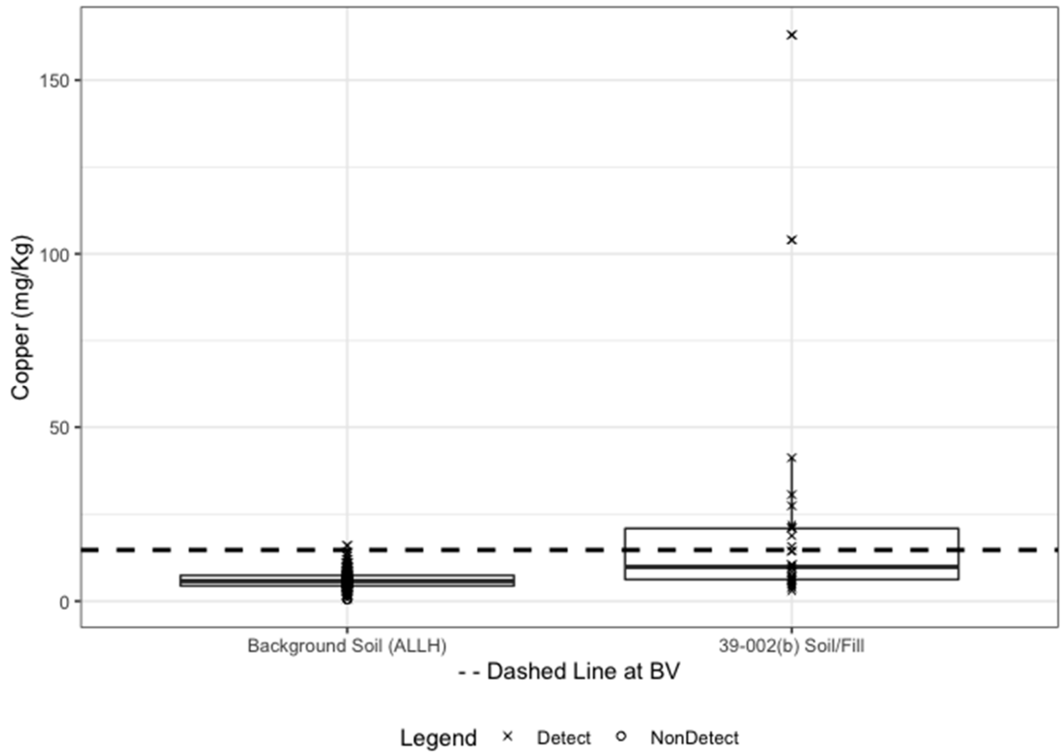

Figure F-27 Box plot for copper in soil at AOC 39-002(b)

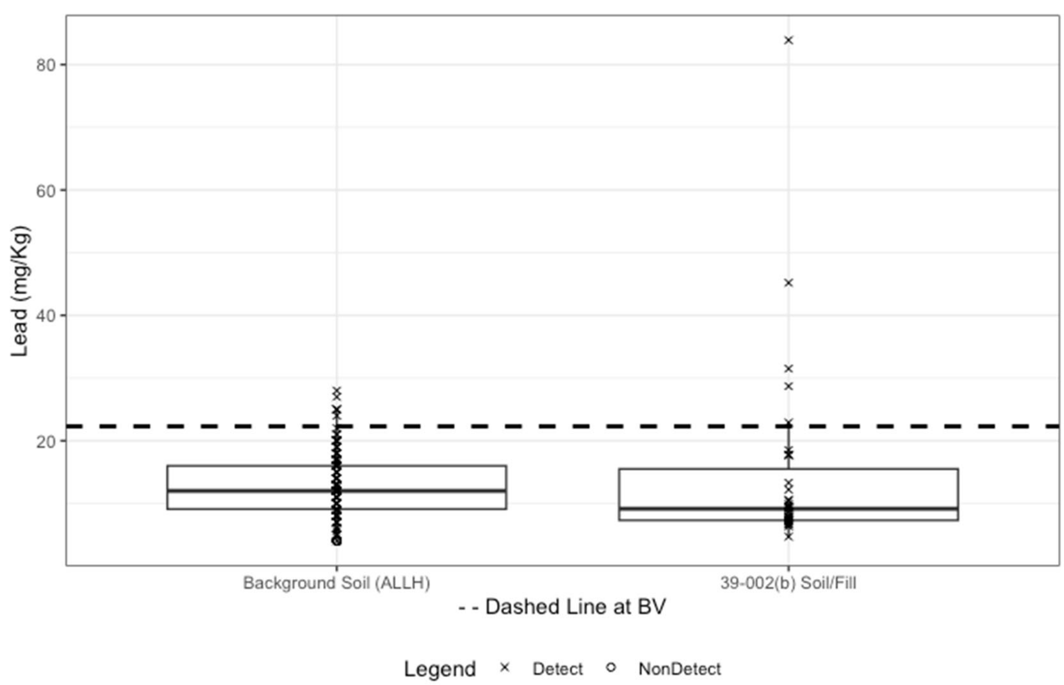

Figure F-28 Box plot for lead in soil at AOC 39-002(b)

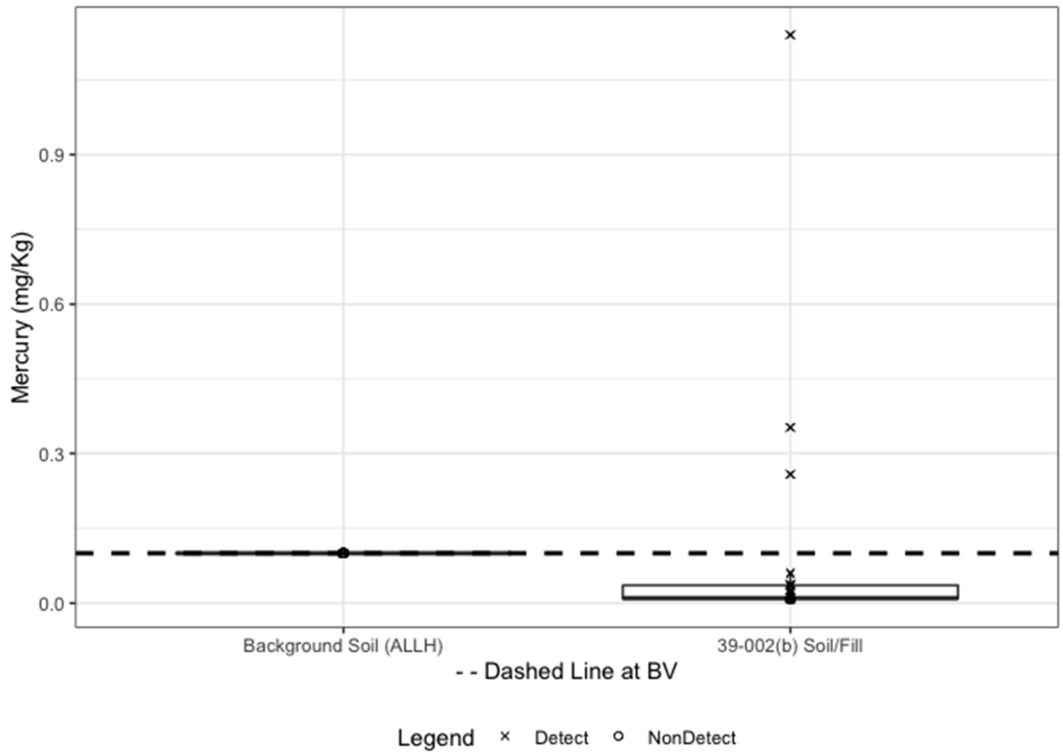

Figure F-29 Box plot for mercury in soil at AOC 39-002(b)

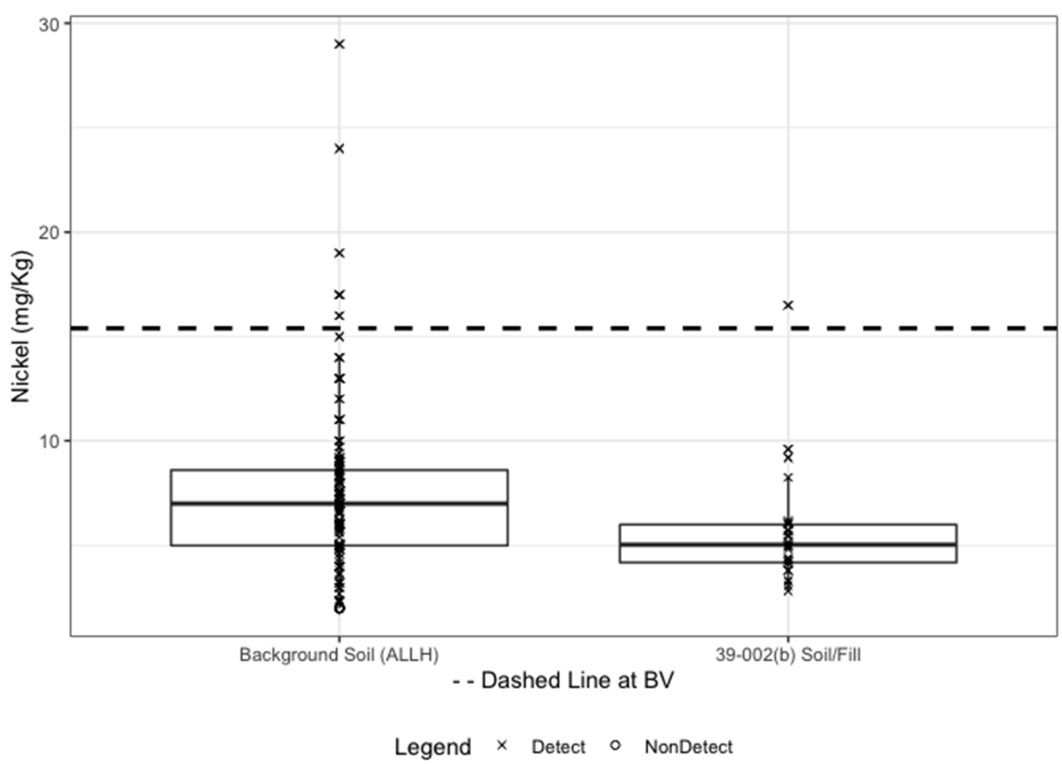

Figure F-30 Box plot for nickel in soil at AOC 39-002(b)

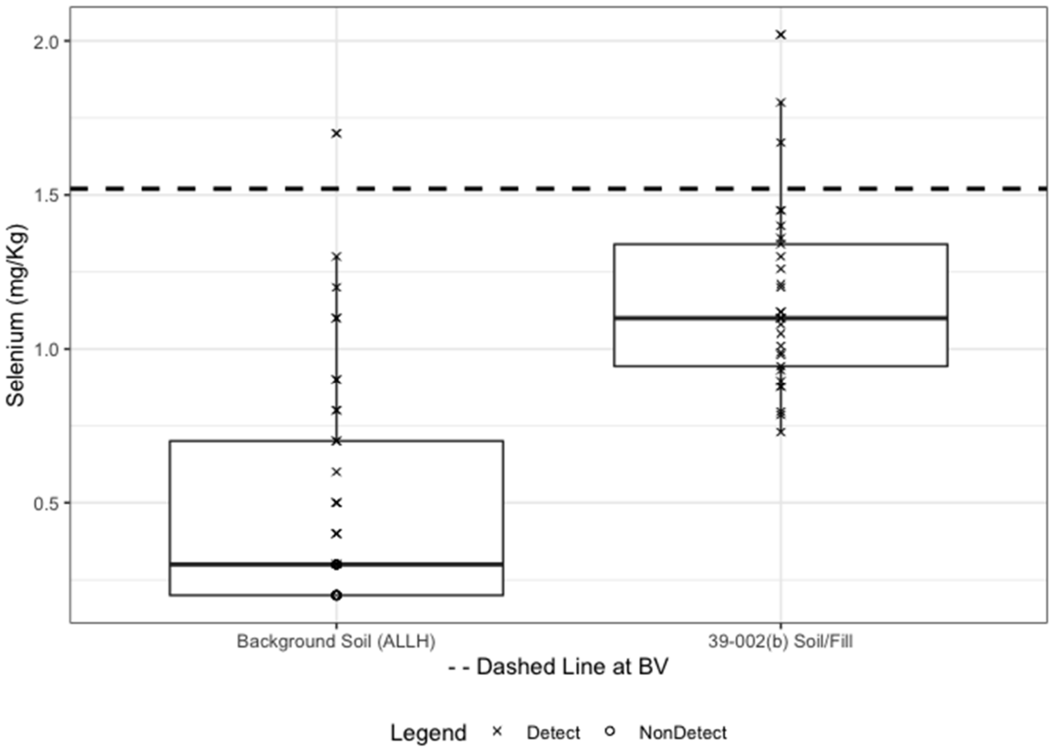

Figure F-31 Box plot for selenium in soil at AOC 39-002(b)

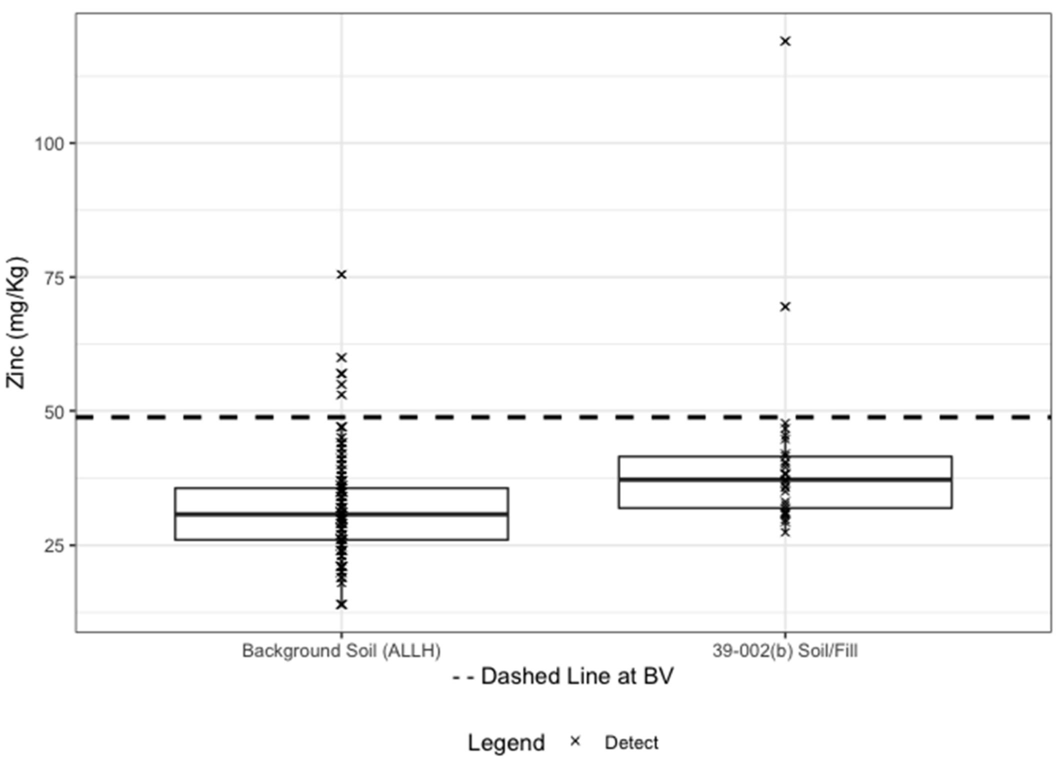

Figure F-32 Box plot for zinc in soil at AOC 39-002(b)

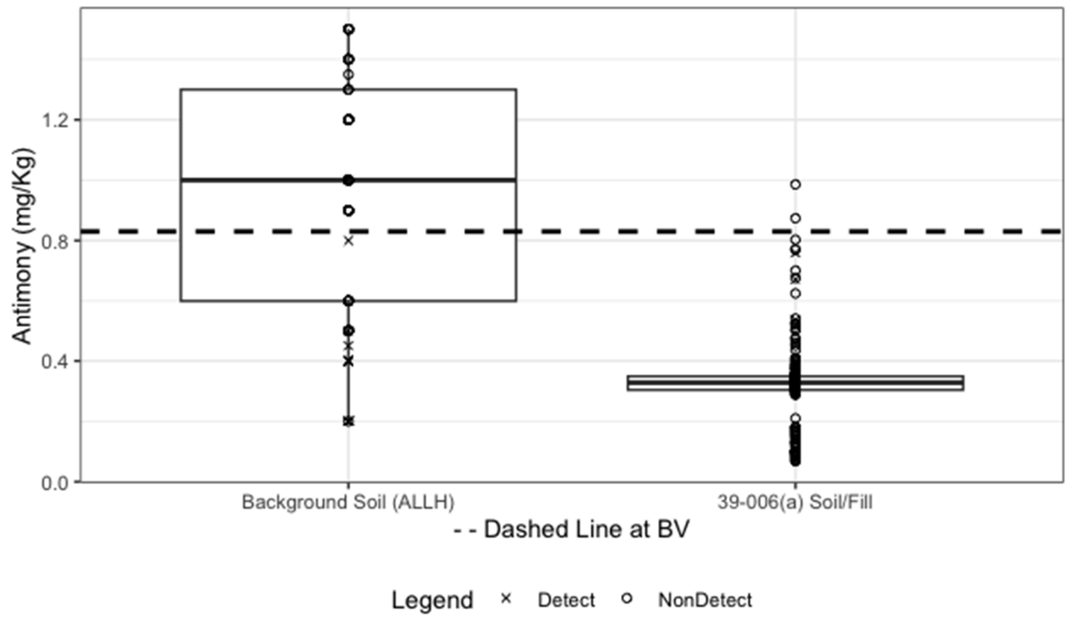

Figure F-33 Box plot for antimony in soil at SWMU 39-006(a)

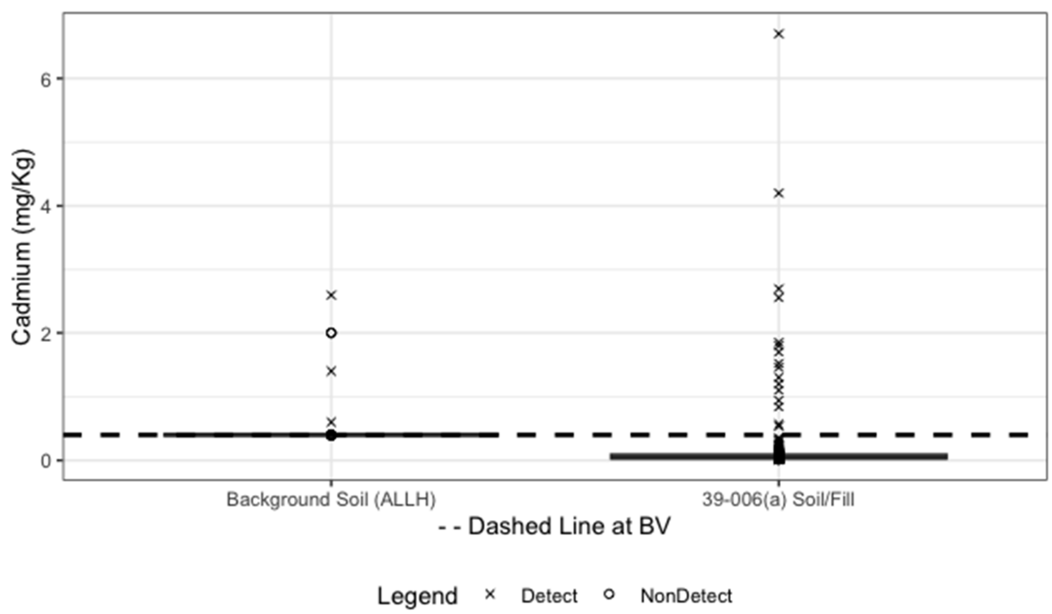

Figure F-34 Box plot for cadmium in soil at SWMU 39-006(a)

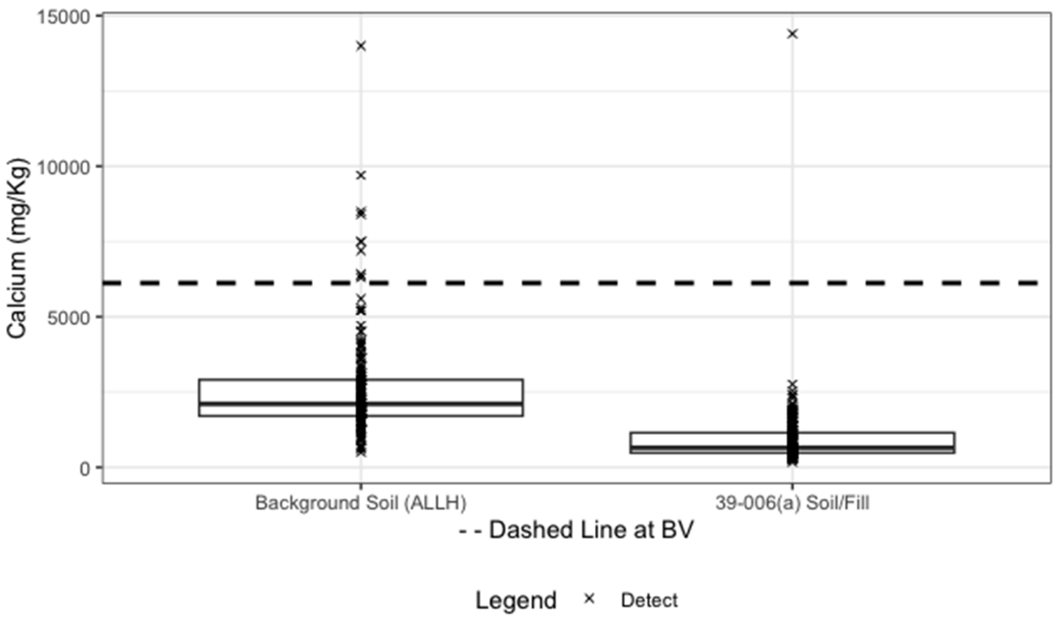

Figure F-35 Box plot for calcium in soil at SWMU 39-006(a)

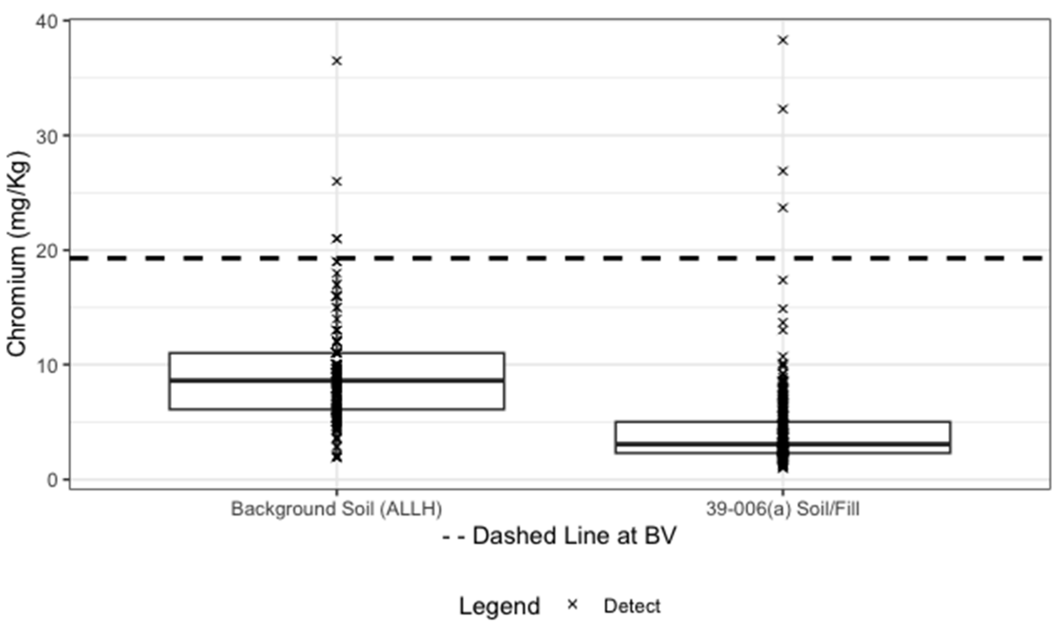

Figure F-36 Box plot for chromium in soil at SWMU 39-006(a)

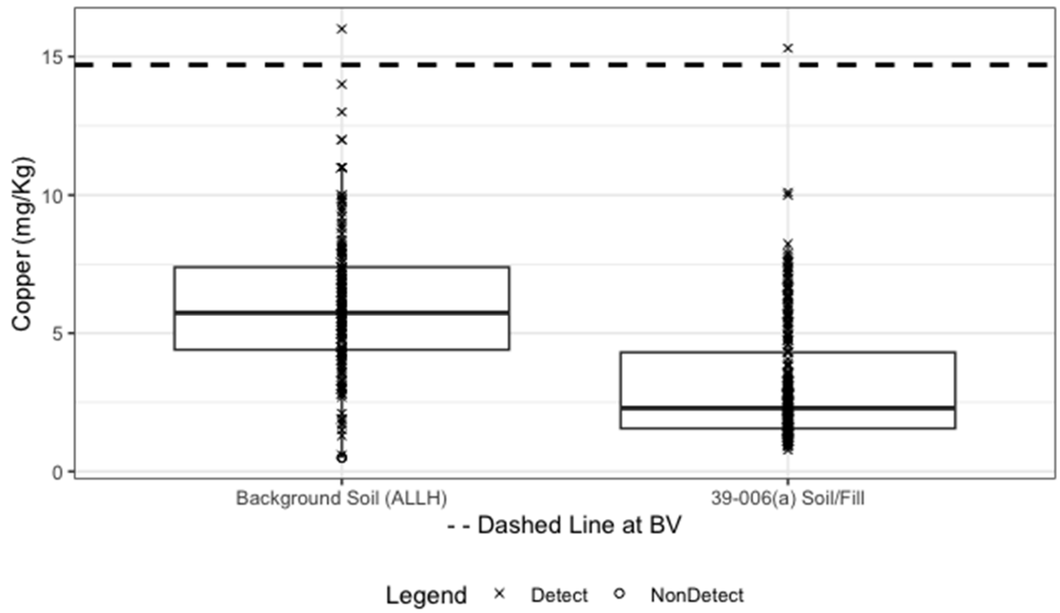

Figure F-37 Box plot for copper in soil at SWMU 39-006(a)

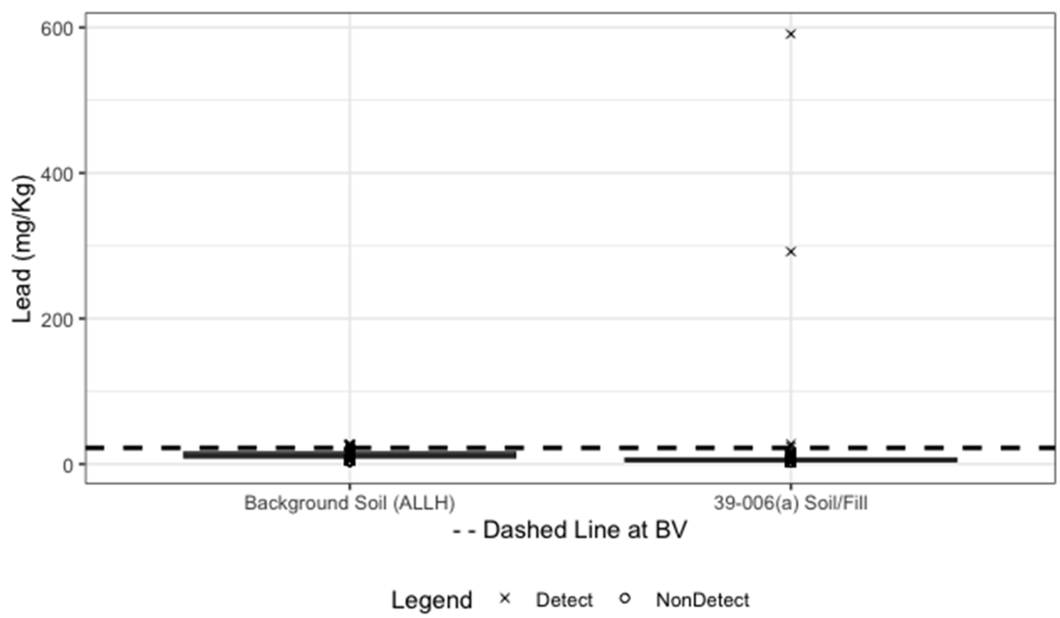

Figure F-38 Box plot for lead in soil at SWMU 39-006(a)

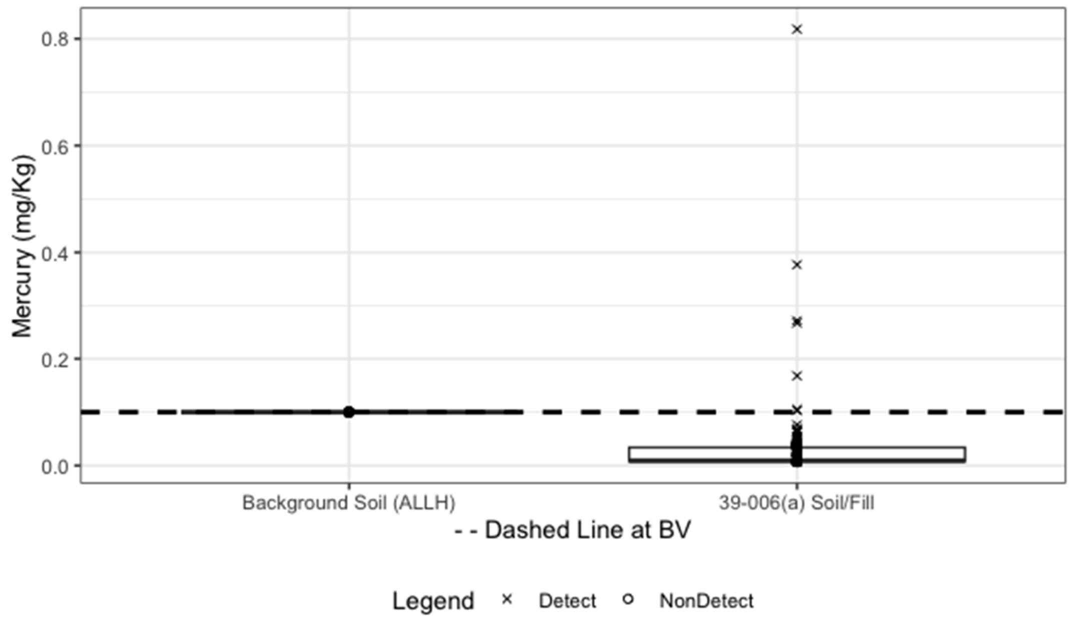

Figure F-39 Box plot for mercury in soil at SWMU 39-006(a)

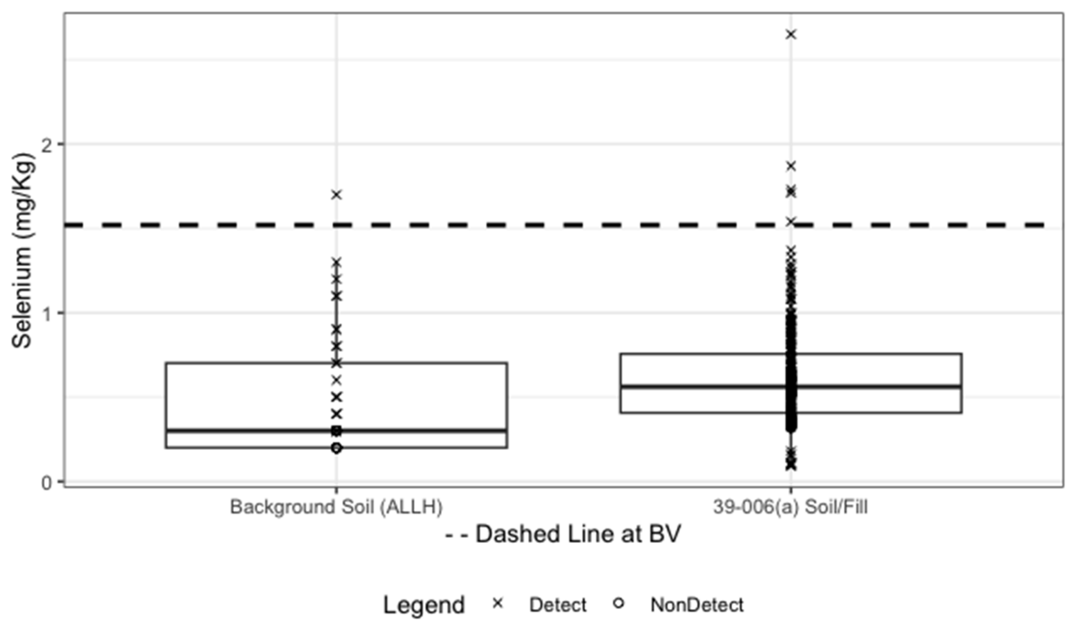

Figure F-40 Box plot for selenium in soil at SWMU 39-006(a)

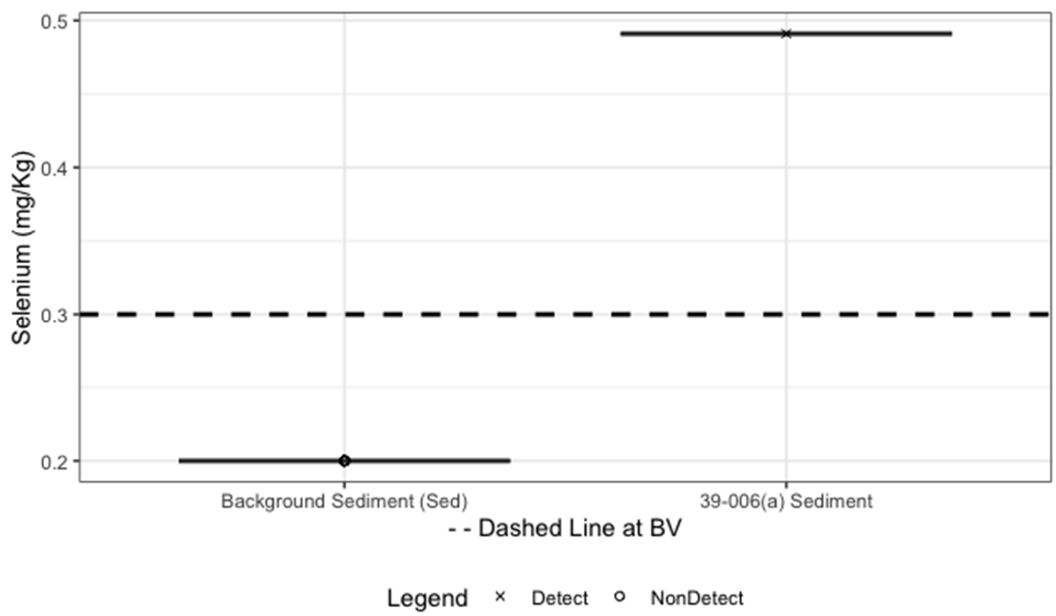

Figure F-41 Box plot for selenium in sediment at SWMU 39-006(a)

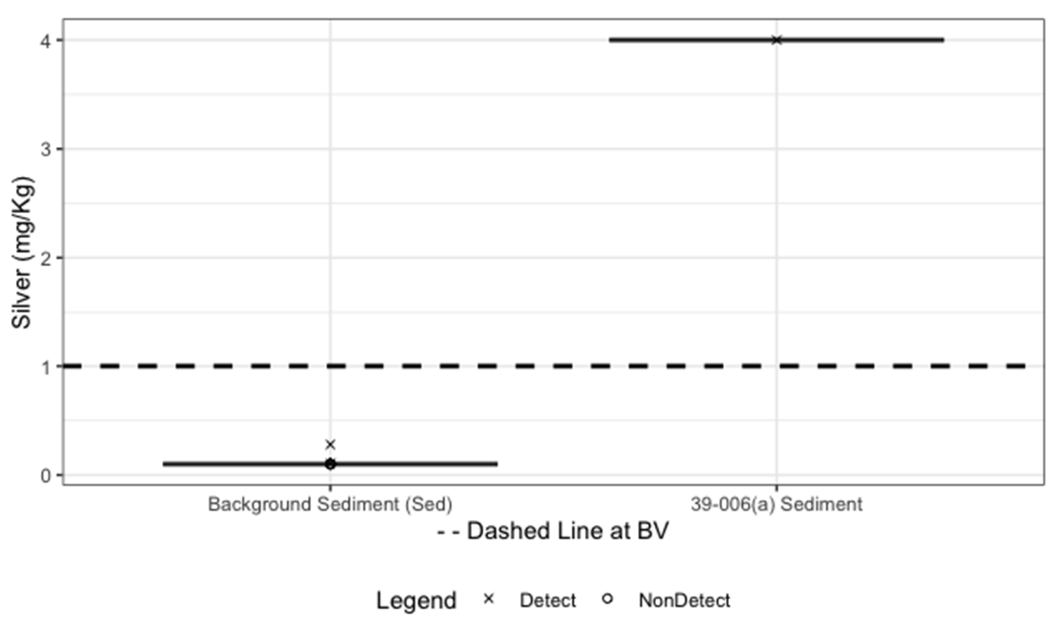

Figure F-42 Box plot for silver in sediment at SWMU 39-006(a)

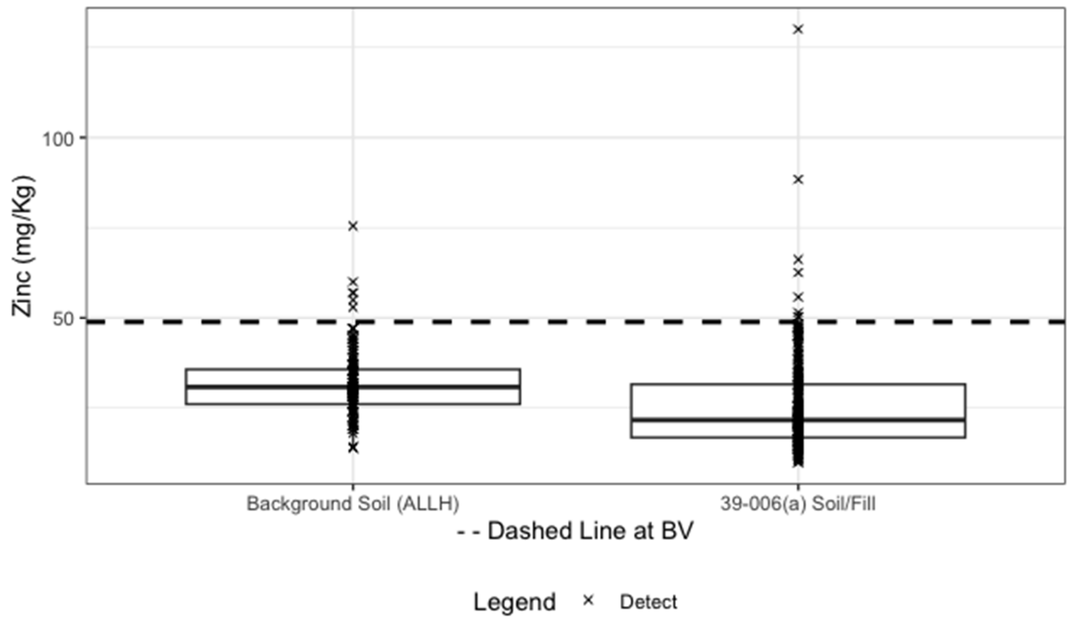

Figure F-43 Box plot for zinc in soil at SWMU 39-006(a)

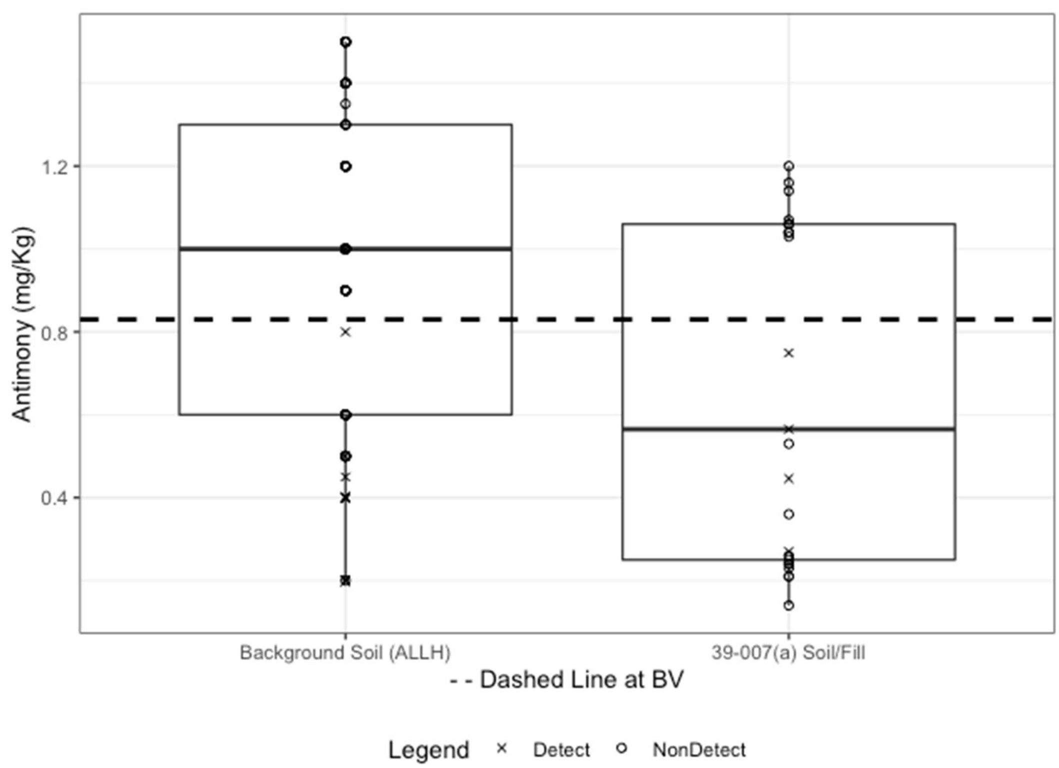

Figure F-44 Box plot for antimony in soil at SWMU 39-007(a)

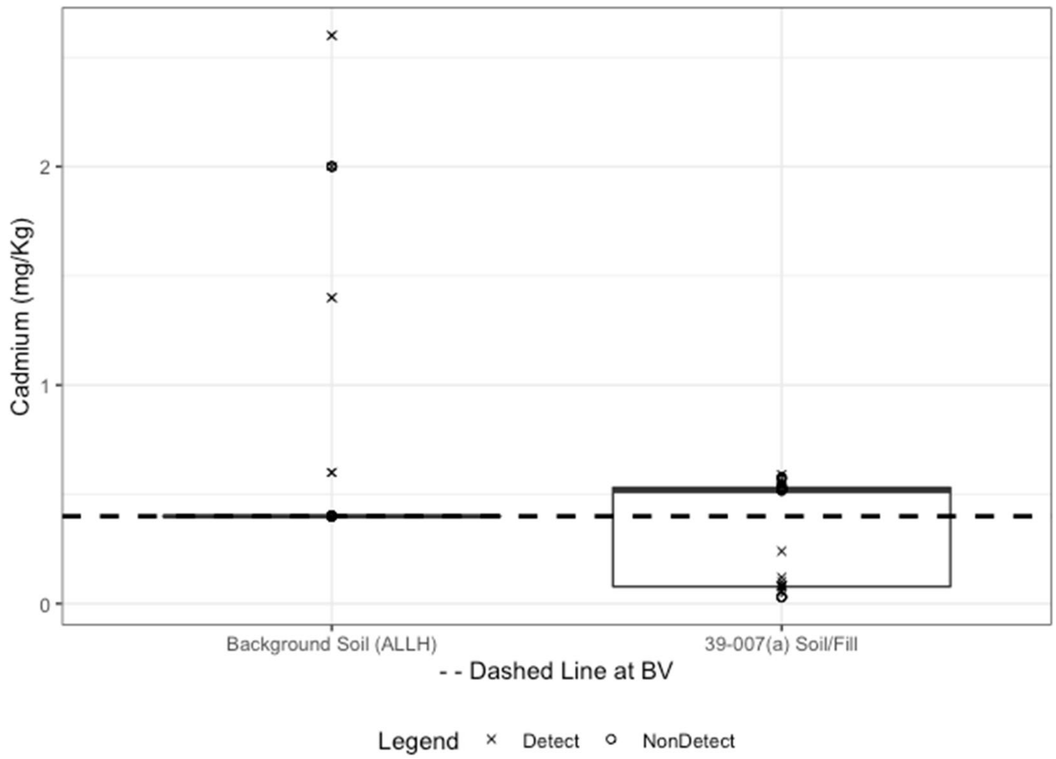

Figure F-45 Box plot for cadmium in soil at SWMU 39-007(a)

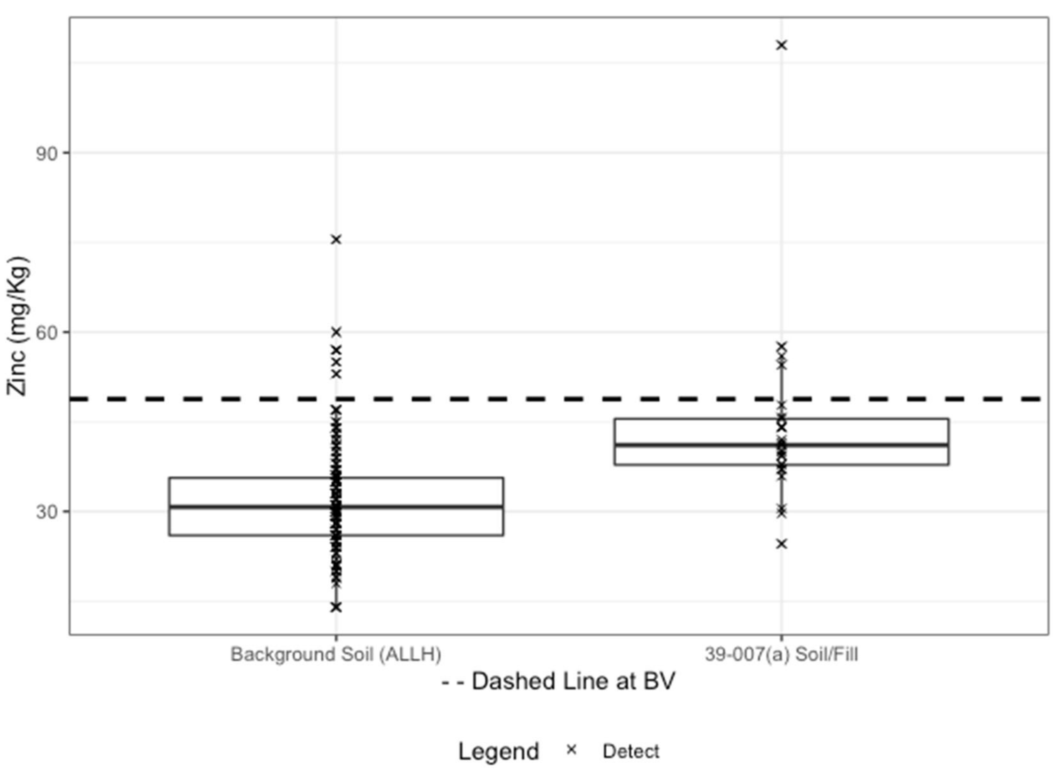

Figure F-46 Box plot for zinc in soil at SWMU 39-007(a)

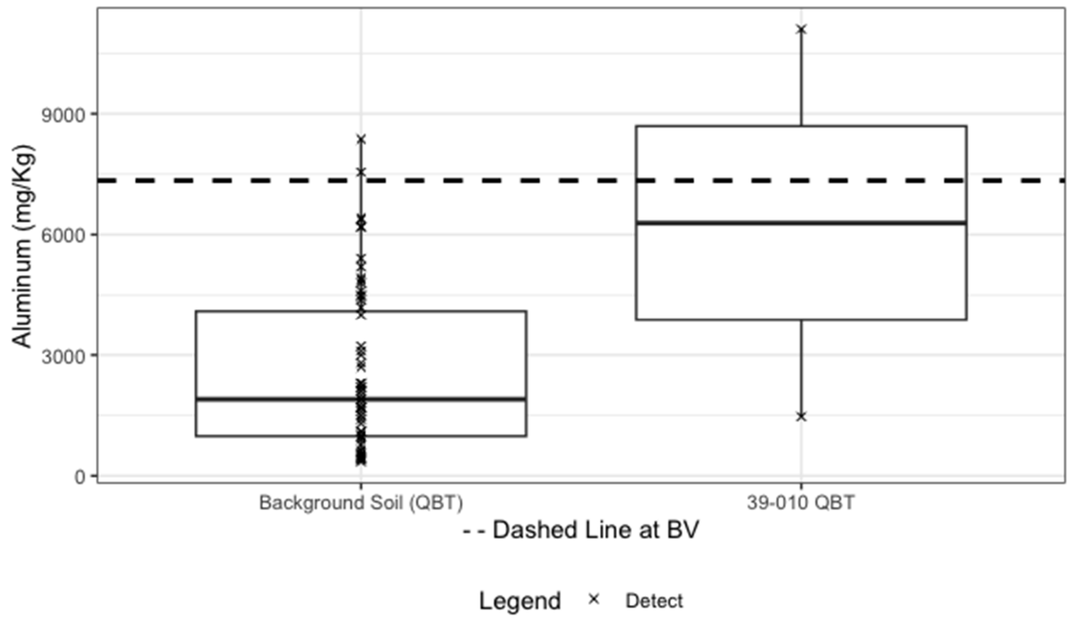

Figure F-47 Box plot for aluminum in Qbt 2,3,4 at SWMU 39-010

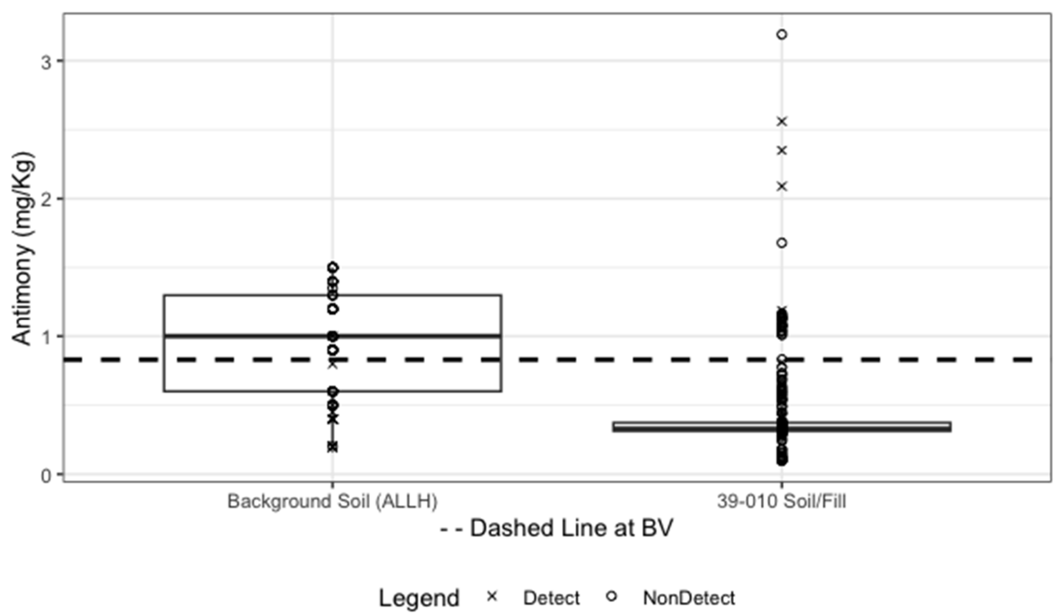

Figure F-48 Box plot for antimony in soil at SWMU 39-010

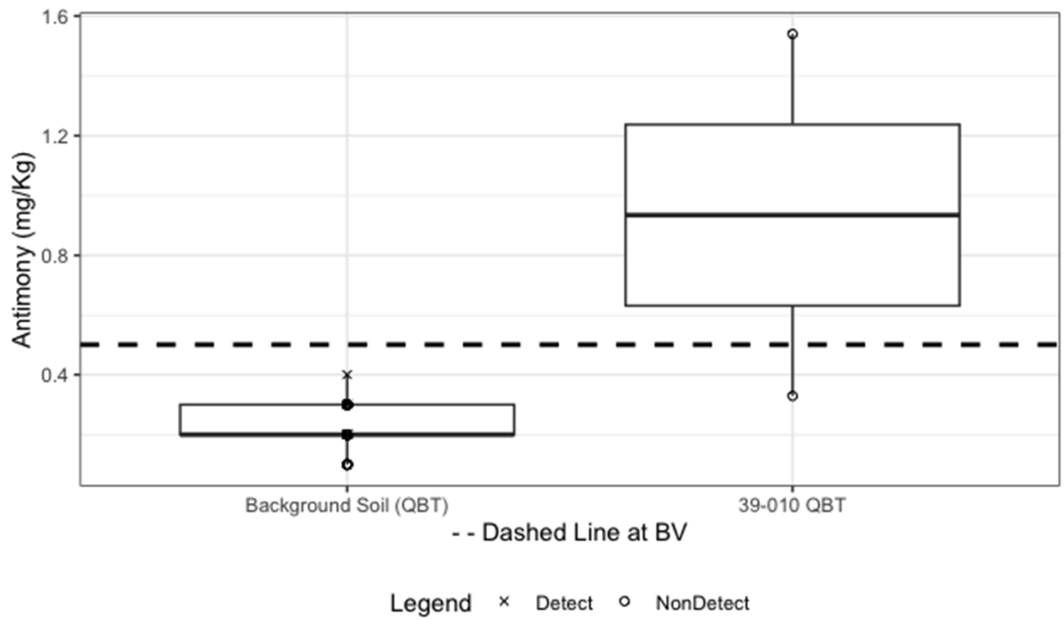

Figure F-49 Box plot for antimony in Qbt 2,3,4 at SWMU 39-010

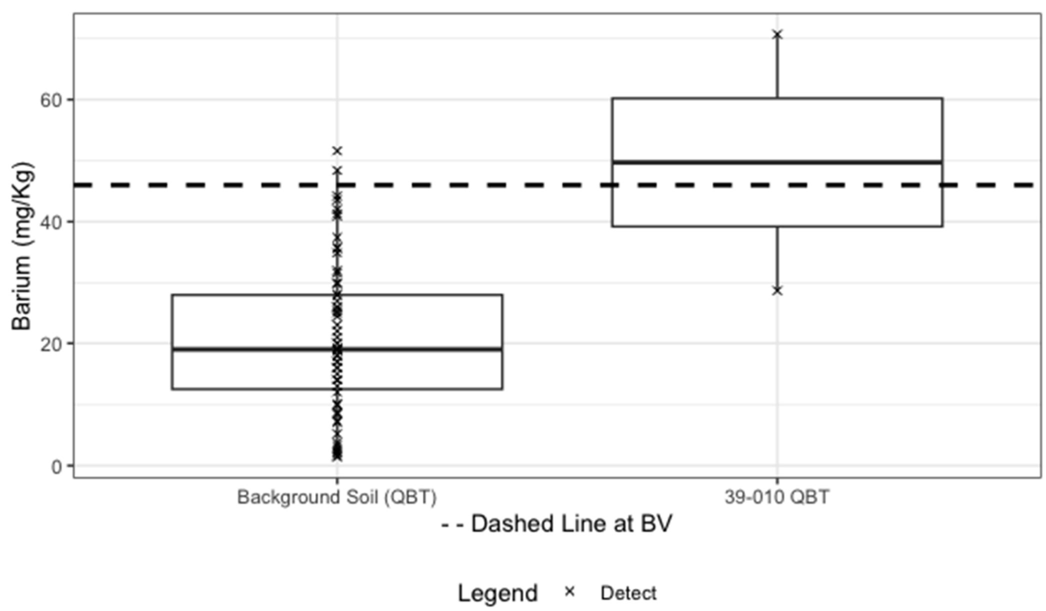

Figure F-50 Box plot for barium in Qbt 2,3,4 at SWMU 39-010

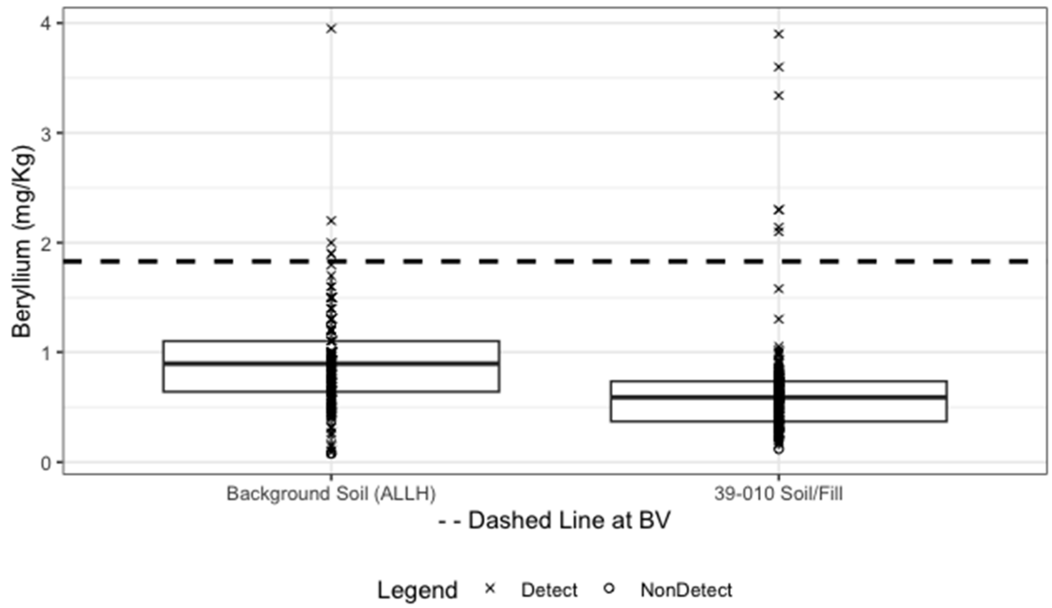

Figure F-51 Box plot for beryllium in soil at SWMU 39-010

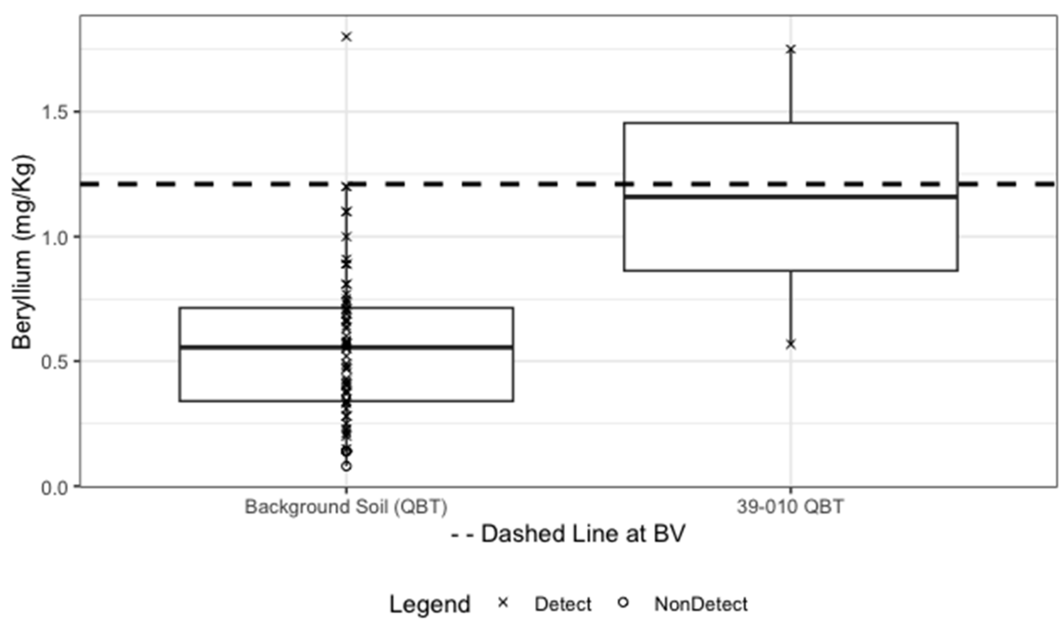

Figure F-52 Box plot for beryllium in Qbt 2,3,4 at SWMU 39-010

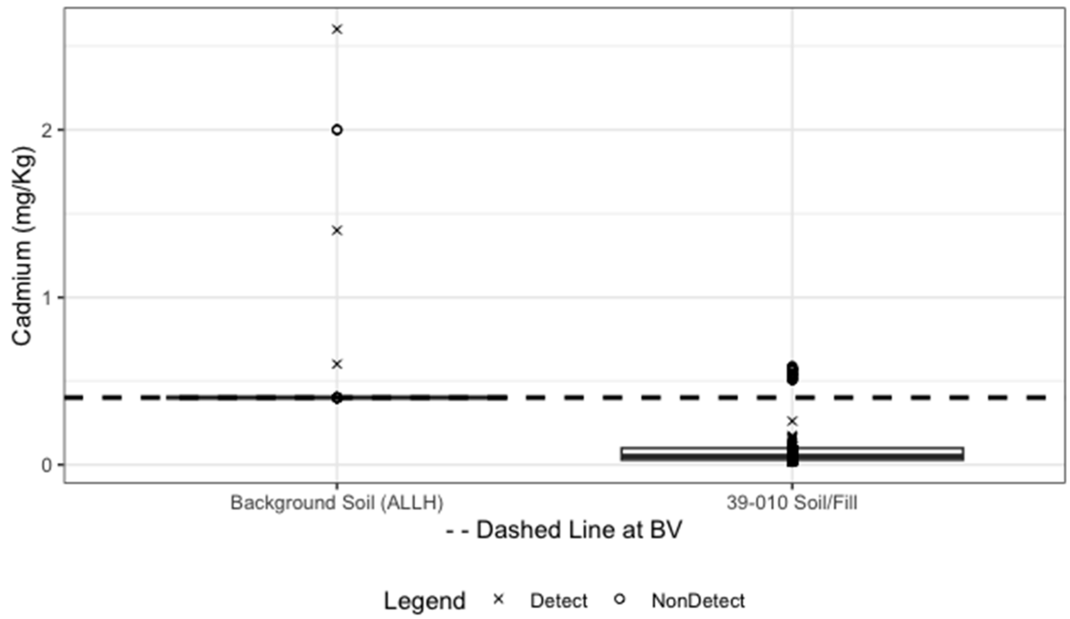

Figure F-53 Box plot for cadmium in soil at SWMU 39-010

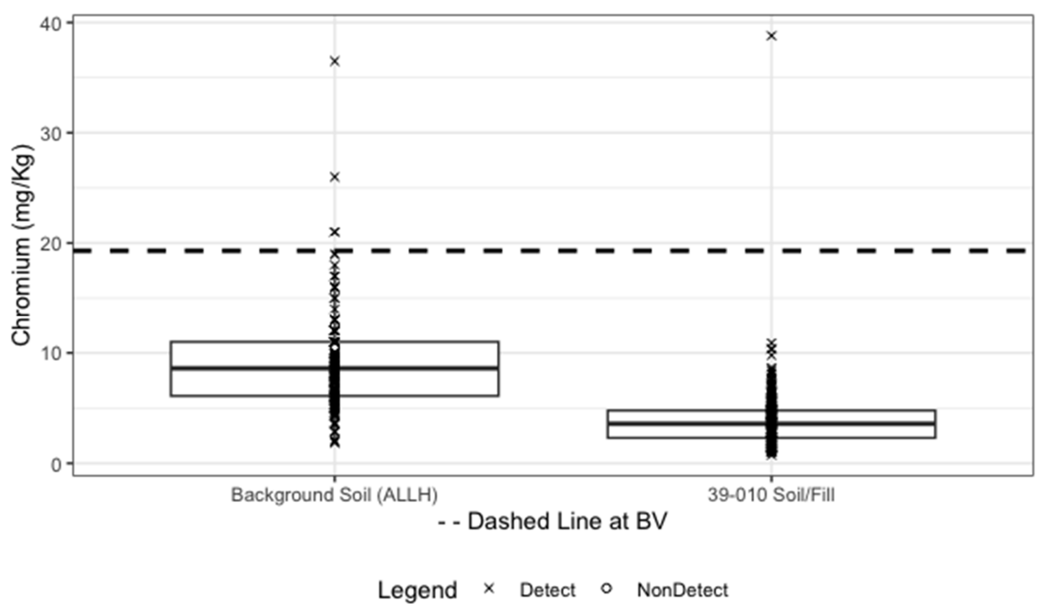

Figure F-54 Box plot for chromium in soil at SWMU 39-010

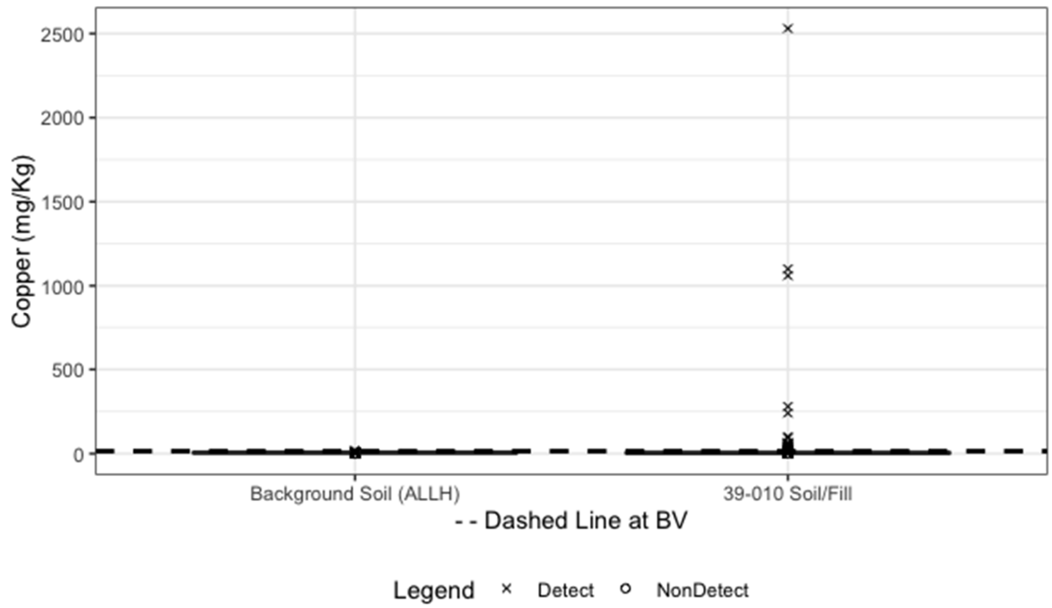

Figure F-55 Box plot for copper in soil at SWMU 39-010

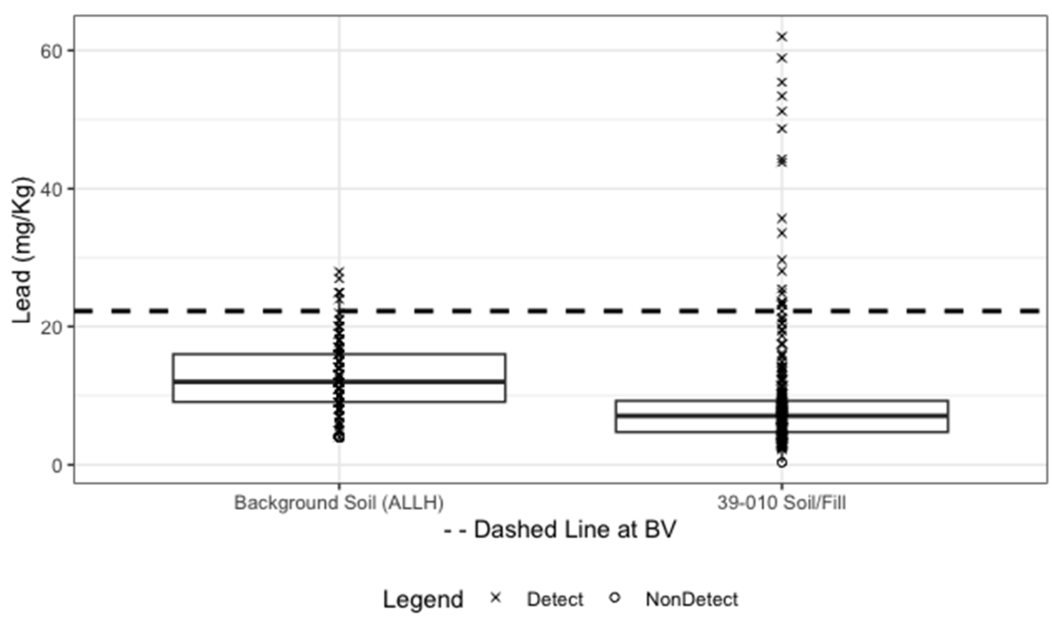

Figure F-56 Box plot for lead in soil at SWMU 39-010

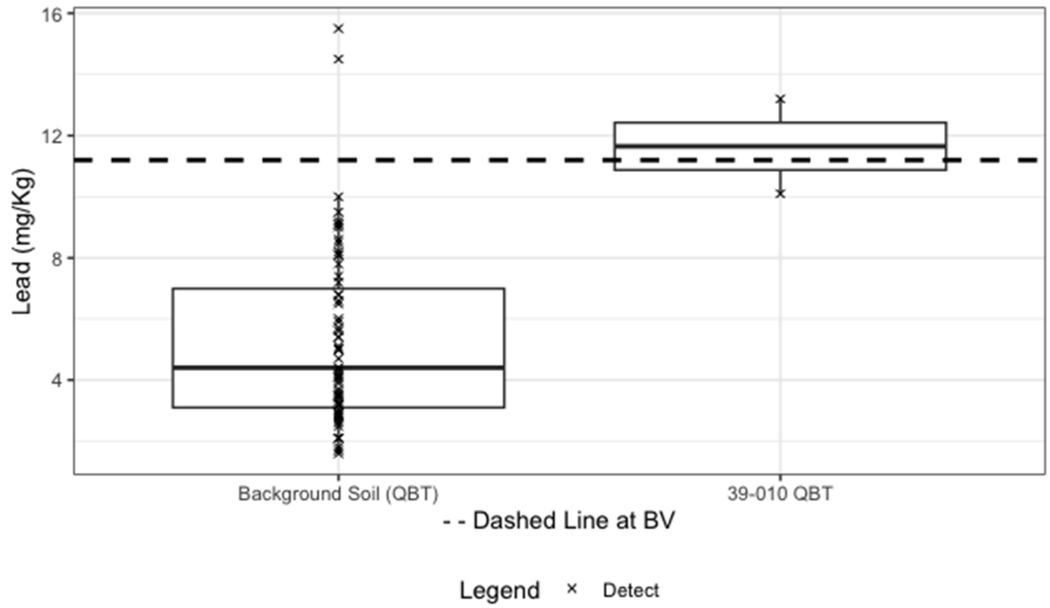

Figure F-57 Box plot for lead in Qbt 2,3,4 at SWMU 39-010

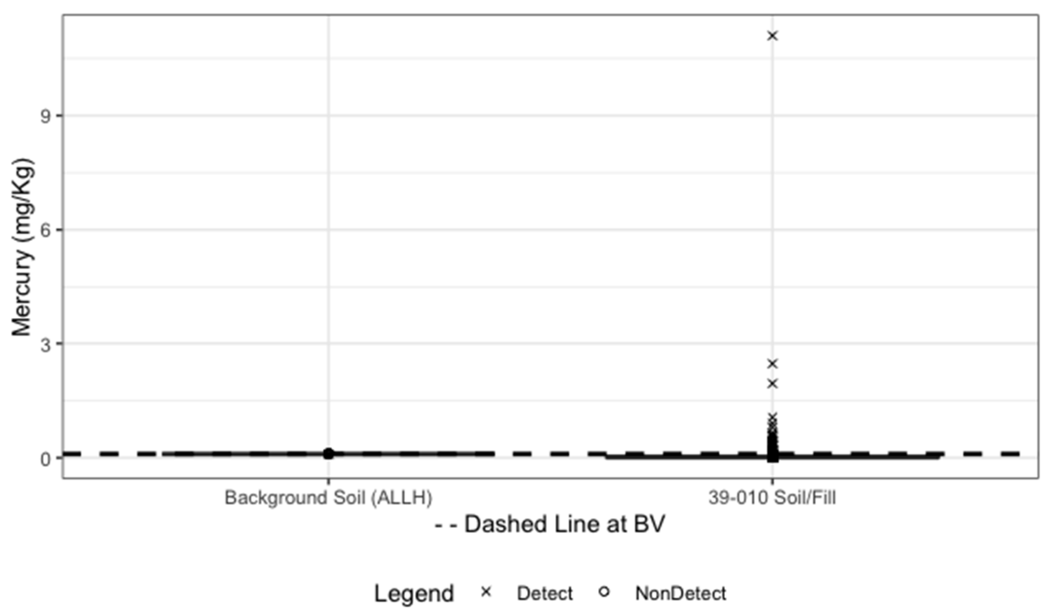

Figure F-58 Box plot for mercury in soil at SWMU 39-010

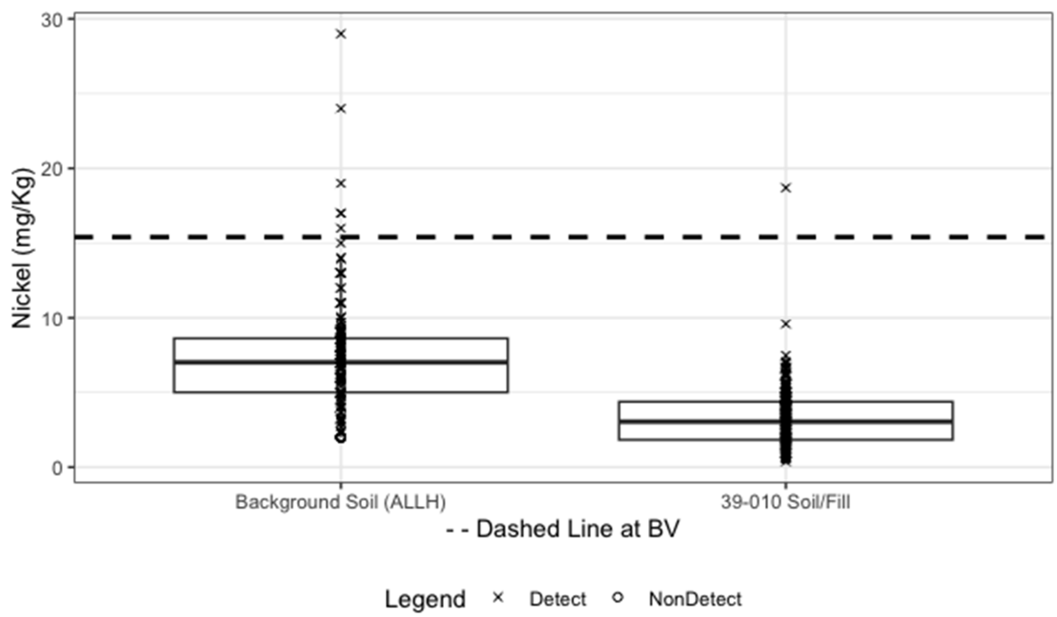

Figure F-59 Box plot for nickel in soil at SWMU 39-010

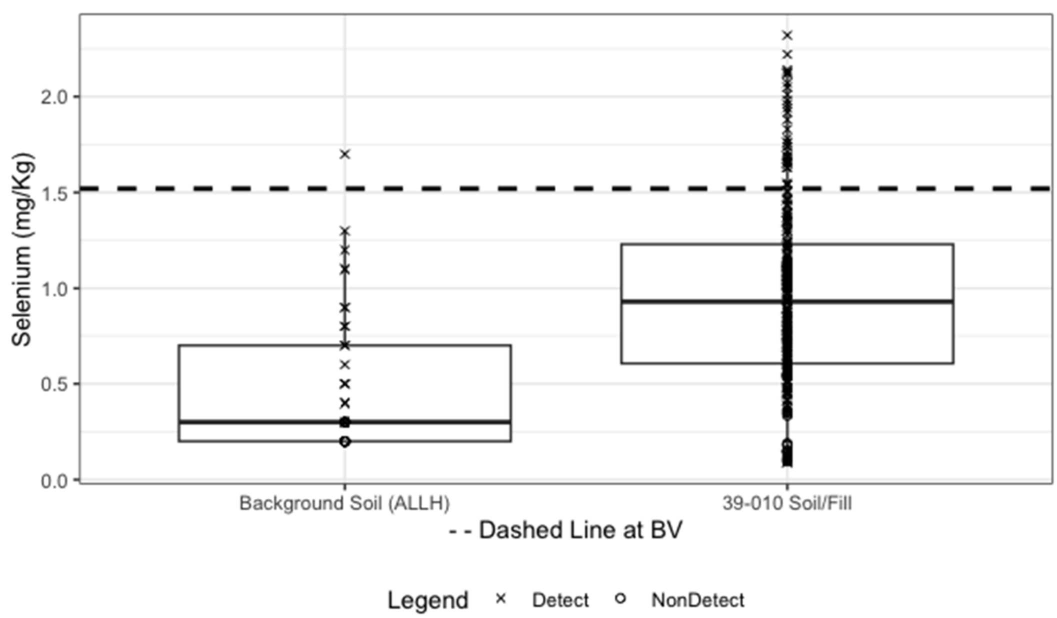

Figure F-60 Box plot for selenium in soil at SWMU 39-010

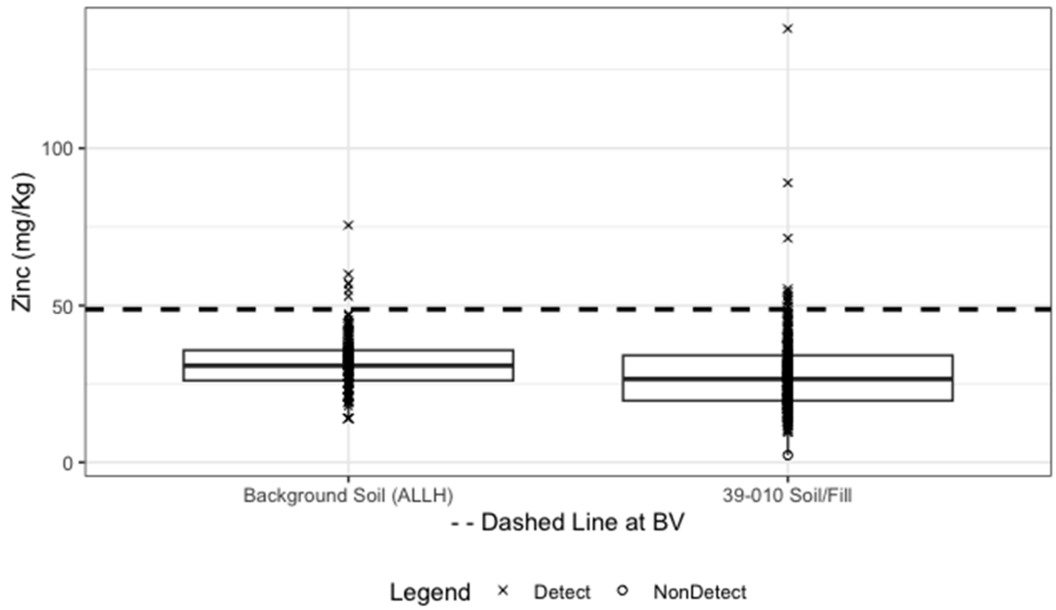

Figure F-61 Box plot for zinc in soil at SWMU 39-010

Table F-1
Results for Statistical Tests for
Inorganic Chemicals in Soil at SWMU 39-001(a)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Cadmium	n/a*	0.227	1	No

* n/a = Not applicable.

Table F-2
Results for Statistical Tests for
Inorganic Chemicals in Soil at Area 1 of SWMU 39-002(a)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Cadmium	n/a[a]	0.300	1	No
Calcium	0.033	0.392	0.485	No
Copper	0.83	<0.001	<0.001	Yes
Lead	1	0.206	<0.001	No[b]
Mercury	n/a	<0.001	0.459	Yes
Nickel	1	1.00	0.505	No
Selenium	<0.001	0.023	0.613	Yes
Sodium	1	1	1	No
Zinc	<0.001	<0.001	<0.001	Yes

[a] n/a = Not applicable.

[b] Retained due to detections being substantially greater (>10×) than background value.

Table F-3
Results for Statistical Tests for
Inorganic Chemicals in Soil at Area 2 of SWMU 39-002(a)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Copper	0.586	0.888	0.068	No*
Iron	0.009	0.333	1	No
Vanadium	0.578	0.959	1	No
Zinc	<0.001	<0.001	1	Yes

* Retained due to detections being substantially greater (>10×) than background value.

Table F-4
Results for Statistical Tests for
Inorganic Chemicals in Soil at Area 3 of SWMU 39-002(a)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Copper	0.0949	0.005	0.084	No
Lead	0.99	0.981	1	No
Sodium	0.0691	0.193	1	No
Zinc	0.0559	0.686	1	No

Table F-5
Results for Statistical Tests for
Inorganic Chemicals in Soil at AOC 39-002(b)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Calcium	0.609	0.186	1	No
Copper	<0.001	<0.001	<0.001	Yes
Lead	0.978	0.200	<0.001	No
Mercury	n/a[a]	0.073	0.073	No[b]
Nickel	0.997	0.925	1	No
Selenium	<0.001	0.001	0.178	Yes
Zinc	<0.001	0.001	0.144	Yes

[a] n/a = Not applicable.

[b] Retained due to detections being substantially greater (>10×) than background value.

Table F-6
Results for Statistical Tests for
Inorganic Chemicals in Soil at SWMU 39-006(a)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Cadmium	n/a[a]	1	0.643	No[b]
Calcium	1	1	0.588	No
Chromium	1	1	0.588	No
Copper	1	1	1	No
Lead	1	1	0.345	No[b]
Mercury	n/a	1	0.354	No[b]
Selenium	0.044	0.466	0.554	No[c]
Zinc	1	0.983	0.347	No

[a] n/a = Not applicable.

[b] Retained due to detections being substantially greater (>10×) than background value.

[c] Selenium is retained based on a detection in sediment.

Table F-7
Results for Statistical Tests for
Inorganic Chemicals in Soil at SWMU 39-007(a)

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Cadmium	n/a*	0.294	1	No
Zinc	<0.001	<0.001	0.127	Yes

* n/a = Not applicable.

Table F-8
Results for Statistical Tests for
Inorganic Chemicals in Soil at SWMU 39-010

Analyte	Gehan Test p-Value	Quantile Test p-Value	Slippage Test p-Value	COPC?
Beryllium	1	1	1	No
Cadmium	n/a[a]	1	1	No
Chromium	1	1	0.605	No
Copper	1	0.084	<0.001	No[b]
Lead	1	0.999	0.002	No
Mercury	n/a	0.001	0.001	Yes
Nickel	1	1	1	No
Selenium	<0.001	0.001	0.050	Yes
Zinc	1	0.641	0.367	No

[a] n/a = Not applicable.

[b] Retained due to detections being substantially greater (>10×) than background value.

Appendix G

Risk Assessments

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Figure

Tables

Attachments

Attachment G-1	ProUCL Files (on CD included with this document)
Attachment G-2	Chlorinated Dioxin/Furan Toxicity Equivalent Calculations (on CD included with this document)
Attachment G-3	Calculated Construction Worker SSLs (on CD included with this document)
Attachment G-4	Ecological Scoping Checklists

G-1.0 INTRODUCTION

This appendix presents the results of the human health and ecological risk-screening evaluations conducted in support of the environmental characterization of six sites within the North Ancho Canyon Aggregate Area, located in the southern portion of Los Alamos National Laboratory (LANL or the Laboratory). The evaluations of potential risk at these five solid waste management units (SWMUs) and one area of concern (AOC) are based on decision-level data from historical and current Phase II investigations.

G-2.0 BACKGROUND

Brief descriptions of the five SWMUs and one AOC in the North Ancho Canyon Aggregate Area assessed for potential risk and dose are presented below.

G-2.1 Site Descriptions and Operational History

G-2.1.1 SWMU 39-001(a) – Landfill

SWMU 39-001(a) is a former landfill north of the light gas-gun facility (building 39-69) at Technical Area 39 (TA-39). The 1990 SWMU report describes the site as consisting of two rectangular trenches measuring 80-ft long × 20-ft wide × 10-ft-deep. Based on the results of the 1993 geophysical survey, the 1997 Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) concluded that this landfill consisted of just a single, amorphous unit. Excavation activities associated with the 2009 Phase I Consent Order field investigation confirmed one irregularly-shaped disposal trench coincident with the anomalies identified by the 1997 RFI geophysical survey. Interviews with site workers indicated the landfill was used for disposal from 1953 to 1979 (LANL 1993, 015316; LANL 1997, 055633; NMED 2010, 108675). Wastes disposed of in this landfill included firing-site debris consisting of metal, cabling, wire, empty chemical containers, glass, wood, plastics, Styrofoam, concrete, and office waste. Waste disposed of prior to 1976 may have included heavy metals, oils containing polychlorinated biphenyls (PCBs), high explosives (HE), thorium isotopes, natural and depleted uranium, and solvents. SWMU 39-001(a) was completely excavated during the 2009 Phase I Consent Order investigation.

As part of the 2008–2009 remediation activities conducted at SWMUs 39-001(a) and 39-001(b), the Laboratory requested approval from the New Mexico Environment Department (NMED) for establishing areas of contamination at each site. The purpose of the area of contamination designations was to provide areas where remediation waste and layback and overburden spoils could be staged and segregated on-site without triggering a new point of waste generation or a new area of waste placement subject to RCRA requirements RCRA. NMED approved the request for establishment of these areas of contamination. The Laboratory later requested expansion of the two designated areas of contamination, which was subsequently approved by NMED. The approval of the areas of contamination designation for sites in North Ancho Canyon Aggregate Area required that soil not be returned to the point of origin unless contaminant concentrations are less than residential cleanup levels. Two areas located along the eastern boundary of SWMU 39-001(a), within the designated area of contamination, were used to stage electrical capacitors removed from the SWMU 39-001(a) landfill. A release of PCB-contaminated oil from the capacitors was discovered while the capacitors were being staged on-site.

Following the removal of all waste and contaminated soil from the waste stockpile areas at SWMUs 39-001(a) and 39-001(b) and the removal of the capacitors and visually-contaminated soil from the capacitor staging areas at SWMU 39-001(a), sampling was performed in 2010 within and around the footprints of the former waste stockpile and capacitor staging areas in order to characterize residual contamination remaining on the surface after completion of waste management activities to determine whether additional cleanup was required. Based on confirmation sampling results, several feet of contaminated soil was excavated from specific locations within the waste stockpile areas and disposed of off-site. Results from additional confirmation sampling indicated that additional remediation would be required. Proposed sampling and remediation activities for the former waste staging areas is described in the 2011 approved Phase II Investigation Work Plan (IWP) for North Ancho Canyon Aggregate Area, Revision 1 (LANL 2011, 201561; NMED 2011, 203447).

This sampling was unrelated to the sampling performed during the 2009 Phase I Consent Order investigation to characterize the nature and extent of contamination at the associated SWMUs, and the results of the sampling did not affect the conclusions of the 2009 North Ancho Canyon Aggregate Area investigation.

G-2.1.2 SWMU 39-002(a) – Storage Area

SWMU 39-002(a) consists of three former storage areas that were associated with former Building 39-2.

Area 1 of SWMU 39-002(a) was a former unpaved, outdoor storage area and satellite accumulation area (SAA) next to the northwest corner of former building 39-2 at TA-39. The site measured approximately 25 ft × 30 ft, and was used for storage for approximately 10 yr before being registered as an SAA. A 30-gal. drum with small quantities of solvents (acetone and ethanol) and adhesives, along with rags and paper wipes contaminated with solvents or adhesives, was stored at the site. The area was also used to store lead-containing materials and damaged capacitors and transformers that may have contained PCBs. This SAA was removed from service in April 1993. Building 39-2 was demolished in 2016.

Area 2 of SWMU 39-002(a) is a former indoor SAA (inside room 18-A of building 39-2) that was used for approximately 10 yr for storing waste chemicals from photographic processing in 5-gal containers. According to the LANL RCRA storage area database dated July 2017, Area 2 SAA was removed in March 1993. No known or documented releases are associated with this SAA. Because the site was located inside a building, there was no potential for direct environmental releases.

Area 3 of SWMU 39-002(a) is a former outdoor SAA and holding and receiving area located on the asphalt driveway at the north end of the loading dock on the southeast side of building 39-2. The SAA measured approximately 5 ft wide × 5 ft long. Building 39-02 was demolished in 2016. Used vacuum pump oil contaminated with solvents, ethanol, acetone, and trichloroethane were stored in the Area 3 SAA. According to the LANL RCRA storage area database dated July 2017, the Area 3 SAA was removed in April 1993; no known or documented releases are associated with this SAA. The storage area where the SAA was located had not been used before 2007.

G-2.1.3 AOC 39-002(b) – Storage Area

AOC 39-002(b) consists of a former SAA that was located on a 5 ft × 5 ft concrete pad adjacent to a firing site support building (structure 39-6) [(SWMU) 39-004(c)] at TA-39. Beginning in 1953, the area was used to store small quantities of paper contaminated with waste solvents (ethanol, acetone, trichloroethane), copper sulfate, transformer oil, vacuum pump grease, and photographic waste. The date the SAA was established is not known; however, the SAA was removed from service in 1993. The concrete pad is intact; no staining is visible on the pad. AOC 39-002(b) is located within the blast radius of an active firing site [SWMU 39-004(c)].

G-2.1.4 SWMU 39-006(a) – Septic System

SWMU 39-006(a) consists of a septic system with inactive and active components located east and south of former building 39-2 at TA-39. The 1990 SWMU report describes SWMU 39-006(a) as an active septic system consisting of a septic tank (structure 39-104), a former septic tank (former structure 39-12), inlet and outlet drainlines, a siphon box, distribution boxes, a subsurface sand filter, and a former outfall that served as a sanitary waste system for former building 39-2 (LANL 1990, 007513). The original/inactive portion of the septic system was constructed in 1952, consisting of:

- a septic tank (former structure 39-12) measuring approximately 12 ft long × 7 ft wide × 6 ft deep,
- 4-in. and 6-in.-diameter vitrified clay pipe (VCP) inlet and outlet drainlines,
- a subsurface sand filter,
- three manholes (structures 39-85, 39-86, and 39-87), and
- an outfall located approximately 225 ft south of the original subsurface sand filter.

Septic tank 39-12 was located 100 ft east of former building 39-2 and was connected to a sand filter north of New Mexico (NM) State Road 4. The sand filter discharged to an outfall south of NM State Road 4 in North Ancho Canyon. The system only received discharges from building 39-2. Photographic-processing chemicals from former building 39-2 were routinely discharged to septic tank 39-12, eventually causing the septic tank to malfunction. To correct the problem, a chemical seepage pit was installed directly north of former septic tank 39-12 in 1973 to manage the photographic-processing chemicals. The chemical seepage pit consisted of an open pit approximately 12 ft deep and filled with cobble. A corrugated metal pipe approximately 1 ft in diameter runs vertically through the center of the pit. The seepage pit handled approximately 75 gal./yr until 1992.

In 1973 the entire septic system was upgraded when septic tank 39-12 was enlarged to a capacity of 1860-gal., and a new subsurface sand filter and outfall were installed on the south side of NM State Road 4; at that time, use of the original subsurface sand filter and outfall were discontinued. The upgraded septic system consisted of the expanded septic tank 39-12, 4-in. and 6-in.in diameter VCP inlet and outlet drainlines, a siphon box, two distribution boxes, a new subsurface sand filter, three manholes (structures 39-85, 39-86, and 39-87), and a new outfall located south of NM State Road 4 that continued to serve only former building 39-2.

In 1984, septic tank 39-12 was abandoned in place and a new 2,400-gal.-capacity septic tank (structure 39-104) was installed as part of the existing septic system. The newly installed septic tank 39-104 served former buildings 39-2, 39-100, 39-103, 39-107, and 39-101, and buildings 39-62 and 39-98, and it discharged to the subsurface sand filter and the outfall located south of NM State Road 4. Septic tank 39-104, the new sand filter south of NM State Road 4, and the still-active drainlines are part of the SWMU 39-006(a) active components. In 1989, the 6-in.-diameter VCP outlet from the new sand filter was plugged, eliminating the discharge to the outfall. Buildings 39-2, 39-100, 39-101, 39-103, and 39-107 underwent decontamination and decommissioning (D&D) and were removed at various dates. Buildings 39-62 and 39-98 remain in place. The original/inactive septic tank (former structure 39-12), inactive chemical seepage pit, and the original subsurface sand filter were removed during 2009 Phase I Consent Order investigation field activities.

G-2.1.5 SWMU 39-007(a) – Storage Area

SWMU 39-007(a) is the location of a former storage area on a concrete pad under a covered porch outside the east side of an equipment shelter (structure 39-63) at TA-39. The dates of operation of the storage area are not known. Used oil containing lead and solvents was stored at this area. The area around the concrete pad is relatively flat but slopes eastward to a drainage near the adjacent road. A portion of the site was remediated during a 1995 voluntary corrective action (VCA) to remove PCB-contaminated soil (LANL 1996, 053786).

G-2.1.6 SWMU 39-010 – Excavated Soil Pile

SWMU 39-010 is an area used for staging soil excavated during the 1978 construction of a firing site [SWMU 39-004(e)] at TA-39. During construction of the firing site, large quantities of soil were removed and deposited in the canyon east of the firing site, forming SWMU 39-010. The site has been inactive since 1978. This soil dump, covering approximately 76,200 ft^2, was not identified in the 1990 SWMU report (LANL 1990, 007513). However, it was noted in both the RFI work plan (LANL 1993, 015316) and described in a letter notification to NMED designating a new SWMU (LANL 2001, 071215).

G-2.2 Investigation Sampling

The final data set used to identify chemicals of potential concern (COPCs) for the North Ancho Canyon Aggregate Area and used in this appendix to evaluate the potential risks to human health and the environment are the qualified analytical results from historical sampling activities and the 2022–2023 investigation. Only those data determined to be of decision-level quality after the data quality assessment (Appendix D) are included in the final data set evaluated in this appendix.

G-2.3 Determination of COPCs

Section 5.0 of the investigation report summarizes the COPC selection process. Only COPCs detected above background values (BVs) (inorganic chemicals and naturally occurring radionuclides) with detection limits (DLs) greater than BVs (inorganic chemicals) and detected (organic chemicals, inorganic chemicals with no BVs, and fallout radionuclides) were retained. The industrial scenario used data for samples collected at 0.0–1.0 ft below ground surface (bgs). The residential and construction worker scenarios used data for samples collected at 0.0–10.0 ft bgs. The ecological analysis used data for samples collected at 0.0–6.0 ft bgs. However, sampling depths often overlapped because of multiple investigations. Therefore, samples with a starting depth of less than the lower bound of the interval were included in the risk-screening assessments for a given scenario, as appropriate.

Tables G-2.3-1 to G-2.3-23 summarize the COPCs evaluated for potential risk for each site in the North Ancho Canyon Aggregate Area. Some of the COPCs identified in this report may not be evaluated for potential risk under one or more scenarios because samples were not collected within the specified depth intervals associated with a given scenario.

G-3.0 CONCEPTUAL SITE MODEL

The primary mechanisms of release related to historical contaminant sources are described in the approved investigation work plan for the North Ancho Canyon Aggregate Area (LANL 2007, 101894; NMED 2007, 098948) and the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675) and summarized in section 2.0 of the approved Phase II investigation work plan (LANL 2011, 201561; NMED 2011, 203447). Releases from sites within the North Ancho Canyon Aggregate Area may have occurred as a result of air emissions, surface releases, subsurface leaks, or effluent discharges. Previous sampling results indicated contamination from inorganic chemicals, organic chemicals, and radionuclides (LANL 2010, 108500.11).

G-3.1 Receptors and Exposure Pathways

The primary exposure pathway for human receptors is surface soil and subsurface soil/tuff that may be brought to the surface through intrusive activities. Migration of contamination to groundwater through the vadose zone is unlikely, given the depth to regional groundwater (approximately 600 to 1200 ft). 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 subsurface contamination to human receptors are complete for the resident and the construction worker, where appropriate. The exposure pathways are the same as those for surface soil. Sources, exposure pathways, and receptors are shown in the conceptual site model (CSM) (Figure G-3.1-1).

NMED "Risk Assessment Guidance for Investigation and Remediation" (NMED 2022, 702484) requires that sites larger than 2 acres be evaluated to determine whether beef ingestion is a plausible and complete exposure pathway. The beef ingestion pathway is not complete because most sites are fewer than 2 acres in size and grazing of cattle is prohibited in all Laboratory areas evaluated in this report. In addition, most areas are highly industrialized and are not conducive to grazing cattle. Therefore, further evaluation of the beef ingestion pathway is not necessary.

The sites in the North Ancho Canyon Aggregate Area are current or former industrial areas on Laboratory property. The developed sites provide minimal or no potential habitat for ecological receptors, especially where sites are covered with asphalt. 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 6.0 ft (ecological) or 10.0 ft (human health) are not complete unless contaminated soil or tuff has been excavated and brought to the surface.

Exposure pathways are complete for surface soil and tuff for ecological receptors at unpaved sites or areas where potential habitat is present. The potential pathways are root uptake by plants, inhalation of vapors (burrowing animals only), 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 exposure was not evaluated because of the lack of surface water features. Sources, exposure pathways, and receptors are presented in the CSM (Figure G-3.1-1).

G-3.2 Environmental Fate and Transport

The evaluation of environmental fate addresses the chemical processes affecting the persistence of chemicals in the environment, and the evaluation of transport addresses the physical processes affecting mobility along a migration pathway. Migration into soil and tuff depends on precipitation or snowmelt, soil moisture content, depth of soil, soil 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 investigation report. Results from the deepest samples collected at most sites showed either no detected concentrations of COPCs or low- to trace-level concentrations of only a few inorganic, organic, and/or radionuclide COPCs. The limited extent of contamination is related to the absence of the key factors that facilitate migration, as discussed previously. Given how long the contamination has been present in the subsurface, the physical and chemical properties of the COPCs, and the lack of saturated conditions, the potential for contaminant migration to groundwater is very low.

NMED risk guidance (NMED 2022, 702484) 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) may be used to identify chemical concentrations in soil that have the potential to contaminate groundwater. 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 unfounded for cases such as these North Ancho Canyon Aggregate Area sites, where sampling has shown that contamination is vertically bounded near the surface and the distance from the surface to the water table aquifer is considerable. 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 functions 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 and the potential for ion exchange (barium and other inorganic chemicals) 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.

Current potential transport mechanisms that may lead to exposure include the following:

- dissolution and/or particulate transport of surface contaminants during precipitation and runoff events
- airborne transport of contaminated surface soil
- continued dissolution and advective/dispersive transport of chemical contaminants contained in subsurface soil and tuff as a result of past operations
- disturbance of contaminants in shallow soil and subsurface tuff by Laboratory operations
- disturbance and uptake of contaminants in shallow soil by plants and animals

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 near the original release points. The primary potential release and transport mechanisms identified for North Ancho Canyon Aggregate Area include direct discharge; precipitation, sorption, and mechanical transport; dissolution and advective transport in water; and volatilization, diffusion, and dispersion. Less significant transport mechanisms include wind entrainment and dispersal of surface soil and uptake of contaminants from soil and water by biota.

Gas or vapor-phase contaminants such as VOCs are likely to volatilize to the atmosphere from near-surface soil and sediment and/or migrate by diffusion through air-filled pores in the vadose zone. Migration of vapor-phase contaminants from tuff into ambient air may occur by diffusion or advection driven by barometric pressure changes.

G-3.2.1 Inorganic Chemicals

In general, and particularly in a semiarid climate, inorganic chemicals are not highly soluble or mobile in the environment, although there are exceptions. The physical and chemical factors that determine the distribution of inorganic COPCs within the soil and tuff at the North Ancho Canyon Aggregate Area are the soil-water partition coefficient (K_d) of the inorganic chemicals, the pH of the soil, soil characteristics (such as sand or clay content), and the redox potential (Eh). The interaction of these factors is complex, but 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 values. Chemicals with K_d values greater than 40 are very unlikely to migrate through soil toward the water table.

Table G-3.2-1 presents the K_d values and water solubility for the inorganic COPCs for the North Ancho Canyon Aggregate Area. Based on this criterion, the following inorganic COPCs have a low potential to mobilize and migrate through soil and the vadose zone: aluminum, antimony, barium, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, sodium, thallium, vanadium, and zinc. The K_d values for arsenic, copper, cyanide, iron, magnesium, nitrate, perchlorate, selenium, silver, and uranium are less than 40 and may indicate a greater potential to mobilize and migrate through soil and the vadose zone beneath the sites. These potentially more mobile inorganics with low K_d values are discussed in more detail below.

It is important to note that other factors besides the K_d values (e.g., speciation in soil, Eh, pH, and soil mineralogy) also play significant roles in the likelihood that inorganic chemicals will migrate. Nutrients necessary for life, such as calcium, magnesium, and sodium, are not discussed. 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 1997, 056531) https://www.atsdr.cdc.gov/toxprofiledocs/index.html.

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 found in soil and in this form, arsenic is relatively immobile. However, under low-pH and reducing conditions, arsenic can become soluble and may leach into groundwater or result in runoff of arsenic into surface waters. Arsenic is expected to have low mobility under the environmental conditions (neutral to slightly alkaline soil pH and oxidizing near-surface conditions) present at the North Ancho Canyon Aggregate Area.

Copper movement in soil is determined by physical and chemical interactions with the soil components. Most copper deposited in soil will be strongly adsorbed and remains in the upper few centimeters of soil. Copper will adsorb to organic matter, carbonate minerals, clay minerals, or 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. Soil in the area is neutral to slightly alkaline, so the leaching of copper is not a concern at this site. 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.

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 at low concentrations in subsurface soil is likely to biodegrade under both aerobic and anaerobic conditions. Cyanide is present at the site in trace to low levels and is not expected to be mobile.

Iron is naturally occurring in soil and tuff and may be relatively mobile under reducing conditions. Iron is sensitive to soil pH conditions, occurring 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 minerals, such as lepidocrocite, hematite, and goethite. Iron is not expected to be mobile in the neutral to slightly alkaline, well-drained soil at the North Ancho Canyon Aggregate Area.

Nitrate is an inorganic water-soluble salt with the potential for rapid migration through soils to surface water and groundwater. Sorption of anions such as nitrate is insignificant in most soils. Therefore, leaching of excess soil nitrate into bodies of water is an important consideration. Drainage characteristics of soils are strongly related to nitrate levels in shallow wells near agricultural areas. Other factors affecting leaching potential include the texture of the soil, pH, precipitation rates, tillage, and the types of crops or vegetation that may be planted in the soils. Nitrate has the potential to move into various environmental compartments and is subject to abiotic and biotic degradation processes. Transformation and degradation processes include denitrification to atmospheric nitrogen and plant uptake. Levels of nitrate in soil vary considerably as a function of soil properties, temperature, precipitation rates, nitrogen loadings, farming practices (tillage, crops planted), and seasonal changes. In well-drained aerobic soils, the conversion of ammonia into nitrate (nitrification) increases the soil-nitrate content. In anaerobic soils with high organic matter, such as waterlogged soils or wetlands, denitrification decreases the levels of nitrate in soils. Acidic soils tend to have lower levels of nitrate since the nitrification process ceases at pH levels below 4.5. Nitrate is expected to have moderate mobility under the environmental conditions (neutral to slightly alkaline soil pH and oxidizing near-surface conditions) present at the North Ancho Canyon Aggregate Area; however, lack of soil moisture and precipitation is expected to limit mobility of nitrate.

Perchlorate is somewhat soluble in water and may migrate with water molecules in saturated soil. As noted above, the subsurface material beneath the sites has low moisture content, which inhibits the mobility of 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 of 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 soil pH in the North Ancho Canyon Aggregate Area is neutral to slightly alkaline, indicating that selenium is not likely to migrate.

Silver is released to air and water via natural processes, such as the weathering of rock and the erosion of soil. 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 they may potentially migrate into the subsurface. Site conditions are neutral to slightly alkaline and silver is not expected to be mobile.

Uranium is a natural and commonly occurring radioactive element that is 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, therefore, are 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 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.

G-3.2.2 Organic Chemicals

Table G-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 North Ancho Canyon Aggregate Area. The 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 of organic COPCs at the North Ancho Canyon Aggregate Area. The information is summarized from “Excerpted pages from Fate and Transport of Organic Chemicals in the Environment: A Practical Guide, 2nd Ed.” (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. Several organic COPCs at the North Ancho Canyon Aggregate Area sites have water solubilities greater than 1000 mg/L, including acetone, acetonitrile, 4-amino-2,6-dinitrotoluene, 2-amino-2,6-dinitrotoluene, benzene, benzoic acid, 2-butanone, chloromethane, di-n-butylphthalate, dimethylphthalate, diethylphthalate, 2-hexanone, iodomethane, methylene chloride, nitroglycerin, phenol, tetryl, trichloroethene (TCE), and trichlorofluoromethane.

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, are slightly prone to biodegradation, and are not rapidly metabolized in plants and animals. The organic COPCs identified as having water solubilities less than 10 mg/L are acenaphthene; anthracene; Aroclor-1242; Aroclor-1248; 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; 4,4’-DDE; 4,4’-DDT; di-n-octylphthalate, dibenz(a,h)anthracene; dibenzofuran; fluoranthene; fluorene; Her Majesty’s Explosives (HMX), indeno(1,2,3-cd)pyrene; 4,4’-methoxychlor; phenanthrene; pyrene; and 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD).

Vapor pressure is a chemical characteristic used to evaluate the tendency of organic chemicals to volatilize. Chemicals with vapor pressure greater than 0.01 mm Hg are likely to volatilize, and concentrations at the site are therefore reduced over time. Vapors of these chemicals are more likely to travel toward the atmosphere and not migrate towards groundwater. Acetone; acetonitrile; benzene; 2-butanone; chloromethane; 1,2-dichlorobenzene; 1,4-dichlorobenzene; ethylbenzene; 2-hexanone; iodomethane; isopropylbenzene; 4-isopropyltoluene; methylene chloride; 1-methylnaphthalene; 2-methylnaphthalene; naphthalene; tetrachloroethene; toluene; TCE; trichlorofluoromethane; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; 1,2-xylene; and 1,3-xylene+1,4-xylene 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. Benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; bis(2-ethylhexyl)phthalate; carbazole; chrysene; 4,4-DDT; di-n-octylphthalate; dibenz(a,h)anthracene;

HMX; indeno(1,2,3-cd)pyrene; PETN (pentaerythritol tetranitrate), RDX (Royal Demolition Explosive [1,3,5-trinitro-1,3,5-triazine]); 2,3,7,8-TCDD; and tetryl have vapor pressures less than 0.000001 mm Hg.

The K_{ow} is an indicator of the potential for an organic chemical 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} above 1000 [Log K_{ow} above 3], the greater the affinity the chemical has for bioaccumulation and bioconcentration in the food chain, the greater the potential for sorption in the soil, and the lower the mobility. Chemicals with Kow above 100,000 [Log Kow above 5] are considered highly hydrophobic and bioaccumulative (EPA 2008, 702826). COPCs at the North Ancho Canyon Aggregate Area sites that have a K_{ow} greater than 100,000 include Aroclor-1242, Aroclor-1248, 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; 4,4’-DDE; 4,4’-DDT; di-n-octylphthalate, dibenz(a,h)anthracene; fluoranthene; indeno(1,2,3-cd)pyrene; 4,4’-methoxychlor; pentachlorophenol, and 2,3,7,8-TCDD.

A K_{ow} of less than 500 [Log K_{ow} less than 2.7] indicates high water solubility, mobility, little to no affinity for bioaccumulation, and degradability by microbes, plants, and animals. Chemicals at the North Ancho Canyon Aggregate Area sites that have a K_{ow} less than 500 are acetone; acetonitrile, 4-amino-2,6-dinitrotoluene; 2-amino-2,6-dinitrotoluene; benzene; benzoic acid, 2-butanone, chloromethane, diethylphthalate; dimethylphthalate; 2-hexanone; HMX; iodomethane; methylene chloride; nitroglycerin; phenol, PETN; RDX; triaminotrinitrobenzene (TATB), tetryl; TCE; trichlorofluoromethane; 2,4,6-trinitrotoluene; and toluene.

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. Most organic COPCs have K_{oc} values above 500 L/kg, indicating a very low potential to migrate toward groundwater. The organic COPCs with K_{oc} values less than 500 L/kg include acetone; acetonitrile; 4-amino-2,6-dinitrotoluene; 2-amino-2,6-dinitrotoluene; benzene; benzoic acid; 2-butanone; chloromethane; di-n-butylphthalate; 1,2-dichlorobenzene; 1,4-dichlorobenzene; dimethylphthalate; diethylphthalate; ethylbenzene; 2-hexanone; iodomethane; methylene chloride; nitroglycerin; phenol; RDX; tetrachloroethene; tetryl; toluene; TCE; trichlorofluoromethane; 1,2-xylene; and 1,3-xylene+1,4-xylene.

Aroclors, polycyclic aromatic hydrocarbons (PAHs), and phthalates are the least mobile and the most likely to bioaccumulate. Acetone, benzene, 2-hexanone, methylene chloride, and TCE are more soluble and volatile, and are more likely to travel toward the atmosphere and not migrate toward groundwater. Because the organic COPCs were detected at low concentrations and extent is defined, they are not likely to migrate to groundwater or to accumulate in plants or animals.

G-3.2.3 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 toward the water table.

Table G-3.2-3 gives physical and chemical properties of the radionuclide COPCs identified at the North Ancho Canyon Aggregate Area sites. Based on K_d values, cesium-134, cesium-137, and plutonium-239/240 have a very low potential to migrate toward groundwater at the sites within the

North Ancho Canyon Aggregate Area. The K_d values for tritium, uranium-234, uranium-235/236, and uranium-238 are less than 40 and indicate a potential to migrate towards groundwater. Migration is mitigated by the arid conditions and low soil moisture at the site.

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 depends 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. Tritium activities in the subsurface at the area of elevated radioactivity are low (generally <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.

Uranium is a natural and commonly occurring radioactive element that is 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, therefore, are 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.

G-3.3 Exposure Point Concentration Calculations

The exposure point concentrations (EPCs) represent upper-bound concentrations of COPCs. For comparison with risk-screening levels (RSLs), the upper confidence limit (UCL) of the arithmetic mean was calculated when possible and used as the EPC. The UCLs were calculated using all available decision-level data within the depth range of interest. If an appropriate UCL of the mean could not be calculated due to low detection frequency or sample size, or if the UCL exceeded the maximum concentration, then the maximum detected concentration of the COPC was used as the EPC (maximum DLs were used as the EPCs for some inorganic COPCs). 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 G-2.3-1 to G-2.3-23.

The UCLs of the mean concentrations were calculated using the U.S. Environmental Protection Agency (EPA) ProUCL 5.2 software, which is based on EPA guidance. The ProUCL program calculates 95%, 97.5%, and 99% UCLs and recommends a distribution and UCL. The 95% UCL for the recommended calculation method was used as the EPC unless the lognormal distribution resulted in recommendation of the Kaplan Meier UCL based upon Land's H-statistic (KM-H-UCL). In this case, the nonparametric bias-corrected and accelerated (BCA) Bootstrap UCL was used when the standard deviation of the logged mean was less than 1; otherwise, the Bootstrap t UCL was applied. If multiple UCLs were recommended, the highest one was conservatively 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 often are nonparametric (no definable shape to the distribution). The ProUCL documentation strongly recommends against using the maximum detected concentration for the EPC. The maximum detected concentration was used to represent the EPC for COPCs only when there were too few detections to calculate a UCL. Input and output data files for ProUCL calculations are provided on CD as Attachment G-1.

The EPC for chlorinated dioxins and furans is calculated based on toxicity equivalency to 2,3,7,8-TCDD. Toxicity equivalence concentrations (TECs) are calculated for each individual sample. If five or more samples are available, then the TECs were input to ProUCL for calculation of 95% UCL to be used as the EPC. Otherwise, the maximum calculated TEC is used as the EPC. TEC calculations are provided in Attachment G-2.

G-4.0 HUMAN HEALTH RISK-SCREENING EVALUATIONS

Human health risk-screening assessments were conducted for six SWMUs and AOCs in the North Ancho Canyon Aggregate Area. All sites were screened for construction worker and residential scenarios using data from 0.0 to 10.0 ft bgs. Sites also were screened for the industrial scenario using data from 0.0 to 1.0 ft bgs. The human health risk-screening assessments compared either the 95% UCL of the mean concentration or the maximum detected concentration of each COPC with SSLs for chemicals and screening action levels (SALs) for radionuclides.

G-4.1 Human Health SSLs and SALs

Human health risk-screening assessments were conducted using SSLs for the construction worker, industrial, and residential scenarios; obtained from NMED guidance (NMED 2022, 702484). The NMED SSLs are based on a target hazard quotient (HQ) of 1 and a target cancer risk of 1×10^{-5} (NMED 2022, 702484). If SSLs were not available from NMED guidance, the EPA regional screening tables (https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables) were used. However, EPA regional screening levels do not include construction worker values, so if NMED does not have a construction worker SSL, then a construction worker SSL must be calculated using the toxicity data from the EPA regional screening table and the parameters and equations from the NMED guidance (NMED 2022, 702484). Attachment G-3 reports the calculated construction worker values used in this report. The EPA regional screening levels 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}. Surrogate chemicals also were used for some COPCs without an SSL based on structural similarity or because the COPC is a breakdown product. Exposure parameters used to calculate the industrial, construction worker, and residential SSLs are presented in Table G-4.1-1.

Lead was evaluated separately using an alternative method following NMED soil-screening guidance. See section G-4.4.1 for more information. Essential nutrients and total petroleum hydrocarbons (TPH) were also evaluated separately as explained in sections G-4.4.2 and G-4.4.3, respectively.

Radionuclide SALs were used for comparison with radionuclide COPC EPCs and were derived using the Residual Radioactivity (RESRAD) model, "RESRAD-ONSITE 7.2 User's Guide" (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/). The SALs are based on a 25-mrem/yr dose. Exposure parameters used to calculate the SALs are presented in Tables G-4.1-2 and G-4.1-3.

G-4.2 Results of Human Health Screening Evaluation

The EPC of each COPC was compared with the SSLs for the industrial, construction worker, and residential scenarios, as appropriate. For carcinogenic chemicals, the EPCs were divided by the SSL and multiplied by 1×10^{-5}. The sum of the carcinogenic risks was compared with the NMED target cancer risk level of 1×10^{-5}. For noncarcinogenic chemicals, an HQ was generated for each COPC by dividing the EPC by the SSL. The HQs were summed to generate a hazard index (HI). The HI was compared with the NMED target HI of 1. Lead, nutrient, and TPH concentrations were compared with values computed from an alternative evaluation method. See sections G-4.4.1, G-4.4.2, and G-4.4.3 for more information

(NMED 2022, 702484). Total doses for each exposure scenario were estimated using SALs. The radionuclide EPCs were divided by the SAL and multiplied by 25 mrem/yr. The results are presented in Tables G-4.2-1 to G-4.2-9 and are described below for each SWMU evaluated.

G-4.2.1 SWMU 39-001(a) – Landfill

A risk-screening assessment for the industrial scenario was not calculated because the 0.0–1.0 ft bgs depth interval was excavated.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-1, G-4.2-2, and G-4.2-3. The total excess cancer risk for the construction worker scenario is 3×10^{-8}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.06, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.1 mrem/yr.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-4, G-4.2-5, and G-4.2-6. The total excess cancer risk for the residential scenario is 3×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 0.2, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr.

G-4.2.2 SWMU 39-002(a) – Storage Area

Area 1

The results of the risk-screening assessment for the industrial scenario for Area 1 of SWMU 39-002(a) are presented in Tables G-4.2-7, G-4.2-8, and G-4.2-9. The total excess cancer risk for the industrial scenario is 5×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.5, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.09 mrem/yr.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-10, G-4.2-11, and G-4.2-12. The total excess cancer risk for the construction worker scenario is 3×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.5, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.2 mrem/yr.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-13, G-4.2-14, and G-4.2-15. The total excess cancer risk for the residential scenario is 3×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 2, which is greater than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 1 mrem/yr.

Lead was identified as a COPC for industrial, construction worker, and residential scenarios and is evaluated in section G-4.4-1. Total petroleum hydrocarbons – diesel range organics was identified as a COPC for industrial, construction worker, and residential scenarios and is evaluated in section G-4.4-3.

Area 2

The results of the risk-screening assessment for the industrial scenario for Area 2 of SWMU 39-002(a) are presented in Tables G-4.2-16 and G-4.2-17. The total excess cancer risk for the industrial scenario is 3×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.1, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-18 and G-4.2-19. The total excess cancer risk for the construction worker scenario is 2×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.3, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-20 and G-4.2-21. The total excess cancer risk for the residential scenario is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 1, which is equal to the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Area 3

The results of the risk-screening assessment for the industrial scenario for Area 3 of SWMU 39-002(a) are presented in Tables G-4.2-22 and G-4.2-23. The total excess cancer risk for the industrial scenario is 2×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.003, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-24 and G-4.2-25. The total excess cancer risk for the construction worker scenario is 3×10^{-8}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.02, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-26 and G-4.2-27. The total excess cancer risk for the residential scenario is 4×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 0.04, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

G-4.2.3 AOC 39-002(b) – Storage Area

The results of the risk-screening assessment for the industrial scenario for SWMU 39-006(a) are presented in Tables G-4.2-28, G-4.2-29, and G-4.2-30. The total excess cancer risk for the industrial scenario is 2×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.02, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-31, G-4.2-32, and G-4.2-33. The total excess cancer risk for the construction worker scenario is 6×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.2, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.2 mrem/yr.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-34, G-4.2-35, and G-4.2-36. The total excess cancer risk for the residential scenario is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 1, which is equal to the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.7 mrem/yr.

G-4.2.4 SWMU 39-006(a) – Septic System

The results of the risk-screening assessment for the industrial scenario for SWMU 39-006(a) are presented in Tables G-4.2-37, G-4.2-38, and G-4.2-39. The total excess cancer risk for the industrial scenario is 1×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.5, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.06 mrem/yr.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-40, G-4.2-41, and G-4.2-42. The total excess cancer risk for the construction worker scenario is 7×10^{-9}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.4, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-43, G-4.2-44, and G-4.2-45. The total excess cancer risk for the residential scenario is 7×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 0.4, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 2 mrem/yr.

Lead was identified as a COPC for industrial, construction worker, and residential scenarios and is evaluated in section G-4.4-1.

G-4.2.5 SWMU 39-007(a) – Storage Area

The results of the risk-screening assessment for the industrial scenario are presented in Tables G-4.2-46 and G-4.2-47. The total excess cancer risk for the industrial scenario is 4×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.006, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-48 and G-4.2-49. The total excess cancer risk for the construction worker scenario is 5×10^{-8}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.01, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-50 and G-4.2-51. The total excess cancer risk for the residential scenario is 2×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 0.06, which is less than the NMED target HI of 1 (NMED 2022, 702484). No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

G-4.2.6 SWMU 39-010 – Excavated Soil Pile

The results of the risk-screening assessment for the industrial scenario for SWMU 39-010 are presented in Tables G-4.2-52, G-4.2-53, and G-4.2-54. The total excess cancer risk for the industrial scenario is 1×10^{-7}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The industrial HI is 0.01, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 0.5 mrem/yr.

The results of the risk-screening assessment for the construction worker scenario are presented in Tables G-4.2-55, G-4.2-56, and G-4.2-57. The total excess cancer risk for the construction worker scenario is 2×10^{-8}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The construction worker HI is 0.2, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs and the total estimated dose is 10 mrem/yr.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-58, G-4.2-59, and G-4.2-60. The total excess cancer risk for the residential scenario is 1×10^{-6}, which is less than the NMED target risk level of 1×10^{-5} (NMED 2022, 702484). The residential HI is 0.2, which is less than the NMED target HI of 1 (NMED 2022, 702484). Radionuclide EPCs were less than SALs; however, the total estimated dose is 30 mrem/yr, which exceeds the benchmark of 25 mrem/yr.

G-4.3 Vapor-Intrusion Pathway

NMED soil-screening guidance (NMED 2022, 702484, Section 2.5) requires an evaluation of the vapor-intrusion pathway per EPA guidance. Note that NMED guidance cites "OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance"; however, EPA's "Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air" is the most current guidance (https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor). Residential receptors and commercial and industrial workers could be exposed to volatile compounds vaporized from subsurface media (soil gas and/or groundwater) through pore spaces in the vadose zone and building foundations (or slabs) into indoor air. This pathway must be evaluated if (1) compounds are present in subsurface media that are sufficiently volatile and toxic and (2) exposure could occur in existing or planned buildings. The executive summary of the above-mentioned EPA guidance specifically states that, among other criteria, the vapor-intrusion pathway is referred to as "complete" only if buildings exist that are occupied by one or more individuals when the vapor-forming chemicals are present indoors. The guidance further states that the vapor-intrusion pathway is incomplete if these conditions are absent and reasonably expected to be absent in the future.

For each site investigated, one of the following three designations was made for the vapor-intrusion pathway: (1) incomplete pathway and no action required, (2) potentially complete pathway and qualitative evaluation required, or (3) complete pathway and quantitative evaluation required. A summary of the vapor-intrusion pathway designations for each site is included in Table G-4.3-1. Because only bulk soil data are available for these sites, NMED vapor-intrusion screening levels are not directly applicable for the evaluation.

Incomplete Pathway: No Action Required

The vapor-intrusion pathway is designated as "incomplete" and will not be evaluated further if one of the following conditions is met:

(1) No buildings are located near the site and buildings are reasonably expected to be absent in the future (NMED 2022, 702484); https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor.

(2) Volatile and toxic compounds are not detected, meaning all the results were 100% nondetections.

(3) The site has no history of containing volatile and toxic compounds and VOC sampling was not conducted during the investigation.

Potentially Complete Pathway: Qualitative Evaluation Required

The vapor-intrusion pathway is designated as potentially complete if all of the following conditions are met:

(1) Detections of volatile and toxic compounds are minimally detected (e.g., once or twice) in site media (soil, tuff).

(2) No sources for volatile and toxic compounds are suspected.

(3) Concentrations are decreasing with depth.

A qualitative evaluation of the vapor-intrusion pathway will be used for the sites meeting the above criteria. Unless pore-gas sampling was specified in the approved investigation work plan for the site, the qualitative evaluation will be made using bulk soil data rather than pore-gas data. The qualitative evaluation will include all site-specific COPCs that are volatile and toxic (i.e., all COPCs having a Henry's Law constant of 1×10^{-5} atm-m^3/mol or greater, a molecular weight of approximately 200 g/mol or less and known to pose a potential cancer risk or noncancer hazard through the inhalation pathway). Nondetected organic compounds are not considered COPCs and will not be evaluated.

Complete Pathway: Quantitative Evaluation Required

The vapor-intrusion pathway is designated as "complete" for a specific building or collection of buildings when the following five conditions are met:

(1) A subsurface source of vapor-forming chemicals is present underneath or near the building(s) (e.g., VOCs are found at significant levels within 10 ft of the base of the foundation).

(2) Vapors form and have a route along which to migrate (be transported) toward the building.

(3) The building(s) is (are) susceptible to soil gas entry, which means openings exist for the vapors to enter the building and driving "forces" (e.g., air pressure differences between the building and the subsurface environment) exist to draw the vapors from the subsurface through the openings into the building(s).

(4) One or more vapor-forming chemicals composing the subsurface vapor source(s) is (are) present in the indoor environment.

(5) The building(s) is (are) occupied by one or more individuals when the vapor-forming chemical(s) is (are) present indoors.

SWMU 39-001(a), Area 2 of SWMU 39-002(a), Area 3 of SWMU 39-002(a), and SWMU 39-010 have no nearby buildings, and buildings are not reasonably anticipated to be present in the future; therefore, the vapor-intrusion pathway is incomplete and no action is required. Additional information for these SWMUs is presented in sections G-4.3.1, G-4.3.2, and G-4.3.6, respectively.

Volatile organic COPCs or VOCs were sampled near buildings for Area 1 of SWMU 39-002(a), AOC 39-002(b), SWMU 39-006(a), and SWMU 39-007(a) and, therefore, the vapor-intrusion pathway is designated as potentially complete. Additional lines of evidence are provided for these sites in sections G-4.3.2, G-4.3.3, G-4.3.4, and G-4.3.5, respectively.

G-4.3.1 SWMU 39-001(a) – Landfill

SWMU 39-001(a) is a former landfill north of the light gas-gun facility (building 39-69) at TA-39. The 1990 SWMU report identified the site as consisting of two 80- × 20- × 10-ft-deep rectangular trenches (LANL 1990, 007513). Based on the results of a 1993 geophysical survey, the 1997 RFI concluded this disposal area consists of a single amorphous unit. Excavation activities associated with the 2009 field investigation confirmed a solitary, irregularly shaped disposal trench coincident with the anomalies identified by the 1997 RFI geophysical survey. Interviews of site workers indicated that the landfill was used for disposal from 1953 to 1979 (LANL 1993, 015316; LANL 1997, 055633). Wastes disposed of in this landfill included firing-site debris consisting of metal, cabling, and wire, empty chemical containers, glass, wood, plastics, Styrofoam, concrete, and office waste. Waste disposed of before 1976 may have included heavy metals, PCB-containing oils, high explosives (HE), thorium isotopes, natural and depleted uranium, and solvents. SWMU 39-001(a) was completely excavated during the 2009 Phase I Consent Order investigation.

VOCs and semivolatile organic compounds (SVOCs) that meet the NMED criteria for volatility and toxicity were minimally detected at this site, and no buildings are present or reasonably anticipated to be present in the future. Therefore, the vapor-intrusion pathway is incomplete based upon NMED and EPA guidance (NMED 2022, 702484); https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor. Therefore, no further evaluation is necessary.

G-4.3.2 SWMU 39-002(a) – Storage Area

SWMU 39-002(a) consists of three former storage areas that were associated with former Building 39-2.

<u>Area 1</u>

Area 1 of SWMU 39-002(a) was a former unpaved, outdoor storage area and SAA next to the northwest corner of former building 39-2 at TA-39. The site measured approximately 25 ft × 30 ft and was used for storage for approximately 10 yr before being registered as an SAA. A 30-gal. drum with small quantities of solvents (acetone and ethanol) and adhesives, along with rags and paper wipes contaminated with solvents or adhesives, was stored at the site. The area was also used to store lead-containing materials and damaged capacitors and transformers that may have contained PCBs. This SAA was removed from service in April 1993. Building 39-2 was demolished in 2016. This SWMU is 115 ft from the access control facility (building 39-98), which is the nearest continually occupied structure nearby. Building 39-62 is located just north of Area 1 of SWMU 39-002(a) and is not continually occupied.

Several compounds meeting the criteria for volatility and toxicity were infrequently detected at this site. The VOCs 1,2-dichlorobenzene; ethylbenzene; iodomethane; methylene chloride; toluene; TCE; 1,2,4-trimethylbenzene; and xylenes all were detected infrequently in the 35 samples from the 0.0–1.0 ft depth interval and the 163 samples from the 0.0–10.0 ft depth interval. These compounds are minimally detected (e.g., at most three times) in site media. However, this is more than the one or two detections allowed as defined by NMED risk guidance (NMED 2022, 702484). Furthermore, one VOC (methylene chloride) was detected in 11 samples from 0.0 to 10.0 ft deep.

Ethylbenzene; methylene chloride; TCE; 1,2,4-trimethylbenzene; and xylenes were detected at estimated (J-qualified) concentrations in one to three samples at a depth of 0.0–1.0 ft bgs at concentrations below the lowest reported DL. Methylene chloride was detected at estimated (J-qualified) concentrations similar to those found in the 0.0–1.0 ft bgs interval in eight samples found in the 1.0–3.0 ft bgs interval, with no detections from deeper intervals. Toluene (3 detections) was detected above maximum reporting limits in the 0.0–1.0 ft bgs interval, but not at deeper intervals. TCE was detected once at 1.0–2.0 ft bgs at similar concentrations as the shallower samples, but it was not detected in deeper (>2 ft bgs) samples. Ethylbenzene; toluene; and 1,2,4-trimethylbenzene had no detections from intervals below 1.0 ft bgs.

Dichlorobenzene[1,2-] was not detected at 0.0–1.0 ft bgs, but was detected at estimated (J-qualified) concentrations in three samples in the 0.0–10.0 ft bgs interval. There were no detections below 3.0 ft bgs. Iodomethane is sufficiently volatile (Henry's Law 5.23×10^{-3} atm-m^3/mole) and was detected in one sample from 1.0–2.0 ft bgs at an estimated (J-qualified) concentration of 0.00081 mg/kg. However, there are no inhalation toxicity data, and 1,2-dichlorobenzene will not be evaluated further for vapor intrusion.

One SVOC (naphthalene) that meets the criteria for volatility and toxicity was detected in 21 of 35 samples in the 0.0–1.0 ft bgs interval, and 72 of 163 samples at 0.0–10.0 ft bgs. The frequency of detection indicates that naphthalene does not meet the definition of minimally detected (e.g., once or twice) in site media based upon NMED's risk guidance (NMED 2022, 702484). The maximum concentration of 4.39 mg/kg was in the 1.2–2.2 ft bgs interval, and concentrations generally decreased at lower depths. The maximum concentration was well below industrial or residential SSLs.

The reporting limits, detected concentrations for each compound are shown in Table G-4.3-2. In addition, while not directly comparable to soil concentrations, the table includes the NMED vapor-intrusion SSL target indoor air concentrations for each compound.

Multiple Lines of Evidence Evaluation: The site description indicates solvent (or other volatile chemicals) usage, storage, or disposal at this site. The previously existing building was removed in 2016, and there are no occupied buildings over the footprint of this site. The nearest continually occupied building is approximately 115 ft away. A partially occupied building is immediately adjacent to the SMWU to the north.

VOCs and other potentially volatile and toxic chemicals were detected, in some cases frequently. No concentrations of VOCs were detected in samples collected from intervals greater than 4.0 ft bgs; therefore, concentrations have been shown to decrease with depth. In addition, soil gas samples are not recommended within 5 ft of ground surface because of the influence of ambient air (https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor) so collection of vapor samples at this site would not provide quantitative data. All estimated detections of VOCs except toluene are below or within the range of report DLs. Only one unqualified detection of toluene was higher than the maximum report DL.

While bulk soil concentrations are not directly comparable with indoor air concentrations, it is clear that none of the concentrations detected at this site would provide the mass required to exceed the indoor air vapor-intrusion SSLs for even a brief period. If any buildings, including slab-on-grade structures, are constructed at the site in the future, excavation for the purpose of leveling and installing footers would likely remove any impacted soil from beneath the footprint of the building.

Although VOCs and other volatile and toxic chemicals were detected, no continually occupied structures are located at or immediately adjacent to this site and none is planned for the foreseeable future. Therefore, the vapor-intrusion pathway is considered incomplete based upon NMED guidance (NMED 2022, 702484). None of the detected VOCs or SVOCs exceeded NMED SSLs, and significant concentrations are considered absent. Therefore, multiple lines of evidence indicate that no further evaluation is necessary.

Area 2

Area 2 of SWMU 39-002(a) is a former indoor SAA located in room 18-A of former building 39-2 that was used for storing waste chemicals from photographic processing. According to the Laboratory Resource Conservation and Recovery Act storage area database dated July 2017, this SAA was removed in March 1993. The building that previously housed Area 2 was demolished in 2016. No known or documented releases are associated with this SAA.

While VOCs and SVOCs that meet the NMED criteria for volatility and toxicity were minimally detected at this site, and because no buildings are present or reasonably anticipated to be present in the future, the vapor-intrusion pathway is incomplete based upon NMED and EPA guidance (NMED 2022, 702484); https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor. Therefore, no further evaluation is necessary.

Area 3

Area 3 of SWMU 39-002(a) is a former outdoor SAA and holding/receiving area that was located on the asphalt driveway at the north end of the loading dock on the southeast side of former building 39-2 that measured approximately 5 ft wide × 5 ft long. Building 39-2 was demolished in 2016.

While VOCs and SVOCs that meet the NMED criteria for volatility and toxicity were minimally detected at this site, and because no buildings are present or reasonably anticipated to be present in the future, the vapor-intrusion pathway is incomplete based upon NMED and EPA guidance (NMED 2022, 702484); https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor. Therefore, no further evaluation is necessary.

G-4.3.3 AOC 39-002(b) – Storage Area

AOC 39-002(b) consists of a former SAA that was located on a 5- × 5-ft concrete pad adjacent to a firing site support building (structure 39-6) [(SWMU) 39-004(c)] at TA-39. Beginning in 1953, the area was used to store small quantities of paper contaminated with waste solvents (ethanol, acetone, trichloroethane), copper sulfate, transformer oil, vacuum pump grease, and photographic waste. The date the SAA was established is not known; however, the SAA was removed from service in 1993. The concrete pad is intact; no staining is visible on the pad. AOC 39-002(b) is located within the blast radius of an active firing site [SWMU 39-004(c)]. The support buildings (buildings 39-6 and 39-138) are not continually occupied but are occupied part time. The buildings are approximately 25 or more feet away.

Three compounds meeting the criteria for volatility and toxicity were infrequently detected at this site. The VOCs 4-isopropyltoluene and trichloroethene were detected once in the 29 samples from the 0.0–10.0 ft bgs depth interval, and the VOC tetrachloroethene was detected twice. This meets the criteria of being minimally detected (i.e., one or two detections allowed) as defined by NMED (NMED 2022, 702484). No SVOCs that meet the definition of volatility and toxicity were detected at this site.

Isopropyltoluene[4-] was detected in the 2.0–3.0 ft bgs sample, but not from deeper samples, at concentrations above maximum report DLs. The two tetrachloroethene detections (estimated [J-qualified] and below typical report DL) were detected in the 2.0–3.0 ft bgs depth interval. Trichloroethene also was detected in the 2.0–3.0 ft bgs interval at concentrations above maximum report DLs. Maximum sample depth at this site was 7.0 ft bgs.

The reporting limits and detected concentrations for each compound are shown in Table G-4.3-3. In addition, while not directly comparable to soil concentrations, the table includes the NMED vapor-intrusion SSL target indoor air concentrations for each compound.

Multiple Lines of Evidence Evaluation: The site description indicates usage, storage, or disposal of solvents (or other volatile chemicals) at this site. The nearby structures (within approximately 25 feet) are occupied part time.

VOCs were minimally detected. No concentrations of VOCs were detected in samples collected from intervals greater than 3.0 ft bgs and, therefore, concentrations have been shown to decrease with depth. In addition, soil gas samples are not recommended within 5 ft of ground surface because of the influence of ambient air (https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor) and collection of vapor samples at this site would not provide quantitative data.

While bulk soil concentrations are not directly comparable with indoor air concentrations, it is clear that none of the concentrations detected at this site would provide the mass required to exceed the indoor air vapor-intrusion SSLs for even a brief period of time. If any buildings, including slab-on-grade structures, are constructed at the site in the future, excavation for the purpose of leveling and installing footers would likely remove any impacted soil from beneath the footprint of the building.

Although VOCs and other volatile and toxic chemicals were detected, concentrations are low and number of detections are minimal at this site. Furthermore, concentrations were observed to decrease with depth. The nearby structures are not continually occupied but are occupied only part time. Therefore, the vapor-intrusion pathway is considered incomplete based upon NMED guidance (NMED 2022, 702484). None of the detected VOCs or SVOCs exceeded NMED SSLs and, therefore, significant concentrations are considered absent. Therefore, multiple lines of evidence indicate that no further evaluation is necessary.

G-4.3.4 SWMU 39-006(a) – Septic System

SWMU 39-006(a) consists of a septic system with inactive and active components located east and south of former building 39-2 at TA-39. The 1990 SWMU report describes SWMU 39-006(a) as an active septic system consisting of a septic tank (structure 39-104), a former septic tank (former structure 39-12), inlet and outlet drainlines, a siphon box, distribution boxes, a subsurface sand filter, and a former outfall that served as a sanitary waste system for former building 39-2. The original/inactive portion of the septic system was constructed in 1952, consisting of:

- a septic tank (former structure 39-12) measuring approximately 12 ft long × 7 ft wide × 6 ft deep,
- 4-in.- and 6-in.-diameter vitrified clay pipe (VCP) inlet and outlet drainlines,
- a subsurface sand filter,
- three manholes (structures 39-85, 39-86, and 39-87), and
- an outfall located approximately 225 ft south of the original subsurface sand filter.

Septic tank 39-12 was located 100 ft east of former building 39-2 and was connected to a sand filter north of NM State Road 4. The sand filter discharged to an outfall south of NM State Road 4 in North Ancho Canyon. The system only received discharges from building 39-2. Photographic-processing chemicals from former building 39-2 were routinely discharged to septic tank 39-12, eventually causing the septic tank to malfunction. To correct the problem, a chemical seepage pit was installed directly north of former septic tank 39-12 in 1973 to manage the photographic-processing chemicals. The chemical seepage pit consisted of an open pit approximately 12 ft deep and filled with cobble; a corrugated metal pipe approximately 1 ft in diameter runs vertically through the center of the seepage pit. The seepage pit handled approximately 75 gal./yr until 1992.

In 1973 the entire septic system was upgraded when septic tank 39-12 was enlarged to a capacity of 1860-gal., and a new subsurface sand filter and outfall were installed on the south side of NM State Road 4; use of the original subsurface sand filter and outfall were discontinued at that time. The upgraded septic system consisted of the expanded septic tank 39-12, 4-in.- and 6-in.-diameter VCP inlet and outlet drainlines, a siphon box, two distribution boxes, a new subsurface sand filter, three manholes (structures 39-85, 39-86, and 39-87), and a new outfall located south of NM State Road 4 that continued to serve only former building 39-2.

In 1984, septic tank 39-12 was abandoned in place and a new 2400-gal.-capacity septic tank (structure 39-104) was installed as part of the existing septic system. The newly installed septic tank 39-104 served former buildings 39-2, 39-100, 39-103, 39-107, and 39-101, and buildings 39-62 and 39-98, and discharged to the subsurface sand filter and the outfall located south of NM State Road 4. Septic tank 39-104, the new sand filter south of NM State Road 4, and the still-active drainlines are part of the SWMU 39-006(a) active components. In 1989, the 6-in.-diameter VCP outlet from the new sand filter was plugged, eliminating discharge to the outfall. Buildings 39-2, 39-100, 39-101, 39-103, and 39-107 underwent D&D and were removed at various dates. Buildings 39-62 and 39-98 remain in place. The original/inactive septic tank (former structure 39-12), the inactive chemical seepage pit, and the original subsurface sand filter were removed during 2009 Phase I Consent Order investigation field activities.

Data collected for this SWMU from 1996 activities, 2009 Phase I Investigation Report, and 2022 Phase II investigation are decision-level data. Organics detected in the 14 samples collected included PAHs, PCBs, phthalates, benzoic acid, and VOCs including benzene, methylene chloride, 4-isopropyltoluene and acetone. Based on comparison of maximum detected concentrations to NMED SSLs, there were no elevated cancer risks or noncancer hazard for workers, construction workers, or residents.

Several compounds meeting the criteria for volatility and toxicity were infrequently detected at this site. The VOCs benzene; 2-butanone; 2-hexanone; iodomethane; 4-isopropyltoluene; toluene; 1,2,4-timethylbenzene; and xylenes all were infrequently detected. These compounds are minimally detected (e.g., at most 5 times out of 171 samples) in site media. However, this is more than the 1 or 2 detections allowed as defined by NMED risk guidance (NMED 2022, 702484). Furthermore, two VOCs (acetone and methylene chloride) were more frequently detected (16 and 33 detections, respectively). One SVOC, naphthalene, meets the volatility and toxicity criteria and was detected in 3 samples.

The reporting limits and detected concentrations for each compound are shown in Table G-4.3-4. In addition, while not directly comparable to soil concentrations, the table includes NMED vapor-intrusion SSL target indoor air concentrations for each compound.

- Acetone was detected in six samples. All detections were at depths of 6.0 ft bgs or greater. Twelve of the detections were estimated (J-flagged) concentrations below the lowest DL. The maximum detection (location 39-61790; 14.0–15.0 ft bgs) occurred south of the former original sand filter near NM Highway 4.
- Benzene was detected in only one sample (location 39-01502; 8.0–9.0 ft bgs) at the south edge of the former original septic tank.
- Iodomethane was detected at concentrations below the reported DL in only one sample (location 39-604872; 9.5–10.0 ft bgs) at the former chemical seepage pit.
- Butanone[2-] was detected in only two samples at concentrations below the reported DL. Location 39-61816 (12.0–13.0 ft bgs) is located south of NM Highway 4, and location 39-61804 (8.8–9.8 ft bgs) is located along the main drain line south of the former original septic tank.
- Hexanone[2-] was detected in only three samples and had the maximum detected result of any VOC (0.231 mg/kg at location 39-61825; 4.0–5.0 ft bgs). All three of the detections are south of NM Highway 4. The location of the maximum detection is at the former original outfall located south of NM Highway 4.
- Isopropyltoluene[4-] was detected in only three samples at J-flagged concentrations less than the DL. One detection occurred at the original septic tank (39-604874; 9.5-10.0 ft bgs), and two occurred in the 0.0–1.0 ft bgs interval at the outfall south of NM Highway 4.
- Methylene chloride was the most frequently detected VOC, with 33 detections, all of which were estimated (J-flagged) concentrations less than the DL, and they occurred at 12 locations. The maximum detection (0.0045 mg/kg; location 39-61835; 14.0–15.0 ft bgs) occurred at the former original sand filter. A majority of the methylene chloride detections (29 of 33) occurred at the former original sand filter. Two detections occurred at the outfall south of NM Highway 4 (location 39-61828), and two detections occurred in the far northwest along the former line that serviced former building 39-2 (locations 39-61793 and 39-61794).
- Naphthalene was detected in only three samples and at J-flagged concentrations less than the DL. Detections occurred at location 39-61805 (at former line servicing building 39-103) and at location 39-61797, along main drain line between septic tank and sand filter.
- Toluene was detected in only three samples at J-flagged concentrations less than the DL. Detections occurred at locations 39-64887 (6.0–7.0 ft bgs) and 39-61796 (5.8–6.8 ft bgs near original septic tank) and at location 39-604893 (1.0–3.0 ft bgs at sand filter).
- One detection occurred at the original septic tank (39-604874; 9.5–10.0 ft bgs), and two occurred in the 0.0–1.0 ft bgs interval at the outfall south of NM Highway 4.
- Trimethylbenzene[1,2,4-] was detected in only five samples, all of which were estimated (J-flagged) concentrations less than the DL, and they occurred at three locations near the sand filter. The maximum detection (0.0056 mg/kg) occurred at location 39-604886 at 6.0–7.0 ft bgs.
- Xylene was detected in only three samples at J-flagged concentrations less than the DL. All three locations were along the drain line south of NM Highway 4 (39-61820, 39-61821, and 39-61822).

VOCs were detected in multiple intervals, with most occurring in the vicinity of 10 ft bgs. Few VOC detections were in shallow soil intervals. Most of the detections were J-flagged estimated concentrations less than the DL. Furthermore, most of the detections occurred at the original sand filter, which is not near any buildings.

With the exception of acetone and methylene chloride, all detection frequencies are below 5%, indicating minimal levels of contamination and limited spatial extent. Acetone and methylene chloride were the most frequently detected VOCs. There were no elevated cancer risks or noncancer hazards for workers, construction workers, or residents based on comparison of maximum detected concentrations to NMED SSLs. Maximum VOC concentrations were much lower than the NMED SSLs, where the residential cumulative cancer risk across all constituents was 7×10^{-7} and the HI was 0.5.

Multiple Lines of Evidence Evaluation: The SWMU 39-006(a) was a septic system that serviced several former buildings. The site history noted that photographic processing wastes were routinely discharged to the system. No occupied buildings are near the inactive portions of the septic system. However, two buildings are connected to the active septic system lines.

- Building 39-62 is located approximately 150 ft northwest from 39-006(a) sample location 39-61794, and approximately 300 linear ft upgradient along the main drain line from the inactive portions of the septic system. Building 39-62 is not occupied full time.
- Building 39-98 is approximately 250 ft northeast from a former septic tank and chemical seepage pit, and approximately 375 linear ft upgradient along the main drain line from the inactive portions of the septic system. Building 39-98 is the access control building and so is routinely occupied.

Although VOCs and other volatile and toxic chemicals were detected, they are infrequently detected, concentrations are low and/or are detected only at locations 150 ft or more distant from occupied structures. Most of the detections were J-flagged estimated concentrations less than the DL. While bulk soil concentrations are not directly comparable with indoor air concentrations, it is clear that none of the concentrations detected at this site would provide the mass required to exceed the indoor air vapor-intrusion SSLs for even a brief period of time. None of the detected VOCs or other volatile chemicals exceeded NMED SSLs and, therefore, significant concentrations are considered absent. Therefore, multiple lines of evidence indicate that no further evaluation of the vapor-intrusion pathway is necessary.

G-4.3.5 SWMU 39-007(a) – Storage Area

SWMU 39-007(a) is the location of a former storage area on a concrete pad under a covered porch outside the east side of an equipment shelter (structure 39-63) at TA-39. The dates of operation of the storage area are not known. Used oil containing lead and solvents was stored at this area. The area around the concrete pad is relatively flat but slopes eastward to a drainage near the adjacent road. A portion of the site was remediated during a 1995 voluntary corrective action to remove PCB-contaminated soil (LANL 1996, 053786).

SWMU 39-007(a) is located in an isolated area, approximately 700 ft east of AOC 39-001(b) and SWMU 39-004(c). It is not impacted by or related to other SWMUs or AOCs. An unoccupied storage shed exists at the site, but no occupied structures are planned for this site in the future.

Several compounds meeting the criteria for volatility and toxicity were infrequently detected at this site. The VOCs acetone; 1,4-dichlorobenzene; ethylbenzene; and toluene were all infrequently detected at estimated (J-qualified) concentrations. These compounds are rarely detected (e.g., at most three times) in site media. Acetone and 1,4-dichlorobenzene were detected twice; ethylbenzene and toluene each were detected three times. However, for ethylbenzene and toluene this is more than the one or two detections allowed by NMED "Risk Assessment Guidance for Investigations and Remediation" (NMED 2022, 702484) for defining volatile contaminants as minimally detected. None of the SVOCs meeting the definition of volatility or toxicity was detected at this site.

In the 8 samples analyzed for VOCs from the 0.0–1.0 ft bgs interval, 1,4-dichlorobenzene, ethylbenzene, and toluene were detected at estimated (J-qualified) concentrations in 2 samples each at concentrations below the lowest reported DL. Additionally, VOCs were detected infrequently in the 13 soil samples analyzed for VOCs from the deeper intervals. Ethylbenzene was detected once at estimated (J-qualified) concentrations in the 1.0–2.0 ft bgs interval. Ethylbenzene concentrations decreased with depth as indicated by no detections from 2.0–3.0 ft bgs.

Acetone was not detected in the 0.0–1.0 ft bgs interval but was detected at estimated (J-qualified) concentrations at deeper intervals. Acetone was detected once from 2.0–3.0 ft bgs. There were no deeper detections of any VOCs.

The reporting limits and detected concentrations for each compound are shown in Table G-4.3-5. In addition, while not directly comparable to soil concentrations, the table includes the NMED vapor-intrusion SSL target indoor air concentrations for each compound.

Multiple Lines of Evidence Evaluation: The site description indicates solvent (or other volatile chemicals) usage, storage, or disposal at this site. The existing structure is not occupied, and no occupied structures are envisioned for the future.

VOCs were detected infrequently. With the exception of ethylbenzene and toluene, all VOCs meet the definition of minimally detected (NMED 2022, 702484). Ethylbenzene and toluene were detected three times.

VOCs meet the criteria of decreasing with depth. No concentrations of VOCs were detected in samples collected from intervals greater than 2.0 ft bgs with the exception of one estimated (J-qualified) acetone sample, and the 2.0–3.0 ft bgs sample had a lower concentration than the 1.0–2.0 ft bgs soil sample. Therefore, concentrations have been shown to decrease with depth.

VOC concentrations are not significant. No VOCs exceeded NMED SSLs. All estimated detections of VOCs except one sample of acetone are below or within the range of report DLs. In addition, soil gas samples are not recommended within 5 ft of ground surface because of the influence of ambient air (https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor) so collection of vapor samples at this site would not provide quantitative data.

While bulk soil concentrations are not directly comparable with indoor air target concentrations used to derive vapor-intrusion SSLs, it is clear that none of the concentrations detected at this site would provide the mass required to exceed the indoor air vapor-intrusion SSLs for even a brief period of time. If any buildings, including slab-on-grade structures, are constructed at the site in the future, excavation for the purpose of leveling and installing footers would likely remove any impacted soil from beneath the footprint of the building.

Although VOCs were detected, occupied structures are located at this site and none is planned for the foreseeable future, nearly all VOCs are minimally detected, and concentrations are decreasing with depth. Therefore, the vapor-intrusion pathway is considered incomplete based upon NMED guidance (NMED 2022, 702484). None of the detected VOCs or other volatiles exceeded NMED SSLs and, therefore, significant concentrations are considered absent. Therefore, multiple lines of evidence indicate that no further evaluation is necessary.

G-4.3.6 SWMU 39-010 – Excavated Soil Pile

SWMU 39-010 is an area used for staging soil excavated during the 1978 construction of a firing site [SWMU 39-004(e)] at TA-39. During construction of the firing site, large quantities of soil were removed and deposited in the canyon east of the firing site, forming SWMU 39-010. The site has been inactive since 1978. This soil dump, covering approximately 76,200 ft^2, was not identified in the 1990 SWMU report (LANL 1990, 007513). However, it was noted in both the RFI work plan (LANL 1993, 015316) and described in a letter notification to NMED designating a new SWMU (LANL 2001, 071215).

While VOCs and SVOCs that meet the NMED criteria for volatility and toxicity were minimally detected at this site, because no buildings are present or reasonably anticipated to be present in the future, the vapor-intrusion pathway is incomplete based upon NMED and EPA guidance (NMED 2022, 702484); https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor. Therefore, no further evaluation is necessary.

G-4.4 Other COPCs

G-4.4.1 Lead

NMED has an alternate evaluation for lead. The EPA-recommended levels for lead, which are based on blood-lead modeling, were applied for the residential and industrial/construction worker scenarios. The screening values for these scenarios were based on back-calculations to determine a soil concentration that would not result in an estimated blood-lead concentration of greater than 10 µg/dL (400 mg/kg for residential adult and 800 mg/kg for industrial/construction worker).

Because derivation of the lead-screening values is based on a biokinetic model that considers multiple sources of exposure, the lead-screening values are fundamentally different from the SSLs for other metals. Therefore, lead is evaluated separately from other noncarcinogenic COPCs and is not included in the HI for noncarcinogens. Soil lead levels were below screening values for all receptor scenarios at Area 1 of SWMU 39-002(a) and SWMU 39-006(a), the sites at which lead was identified as a COPC (Table G-4.4-1).

G-4.4.2 Essential Nutrients

NMED guidance has SSLs for evaluation of essential nutrients. However, essential nutrients were not identified as COPCs at any of the five SWMUs and one AOC being evaluated. Therefore, further evaluation of essential nutrients is not necessary.

G-4.4.3 Total Petroleum Hydrocarbons

NMED has SSLs for TPH that are based on their classification as aliphatic or aromatic and on their carbon number/molecular weight. Because TPH is essentially a summation of the three fractions, C11-C22 Aromatics, C9-C18 Aliphatics, and C19-C36 Aliphatics, NMED-derived TPH soil-screening values are based on reasonable assumptions about the composition of petroleum products commonly found at contaminated sites. The TPH SSLs were calculated based on the noncarcinogenic toxicity of the hydrocarbon fractions as applicable to the ingestion and dermal exposure pathways, weighted according to the assumed composition of the petroleum product. Because the reported detections at North Ancho sites were for diesel-range organics, the SSL values of 1000 mg/kg for the residential scenario and 3000 mg/kg for the industrial and construction worker scenarios were used to calculate ratios at sites where TPH was identified as a COPC. The results of the comparisons found that TPH was less than the SSLs (Table G-4.4-2). Therefore, further evaluation of TPH is not necessary.

G-4.5 Uncertainty Analysis

G-4.5.1 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 the chemicals detected or that have DLs above background are retained for further analysis. There are no established BVs for organic chemicals, and all detected organic chemicals are identified as COPCs and retained for further analysis. Other uncertainties may include errors in sampling, laboratory analysis, and data analysis. However, because concentrations used in the risk-screening evaluations include those detected below the estimated quantitation limits and nondetections above BVs, data evaluation uncertainties are expected to have little effect on the risk-screening results.

G-4.5.2 Exposure Evaluation

The current and reasonably foreseeable future land use is industrial. To the degree that actual activity patterns are not represented by those activities assumed by the industrial scenario, uncertainties are introduced in the assessment, and the evaluation presented in this assessment overestimates potential exposure and risk. An individual may be subject to exposures in a different manner than the exposure assumptions used to derive the industrial SSLs.

For the sites evaluated, individuals might not be on-site at present or in the future for that frequency and duration.

- The construction worker assumptions for the SSLs are that the potentially exposed individual is outside on-site for 8 hr/day, 250 days/yr, and 1 yr (NMED 2022, 702484).
- The industrial assumptions for the SSLs are that the potentially exposed individual is outside on-site for 8 hr/day, 225 days/yr, and 25 yr (NMED 2022, 702484).
- The residential SSLs are based on exposure of 24 hr/day, 350 days/yr, and 30 yr (NMED 2022, 702484).

Numerous assumptions are made relative to exposure pathways including input parameters, completeness of a given pathway, 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 (NMED 2022, 702484). When several upper-bound values, as are found in NMED guidance (NMED 2022, 702484), are combined to estimate exposure for any one pathway, the resulting risk estimate can exceed the 99th 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. Risk from a single location or area with relatively high COPC concentrations may be underestimated by using a representative sitewide value. The use of a UCL is intended to provide a protective upper-bound (i.e., conservative) 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. In addition, the maximum DL was used as the EPC for some inorganic COPCs with elevated DLs above BVs.

SWMU 39-001(a)

None of the calculated human health risks, hazards, or radiological doses exceeded the NMED targets.

SWMU 39-002(a)

Area 1

The residential chemical cancer risk at Area 1 of SWMU 39-002(a) is 3×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The primary contributors are pentachlorophenol and PAHs including benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene. The residential HI is 2, which is greater than the NMED target risk level of 1, primarily due to thallium.

The following contributors collectively sum to 3×10^{-5}: benzo(a)anthracene (5×10^{-6}); benzo(a)pyrene (8×10^{-6}); benzo(b)fluoranthene (6×10^{-6}); dibenz(a,h)anthracene (7×10^{-6}); indeno(1,2,3-cd)pyrene (4×10^{-6}); and pentachlorophenol (2×10^{-6}). EPCs for all contributors were less than the respective residential SSLs.

Benzo(a)anthracene was detected in 139 of 167 samples with a maximum concentration of 13.6 mg/kg at a depth interval of 0.0–1.0 ft bgs at location 39-604811. The EPC (0.83 mg/kg) was the UCL based on the lognormal data distribution. A total of 14 sample results exceeded the SSL (1.53 mg/kg), primarily on the southern edge of the SWMU and in the near-surface sampling intervals (0.0–1.5 ft bgs).

Benzo(a)pyrene was detected in 140 of 167 samples with a maximum concentration of 13.7 mg/kg at a depth interval of 0.0–1.0 ft bgs at location 39-604811. The EPC (0.906 mg/kg) was the UCL based on the lognormal data distribution. A total of 24 sample results exceeded the SSL (1.12 mg/kg), primarily in the in the near-surface sampling intervals (0.0–2.2 ft bgs).

Benzo(b)fluoranthene was detected in 142 of 167 samples with a maximum concentration of 14.9 mg/kg at a depth interval of 0.0–1.0 ft bgs at location 39-604811. The EPC (0.497) mg/kg) was the UCL based on the lognormal data distribution. A total of 20 sample results exceeded the SSL (1.53 mg/kg), primarily in the near-surface sampling intervals (0.0–2.2 ft bgs).

Indeno(1,2,3-cd)pyrene was detected in 137 of 167 samples with a maximum concentration of 9.37 mg/kg at a depth interval of 0.0–1.0 ft bgs at location 39-604811. The EPC (0.6 mg/kg) was the UCL based on the lognormal data distribution. A total of 8 sample results exceeded the SSL (1.53 mg/kg), primarily in the near-surface sampling intervals (0.0 to 2.2 ft bgs).

Pentachlorophenol was a primary contributor to the residential excess cancer risk; however, it was detected in only 2 of 167 samples. The maximum concentration of the samples was 1.99 mg/kg at a depth interval of 0.0–1.0 ft bgs at location 39-604811. The EPC (1.99 mg/kg) was the maximum detected concentration. No sample results exceeded the SSL (9.85 mg/kg).

Thallium was detected in 2 of 163 samples with the EPC being the maximum detected concentration of 1.26 mg/kg. The maximum concentration was from the depth interval of 0.0–1.0 ft bgs at location 39-604812. Only 2 detections (1.26 mg/kg and 0.87 mg/kg) and 1 DL (0.78 mg/kg) exceeded the BV (0.73 mg/kg). The 2 detections also exceeded the residential SSL (0.78 mg/kg). The limited number of detections and limited results exceeding BV and SSL indicate that thallium is unlikely to present hazards to human receptors.

Given that the site is currently under institutional control, no further action is recommended based on residential risk; however, this site may need to be reevaluated if land is transferred in the future for residential use.

Area 2

The residential chemical cancer risk at Area 2 of SWMU 39-002(a) is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The primary contributors are Aroclor-1254 and PAHs including benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; and dibenz(a,h)anthracene. The residential HI is 1, which is equal to the NMED target risk level of 1.

Aroclor-1254 was detected in 51 of 53 samples in the 0.0–1.0 ft bgs interval, with a maximum concentration of 11.8 mg/kg at location 39-61752, which was the only detected result in the 0.0–1.0 ft bgs interval to exceed the SSL (11 mg/kg). Given that the site is currently under institutional control, no further action is recommended based on residential risk; however, this site may need to be reevaluated if land is transferred in the future for residential use.

Area 3

None of the calculated human health risks, hazards, or radiological doses exceeded the NMED targets.

AOC 39-002(b)

The residential chemical cancer risk at AOC 39-002(b) is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The excess risk is due to Aroclor-1248. Aroclor-1248 was detected in 15 of 35 samples with a maximum concentration of 14.6 mg/kg at a depth interval of 2.0–3.0 ft bgs at location 39-61701. The maximum detection was the only result that exceeded the SSL (11 mg/kg).

Given that the site is currently under institutional control, no further action is recommended based on residential risk; however, this site may need to be reevaluated if land is transferred in the future for residential use.

SWMU 39-006(a)

None of the calculated human health risks, hazards, or radiological doses exceeded the NMED targets.

SWMU 39-007(a)

None of the calculated human health risks, hazards, or radiological doses exceeded the NMED targets.

SWMU 39-010

The residential radiological dose at SWMU 39-010 is 30 mrem/yr, which is greater than the target dose of 25 mrem/yr. The primary contributor to the total dose is cobalt-60 (18 mrem/yr).

Cobalt-60 was detected in only 1 of 246 samples in the 0.0–10.0 ft bgs interval with a maximum activity of 1.86 pCi/g at the 9.0–10.0 ft bgs interval at location 39-61736. The maximum detected result was used as the EPC, which conservatively over-estimates the potential human exposure.

Cobalt-60 is a synthetic radionuclide with a half-life of only 5.3 years. The SWMU 39-010 was created during 1978 as a soil dump during the construction of a firing site, so approximately 8 half-lives would have passed since SWMU 39-010 was formed. This means more than 95% of the cobalt-60 activity would have decayed. The low frequency of detection suggests cobalt-60 is not a potential risk. Furthermore, given that the site is currently under institutional control, no further action is recommended based on residential risk; however, this site may need to be reevaluated if land is transferred in the future for residential use.

G-4.5.3 Toxicity Evaluation

The primary uncertainty associated with the SSLs is related to the derivation of toxicity values used in their calculation. Toxicity values (reference doses [RfDs] and slope factors [SFs]) were used to derive the SSLs used in this risk-screening evaluation (NMED 2022, 702484). Uncertainties were identified in five areas with respect to the toxicity values: (1) extrapolation from other animals to humans, (2) variability among individuals in the human population, (3) the derivation of RfDs and SFs, (4) the chemical form of the COPC, and (5) the use of surrogate chemicals.

Extrapolation from Animals to Humans. The SFs and RfDs are often determined by extrapolation from animal data to humans. This may result in uncertainties in toxicity values because, between animals and humans, differences exist in chemical absorption, metabolism, excretion, and toxic responses between animals and humans. 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 usually is incorporated in each step, resulting in the overestimation of potential risk.

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 evaluation. This factor of 10 is generally considered to result in a conservative estimate of risk from noncarcinogenic COPCs.

Derivation of RfDs and SFs. The RfDs and SFs for different chemicals are derived from experiments conducted by different laboratories that may have different accuracy and precision that could lead to an overestimation or underestimation of the risk. The uncertainty associated with the toxicity factors for noncarcinogens is measured by the uncertainty factor, the modifying factor, and the confidence level. For carcinogens, the weight-of-evidence classification indicates the likelihood that a contaminant is a human carcinogen. Toxicity values with high uncertainties may change as new information is evaluated.

Chemical Form of the COPC. COPCs may be bound to the environment matrix and not available for absorption into the human body. However, the COPCs are assumed to be completely 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 the risk assessment. Surrogates were used to provide SSLs for the following constituents based on structural similarity: TATB [1,3,5- trinitrobenzene]; carbazole [dibenzofuran]; iodomethane [bromomethane]; 4-isopropyltoluene [isopropylbenzene]; acenaphthylene [pyrene]; benzo(g,h,i)perylene [pyrene], 1,3-xyxlenes + 1,4-xylenes [total xylenes]. The overall impact of surrogates on the risk assessment is minimal because these COPCs were generally detected at low concentrations (less than 1 mg/kg). Use of surrogates is not expected to bias the risk assessment results high or low.

G-4.5.4 Additive Approach

For noncarcinogens, the effects of exposure to multiple chemicals are generally unknown. Possible interactions could be synergistic or antagonistic, resulting in either an overestimation or underestimation of the potential risk. In addition, 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 or by different modes of action but are addressed additively.

G-4.6 Interpretation of Human Health Risk Screening Results

G-4.6.1 SWMU 39-001(a) – Landfill

Industrial Scenario

A risk-screening assessment for the industrial scenario was not calculated because the 0.0–1.0 ft bgs depth interval was previously excavated.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 3×10^{-8}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.06, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.1 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of 8×10^{-8}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 3×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr. The total radiological dose for the residential scenario is equivalent to a total risk of 2×10^{-6}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

G-4.6.2 SWMU 39-002(a) – Storage Area

Area 1

Industrial Scenario

The total excess cancer risk for the industrial scenario is 5×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.5, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.09 mrem/yr. The total radiological dose for the industrial scenario is equivalent to a total risk of 2×10^{-6}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Construction Worker Scenario

The total excess cancer risk for the construction worker scenario is 3×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.5, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.2 mrem/yr. The total radiological dose for the construction worker scenario is equivalent to a total risk of 2×10^{-7}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Residential Scenario

The total excess cancer risk for the residential scenario is 3×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The residential HI is 2, which is greater than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 1 mrem/yr. The total radiological dose for the residential scenario is equivalent to a total risk of 1×10^{-5}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Area 2

Industrial Scenario

The total excess cancer risk for the industrial scenario is 3×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.1, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Construction Worker Scenario

The total excess cancer risk for the construction worker scenario is 2×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.3, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Residential Scenario

The total excess cancer risk for the residential scenario is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The residential HI is 1, which is equal to the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Area 3

Industrial Scenario

The total excess chemical cancer risk for the industrial worker scenario is 2×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.003, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 3×10^{-8}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.02, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 4×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The residential HI is 0.04, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

G-4.6.3 AOC 39-002(b) – Storage Area

Industrial Scenario

The total excess cancer risk for the industrial scenario is 2×10^{-6}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.02, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr. The total dose for the industrial scenario is equivalent to a total risk of 4×10^{-6} based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Construction Worker Scenario

The total excess cancer risk for the construction worker scenario is 6×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.2 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of 1×10^{-7}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Residential Scenario

The total excess cancer risk for the residential scenario is 2×10^{-5}, which is greater than the NMED target risk level of 1×10^{-5}. The residential HI is 1, which is equal to the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.7 mrem/yr. The total dose for the residential scenario is equivalent to a total risk of 9×10^{-6}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

G-4.6.4 SWMU 39-006(a) – Septic System

Industrial Scenario

The total excess cancer risk for the industrial scenario is 1×10^{-7}, which is less than the NMED target risk level of 1×10^{-5}. The industrial HI is 0.5, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.06 mrem/yr. The total dose for the industrial scenario is equivalent to a total risk of 1×10^{-6}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Construction Worker Scenario

The total excess cancer risk for the construction worker scenario is 7×10^{-9}, which is less than the NMED target risk level of 1×10^{-5}. The construction worker HI is 0.4, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.3 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of 2×10^{-7}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Residential Scenario

The total excess cancer risk for the residential scenario is 7 × 10^{-7}, which is less than the NMED target risk level of 1 × 10^{-5}. The residential HI is 0.4, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 2 mrem/yr. The total dose for the residential scenario is equivalent to a total risk of 2 × 10^{-5}, based on conversion from estimated dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

G-4.6.5 SWMU 39-007(a) – Storage Area

Industrial Scenario

The total excess chemical cancer risk for the industrial worker scenario is 4 × 10^{-7}, which is less than the NMED target risk level of 1 × 10^{-5}. The industrial HI is 0.006, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval.

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 5 × 10^{-8}, which is less than the NMED target risk level of 1 × 10^{-5}. The construction worker HI is 0.01, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 2 × 10^{-6}, which is less than the NMED target risk level of 1 × 10^{-5}. The residential HI is 0.06, which is less than the NMED target HI of 1. No radionuclide COPCs were identified in the 0.0–10.0 ft bgs depth interval.

G-4.6.6 SWMU 39-010 – Excavated Soil Pile

Industrial Scenario

The total excess chemical cancer risk for the industrial worker scenario is 1 × 10^{-7}, which is less than the NMED target risk level of 1 × 10^{-5}. The industrial HI is 0.01, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 0.5 mrem/yr. The total dose for the industrial scenario is equivalent to a total risk of 8 × 10^{-6}, based on conversion from dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) https://resrad.evs.anl.gov/documents/).

Construction Worker Scenario

The total excess chemical cancer risk for the construction worker scenario is 2 × 10^{-8}, which is less than the NMED target risk level of 1 × 10^{-5}. The construction worker HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs and the total estimated dose is 10 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of 7 × 10^{-6}, based on conversion from dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

Residential Scenario

The total excess chemical cancer risk for the residential scenario is 1 × 10^{-6}, which is less than the NMED target risk level of 1 × 10^{-5}. The residential HI is 0.2, which is less than the NMED target HI of 1. Radionuclide EPCs were less than SALs; however, the total estimated dose is 30 mrem/yr, which is greater than the target of 25 mrem/yr. The total radiological dose for the residential scenario is equivalent to a total risk of 3×10^{-4}, based on conversion from dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

G-5.0 ECOLOGICAL RISK-SCREENING EVALUATIONS

The approach for conducting ecological evaluations is described in the “Screening Level Ecological Risk Assessment Methods, Revision 5.1” (LANL 2018, 602965).

The evaluation consists of four parts: a scoping evaluation, a screening evaluation, an uncertainty analysis, and an interpretation of the results.

G-5.1 Scoping Evaluation

The scoping evaluation establishes the breadth and focus of the screening evaluation. The ecological scoping checklist (Attachment G-4) is a useful tool for organizing existing ecological information. The information was used to determine whether ecological receptors might be affected, identify the types of receptors that might be present, and develop the ecological CSM for the North Ancho Canyon Aggregate Area sites (Attachment G-4). Some of the area is developed and provides minimal potential habitat for ecological receptors. The quality of the habitat varies and, in some cases, includes some sites that have native grasses, forbs, and trees that can be suitable habitat for ecological receptors.

The scoping evaluation indicated that terrestrial receptors were appropriate for evaluating the concentrations of COPCs in soil. Exposure is assessed across a site to a depth of 0.0–6.0 ft bgs. Aquatic receptors were not evaluated because no aquatic communities and no aquatic habitat or perennial source of water exist at any of the sites. The depth of the regional aquifer (greater than 500 ft bgs) and the semiarid climate limit transport to groundwater. The potential exposure pathways for terrestrial receptors in soil include root uptake, inhalation, soil ingestion, dermal contact, and food web transport (Attachment G-4). Not all of these pathways are quantitatively addressed. Plants and invertebrates are assessed by comparing the EPC to direct contact soil ESLs as opposed to modeling root uptake by plants or ingestion by invertebrates.

The potential risk was evaluated in the risk-screening assessments for the following ecological receptors representing several trophic levels:

- generic plant
- soil-dwelling invertebrate (represented by the earthworm)
- the deer mouse (mammalian omnivore)
- the montane shrew (mammalian insectivore)
- mountain cottontail (mammalian herbivore)
- gray fox (mammalian carnivore)
- American robin (avian insectivore, avian omnivore, and avian herbivore)
- American kestrel (avian insectivore and avian carnivore)

LANL is the source of the rationale for using these receptors (LANL 2018, 602965). The North Ancho Canyon Aggregate Area lies outside the mapped threatened and endangered (T&E) species core or buffer habitats (Attachment G-4).

G-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. 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. Populations of protected species tend to be small, and the loss of an individual adversely affects the species as a whole.

In accordance with this guidance, the Laboratory developed generic assessment endpoints 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 potential adverse effects on 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.

G-5.3 Ecological Risk Screening Evaluation

The ecological screening evaluation identifies chemicals of potential ecological concern (COPECs) and is based on the comparison of EPCs (95% UCLs, maximum detected concentrations, or maximum DL) with ecological screening levels (ESLs). The EPCs used in the assessments for the North Ancho Canyon Aggregate Area are presented in Tables G-2.3-1 through G-2.3-23.

The ESLs were obtained from the ECORISK Database, Version 4.3 (N3B 2022, 702057)and are presented in Table G-5.3-1. The ESLs are based on similar species of the test population derived from a variety of toxicity studies and converted to a NOAEL. Lowest observed adverse-effect level– (LOAEL-) based ESLs are used in the uncertainty analysis for the ecological screening. Information relevant to the calculation of NOAEL-based ESLs and LOAEL-based ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and TRVs, are in the ECORISK Database, Version 4.3 (N3B 2022, 702057).

The screening evaluation begins with calculating an HQ by dividing the EPC by the minimum ESL for a given COPC. HQs greater than 0.3 in the minimum ESL table are used to identify COPECs requiring additional evaluation. When COPECs are identified, the next step is performed to determine receptors potentially at risk by calculating the ratio of the COPEC-specific EPC to the receptor-specific NOAEL-based ESL (receptor HQ). Individual NOAEL-based HQs for a receptor are then summed to derive an HI for each ecological receptor. An HI greater than 1 indicates that further assessment is needed for that receptor. The HQ values greater than 0.3 are highlighted in the receptor HQ-HI tables. All COPECs are further evaluated for all receptors in the uncertainty analysis section G-5.4.5 using NOAEL-based ESLs that are adjusted by population area use factor (PAUF). Only wildlife have population adjustments because home range (HR) information is available for these receptors. To clarify which receptors require additional evaluation, the HQs greater than 0.1 and the HIs greater than 1 are highlighted in the PAUF-adjusted HI tables. COPCs without NOAEL-based ESLs are retained as COPECs and discussed further in section G-5.4.8. 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.

G-5.3.1 SWMU 39-001(a) – Landfill

The results of the minimum ESL comparisons are presented in Table G-5.3-2. Antimony, mercury, Aroclor-1242, Aroclor-1254, and bis(2-ethylhexyl)phthalate were retained as COPECs because the HQs were greater than 0.3.

Nitrate does not have an ESL, is retained as a COPEC, and is discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-3. The HI analysis indicates that the American kestrel (intermediate carnivore), American robin (omnivore and insectivore), mountain cottontail, deer mouse, and earthworm have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

G-5.3.2 SWMU 39-002(a) – Storage Area

Area 1

The results of the minimum ESL comparisons are presented in Table G-5.3-4. Copper; cyanide (total); lead; mercury; selenium; thallium; zinc; acenaphthene; Aroclor-1254; benzo(a)anthracene; benzoic acid; bis(2-ethylhexyl)phthalate; chrysene; di-n-butylphthalate; naphthalene; pentachlorophenol; phenanthrene; 2,3,7,8-TCDD; and TPH were retained as COPECs because the HQs were greater than 0.3.

Nitrate, 2-chloronaphthalene, ethylbenzene, 1-methylnaphthalene, and 1,2,4-trimethylbenzene do not have ESLs, are retained as COPECs, and are discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-5. The HI analysis indicates that the American kestrel (top and intermediate carnivore), American robin (all feeding guilds), mountain cottontail, mountain shrew, deer mouse, earthworm, and generic plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

Area 2

The results of the minimum ESL comparisons are presented in Table G-5.3-6. Antimony, copper, zinc, Aroclor-1248, Aroclor-1254, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate were retained as COPECs because the HQs were greater than 0.3.

Nitrate, does not have an ESL, is retained as a COPEC, and is discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-7. The HI analysis indicates that the American kestrel (intermediate carnivore), American robin (all feeding guilds), mountain cottontail, montane shrew, deer mouse, earthworm, and generic plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

Area 3

The results of the minimum ESL comparisons are presented in Table G-5.3-8. Aroclor-1254; bis(2-ethylhexyl)phthalate; di-n-butyl phthalate; and 2,3,7,8-TCDD were retained as COPECs because the HQs were greater than 0.3.

Nitrate does not have an ESL, is retained as a COPEC, and is discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-9. The HI analysis indicates that the American kestrel (intermediate carnivore), American robin (omnivore and insectivore), montane shrew, and deer mouse have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

G-5.3.3 AOC 39-002(b) – Storage Area

The results of the minimum ESL comparisons are presented in Table G-5.3-10. Copper; mercury; zinc; Aroclor-1242; Aroclor-1248; Aroclor-1254; Aroclor-1260; bis(2-ethylhexyl)phthalate; di-n-butylphthalate; and 2,3,7,8-TCDD were retained as COPECs because their HQs were greater than 0.3.

Nitrate and 4-isopropyltoluene do not have ESLs, are retained as COPECs, and are discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-11. The HI analysis indicates that the American kestrel (top and intermediate carnivore), American robin (all feeding guilds), mountain cottontail, montane shrew, deer mouse, earthworm, and generic plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

G-5.3.4 SWMU 39-006(a) – Septic System

The results of the minimum ESL comparisons are presented in Table G-5.3-12. Cadmium, cyanide, lead, mercury, selenium, silver, Aroclor-1254, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and 2-hexanone were retained as COPECs because their HQs were greater than 0.3.

Nitrate; chloronaphthalene; 4-isopropyltoluene; 1-methylnaphthalene; and 1,2,4-trimethylbenzene do not have ESLs, are retained as COPECs, and are discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-13. The HI analysis indicates that the American kestrel (top carnivore and intermediate carnivore), American robin (all feeding guilds), montane shrew, deer mouse, and generic plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

G-5.3.5 SWMU 39-007(a) – Storage Area

The results of the minimum ESL comparisons are presented in Table G-5.3-14. Zinc, Aroclor-1248, Aroclor-1254, and bis(2-ethylhexyl)phthalate were retained as COPECs because the HQs were greater than 0.3.

Nitrate and ethylbenzene do not have ESLs, are retained as COPECs, and are discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-15. The HI analysis indicates that the American kestrel (intermediate carnivore), American robin (omnivore and insectivore), montane shrew, and deer mouse have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section. (G-4.5)

G-5.3.6 SWMU 39-010 – Excavated Soil Pile

The results of the minimum ESL comparisons are presented in Table G-5.3-16. Copper; mercury; selenium; Aroclor-1254; bis(2-ethylhexyl)phthalate; di-n-butylphthalate; and 2,3,7,8-TCDD were retained as COPECs because their HQs were greater than 0.3.

Aluminum; nitrate; chloromethane; 4-isopropyltoluene; 1-methylnaphthalene; TATB; 1,2,4-trimethylbenzene; and 1,2,5-trimethylbenzene are retained as COPECs, and are discussed in the uncertainty section (G-4.5).

HQs and HIs for these COPEC and receptor combinations are presented in Table G-5.3-17. The HI analysis indicates that the American kestrel (intermediate carnivore), American robin (all feeding guilds) montane shrew, deer mouse, earthworm, and generic plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section (G-4.5).

G-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 for sites. The following narrative contains a qualitative uncertainty analysis of the issues relevant to evaluating the potential ecological risk at these North Ancho Canyon Aggregate Area sites.

G-5.4.1 Chemical Form

The assumptions used in the ESL derivations were conservative and not necessarily representative of actual conditions. These assumptions include maximum chemical bioavailability, maximum receptor ingestion rates, minimum body weight, and additive effects of multiple COPECs. Most of these factors tend to result in conservative estimates of the ESLs, which may lead to an overestimation of the potential risk. The assumption of additive effects for multiple COPECs may result in an overestimation or underestimation of the potential risk to receptors.

The chemical form of the individual COPCs was not determined as part of the investigation, largely a limitation on analytical quantitation of individual chemical species. Toxicological data are typically based on the most toxic and bioavailable chemical species not likely found in the environment. The inorganic, organic, and radionuclide COPECs generally are not 100% bioavailable to receptors in the natural environment because of 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, and the values were biased toward overestimating the potential risk to receptors.

G-5.4.2 Exposure Assumptions

The EPCs used in the calculations of HQs were the 95% UCL, the maximum detected concentration, or the maximum DL to a depth of 6 ft, thereby conservatively estimating the exposure to each COPC. As a result, the exposure of individuals within a population was evaluated using this specific concentration, which was assumed constant throughout the exposure area. The sampling also focused on areas of known contamination, and receptors were assumed to ingest 100% of their food and spend 100% of their time at the site. The assumptions made regarding exposure for terrestrial receptors result in an overestimation of the potential exposure and risk, because COPECs varied across the site and were infrequently detected.

G-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 LOAEL-based threshold. 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 typically are 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 likely are 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 may result in an underestimation or overestimation of potential risk. In addition, ESLs are based on the use of ecological receptor model parameters that produce the most conservative estimate for the ESL. In order to bound the risk with a central tendency comparison value, a comparison to LANL Ecological Preliminary Remediation Goals (Eco-PRGs) is included in the site discussions (section G-5.4.7). The Eco-PRGs are reported in the ECORISK Database Release 4.3 (N3B 2022, 702057) and the methodology for their development is outlined in “Ecological Preliminary Remediation Goals for Soils at Los Alamos National Laboratory, Revision 1,” LANL (2017, 602647).

G-5.4.4 Area Use Factors

In addition to the direct comparison of the EPC with the ESLs, area use factors (AUFs) are used to account for the amount of time a receptor is likely to spend within the contaminated areas based on the size of the receptor’s HR. The AUF for individual organisms is calculated by dividing the size of the site by the HR for that receptor. Because T&E species must be assessed on an individual basis, the AUF is used for the Mexican spotted owl. The HR for the Mexican spotted owl is 366 hectare (ha). The site areas and AUFs for each site are presented in Table G-5.4-1.

The American kestrel (top carnivore) is used as the surrogate receptor for the Mexican spotted owl.

Three sites, SWMU 39-002(a) [Area 1], AOC 39-002(b), and SWMU 39-006(a), had NOAEL-based HIs for the kestrel (top carnivore) greater than 1. Application of the AUFs for the Mexican spotted owl to the HIs for the kestrel yielded AUF-adjusted NOAEL-based HIs of 4×10^{-5}, 5×10^{-6}, and 6×10^{-4}. Therefore, potential adverse impacts to the Mexican spotted owl at any of the sites are unlikely.

G-5.4.5 Population Area Use Factors

After the initial screening evaluation (refer to section G-5.3), COPECs are further evaluated using PAUFs, which are described below, to ensure that exposure to multiple COPECs at a site will not lead to potential adverse impacts on a given receptor population. The PAUFs calculated for the NOAEL-based ESLs may also be used to adjust the LOAEL-based ESLs (section G-5.4.7).

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 at these North Ancho Canyon Aggregate Area sites 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. (Bowman et al. 2002, 073475) estimate that the median dispersal distance for mammals is 7 times the linear dimension of the HR (i.e., 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.

The PAUFs are calculated by dividing the site area by the population area of each receptor. The HQs are adjusted by multiplying by the PAUFs. HIs are recalculated using the PAUF-adjusted HQs. If the PAUF is above 1, the HQs are not adjusted for that receptor. The HQs for the generic 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.

The HRs for the robin, deer mouse, shrew, mountain cottontail, and gray fox were determined using the data in EPA's wildlife exposure factors handbook (EPA 1993, 059384). The HRs were either for specific environments or averages of different environments presented in the respective exposure parameter/population dynamic tables. "Screening-Level Ecological Risk Assessments Methods" (LANL 2018, 602965, Table 3.3-1) presents how the EPA data were used to derive the HRs for each receptor. The HRs were used to calculate the population areas for each receptor as described in the previous paragraph.

If the PAUF-adjusted HI for any receptor is greater than 1, then those receptors and any associated COPECs with HQ greater than 0.1 are further evaluated using a LOAEL-based ESL analysis and PAUF-adjusted LOAEL-based ESL analysis described in section G-5.4.6.

G-5.4.5.1 SWMU 39-001(a)

The area of SWMU 39-001(a) is approximately 0.111 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-2). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than or equal to 1 for all receptors (Table G-5.4-3). The earthworm had an unadjusted NOAEL-based HI of 2 (Table G-5.4-3), suggesting minimal potential effects to the invertebrate community.

G-5.4.5.2 SWMU 39-002(a)

Area 1

The area of SWMU 39-002(a) Area 1 is approximately 0.0135 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-4). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than 1 for all receptors. The earthworm had an unadjusted NOAEL-based HI of 40 and the generic plant had an unadjusted NOAEL-based HI of 30 (Table G-5.4-5).

Area 2

The area of SWMU 39-002(a) Area 2 is approximately 0.0295 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-6). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than 1 for all receptors. The earthworm had an unadjusted NOAEL-based HI of 2 and the generic plant had an unadjusted NOAEL-based HI of 3 (Table G-5.4-7).

Area 3

The area of SWMU 39-002(a) Area 3 is approximately 0.025 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-8). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than or equal to 1 for all receptors (Table G-5.4-9). The earthworm and generic plant had unadjusted NOAEL-based HIs of less than 1 (Table G-5.4-9).

G-5.4.5.3 AOC 39-002(b)

The area of AOC 39-002(b) is approximately 0.0018 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-10). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than 1 for all receptors. The earthworm had an unadjusted NOAEL-based HI of 10 and the generic plant had an unadjusted NOAEL-based HI of 1 (Table G-5.4-11).

G-5.4.5.4 SWMU 39-006(a)

The area of SWMU 39-006(a) is approximately 0.22 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-12). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than or equal to 1 for all receptors (Table G-5.4-13). The generic plant had an unadjusted NOAEL-based HI of 2 (Table G-5.4-3).

G-5.4.5.5 SWMU 39-007(a)

The area of SWMU 39-007(a) is approximately 0.0077 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-14). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than or equal to 1 for all receptors (Table G-5.4-15). The earthworm and generic plant had unadjusted NOAEL-based HIs of less than 1 (Table G-5.4-15).

G-5.4.5.6 SWMU 39-010

The area of SWMU 39-010 is approximately 1.27 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.4-16). The HQs and HIs are recalculated using the PAUFs. The HIs for the generic plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The PAUF-adjusted HI analysis using NOAEL-based ESLs yielded HIs less than or equal to 1 for all receptors except for American robin (omnivore and insectivore) (HI of 2 and 3, respectively) and deer mouse (HI = 3) (Table G-5.4-17). The earthworm had an unadjusted NOAEL-based HI of 4 and the generic plant had an unadjusted NOAEL-based HI of 3 (Table G-5.4-17).

G-5.4.6 LOAEL Analysis

An LOAEL-based ESL HQ-HI analysis was performed if the HQ-HI analysis using PAUF-adjusted NOAEL-based ESLs (section 5.4.5) resulted in a receptor with an HI greater than 1 and a COPEC for the respective receptor had an HQ greater than 0.1. The LOAEL-based ESLs were used to address the HIs and reduce the associated uncertainty and conservativeness of the NOAEL ESLs used in the initial screening evaluations in section G-5.3. The LOAEL-based ESLs were calculated based on toxicity information in the ECORISK Database, Release 4.3 (N3B 2022, 702057) and are presented in Table G-5.4-18. First, LOAEL-based ESL receptor HQ-HI calculations were completed. Any HI values greater than 1 and any HQ values greater than 0.1 are highlighted in the HI analysis using LOAEL-based ESL tables. If one or more wildlife receptors are identified in the HI analysis using LOAEL-based ESL tables, then a final step involving population-adjusted HI values is completed. The results of the PAUF-adjusted LOAEL-based ESL HQ-HI analysis are presented in the adjusted HI analysis using LOAEL-based ESL tables, and HI values greater than 1 or any HQ values greater than 0.1 are highlighted. The PAUFs used for the LOAEL analyses are the same as those described in section G-5.4.5.

G-5.4.7 Site Discussions

G-5.4.7.1 SWMU 39-001(a)

The HI using unadjusted NOAEL-based ESLs for SWMU 39-001(a) is greater than 1 for the earthworm, with mercury being the primary COPEC. The HI analysis using LOAEL-based ESLs yielded an HI less than 1 for the earthworm (Table G-5.4-19), indicating no unacceptable risk to ecological receptors is present at this site.

G-5.4.7.2 SWMU 39-002(a)

Area 1

The HI using unadjusted NOAEL-based ESLs for SWMU 39-002(a) Area 1 is greater than 1 for earthworm and the generic plant with HQs greater than 1 for copper, lead, mercury, selenium, thallium, zinc, acenaphthene, naphthalene, pentachlorophenol, phenanthrene, and TPH being the primary COPECs. The HI analysis using LOAEL-based ESLs yielded an HI of 4 for the earthworm, and 4 for the generic plant (Table G-5.4-20). The primary contributors for the earthworm are mercury (HQ = 3) and phenanthrene (HQ = 0.3). The primary contributors for the generic plant are selenium (HQ = 0.3), thallium (HQ = 3), acenaphthene (HQ = 0.2), and TPH (HQ = 0.2).

Acenaphthene was detected in 110 of 167 samples in the 0.0–6.0 ft bgs interval, with a maximum detection of 8.97 mg/kg at location 39-61859 (0.0–1.0 ft bgs) and EPC of 0.414 mg/kg. Three detections from 0.0 to 6.0 ft bgs exceeded the generic plant LOAEL-ESL (2 mg/kg) and two detections exceed the soil ecological preliminary remediation goal (Eco-PRG) (2.5 mg/kg) for acenaphthene.

Mercury concentrations were greater than the BV (0.1 mg/kg) in 53 of 124 detections across all media from 0.0 to 6.0 ft bgs, with an EPC of 1.73 mg/kg and a maximum concentration of 28.1 mg/kg at location 39-61669. The EPC of 1.73 mg/kg is greater than the LOAEL-ESL (0.5 mg/kg) but less than the soil Eco-PRG for soil dwelling invertebrates (390 mg/kg). None of the site detections exceeds the Eco-PRG.

Phenanthrene was detected in 148 samples in the 0.0–6.0 ft bgs interval, with a maximum detection of 66.7 mg/kg at location 39-61859 (0.0–1.0 ft bgs) and EPC of 3.08 mg/kg. Five detections from 0.0 to 6.0 ft bgs exceeded the soil dwelling invertebrate LOAEL-ESL and Eco-PRG (both 12 mg/kg) for phenanthrene.

Selenium concentrations were above BV in 10 of 117 detections across all media from 0.0 to 6.0 ft bgs, with an EPC of 0.865 mg/kg and a maximum detected concentration of 1.91 mg/kg. No detections were greater than either the generic plant LOAEL-ESL (3 mg/kg) or generic plant soil Eco-PRG (15 mg/kg) for selenium.

Thallium concentrations were above BV in 2 of 2 detections across all media from 0.0 to 6.0 ft bgs, with an EPC and maximum detected concentration of 1.26 mg/kg. Both detections were greater than the generic plant LOAEL-ESL (0.5 mg/kg) but did not exceed the generic plant soil Eco-PRG (3.2 mg/kg) for thallium.

TPH was detected in 13 of 14 samples in the 0.0–6.0 ft bgs interval, with a maximum detection of 170 mg/kg at location 39-01497 (0.0–0.5 ft bgs) and EPC of 78.14 mg/kg. TPH has no established Eco-PRG, but did not exceed the generic plant LOAEL-ESL (419 mg/kg) in any samples.

The ecoscoping checklist documents that Area 1 of SWMU 39-002(a) consists of bare ground, gravel, and limited grasses immediately adjacent to a building (Attachment G-4). Additionally, this area is in an actively used area near the entry to TA-39. Thus, the site has minimal ecological habitat. Given the limited number of detections exceeding LOAEL-ESLs and Eco-PRGs and the limited ecological habitat at the site, it is unlikely that the site presents potential risk to the generic plant or soil-dwelling invertebrate populations.

Area 2

The HI using unadjusted NOAEL-based ESLs for Area 2 of SWMU 39-002(a) is greater than 1 for earthworm and the generic plant with antimony, copper, and zinc being the primary COPECs. The HI analysis using LOAEL-based ESLs yielded HIs less than 1 for earthworm and the generic plant (Table G-5.4-21), indicating that no unacceptable risk to ecological receptors is present at this site.

Area 3

The HI using PAUF-adjusted NOAEL-based ESLs and unadjusted NOAEL-based ESLs (earthworm and generic plant) for Area 3 of SWMU 39-002(a) are equivalent to or less than 1. Therefore, there are no potential ecological risks from this site and no LOAEL-based evaluations were conducted.

G-5.4.7.3 AOC 39-002(b)

The HI using unadjusted NOAEL-based ESLs for AOC 39-002(b) is greater than 1 for the earthworm with copper, mercury, and zinc being the primary COPECs. The HI analysis using LOAEL-based ESLs yielded HIs less than or equal to 1 for the earthworm (Table G-5.4-22), indicating no unacceptable risk to ecological receptors is present at this site.

G-5.4.7.4 SWMU 39-006(a)

The HI using PAUF-adjusted NOAEL-based ESLs for SWMU 39-0006(a) is greater than 1 for the generic plant, with lead and selenium being the primary COPECs. The HI analysis using LOAEL-based ESLs yielded HIs less than 1 for generic plant (Table G-5.4-23), indicating no unacceptable risk to ecological receptors is present at this site.

G-5.4.7.5 SWMU 39-007(a)

The HI using PAUF-adjusted NOAEL-based ESLs and unadjusted NOAEL-based ESLs (earthworm and generic plant) for SWMU 39-007(a) are equivalent to or less than 1. Therefore, there are no potential ecological risks from this site and no LOAEL-based evaluations were conducted.

G-5.4.7.6 SWMU 39-010

The HI using PAUF-adjusted NOAEL-based ESLs for SWMU 39-010 is greater than 1 for the American robin (omnivore and insectivore), deer mouse, earthworm, and generic plant, with copper; mercury; selenium; bis(2-ethylhexyl)phthalate; di-n-butylphthalate; and 2,3,7,8-TCDD being the primary COPECs. The HI analysis using LOAEL-based ESLs yielded an HI of 3 for the American robin (omnivore), 5 for the American robin (insectivore), and 2 for the deer mouse (Table G-5.4-24). The PAUF-adjusted HI analysis using LOAEL-based ESLs resulted in an HI of 0.2 for the American robin (omnivore), 0.3 for the American robin (insectivore), and 0.9 for the deer mouse (Table G-5.4-25) indicating that no unacceptable risk to these ecological receptors is present at this site. The HI analysis using LOAEL-based ESLs yielded HIs less than 1 for earthworm and generic plant (Table G-5.4-24), indicating that no unacceptable risk to invertebrates or plants is present at this site.

G-5.4.8 Chemicals without ESLs

Several COPECs do not have ESLs for any receptor in Version 4.3 of the ECORISK Database, Release 4.3 (N3B 2022, 702057). In an effort to address this uncertainty and to provide a quantitative assessment of potential ecological risk, several online toxicity database searches were conducted to determine if any relevant toxicity information is available.

The online searches included 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, U.S. Department of Agriculture Integrated Pesticide Management Database, American Bird Conservancy Pesticide Toxicity Database, and Oak Ridge National Laboratory Risk Assessment Information System. 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.

Toxicity data are not available for aluminum; chloromethane; 2-chloronaphthalene; ethylbenzene; 4-isopropyltoluene; TATB; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; and 1-methylnaphthalene. No surrogate or other toxicity information is available for aluminum; ethylbenzene; nitrate; TATB; 1,2,4-trimethylbenzene; and 1,3,5-trimethylbenzene. A surrogate based on structural similarity was used to evaluate the potential toxicity for 2-chloronaphthalene; 4-isopropyltoluene; TATB; and 1-methylnaphthalene.

Aluminum was identified as a COPC from 0.0 to 6.0 ft bgs at one site, SWMU 39-010, with maximum concentration of 13,500 mg/kg. Aluminum is a ubiquitous and primary constituent in the earth’s crust. Aluminum typically is not bioavailable in the soil matrix. The NMED residential SSL for aluminum is 78,000 mg/kg, suggesting that potential toxicity to higher trophic level terrestrial organisms is low. Because it is ubiquitous and the potential toxicity is low, aluminum is eliminated as a COPEC.

Chloromethane was identified as a COPC from 0.0 to 6.0 ft bgs at one site, SWMU 39-010, with a maximum concentration of 0.00154 mg/kg. It was detected in only 2 of 154 samples. Chloromethane is a volatile compound that is unlikely to bioconcentrate or bioaccumulate. The minimum ESL for any VOC in the ESL database is 0.038 m/kg, which is approximately 25 times greater than the chloromethane concentration. Thus, given the low concentrations and infrequent detections, it is not likely to present an ecological risk. Chloromethane is eliminated as a COPEC.

Chloronaphthalene[2-] was identified as a COPC from 0.0−6.0 ft bgs at two sites, Area 1 of 39-002(a) and 39-006(a), with a maximum concentration of 0.0421 mg/kg. Based on its structural similarity, naphthalene is used as a surrogate. The minimum ESL for naphthalene (1 mg/kg for the plant) is used to screen 2-chloronaphtahlene and results in a maximum HQ of 0.0421. Because the maximum HQ is less than 0.3, 2-chloronaphthalene is eliminated as a COPEC.

Ethylbenzene was identified as a COPC from 0.0 to 6.0 ft bgs at two sites, Area 1 of 39-002(a) and 39-007(a), with a maximum concentration of 0.0062 mg/kg. It was detected in only 3 of 21 samples at SWMU 39-007(a) and in 1 of 163 samples at Area 1 of SWMU 39-002(a). Ethylbenzene is a volatile compound that is unlikely to bioconcentrate or bioaccumulate. The minimum ESL for any VOC in the ESL database is 0.038 m/kg, which is one order of magnitude greater than the maximum ethylbenzene concentration. Thus, given the low concentrations and infrequent detections, it is not likely to present an ecological risk. Ethylbenzene is eliminated as a COPEC.

Isopropyltoluene[4-] was identified as a COPC from 0.0−6.0 ft at three sites with maximum concentrations ranging from 0.00241 mg/kg to 0.00816 mg/kg. Based on its structural similarity, toluene is used as a surrogate. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen 4-isopropyltoluene and results in a maximum HQ of 0.00035. Because the maximum HQ is less than 0.3, 4-isopropyltoluene is eliminated as a COPEC.

Methylnaphthalene[1-] was identified as a COPC from 0.0−6.0 ft at three sites, Area 1 of SWMU 39-002(a), AOC 39-002(b), and SWMU 39-010, with a maximum concentrations ranging from 0.0025 mg/kg to 2.37 mg/kg. Based on its structural similarity, 2-methylnaphthalene is used as a surrogate. The minimum ESL for 2-methylnaphthalene (16 mg/kg for the shrew) is used to screen 1-methylnaphthalene and results in a maximum HQ of 0.15. Because the maximum HQ is less than 0.3, 1-methylnaphthalene is eliminated as a COPEC.

Nitrate was identified as a COPC from 0.0 to 6.0 ft bgs at six sites, with maximum concentrations ranging from 1.6 mg/kg to 71.4 mg/kg. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that potential toxicity is very low. Because nitrate is infrequently detected at elevated concentrations and the potential toxicity is low, nitrate is eliminated as a COPEC.

TATB was identified as a COPC from 0.0 to 6.0 ft at one site, SWMU 39-010, with a maximum concentration of 0.513 mg/kg. Based on its structural similarity, 1,3,5-trinitrobenzene was used as a surrogate. The minimum ESL for 1,3,5-trinitrobenzene (10 mg/kg for the earthworm) was used to screen TATB and resultedin a maximum HQ of 0.0513. Because the maximum HQ is less than 0.3, TATB is eliminated as a COPEC.

Trimethylbenzene[1,2,4-] was identified as a COPC from 0.0 to 6.0 ft bgs at three sites with maximum concentrations ranging from 0.00046 mg/kg to 0.0066 mg/kg. It was detected in only 3 out of 307 samples. Trimethylbenzene[1,2,4-] is a volatile compound that is unlikely to bioconcentrate or bioaccumulate. The minimum ESL for any VOC in the ESL database is 0.038 m/kg, which is one order of magnitude greater than the maximum 1,2,4-trimethylbenzene concentration. Thus, given the low concentrations and infrequent detections, it is not likely to present an ecological risk. Trimethylbenzene[1,2,4-] is eliminated as a COPEC.

Trimethylbenzene[1,3,5-] was identified as a COPC from 0.0 to 6.0 ft bgs at one site with a maximum concentration of 0.000857 mg/kg. It was detected in only 3 out of 154 samples. Trimethylbenzene[1,3,5-] is a volatile compound that is unlikely to bioconcentrate or bioaccumulate. The minimum ESL for any VOC in the ESL database is 0.038 m/kg, which is two orders of magnitude greater than the maximum 1,3,5-trimethylbenzene concentration. Thus, given the low concentrations and infrequent detections, it is not likely to present an ecological risk. Trimethylbenzene[1,3,5-] is eliminated as a COPEC.

G-5.5 Interpretation of Ecological Risk-Screening Results

G-5.5.1 Receptor Lines of Evidence

Based on the ecological risk-screening assessments, several COPECs (including COPECs without an ESL) were identified for the North Ancho Canyon Aggregate Area sites. Receptors were evaluated using several lines of evidence: minimum ESL comparisons, HI analyses, potential effects to populations (individuals for T&E species), LOAEL analyses, and the relationship of detected concentrations and DLs to background concentrations.

Generic Plant

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the generic plant, were less than 0.3.
- The HI analyses using the NOAEL-based ESLs yielded HIs greater than 1 for the generic plant at all sites except SWMU 39-001(a), Area 3 of SWMU 39-002(a), SWMU 39-002(b) and SWMU 39-007(a).
- The HI analyses using the LOAEL-based ESLs yielded HIs less than or equivalent to 1 for all sites except Area 1 of SWMU 39-002(a).
- Field observations made during the site visits found no indication of adverse effects on the generic plant community from COPECs. In addition, Area 1 of SWMU 39-002(a), Area 2 of SWMU 39-002(a), Area 3 of SWMU 39-002(a), and AOC 39-002(b) are partially or fully developed providing minimal ecological habitat. Other SWMUs included in this evaluation provide quality habitat for all ecological receptors.
- As discussed in section G-5.4.7, the potential risks to the generic plant are overestimated and/or are not representative of the sites.

These lines of evidence support the conclusion that no potential ecological risk to the generic plant exists at the six sites in the North Ancho Canyon 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.
- The HI analyses using the NOAEL-based ESLs yielded HIs greater than 1 for the earthworm at all sites except Area 3 of SWMU 39-002(a) and SWMU 39-007(a).
- The HI analyses using the LOAEL-based ESLs yielded HIs less than or equivalent to 1 for all sites except Area 1 of SWMU 39-002(a).
- The ecological habitat at Area 1 of SWMU is marginal, consisting of bare ground next to a building. The developed area and compacted soil is minimal invertebrate habitat. As discussed in section G-5.4.7.2, none of the mercury detections exceeded the ecological PRG and only three acenaphthene detections exceeded the ecological PRG. Given the limited area of marginal habitat, the potential risks to the earthworm are overestimated.

These lines of evidence support the conclusion that no potential ecological risk to the earthworm exists at the six sites in the North Ancho Canyon 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.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the shrew’s population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs less than 1 or equivalent to 1 for the shrew at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the montane shrew exists at the six sites in the North Ancho Canyon Aggregate Area.

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.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the deer mouse's population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs less than or equivalent to 1 for the deer mouse at all sites except SWMU 39-010.
- The HI analyses using the LOAEL-based ESLs yielded HIs greater than 1 for the deer mouse at SWMU 39-010.
- The HI analyses using the PAUF-adjusted LOAEL-based ESLs yielded HIs less than or equivalent to 1 for the deer mouse at SWMU 39-010.

These lines of evidence support the conclusion that no potential ecological risk to the deer mouse exists at the six sites in the North Ancho Canyon Aggregate Area.

Mountain Cottontail (Herbivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the mountain cottontail, were less than 0.3.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the mountain cottontail's population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs less than or equivalent to 1 for the mountain cottontail at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the mountain cottontail exists at the six sites in the North Ancho Canyon Aggregate Area.

Gray Fox (Carnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the gray fox, were less than 0.3.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the gray fox's population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs less than or equivalent to 1 for the gray fox at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the gray fox exists at the six sites in the North Ancho Canyon Aggregate Area.

American 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 American robin, were less than 0.3.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the American robin's population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs greater than 1 for the American robin (omnivore and insectivore) at SWMU 39-010.
- The HI analyses using the LOAEL-based ESLs yielded HIs greater than 1 for the American robin (omnivore and insectivore) at SWMU 39-010.
- The HI analyses using the adjusted LOAEL-based ESLs yielded HIs equivalent to or less than 1 for the American robin (omnivore and insectivore) at SWMU 39-010.

These lines of evidence support the conclusion that no potential ecological risk to the American robin (all feeding guilds) exists at the six sites in the North Ancho Canyon Aggregate Area.

American Kestrel (Intermediate Carnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the American kestrel, were less than 0.3.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the kestrel's (intermediate carnivore) population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs less than or equivalent to 1 for the kestrel (intermediate carnivore) at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the kestrel (intermediate carnivore) exists at the six sites in the North Ancho Canyon Aggregate Area.

American Kestrel (Top Carnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the American kestrel, were less than 0.3.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the kestrel's (top carnivore) population area.
- The HI analyses using the PAUF-adjusted NOAEL-based ESLs yielded HIs less than or equivalent to 1 for the kestrel (top carnivore) at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the kestrel (top carnivore) exists at the six sites in the North Ancho Canyon Aggregate Area.

G-5.5.2 COPECs with No ESLs

COPECs without ESLs were eliminated based on comparisons with surrogate ESLs or human health SSLs. The analysis of COPECs without ESLs supports the conclusion that no potential ecological risk to receptors exists at the six sites in the North Ancho Canyon Aggregate Area.

G-5.5.3 Summary

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations (individuals for T&E species), LOAEL analyses, multiple lines of evidence, and COPECs without ESLs, no potential ecological risks to the earthworm, generic plant, American robin, American kestrel, deer mouse, montane shrew, mountain cottontail, or gray fox exist for the six sites at the North Ancho Canyon Aggregate Area.

G-6.0 CONCLUSIONS

G-6.1 Human Health Risk

For the industrial scenario, all sites had estimated doses below the target of 25 mrem/yr. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval for Area 2 of SWMU 39-002(a), Area 3 of SWMU 39-002(a), and SWMU 39-007(a). No 0.0–1.0 ft bgs soil data were available from SWMU 39-001(a) because the interval was excavated. All sites had total excess cancer risk less than the NMED target risk of 1×10^{-5}. All sites had HIs less than the target hazard of 1.

For the construction worker scenario, all sites had total excess cancer risk less than the NMED target risk of 1×10^{-5}, HIs less than 1, and estimated doses below the target of 25 mrem/yr. No radionuclide COPCs were identified in the 0.0–1.0 ft bgs depth interval for Area 2 of SWMU 39-002(a), Area 3 of SWMU 39-002(a), and SWMU 39-007(a).

For the residential scenario, all sites had total excess cancer risk less than the NMED target risk of 1×10^{-5}, except Area 1 of SWMU 39-002(a), Area 2 of SWMU 39-002(a), and AOC 39-002(b), which had cancer risks of 7×10^{-5} (due to benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; dibenz(a,h)anthracene; and indeno(1,2,3-cd)pyrene), 2×10^{-5} (due to Aroclor-1254 and PAHs including benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; and dibenz(a,h)anthracene), and 2×10^{-5} (due to Aroclor-1248), respectively.

All sites had HIs less than the target hazard of 1, except Area 1 of SWMU 39-002(a), which had an HI of 2 [thallium (2)]. All sites had estimated doses below the target of 25 mrem/yr except SWMU 39-010, which had a radiological dose of 30 mrem/yr due to cobalt-60 (18). Although residential cancer risk at Area 1 of SWMU 39-002(a), Area 2 of SWMU 39-002(a), and AOC 39-002(b); residential hazard at Area 1 of SWMU 39-002(a); and residential dose at SWMU 39-010 exceed current risk/hazard/dose thresholds, the sites are currently under institutional control and land use will remain industrial for the foreseeable future. Therefore, no further action is recommended based on residential risk at this time.

Lead was identified as a COPC because it was detected above background at Area 1 of SWMU 39-002(a), AOC 39-002(b), and SWMU 39-006(a). However, protective soil concentrations for the industrial, construction worker, and residential scenarios were not exceeded at any of these sites.

Volatile organic COPCS or VOCs were detected near buildings at Area 1 of SWMU 39-002(a), AOC 39-002(b), SWMU 39-006(a), and SWMU 39-007(a); therefore, the vapor-intrusion pathway is potentially complete for these sites. However, no further action is recommended because most toxic and organic volatiles were minimally detected at low concentrations and/or the nearby buildings are not continually occupied.

The total doses were equivalent to total excess radiological risks of 2×10^{-6} to 8×10^{-6} for the industrial scenario; 8×10^{-8} to 7×10^{-6} for the construction worker scenario, and 2×10^{-6} to 3×10^{-4} for the residential scenario, based on conversion from dose using RESRAD Version 7.2 (Yu et al. 2018, 702810) (https://resrad.evs.anl.gov/documents/).

No sites within the North Ancho Canyon Aggregate Area are accessible to the public and none is planned for release by the U.S. Department of Energy (DOE) in the foreseeable future. Therefore, an as low as reasonably achievable (ALARA) evaluation for radiological exposure to the public is not currently required. If DOE's plans for releasing these areas change, then an ALARA evaluation will be conducted at that time.

G-6.2 Ecological Risk

Based on evaluations of the minimum ESLs, HI analyses, LOAEL analyses, and COPECs without ESLs, no potential ecological risks to the Mexican spotted owl, gray fox, American kestrel, American robin, mountain cottontail, montane shrew, deer mouse, earthworm, or generic plant exist at the five SWMUs and one AOC evaluated at the North Ancho Canyon Aggregate Area.

G-7.0 REFERENCES

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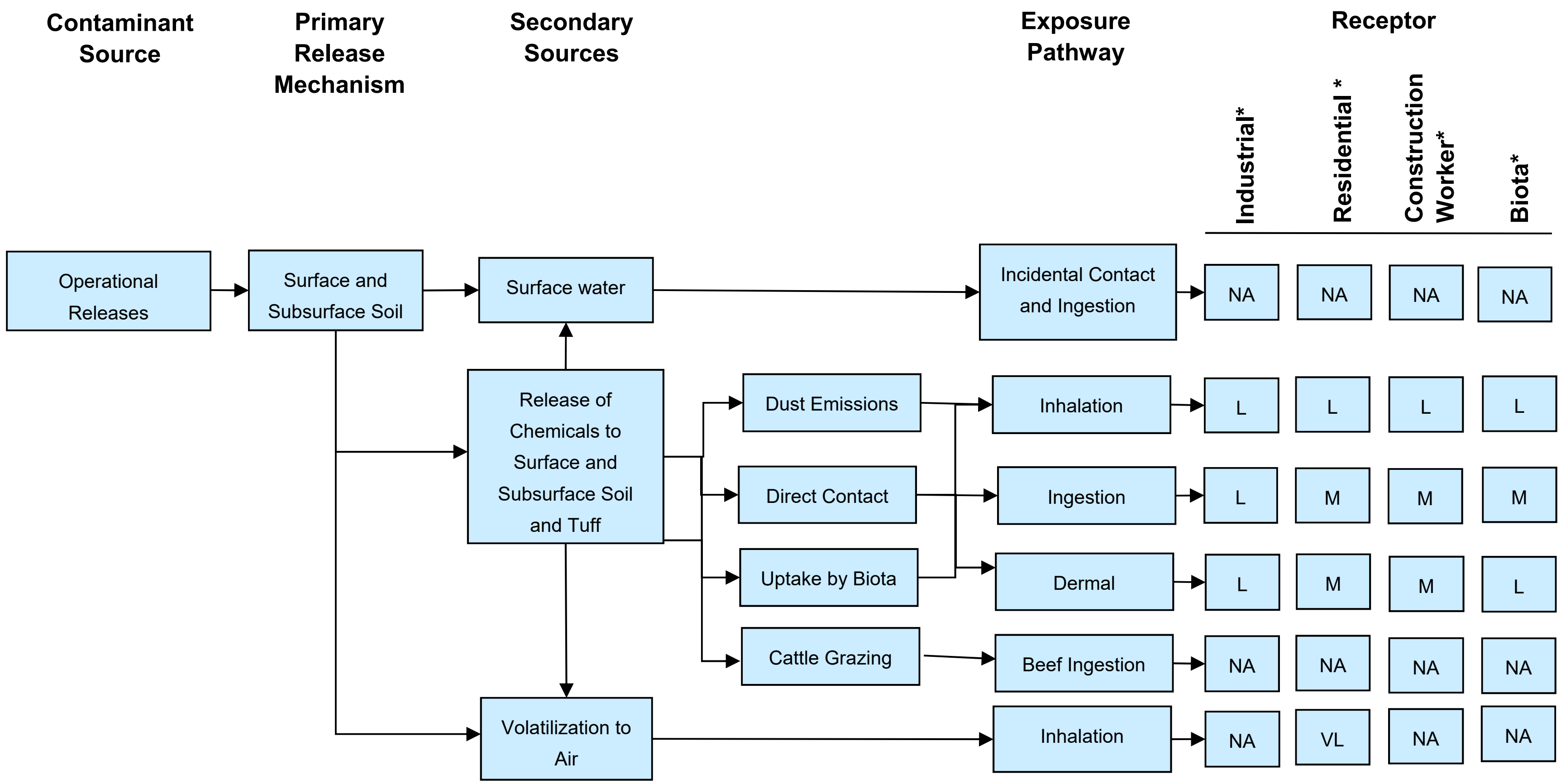

* Very Low (VL), Low (L), and Moderate (M) designations indicate the pathway is a potentially complete pathway and is evaluated in the risk assessments.
Not Applicable (NA) indicates the pathway is incomplete and is not evaluated in the risk assessments.

Figure G-3.1-1 Conceptual site model for the North Ancho Canyon Aggregate Area

Table G-2.3-1
EPCs at SWMU 39-001(a) for the Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	29	0	0.07(U)	6.2 (U)	n/a*	6.2 (U)	Maximum Detection Limit
Mercury	29	11	0.0127 (U)	0.377	Nonparametric	0.0575	95% KM (t)
Nitrate	28	28	0.18 (J)	14.1	Lognormal	2.45	95% H-UCL
Perchlorate	28	7	0.0023 (J)	0.0062 (U)	Normal	0.00418	95% KM (t)
Uranium	1	1	1.91	1.91	n/a	1.91	Maximum Detected Concentration
Organic Chemicals (mg/kg)							
Aroclor-1242	29	7	0.0048 (J)	0.52 (J)	Gamma	0.113	95% KM Adjusted Gamma
Aroclor-1254	29	7	0.0061 (J)	0.064 (J)	Normal	0.0196	95% KM (t)
Aroclor-1260	29	2	0.009 (J)	0.041 (U)	n/a	0.016	Maximum Detected Concentration
Benzo(g,h,i)perylene	29	1	0.041 (J)	0.41 (U)	n/a	0.041	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	29	4	0.052 (J)	0.37 (U)	n/a	0.25	Maximum Detected Concentration
Dibenz(a,h)anthracene	29	1	0.037 (J)	0.41 (U)	n/a	0.037	Maximum Detected Concentration
Di-n-octylphthalate	29	2	0.077 (J)	0.41 (U)	n/a	0.35	Maximum Detected Concentration
HMX	29	2	0.02 (J)	0.179 (U)	n/a	0.044	Maximum Detected Concentration
Indeno(1,2,3-cd)pyrene	29	1	0.037 (J)	0.41 (U)	n/a	0.037	Maximum Detected Concentration
Iodomethane	29	1	0.0027 (J)	0.0062 (U)	n/a	0.0027	Maximum Detected Concentration
Methylene Chloride	29	9	0.0037 (U)	0.014	Normal	0.00781	95% KM (t)
Nitroglycerin	27	1	0.093 (J)	0.77 (UJ)	n/a	0.093	Maximum Detected Concentration
RDX	29	1	0.032 (J+)	0.173 (U)	n/a	0.032	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	1.23E-08	1.23E-08	n/a	1.23E-08	Maximum Detected Concentration
Radionuclides (pCi/g)							
Cesium-134	28	1	-0.043 (U)	0.051 (U)	n/a	0.047	Maximum Detected Concentration
Uranium-238	28	28	0.104	4.67	Lognormal	0.57	95% H-UCL

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-2
EPCs at SWMU 33-001(a) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	18	0	0.07 (U)	6.2 (U)	n/a*	6.2 (U)	Maximum Detection Limit
Mercury	18	6	0.0154 (J)	0.377	Nonparametric	0.0781	95% KM (t)
Nitrate	17	17	0.18 (J)	1.6	Normal	0.89	95% Student's-t
Perchlorate	17	3	0.0026 (J)	0.0062 (U)	n/a	0.0045	Maximum Detected Concentration
Uranium	1	1	1.91	1.91	n/a	1.91	Maximum Detected Concentration
Aroclor-1242	18	4	0.0048 (J)	0.041 (U)	n/a	0.027	Maximum Detected Concentration
Aroclor-1254	18	5	0.0077 (J)	0.064 (J)	Normal	0.0246	95% KM (t)
Bis(2-ethylhexyl)phthalate	18	2	0.052 (J)	0.37 (U)	n/a	0.076	Maximum Detected Concentration
HMX	17	2	0.02 (J)	0.179 (U)	n/a	0.044	Maximum Detected Concentration
Iodomethane	18	1	0.0027 (J)	0.0062 (U)	n/a	0.0027	Maximum Detected Concentration
Methylene Chloride	18	4	0.0041 (U)	0.014	n/a	0.014	Maximum Detected Concentration
RDX	17	1	0.032 (J+)	0.173 (U)	n/a	0.032	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	1.23E-08	1.23E-08	n/a	1.23E-08	Maximum Detected Concentration
Radionuclides (pCi/g)							
Uranium-238	17	17	0.133	4.67	Lognormal	0.816	95% H-UCL

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-3
EPCs at Area 1 of SWMU 39-002(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	53	5	0.11 (U)	5.5 (U)	Normal	0.328	95% KM (t)
Copper	53	53	3.32 (J)	508	Lognormal	63.96	95% H-UCL
Cyanide (Total)	42	2	0.0518 (U)	20.8	n/a[a]	20.8	Maximum Detected Concentration
Lead	53	53	6.53	233 (J)	Nonparametric	39.33	95% Student's-t
Mercury	53	49	0.00803 (U)	28.1 (J)	Nonparametric	1.733	95% KM (t)
Nitrate	42	30	0.24 (U)	10.2	Nonparametric	2.53	95% KM (t)
Perchlorate	42	4	0.000442 (U)	0.0061 (UJ)	n/a	0.000963	Maximum Detected Concentration
Selenium	53	31	0.095 (J)	1.91	Normal	0.775	95% KM (t)
Silver	53	35	0.048 (J)	1.1	Gamma	0.345	95% KM Approximate Gamma
Thallium	53	2	0.0819 (U)	1.26 (J)	n/a	1.26	Maximum Detected Concentration
Zinc	53	53	29.1	416	Nonparametric	93.64	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	55	43	0.00122 (U)	8.97 (J)	Lognormal	1.23	95% Bootstrap t
Acenaphthylene	55	29	0.00122 (U)	0.55 (J)	Gamma	0.096	95% KM Approximate Gamma
Amino-2,6-dinitrotoluene[4-]	53	1	0.054 (U)	0.5 (U)	n/a	0.171	Maximum Detected Concentration
Anthracene	55	46	0.00122 (U)	10.2 (J)	Lognormal	1.345	95% Bootstrap t
Aroclor-1254	53	42	0.0012 (U)	0.449	Gamma	0.121	95% KM Approximate Gamma
Aroclor-1260	53	17	0.00122 (U)	0.155	Normal	0.0223	95% KM (t)
Benzo(a)anthracene	55	51	0.00672	13.6 (J-)	Gamma	2.014	95% KM Approximate Gamma
Benzo(a)pyrene	55	53	0.00332 (J)	13.7 (J)	Gamma	2.222	95% KM Approximate Gamma
Benzo(b)fluoranthene	55	53	0.00368	14.9 (J)	Gamma	2.375	95% KM Approximate Gamma

Table G-2.3-3 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Benzo(g,h,i)perylene	55	53	0.00295 (J)	8.7 (J)	Gamma	1.446	95% KM Approximate Gamma
Benzo(k)fluoranthene	55	47	0.00122 (U)	5.87 (J)	Gamma	1.355	95% KM Approximate Gamma
Bis(2-ethylhexyl)phthalate	55	13	0.0103 (U)	1.52 (U)	Normal	0.124	95% KM (t)
Butylbenzylphthalate	55	4	0.0103 (U)	1.52 (U)	n/a	0.0436	Maximum Detected Concentration
Carbazole	31	22	0.0108 (U)	6.82 (J)	Lognormal	3.242	95% Bootstrap t
Chrysene	55	53	0.00593	16.1 (J-)	Gamma	2.357	95% KM Approximate Gamma
Dibenz(a,h)anthracene	55	32	0.00122 (U)	2.12 (J)	Gamma	0.282	95% KM Approximate Gamma
Dibenzofuran	55	10	0.067 (J)	7.16 (J)	Gamma	0.707	95% KM Approximate Gamma
Dichlorobenzene[1,2-]	79	1	0.000348 (U)	2.28 (UJ)	n/a	0.00043	Maximum Detected Concentration
Di-n-butylphthalate	55	19	0.0105 (U)	4.4 (J)	Gamma	0.53	95% KM Approximate Gamma
Ethylbenzene	53	1	0.000348 (U)	0.0061 (U)	n/a	0.000718	Maximum Detected Concentration
Fluoranthene	55	54	0.017 (J)	52.2	Gamma	6.72	95% KM Approximate Gamma
Fluorene	55	42	0.00122 (U)	10 (J)	Lognormal	1.383	95% Bootstrap t
Indeno(1,2,3-cd)pyrene	55	52	0.00295 (J)	9.37 (J)	Gamma	1.463	95% KM Approximate Gamma
Methylene Chloride	53	3	0.00174 (U)	0.0075 (U)	n/a	0.00287	Maximum Detected Concentration
Methylnaphthalene[1-]	31	19	0.00119 (U)	2.37 (J)	Lognormal	2.235	95% Bootstrap t
Methylnaphthalene[2-]	55	22	0.00119 (U)	3.36 (J)	Lognormal	0.572	95% Bootstrap t
Naphthalene	55	32	0.00122 (U)	13.8 (J)	Lognormal	2.803	95% Bootstrap t
Pentachlorophenol	55	1	0.103 (U)	2.28 (UJ)	n/a	1.99	Maximum Detected Concentration
Phenanthrene	55	54	0.0103	66.7 (J)	Gamma	7.094	95% KM Approximate Gamma
Pyrene	55	54	0.0142 (J)	43.2	Gamma	5.665	95% KM Approximate Gamma
RDX	53	1	0.11 (U)	1 (U)	n/a	0.38	Maximum Detected Concentration
Tetryl	53	1	0.054 (UJ)	0.65 (U)	n/a	0.345	Maximum Detected Concentration
Toluene	53	3	0.000326 (J)	0.0233	n/a	0.0233	Maximum Detected Concentration

Table G-2.3-3 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Total Petroleum Hydrocarbons Diesel Range Organics	11	11	18	170	Normal	93.21	95% Student's-t
Trichloroethene	53	2	0.000348 (U)	0.0061 (U)	n/a	0.000747	Maximum Detected Concentration
Trimethylbenzene[1,2,4-]	53	1	0.000348 (U)	0.0057 (UJ)	n/a	0.00047	Maximum Detected Concentration
Trinitrotoluene[2,4,6-]	53	1	0.054 (U)	1.02	n/a	1.02	Maximum Detected Concentration
Xylene[1,2-]	34	2	0.000348 (U)	0.00114 (U)	n/a	0.000624	Maximum Detected Concentration
Xylene[1,3-]+Xylene[1,4-]	34	2	0.000697 (U)	0.00229 (U)	n/a	0.00177	Maximum Detected Concentration
Radionuclides (pCi/g)							
Cesium-137	42	12	-0.0248 (U)	0.223	Normal	0.0394	95% KM (t)
Tritium	42	1	-3.37 (U)	1.47 (U)	n/a	0.113[b]	Maximum Detected Concentration
Uranium-238	53	53	0.641	8.21	Nonparametric	1.889	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended UCL was negative, so used maximum detected result.

Table G-2.3-4
EPCs at Area 1 of SWMU 39-002(a) for the Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	163	10	0.076 (U)	6.1 (U)	Normal	0.168	95% KM (t)
Copper	163	156	1.1 (U)	508	Nonparametric	26.28	95% KM (t)
Cyanide (Total)	149	5	0.0461 (U)	20.8	Normal	0.732	95% KM (t)
Lead	163	163	2.87	977	Nonparametric	32.31	95% Student's-t
Mercury	163	124	0.00727 (U)	28.1 (J)	Lognormal	1.73	95% Bootstrap t
Nitrate	149	114	0.1 (J)	10.2	Nonparametric	2.055	95% KM (t)

Table G-2.3-4 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Perchlorate	149	16	0.000434 (U)	0.00794	Nonparametric	0.00062736	95% KM (t)
Selenium	163	117	0.095 (J)	1.91	Normal	0.865	95% KM (t)
Silver	163	94	0.025 (J)	1.2 (U)	Gamma	0.214	95% KM Approximate Gamma
Thallium	163	2	0.0819 (U)	1.26 (J)	n/a*	1.26	Maximum Detected Concentration
Zinc	163	163	15.7 (J+)	467	Nonparametric	59.78	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	167	110	0.00113 (U)	8.97 (J)	Lognormal	0.414	95% Bootstrap t
Acenaphthylene	167	81	0.00115 (U)	0.55 (J)	Lognormal	0.0361	95% Bootstrap t
Amino-2,6-dinitrotoluene[4-]	163	1	0.054 (U)	0.5 (U)	n/a	0.171	Maximum Detected Concentration
Anthracene	167	123	0.00115 (U)	10.2 (J)	Lognormal	0.495	95% Bootstrap t
Aroclor-1242	163	1	0.00111 (U)	0.041 (U)	n/a	0.00169	Maximum Detected Concentration
Aroclor-1254	163	97	0.00114 (U)	0.645	Nonparametric	0.0743	95% KM (t)
Aroclor-1260	163	39	0.00111 (U)	0.155	Gamma	0.0118	95% KM Approximate Gamma
Benzo(a)anthracene	167	139	0.00115 (U)	13.6 (J-)	Lognormal	0.83	95% Bootstrap t
Benzo(a)pyrene	167	140	0.00115 (U)	13.7 (J)	Lognormal	0.906	95% Bootstrap t
Benzo(b)fluoranthene	167	142	0.00115 (U)	14.9 (J)	Lognormal	0.98	95% Bootstrap t
Inorganic Chemicals (mg/kg)							
Benzo(g,h,i)perylene	167	141	0.00115 (U)	8.7 (J)	Lognormal	0.594	95% Bootstrap t
Benzo(k)fluoranthene	167	121	0.00115 (U)	5.87 (J)	Nonparametric	0.497	95% KM (t)
Benzoic Acid	167	1	0.169 (U)	7.82 (U)	n/a	0.346	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	167	32	0.0102 (U)	1.6 (U)	Lognormal	0.0552	95% Bootstrap t
Butylbenzylphthalate	167	8	0.0102 (U)	1.6 (U)	Normal	0.0122	95% KM (t)
Carbazole	115	59	0.0103 (U)	6.82 (J)	Nonparametric	0.238	95% KM (t)
Chloronaphthalene[2-]	167	1	0.00112 (U)	0.43 (UJ)	n/a	0.00231	Maximum Detected Concentration
Chrysene	167	140	0.00115 (U)	16.1 (J-)	Lognormal	0.974	95% Bootstrap t
Dibenz(a,h)anthracene	167	94	0.00115 (U)	2.12 (J)	Nonparametric	0.104	95% KM (t)
Dibenzofuran	167	18	0.042 (J)	7.16 (J)	Lognormal	0.272	95% BCA Bootstrap

Table G-2.3-4 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Dichlorobenzene[1,2-]	219	3	0.000343 (U)	2.28 (UJ)	n/a	0.0007	Maximum Detected Concentration
Dimethyl Phthalate	167	1	0.0102 (U)	1.6 (U)	n/a	0.0141	Maximum Detected Concentration
Di-n-butylphthalate	167	55	0.0102 (U)	4.4 (J)	Nonparametric	0.16	95% KM (t)
Di-n-octylphthalate	167	1	0.0102 (U)	1.6 (U)	n/a	0.0189	Maximum Detected Concentration
Ethylbenzene	163	1	0.000343 (U)	0.0065 (U)	n/a	0.000718	Maximum Detected Concentration
Fluoranthene	167	148	0.00115 (U)	52.2	Lognormal	2.792	95% Bootstrap t
Fluorene	167	107	0.00113 (U)	10 (J)	Lognormal	0.451	95% Bootstrap t
Indeno(1,2,3-cd)pyrene	167	137	0.00115 (U)	9.37 (J)	Lognormal	0.6	95% Bootstrap t
Iodomethane	163	1	0.00081 (J)	0.0065 (U)	n/a	0.00081	Maximum Detected Concentration
Methylene Chloride	163	10	0.00172 (U)	0.027 (U)	Normal	0.00186	95% KM (t)
Methylnaphthalene[1-]	115	51	0.00112 (UJ)	2.37 (J)	Nonparametric	0.0753	95% KM (t)
Methylnaphthalene[2-]	167	58	0.00112 (U)	3.36 (J)	Nonparametric	0.0853	95% KM (t)
Naphthalene	167	75	0.00113 (U)	13.8 (J)	Lognormal	0.835	95% Bootstrap t
Pentachlorophenol	167	2	0.102 (U)	4.69 (U)	n/a	1.99	Maximum Detected Concentration
Phenanthrene	167	148	0.00115 (U)	66.7 (J)	Lognormal	3.085	95% Bootstrap t
Pyrene	167	148	0.00115 (U)	43.2	Lognormal	2.362	95% Bootstrap t
RDX	163	1	0.11 (U)	1 (U)	n/a	0.38	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	0.000000183	0.000000183	n/a	1.83E-07	Maximum Detected Concentration
Tetryl	163	1	0.054 (UJ)	0.65 (U)	n/a	0.345	Maximum Detected Concentration
Toluene	163	3	0.000326 (J)	0.0233	n/a	0.0233	Maximum Detected Concentration
Total Petroleum Hydrocarbons Diesel Range Organics	14	13	4.9 (U)	170	Normal	78.14	95% KM (t)
Trichloroethene	163	3	0.000343 (U)	0.0065 (U)	n/a	0.00084	Maximum Detected Concentration
Trimethylbenzene[1,2,4-]	163	1	0.000343 (U)	0.0065 (U)	n/a	0.00047	Maximum Detected Concentration
Trinitrotoluene[2,4,6-]	163	1	0.054 (U)	1.02	n/a	1.02	Maximum Detected Concentration
Xylene[1,2-]	125	2	0.000343 (U)	0.0012 (U)	n/a	0.000624	Maximum Detected Concentration
Xylene[1,3-]+Xylene[1,4-]	125	2	0.000688 (U)	0.0024 (U)	n/a	0.00177	Maximum Detected Concentration

Table G-2.3-4 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Cesium-137	149	14	0-.0868 (U)	0.223	n/a	0.223	Maximum Detected Concentration
Plutonium-239/240	149	1	-0.0625 (U)	0.105	n/a	0.105	Maximum Detected Concentration
Tritium	149	3	-3.41 (U)	20.7	n/a	20.7	Maximum Detected Concentration
Uranium-238	163	163	0.38	8.21	Nonparametric	1.51	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-5
EPCs at Area 1 of SWMU 39-002(a) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	163	10	0.076 (U)	6.1 (U)	Normal	0.168	95% KM (t)
Copper	163	156	1.1 (U)	508	Nonparametric	26.28	95% KM (t)
Cyanide (Total)	149	5	0.0461 (U)	20.8	Normal	0.732	95% KM (t)
Lead	163	163	2.87	977	Nonparametric	32.31	95% Student's-t
Mercury	163	124	0.00727 (U)	28.1 (J)	Lognormal	1.73	95% Bootstrap t
Nitrate	149	114	0.1 (J)	10.2	Nonparametric	2.055	95% KM (t)
Perchlorate	149	16	0.000434 (U)	0.00794	Nonparametric	0.000627	95% KM (t)
Selenium	163	117	0.095 (J)	1.91	Normal	0.865	95% KM (t)
Silver	163	94	0.025 (J)	1.2 (U)	Gamma	0.214	95% KM Approximate Gamma
Thallium	163	2	0.0819 (U)	1.26 (J)	n/a[a]	1.26	Maximum Detected Concentration
Zinc	163	163	15.7 (J+)	467	Nonparametric	59.78	95% Student's-t

Table G-2.3-5 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Organic Chemicals (mg/kg)							
Acenaphthene	167	110	0.00113 (U)	8.97 (J)	Lognormal	0.414	95% Bootstrap t
Acenaphthylene	167	81	0.00115 (U)	0.55 (J)	Lognormal	0.0361	95% Bootstrap t
Amino-2,6-dinitrotoluene[4-]	163	1	0.054 (U)	0.5 (U)	n/a	0.171	Maximum Detected Concentration
Anthracene	167	123	0.00115 (U)	10.2 (J)	Lognormal	0.495	95% Bootstrap t
Aroclor-1242	163	1	0.00111 (U)	0.041 (U)	n/a	0.00169	Maximum Detected Concentration
Aroclor-1254	163	97	0.00114 (U)	0.645	Nonparametric	0.0743	95% KM (t)
Aroclor-1260	163	39	0.00111 (U)	0.155	Gamma	0.0118	95% KM Approximate Gamma
Benzo(a)anthracene	167	139	0.00115 (U)	13.6 (J-)	Lognormal	0.83	95% Bootstrap t
Benzo(a)pyrene	167	140	0.00115 (U)	13.7 (J)	Lognormal	0.906	95% Bootstrap t
Benzo(b)fluoranthene	167	142	0.00115 (U)	14.9 (J)	Lognormal	0.98	95% Bootstrap t
Benzo(g,h,i)perylene	167	141	0.00115 (U)	8.7 (J)	Lognormal	0.594	95% Bootstrap t
Benzo(k)fluoranthene	167	121	0.00115 (U)	5.87 (J)	Nonparametric	0.497	95% KM (t)
Benzoic Acid	167	1	0.169 (U)	7.82 (U)	n/a	0.346	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	167	32	0.0102 (U)	1.6 (U)	Lognormal	0.0552	95% Bootstrap t
Butylbenzylphthalate	167	8	0.0102 (U)	1.6 (U)	Normal	0.0122	95% KM (t)
Carbazole	115	59	0.0103 (U)	6.82 (J)	Nonparametric	0.238	95% KM (t)
Chloronaphthalene[2-]	167	1	0.00112 (U)	0.43 (UJ)	n/a	0.00231	Maximum Detected Concentration
Chrysene	167	140	0.00115 (U)	16.1 (J-)	Lognormal	0.974	95% Bootstrap t
Dibenz(a,h)anthracene	167	94	0.00115 (U)	2.12 (J)	Nonparametric	0.104	95% KM (t)
Dibenzofuran	167	18	0.042 (J)	7.16 (J)	Lognormal	0.272	95% BCA Bootstrap
Dichlorobenzene[1,2-]	219	3	0.000343 (U)	2.28 (UJ)	n/a	0.0007	Maximum Detected Concentration
Dimethyl Phthalate	167	1	0.0102 (U)	1.6 (U)	n/a	0.0141	Maximum Detected Concentration

Table G-2.3-5 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Di-n-butylphthalate	167	55	0.0102 (U)	4.4 (J)	Nonparametric	0.16	95% KM (t)
Di-n-octylphthalate	167	1	0.0102 (U)	1.6 (U)	n/a	0.0189	Maximum Detected Concentration
Ethylbenzene	163	1	0.000343 (U)	0.0065 (U)	n/a	0.000718	Maximum Detected Concentration
Fluoranthene	167	148	0.00115 (U)	52.2	Lognormal	2.792	95% Bootstrap t
Fluorene	167	107	0.00113 (U)	10 (J)	Lognormal	0.451	95% Bootstrap t
Indeno(1,2,3-cd)pyrene	167	137	0.00115 (U)	9.37 (J)	Lognormal	0.6	95% Bootstrap t
Iodomethane	163	1	0.00081 (J)	0.0065 (U)	n/a	0.00081	Maximum Detected Concentration
Methylene Chloride	163	10	0.00172 (U)	0.027 (U)	Normal	0.00186	95% KM (t)
Methylnaphthalene[1-]	115	51	0.00112 (UJ)	2.37 (J)	Nonparametric	0.0753	95% KM (t)
Methylnaphthalene[2-]	167	58	0.00112 (U)	3.36 (J)	Nonparametric	0.0853	95% KM (t)
Naphthalene	167	75	0.00113 (U)	13.8 (J)	Lognormal	0.835	95% Bootstrap t
Pentachlorophenol	167	2	0.102 (U)	4.69 (U)	n/a	1.99	Maximum Detected Concentration
Phenanthrene	167	148	0.00115 (U)	66.7 (J)	Lognormal	3.085	95% Bootstrap t
Pyrene	167	148	0.00115 (U)	43.2	Lognormal	2.362	95% Bootstrap t
RDX	163	1	0.11 (U)	1 (U)	n/a	0.38	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	0.000000183	0.000000183	n/a	0.000000183	Maximum Detected Concentration
Tetryl	163	1	0.054 (UJ)	0.65 (U)	n/a	0.345	Maximum Detected Concentration
Toluene	163	3	0.000326 (J)	0.0233	n/a	0.0233	Maximum Detected Concentration
Total Petroleum Hydrocarbons Diesel Range Organics	14	13	4.9 (U)	170	Normal	78.14	95% KM (t)
Trichloroethene	163	3	0.000343 (U)	0.0065 (U)	n/a	0.00084	Maximum Detected Concentration

Table G-2.3-5 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Trimethylbenzene[1,2,4-]	163	1	0.000343 (U)	0.0065 (U)	n/a	0.00047	Maximum Detected Concentration
Trinitrotoluene[2,4,6-]	163	1	0.054 (U)	1.02	n/a	1.02	Maximum Detected Concentration
Xylene[1,2-]	125	2	0.000343 (U)	0.0012 (U)	n/a	0.000624	Maximum Detected Concentration
Xylene[1,3-]+Xylene[1,4-]	125	2	0.000688 (U)	0.0024 (U)	n/a	0.00177	Maximum Detected Concentration
Radionuclides (pCi/g)							
Cesium-137	149	14	-0.0868 (U)	0.223	n/a	0.223[b]	Maximum Detected Concentration
Plutonium-239/240	149	1	-0.0625 (U)	0.105	n/a	0.105	Maximum Detected Concentration
Tritium	149	3	-3.41 (U)	20.7	n/a	20.7	Maximum Detected Concentration
Uranium-238	163	163	0.38	8.21	Nonparametric	1.51	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended UCL was negative, so used maximum detected result.

Table G-2.3-6
EPCs at Area 2 of SWMU 39-002(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganics (mg/kg)							
Copper	39	39	2.81 (J+)	6870	Nonparametric	480.3	95% Student's-t
Nitrate	5	5	0.636 (J)	1.04	Normal	1.015	95% Student's-t
Zinc	5	5	41.9 (J+)	64.7 (J+)	Normal	57.52	95% Student's-t

Table G-2.3-6 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Organic Chemicals (mg/kg)							
Acenaphthene	5	2	0.0112 (UJ)	0.0585	n/a*	0.0585	Maximum Detected Concentration
Anthracene	5	3	0.0112 (UJ)	0.0891	n/a	0.0891	Maximum Detected Concentration
Aroclor-1248	53	1	0.00112 (U)	2.28 (U)	n/a	0.0769	Maximum Detected Concentration
Aroclor-1254	53	51	0.00123 (U)	11.8	Lognormal	2.154	95% Bootstrap t
Aroclor-1260	53	30	0.00112 (U)	4.18	Lognormal	0.613	95% Bootstrap t
Benzo(a)anthracene	5	3	0.0112 (UJ)	0.315	n/a	0.315	Maximum Detected Concentration
Benzo(a)pyrene	5	3	0.0112 (UJ)	0.361	n/a	0.361	Maximum Detected Concentration
Benzo(b)fluoranthene	5	3	0.0112 (UJ)	0.448	n/a	0.448	Maximum Detected Concentration
Benzo(g,h,i)perylene	5	3	0.0112 (UJ)	0.238	n/a	0.238	Maximum Detected Concentration
Benzo(k)fluoranthene	5	3	0.0112 (UJ)	0.166	n/a	0.166	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	5	3	0.0426 (U)	0.079 (J+)	n/a	0.079	Maximum Detected Concentration
Butylbenzylphthalate	5	4	0.0112 (U)	0.0161 (J-)	n/a	0.0161	Maximum Detected Concentration
Chrysene	5	3	0.0112 (UJ)	0.365	n/a	0.365	Maximum Detected Concentration
Di-n-butylphthalate	5	2	0.16 (U)	0.401 (J+)	n/a	0.401	Maximum Detected Concentration
Dibenz(a,h)anthracene	5	2	0.0112 (UJ)	0.0635	n/a	0.0635	Maximum Detected Concentration
Diethylphthalate	5	4	0.0114 (UJ)	0.0142 (J-)	n/a	0.0142	Maximum Detected Concentration
Fluoranthene	5	3	0.0112 (UJ)	0.84	n/a	0.84	Maximum Detected Concentration
Fluorene	5	2	0.0112 (UJ)	0.0453	n/a	0.0453	Maximum Detected Concentration
Indeno(1,2,3-cd)pyrene	5	3	0.0112 (UJ)	0.24	n/a	0.24	Maximum Detected Concentration
Naphthalene	5	2	0.0112 (UJ)	0.0291 (J)	n/a	0.0291	Maximum Detected Concentration
Phenanthrene	5	3	0.0112 (UJ)	0.531	n/a	0.531	Maximum Detected Concentration
Pyrene	5	3	0.0112 (UJ)	0.641	n/a	0.641	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-7
EPCs at Area 2 of SWMU 39-002(a) for Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganics (mg/kg)							
Antimony	15	0	0.345 (U)	4.05 (U)	n/a*	4.05 (U)	Maximum Detection Limit
Copper	119	119	2.81 (J+)	6870	Nonparametric	159.6	95% Student's-t
Nitrate	15	14	0.382 (U)	15.2	Lognormal	7.463	95% Bootstrap t
Perchlorate	15	3	0.00055 (U)	0.00224 (J)	n/a	0.00224	Maximum Detected Concentration
Zinc	15	15	41.7 (J+)	64.7 (J+)	Nonparametric	49.54	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	15	2	0.0112 (UJ)	0.0585	n/a	0.0585	Maximum Detected Concentration
Anthracene	15	3	0.0112 (UJ)	0.0891	n/a	0.0891	Maximum Detected Concentration
Aroclor-1248	170	5	0.00112 (U)	2.28 (U)	Normal	0.0161	95% KM (t)
Aroclor-1254	170	149	0.00115 (U)	16.5	Lognormal	1.086	95% Bootstrap t
Aroclor-1260	170	79	0.00112 (U)	4.18	Nonparametric	0.174	95% KM (t)
Benzo(a)anthracene	15	3	0.0112 (UJ)	0.315	n/a	0.315	Maximum Detected Concentration
Benzo(a)pyrene	15	3	0.0112 (UJ)	0.361	n/a	0.361	Maximum Detected Concentration
Benzo(b)fluoranthene	15	3	0.0112 (UJ)	0.448	n/a	0.448	Maximum Detected Concentration
Benzo(g,h,i)perylene	15	3	0.0112 (UJ)	0.238	n/a	0.238	Maximum Detected Concentration
Benzo(k)fluoranthene	15	3	0.0112 (UJ)	0.166	n/a	0.166	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	15	12	0.0115 (UJ)	0.109 (J+)	Normal	0.0809	95% KM (t)
Butylbenzylphthalate	15	9	0.0112 (U)	0.0177 (J)	Normal	0.0143	95% KM (t)
Chrysene	15	3	0.0112 (UJ)	0.365	n/a	0.365	Maximum Detected Concentration
Di-n-butylphthalate	15	5	0.0188 (J-)	0.536 (J+)	Normal	0.201	95% KM (t)
Dibenz(a,h)anthracene	15	2	0.0112 (UJ)	0.0635	n/a	0.0635	Maximum Detected Concentration
Diethylphthalate	15	7	0.0114 (UJ)	0.0177 (J)	Normal	0.0137	95% KM (t)
Fluoranthene	15	4	0.0112 (UJ)	0.84	n/a	0.84	Maximum Detected Concentration
Fluorene	15	2	0.0112 (UJ)	0.0453	n/a	0.0453	Maximum Detected Concentration

Table G-2.3-7 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Indeno(1,2,3-cd)pyrene	15	3	0.0112 (UJ)	0.24	n/a	0.24	Maximum Detected Concentration
Naphthalene	15	2	0.0112 (UJ)	0.0291 (J)	n/a	0.0291	Maximum Detected Concentration
Phenanthrene	15	3	0.0112 (UJ)	0.531	n/a	0.531	Maximum Detected Concentration
Pyrene	15	4	0.0112 (UJ)	0.641	n/a	0.641	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-8
EPCs at Area 2 of SWMU 39-002(a) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganics (mg/kg)							
Antimony	15	0	0.345 (U)	4.05 (U)	n/a*	4.05 (U)	Maximum Detection Limit
Copper	119	119	2.81 (J+)	6870	Nonparametric	159.6	95% Student's-t
Nitrate	15	14	0.382 (U)	15.2	Lognormal	7.463	95% Bootstrap t
Perchlorate	15	3	0.00055 (U)	0.00224 (J)	n/a	0.00224	Maximum Detected Concentration
Zinc	15	15	41.7 (J+)	64.7 (J+)	Nonparametric	49.54	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	15	2	0.0112 (UJ)	0.0585	n/a	0.0585	Maximum Detected Concentration
Anthracene	15	3	0.0112 (UJ)	0.0891	n/a	0.0891	Maximum Detected Concentration
Aroclor-1248	161	5	0.00112 (U)	2.28 (U)	Normal	0.0169	95% KM (t)
Aroclor-1254	161	141	0.00119 (U)	16.5	Lognormal	1.155	95% Bootstrap t
Aroclor-1260	161	71	0.00112 (U)	4.18	Nonparametric	0.181	95% KM (t)
Benzo(a)anthracene	15	3	0.0112 (UJ)	0.315	n/a	0.315	Maximum Detected Concentration
Benzo(a)pyrene	15	3	0.0112 (UJ)	0.361	n/a	0.361	Maximum Detected Concentration

Table G-2.3-8 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(b)fluoranthene	15	3	0.0112 (UJ)	0.448	n/a	0.448	Maximum Detected Concentration
Benzo(g,h,i)perylene	15	3	0.0112 (UJ)	0.238	n/a	0.238	Maximum Detected Concentration
Benzo(k)fluoranthene	15	3	0.0112 (UJ)	0.166	n/a	0.166	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	15	12	0.0115 (UJ)	0.109 (J+)	Normal	0.0809	95% KM (t)
Butylbenzylphthalate	15	9	0.0112 (U)	0.0177 (J)	Normal	0.0143	95% KM (t)
Chrysene	15	3	0.0112 (UJ)	0.365	n/a	0.365	Maximum Detected Concentration
Di-n-butylphthalate	15	5	0.0188 (J-)	0.536 (J+)	Normal	0.201	95% KM (t)
Dibenz(a,h)anthracene	15	2	0.0112 (UJ)	0.0635	n/a	0.0635	Maximum Detected Concentration
Diethylphthalate	15	7	0.0114 (UJ)	0.0177 (J)	Normal	0.0137	95% KM (t)
Fluoranthene	15	4	0.0112 (UJ)	0.84	n/a	0.84	Maximum Detected Concentration
Fluorene	15	2	0.0112 (UJ)	0.0453	n/a	0.0453	Maximum Detected Concentration
Indeno(1,2,3-cd)pyrene	15	3	0.0112 (UJ)	0.24	n/a	0.24	Maximum Detected Concentration
Naphthalene	15	2	0.0112 (UJ)	0.0291 (J)	n/a	0.0291	Maximum Detected Concentration
Phenanthrene	15	3	0.0112 (UJ)	0.531	n/a	0.531	Maximum Detected Concentration
Pyrene	15	4	0.0112 (UJ)	0.641	n/a	0.641	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-9
EPCs at Area 3 of SWMU 39-002(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Nitrate	9	7	0.14 (J)	5.8	n/a[a]	5.8[b]	Maximum Detected Concentration
Organic Chemicals (mg/kg)							
Anthracene	9	2	0.037 (J)	0.37 (U)	n/a	0.053	Maximum Detected Concentration
Aroclor-1254	9	4	0.0099 (J)	0.037 (U)	n/a	0.013	Maximum Detected Concentration
Aroclor-1260	9	1	0.0091 (J)	0.037 (U)	n/a	0.0091	Maximum Detected Concentration
Benzo(a)anthracene	9	6	0.049 (J)	0.37 (U)	Normal	0.13	95% KM (t)
Benzo(a)pyrene	9	6	0.06 (J)	0.37 (U)	Normal	0.141	95% KM (t)
Benzo(b)fluoranthene	9	6	0.056 (J)	0.37 (U)	Normal	0.117	95% KM (t)
Benzo(g,h,i)perylene	9	6	0.045 (J)	0.37 (U)	Normal	0.0788	95% KM (t)
Benzo(k)fluoranthene	9	6	0.056 (J)	0.37 (U)	Normal	0.139	95% KM (t)
Bis(2-ethylhexyl)phthalate	9	6	0.065 (J)	0.61	Normal	0.37	95% KM (t)
Chrysene	9	7	0.038 (J)	0.36 (U)	Normal	0.149	95% KM (t)
Di-n-butylphthalate	9	2	0.069 (J)	0.54	n/a	0.54	Maximum Detected Concentration
Fluoranthene	9	9	0.047 (J)	0.39	Normal	0.255	95% Student's-t
Indeno(1,2,3-cd)pyrene	9	2	0.072 (J)	0.37 (U)	n/a	0.079	Maximum Detected Concentration
Methylene Chloride	9	4	0.00082 (U)	0.0054 (U)	n/a	0.002	Maximum Detected Concentration
Phenanthrene	9	6	0.063 (J)	0.37 (U)	Normal	0.199	95% KM (t)
Pyrene	9	9	0.045 (J)	0.38	Normal	0.236	95% Student's-t
TCDD[2,3,7,8-]	1	1	0.00000113	0.00000113	n/a	0.00000113	Maximum Detected Concentration
Trichlorofluoromethane	9	1	0.00037 (J)	0.011 (U)	n/a	0.00037	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended exceeded maximum detection, so maximum detection was used as exposure point concentration.

Table G-2.3-10
EPCs at Area 3 of SWMU 39-002(a) for Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Nitrate	16	14	0.14 (J)	5.8	Nonparametric	1.73	95% KM (t)
Organic Chemicals (mg/kg)							
Acetone	16	1	0.0041 (U)	0.023 (UJ)	n/a*	0.013	Maximum Detected Concentration
Anthracene	16	2	0.037 (J)	0.39 (U)	n/a	0.053	Maximum Detected Concentration
Aroclor-1254	16	4	0.0099 (J)	0.039 (U)	n/a	0.013	Maximum Detected Concentration
Aroclor-1260	16	1	0.0091 (J)	0.039 (U)	n/a	0.0091	Maximum Detected Concentration
Benzo(a)anthracene	16	6	0.049 (J)	0.39 (U)	Normal	0.128	95% KM (t)
Benzo(a)pyrene	16	7	0.043 (J+)	0.39 (UJ)	Normal	0.129	95% KM (t)
Benzo(b)fluoranthene	16	6	0.056 (J)	0.39 (UJ)	Normal	0.116	95% KM (t)
Benzo(g,h,i)perylene	16	6	0.045 (J)	0.39 (UJ)	Normal	0.0779	95% KM (t)
Benzo(k)fluoranthene	16	6	0.056 (J)	0.39 (UJ)	Normal	0.137	95% KM (t)
Bis(2-ethylhexyl)phthalate	16	7	0.065 (J)	0.61	Normal	0.267	95% KM (t)
Chrysene	16	8	0.038 (J)	0.39 (U)	Normal	0.136	95% KM (t)
Di-n-butylphthalate	16	2	0.069 (J)	0.54	n/a	0.54	Maximum Detected Concentration
Fluoranthene	16	12	0.047 (J)	0.39	Normal	0.187	95% KM (t)
Indeno(1,2,3-cd)pyrene	16	2	0.072 (J)	0.39 (UJ)	n/a	0.079	Maximum Detected Concentration
Iodomethane	16	1	0.00077 (J)	0.0059 (U)	n/a	0.00077	Maximum Detected Concentration
Methylene Chloride	16	7	0.00082 (U)	0.0054 (U)	Normal	0.00193	95% KM (t)
PETN	16	1	0.02 (J+)	0.73 (U)	n/a	0.02	Maximum Detected Concentration
Phenanthrene	16	8	0.041 (J)	0.39 (U)	Normal	0.165	95% KM (t)
Pyrene	16	12	0.045 (J)	0.39 (U)	Normal	0.183	95% KM (t)
TCDD[2,3,7,8-]	1	1	0.00000113	0.00000113	n/a	0.00000113	Maximum Detected Concentration
Trichlorofluoromethane	16	1	0.00037 (J)	0.012 (U)	n/a	0.00037	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-11
EPCs at Area 3 of SWMU 39-002(a) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Nitrate	16	14	0.14 (J)	5.8	Nonparametric	1.73	95% KM (t)
Organic Chemicals (mg/kg)							
Acetone	16	1	0.0041 (U)	0.023 (UJ)	n/a*	0.013	Maximum Detected Concentration
Anthracene	16	2	0.037 (J)	0.39 (U)	n/a	0.053	Maximum Detected Concentration
Aroclor-1254	16	4	0.0099 (J)	0.039 (U)	n/a	0.013	Maximum Detected Concentration
Aroclor-1260	16	1	0.0091 (J)	0.039 (U)	n/a	0.0091	Maximum Detected Concentration
Benzo(a)anthracene	16	6	0.049 (J)	0.39 (U)	Normal	0.128	95% KM (t)
Benzo(a)pyrene	16	7	0.043 (J+)	0.39 (UJ)	Normal	0.129	95% KM (t)
Benzo(b)fluoranthene	16	6	0.056 (J)	0.39 (UJ)	Normal	0.116	95% KM (t)
Benzo(g,h,i)perylene	16	6	0.045 (J)	0.39 (UJ)	Normal	0.0779	95% KM (t)
Benzo(k)fluoranthene	16	6	0.056 (J)	0.39 (UJ)	Normal	0.137	95% KM (t)
Bis(2-ethylhexyl)phthalate	16	7	0.065 (J)	0.61	Normal	0.267	95% KM (t)
Chrysene	16	8	0.038 (J)	0.39 (U)	Normal	0.136	95% KM (t)
Di-n-butylphthalate	16	2	0.069 (J)	0.54	n/a	0.54	Maximum Detected Concentration
Fluoranthene	16	12	0.047 (J)	0.39	Normal	0.187	95% KM (t)
Indeno(1,2,3-cd)pyrene	16	2	0.072 (J)	0.39 (UJ)	n/a	0.079	Maximum Detected Concentration
Iodomethane	16	1	0.00077 (J)	0.0059 (U)	n/a	0.00077	Maximum Detected Concentration
Methylene Chloride	16	7	0.00082 (U)	0.0054 (U)	Normal	0.00193	95% KM (t)
PETN	16	1	0.02 (J+)	0.73 (U)	n/a	0.02	Maximum Detected Concentration
Phenanthrene	16	8	0.041 (J)	0.39 (U)	Normal	0.165	95% KM (t)
Pyrene	16	12	0.045 (J)	0.39 (U)	Normal	0.183	95% KM (t)
TCDD[2,3,7,8-]	1	1	0.00000113	0.00000113	n/a	0.00000113	Maximum Detected Concentration
Trichlorofluoromethane	16	1	0.00037 (J)	0.012 (U)	n/a	0.00037	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-12
EPCs at AOC 39-002(b) for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Copper	10	10	4.53	163	Nonparametric	67.01	95% Student's-t
Mercury	10	7	0.00758 (U)	1.14 (J)	Lognormal	0.374	KM (t)
Nitrate	10	7	0.319 (U)	3	Normal	1.661	95% KM (t)
Zinc	10	10	27.4 (J)	119	Nonparametric	62	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1242	12	5	0.00114 (U)	3.75	Normal	1.01	95% KM (t)
Aroclor-1248	12	5	0.00113 (U)	0.329 (J)	Normal	0.111	95% KM (t)
Aroclor-1254	12	8	0.00113 (U)	0.123 (U)	Normal	0.0508	95% KM (t)
Aroclor-1260	12	11	0.00114 (U)	0.483	n/a[a]	0.483[b]	Maximum Detected Concentration
Benzo(g,h,i)perylene	10	2	0.00113 (U)	0.0237 (J)	n/a	0.0237	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	10	2	0.0103 (U)	0.984	n/a	0.984	Maximum Detected Concentration
Butylbenzylphthalate	10	2	0.0103 (U)	0.51	n/a	0.51	Maximum Detected Concentration
Chrysene	10	1	0.00113 (U)	0.0305 (J)	n/a	0.0305	Maximum Detected Concentration
Di-n-butylphthalate	10	2	0.0103 (U)	0.111 (U)	n/a	0.0472	Maximum Detected Concentration
HMX	10	1	0.133 (UJ)	0.221 (J)	n/a	0.221	Maximum Detected Concentration
TCDD[2,3,7,8-]	10	10	6.93E-10	1.44E-05	Gamma	1.25E-05	95% Adjusted Gamma
Radionuclides (pCi/g)							
Uranium-234	10	10	0.652	3.69	Gamma	2.178	95% Adjusted Gamma
Uranium-235/236	10	6	0.0239 (U)	0.309	Normal	0.153	95% KM (t)
Uranium-238	10	10	0.719	11.6	Gamma	6.043	95% Adjusted Gamma

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended UCL exceeded maximum detection, so maximum detection was used as exposure point concentration.

Table G-2.3-13
EPCs at AOC 39-002(b) for Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Copper	29	29	3.06	163	Lognormal	28.28	95% H-UCL
Mercury	29	19	0.00758 (U)	1.14 (J)	Nonparametric	0.147	95% KM (t)
Nitrate	29	24	0.319 (U)	9.21	Nonparametric	2.477	95% KM (t)
Selenium	29	29	0.729 (J)	2.02	Normal	1.264	95% Student's-t
Zinc	29	29	27.4 (J)	119	Nonparametric	46.09	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1242	36	12	0.00114 (U)	3.75	Gamma	0.805	95% KM Adjusted Gamma
Aroclor-1248	36	15	0.00113 (U)	14.6	Lognormal	2.746	95% KM Adjusted Gamma
Aroclor-1254	36	22	0.00113 (U)	3.91	Lognormal	1.127	95% Bootstrap t
Aroclor-1260	36	24	0.00114 (U)	1.08 (J)	Gamma	0.185	95% KM Adjusted Gamma
Benzo(g,h,i)perylene	29	2	0.00113 (U)	0.0237 (J)	n/a*	0.0237	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	29	3	0.0103 (U)	0.984	n/a	0.984	Maximum Detected Concentration
Butylbenzylphthalate	29	2	0.0103 (U)	0.51	n/a	0.51	Maximum Detected Concentration
Chrysene	29	1	0.00113 (U)	0.0305 (J)	n/a	0.0305	Maximum Detected Concentration
Di-n-butylphthalate	29	17	0.0103 (U)	0.982	Nonparametric	0.164	95% KM (t)
HMX	29	3	0.13 (U)	0.221 (J)	n/a	0.221	Maximum Detected Concentration
Isopropyltoluene[4-]	29	1	0.000341 (U)	0.00399	n/a	0.00399	Maximum Detected Concentration
PETN	29	1	0.217 (U)	0.249 (U)	n/a	0.246	Maximum Detected Concentration
RDX	29	1	0.13 (U)	0.481 (J-)	n/a	0.481	Maximum Detected Concentration
TCDD[2,3,7,8-]	29	25	6.93E-10	1.44E-05	Gamma	3.01E-06	95% Adjusted Gamma
Tetrachloroethene	29	2	0.000341 (U)	0.000825 (J)	n/a	0.000825	Maximum Detected Concentration
Trichloroethene	29	1	0.000341 (U)	0.00247	n/a	0.00247	Maximum Detected Concentration

Table G-2.3-13 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Uranium-234	29	29	0.652	3.69	Nonparametric	1.523	95% Student's-t
Uranium-235/236	29	12	0.0239 (U)	0.309	Normal	0.0937	95% KM (t)
Uranium-238	29	29	0.719	11.6	Nonparametric	2.948	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-14
EPCs at AOC 39-002(b) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Copper	20	20	4.53	163	Lognormal	40.84	95% H-UCL
Mercury	20	16	0.00758 (U)	1.14 (J)	Lognormal	0.446	95% Bootstrap t
Nitrate	20	16	0.319 (U)	4.15	Normal	1.963	95% KM (t)
Zinc	20	20	27.4 (J)	119	Nonparametric	48.76	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1242	24	8	0.00114 (U)	3.75	Normal	0.726	95% KM (t)
Aroclor-1248	24	11	0.00113 (U)	14.6	Lognormal	1.801	KM (t)
Aroclor-1254	24	16	0.00113 (U)	3.91	Gamma	1.09	95% KM Adjusted Gamma
Aroclor-1260	24	20	0.00114 (U)	1.08 (J)	Gamma	0.281	95% KM Adjusted Gamma
Benzo(g,h,i)perylene	20	2	0.00113 (U)	0.0237 (J)	n/a*	0.0237	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	20	2	0.0103 (U)	0.984	n/a	0.984	Maximum Detected Concentration

Table G-2.3-14 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Butylbenzylphthalate	20	2	0.0103 (U)	0.51	n/a	0.51	Maximum Detected Concentration
Chrysene	20	1	0.00113 (U)	0.0305 (J)	n/a	0.0305	Maximum Detected Concentration
Di-n-butylphthalate	20	10	0.0103 (U)	0.982	Nonparametric	0.233	95% KM (t)
HMX	20	3	0.13 (U)	0.221 (J)	n/a	0.221	Maximum Detected Concentration
Isopropyltoluene[4-]	20	1	0.000341 (U)	0.00399	n/a	0.00399	Maximum Detected Concentration
PETN	20	1	0.217 (U)	0.249 (U)	n/a	0.246	Maximum Detected Concentration
TCDD[2,3,7,8-]	20	20	6.93E-10	1.44E-05	Gamma	4.96E-06	95% Adjusted Gamma
Tetrachloroethene	20	2	0.000341 (U)	0.000825 (J)	n/a	0.000825	Maximum Detected Concentration
Trichloroethene	20	1	0.000341 (U)	0.00247	n/a	0.00247	Maximum Detected Concentration
Radionuclides (pCi/g)							
Uranium-234	20	20	0.652	3.69	Lognormal	1.727	95% H-UCL
Uranium-235/236	20	12	0.0239 (U)	0.309	Normal	0.122	95% KM (t)
Uranium-238	20	20	0.719	11.6	Gamma	3.798	95% Adjusted Gamma

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-15
EPCs at SWMU 39-006(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Cadmium	14	14	0.0441 (J)	2.56 (J)	Normal	1.058	95% Student's-t
Cyanide (Total)	14	8	0.0588 (U)	70 (J-)	Normal	32.58	95% KM (t)
Lead	14	14	6.64	15.1 (J+)	Normal	11.14	95% Student's-t
Mercury	14	14	0.0127 (J)	0.818	Gamma	0.33	95% Adjusted Gamma
Nitrate	14	13	0.731 (J)	4.66	Normal	2.485	95% KM (t)
Perchlorate	14	9	0.000485 (U)	0.00169 (J)	Normal	0.001	95% KM (t)

Table G-2.3-15 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Selenium	14	13	0.362 (U)	1.54	Normal	0.983	95% KM (t)
Silver	14	7	0.102 (U)	46.6 (J)	Normal	18.79	95% KM (t)
Organic Chemicals (mg/kg)							
Acenaphthene	14	1	0.00112 (U)	0.199	n/a*	0.199	Maximum Detected Concentration
Aroclor-1254	14	7	0.00115 (U)	0.249	Normal	0.0734	95% KM (t)
Aroclor-1260	14	7	0.00115 (U)	0.104	Normal	0.0315	95% KM (t)
Benzo(a)pyrene	14	2	0.00112 (U)	0.00242 (J)	n/a	0.00242	Maximum Detected Concentration
Benzo(b)fluoranthene	14	4	0.00112 (U)	0.00415	n/a	0.00415	Maximum Detected Concentration
Benzo(g,h,i)perylene	14	2	0.00112 (U)	0.00292 (J)	n/a	0.00292	Maximum Detected Concentration
Benzoic Acid	14	3	0.171 (U)	0.366 (U)	n/a	0.343	Maximum Detected Concentration
Chrysene	14	1	0.00112 (U)	0.00415	n/a	0.00415	Maximum Detected Concentration
Di-n-butylphthalate	14	2	0.0101 (U)	0.0725	n/a	0.0725	Maximum Detected Concentration
Fluoranthene	14	9	0.00114 (U)	0.00588	Normal	0.00317	95% KM (t)
Indeno(1,2,3-cd)pyrene	14	1	0.00112 (U)	0.00277 (J)	n/a	0.00277	Maximum Detected Concentration
Isopropyltoluene[4-]	14	2	0.000344 (U)	0.00816 (J-)	n/a	0.00816	Maximum Detected Concentration
Methylene Chloride	14	1	0.00172 (U)	0.00359 (U)	n/a	0.00203	Maximum Detected Concentration
Phenanthrene	14	7	0.00112 (U)	0.0038	Normal	0.00223	95% KM (t)
Pyrene	14	8	0.00114 (U)	0.00622	Normal	0.00301	95% KM (t)
Radionuclides (pCi/g)							
Uranium-238	14	14	1.18	2.84	Normal	2.158	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-16
EPCs at SWMU 39-006(a) for Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Cadmium	190	141	0.0184 (U)	6.7	Nonparametric	0.228	95% KM (t)
Cyanide (Total)	192	63	0.0488 (U)	70 (J-)	Gamma	4.47	95% KM Approximate Gamma
Lead	190	187	2.16 (U)	591	Nonparametric	16.21	95% KM (t)
Mercury	190	69	0.00697 (U)	0.818	Nonparametric	0.0335	95% KM (t)
Nitrate	190	177	0.332 (UJ)	97.5	Nonparametric	11.34	95% KM (t)
Perchlorate	190	58	0.000414 (U)	0.0065 (U)	Lognormal	0.000596	95% BCA Bootstrap
Selenium	190	136	0.092 (J)	1.54	Normal	0.58	95% KM (t)
Silver	190	102	0.03 (J)	227 (J)	Nonparametric	4.841	95% KM (t)
Organic Chemicals (mg/kg)							
Acenaphthene	203	7	0.0011 (UJ)	0.43 (U)	Gamma	0.00568	95% KM Approximate Gamma
Acenaphthylene	203	16	0.0011 (UJ)	0.43 (U)	Normal	0.00618	95% KM (t)
Acetone	203	11	0.00162 (U)	0.025 (U)	Normal	0.00204	95% KM (t)
Anthracene	203	19	0.0011 (UJ)	0.43 (U)	Normal	0.00554	95% KM (t)
Aroclor-1254	203	53	0.0000119 (U)	0.249	Gamma	0.00959	95% KM Approximate Gamma
Aroclor-1260	203	31	0.0000119 (U)	0.104	Lognormal	0.00369	95% BCA Bootstrap
Benzene	202	1	0.000323 (U)	0.0088	n/a[a]	0.0088	Maximum Detected Concentration
Benzo(a)anthracene	203	31	0.0011 (UJ)	0.43 (U)	Nonparametric	0.0134	95% KM (t)
Benzo(a)pyrene	203	32	0.0011 (UJ)	0.43 (U)	Nonparametric	0.014	95% KM (t)
Benzo(b)fluoranthene	203	35	0.0011 (UJ)	0.43 (U)	Nonparametric	0.0201	95% KM (t)
Benzo(g,h,i)perylene	203	32	0.0011 (UJ)	0.43 (U)	Nonparametric	0.0105	95% KM (t)
Benzo(k)fluoranthene	203	24	0.0011 (UJ)	0.43 (U)	Nonparametric	0.00713	95% KM (t)
Benzoic Acid	203	13	0.166 (U)	2.1 (U)	Normal	0.183	95% KM (t)
Bis(2-ethylhexyl)phthalate	203	19	0.00996 (U)	2	Gamma	0.093	95% KM Approximate Gamma
Butanone[2-]	187	1	0.00162 (U)	0.025 (U)	n/a	0.00248	Maximum Detected Concentration

Table G-2.3-16 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Butylbenzylphthalate	203	1	0.00996 (U)	0.43 (U)	n/a	0.0112	Maximum Detected Concentration
Carbazole	172	1	0.00996 (U)	0.113 (U)	n/a	0.0157	Maximum Detected Concentration
Chloronaphthalene[2-]	203	1	0.0011 (U)	0.43 (U)	n/a	0.0421	Maximum Detected Concentration
Chrysene	203	31	0.0011 (UJ)	0.43 (U)	Nonparametric	0.0135	95% KM (t)
Di-n-butylphthalate	203	36	0.00999 (U)	0.43 (U)	Lognormal	0.0113	95% BCA Bootstrap
Di-n-octylphthalate	203	1	0.00996 (U)	0.43 (U)	n/a	0.0218	Maximum Detected Concentration
Dibenz(a,h)anthracene	203	15	0.0011 (UJ)	0.43 (U)	Normal	0.00334	95% KM (t)
Diethylphthalate	203	9	0.00996 (U)	0.43 (U)	Nonparametric	0.0107	95% KM (t)
Fluoranthene	203	47	0.0011 (UJ)	0.577 (J)	Nonparametric	0.0312	95% KM (t)
Fluorene	203	5	0.0011 (UJ)	0.43 (U)	Nonparametric	0.00135	95% KM (t)
Hexanone[2-]	202	2	0.00162 (U)	0.231	n/a	0.231	Maximum Detected Concentration
Indeno(1,2,3-cd)pyrene	203	26	0.0011 (UJ)	0.43 (U)	Nonparametric	0.0114	95% KM (t)
Iodomethane	202	1	0.0009 (J)	0.0065 (U)	n/a	0.0009	Maximum Detected Concentration
Isopropyltoluene[4-]	202	3	0.000323 (U)	0.00816 (J-)	n/a	0.00816	Maximum Detected Concentration
Methylene Chloride	202	26	0.00162 (U)	0.015 (U)	Nonparametric	0.00185	95% KM (t)
Methylnaphthalene[1-]	172	2	0.0011 (U)	0.0125 (U)	n/a	0.00612	Maximum Detected Concentration
Methylnaphthalene[2-]	203	3	0.0011 (U)	0.43 (U)	n/a	0.00612	Maximum Detected Concentration
Naphthalene	203	3	0.0011 (UJ)	0.43 (U)	n/a	0.005	Maximum Detected Concentration
Phenanthrene	203	36	0.0011 (UJ)	0.43 (U)	Nonparametric	0.00528	95% KM (t)
Phenol	203	1	0.0996 (U)	1.13 (U)	n/a	0.49	Maximum Detected Concentration
Pyrene	203	44	0.0011 (UJ)	0.43 (U)	Nonparametric	0.0233	95% KM (t)
TCDD[2,3,7,8-]	1	1	1.95E-08	1.95E-08	n/a	1.95E-08	Maximum Detected Concentration
Toluene	202	3	0.000323 (U)	0.0065 (U)	n/a	0.00048	Maximum Detected Concentration
Trimethylbenzene[1,2,4-]	202	2	0.000323 (U)	0.0064 (U)	n/a	0.00056	Maximum Detected Concentration
Xylene[1,3-]+Xylene[1,4-]	171	3	0.000646 (U)	0.00162 (U)	n/a	0.00113	Maximum Detected Concentration

Table G-2.3-16 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Cesium-137	203	23	-0.0413 (U)	0.333	n/a	0.333[b]	Maximum Detected Concentration
Tritium	202	5	-4.23 (U)	56.1 (J)	n/a	56.1[b]	Maximum Detected Concentration
Uranium-238	203	199	0.0212 (U)	2.84	Gamma	1.015	95% GROS Approximate Gamma

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended UCL was negative, so used maximum detected result.

Table G-2.3-17
EPCs at SWMU 39-006(a) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Cadmium	81	75	0.0212 (J)	2.56 (J)	Nonparametric	0.248	95% KM (t)
Cyanide (Total)	81	32	0.0533 (U)	70 (J-)	Gamma	9.192	95% KM Approximate Gamma
Lead	81	80	2.2	591	Nonparametric	30.29	95% KM (t)
Mercury	81	37	0.007 (U)	0.818	Lognormal	0.0662	95% BCA Bootstrap
Nitrate	81	72	0.332 (UJ)	68.2	Nonparametric	12.74	95% KM (t)
Perchlorate	81	29	0.000433 (U)	0.00324	Normal	0.00086012	95% KM (t)
Selenium	81	61	0.092 (J)	1.54	Normal	0.64	95% KM (t)
Silver	81	49	0.043 (J)	46.6 (J)	Nonparametric	3.88	95% KM (t)

Table G-2.3-17 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Organic Chemicals (mg/kg)							
Acenaphthene	90	7	0.0011 (UJ)	0.38 (U)	Gamma	0.0129	95% KM Approximate Gamma
Acenaphthylene	90	9	0.0011 (UJ)	0.38 (U)	Normal	0.00962	95% KM (t)
Anthracene	90	11	0.0011 (UJ)	0.38 (U)	Normal	0.00872	95% KM (t)
Aroclor-1254	90	32	0.0000119 (U)	0.249	Gamma	0.0183	95% KM Approximate Gamma
Aroclor-1260	90	22	0.0000119 (U)	0.104	Lognormal	0.00745	95% BCA Bootstrap
Benzo(a)anthracene	90	18	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0214	95% KM (t)
Benzo(a)pyrene	90	19	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0227	95% KM (t)
Benzo(b)fluoranthene	90	21	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0327	95% KM (t)
Benzo(g,h,i)perylene	90	20	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0167	95% KM (t)
Benzo(k)fluoranthene	90	13	0.0011 (UJ)	0.38 (U)	Normal	0.0111	95% KM (t)
Benzoic Acid	90	8	0.166 (U)	1.89 (U)	Normal	0.192	95% KM (t)
Bis(2-ethylhexyl)phthalate	90	6	0.00996 (U)	1.47	Normal	0.0752	95% KM (t)
Butylbenzylphthalate	90	1	0.00996 (U)	0.38 (U)	n/a*	0.0112	Maximum Detected Concentration
Carbazole	78	1	0.00996 (U)	0.113 (U)	n/a	0.0157	Maximum Detected Concentration
Chloronaphthalene[2-]	90	1	0.0011 (U)	0.38 (U)	n/a	0.0421	Maximum Detected Concentration
Chrysene	90	18	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0218	95% KM (t)
Di-n-butylphthalate	90	14	0.00999 (U)	0.38 (U)	Normal	0.0146	95% KM (t)
Di-n-octylphthalate	90	1	0.00996 (U)	0.38 (U)	n/a	0.0218	Maximum Detected Concentration
Dibenz(a,h)anthracene	90	10	0.0011 (UJ)	0.38 (U)	Normal	0.00499	95% KM (t)
Diethylphthalate	90	4	0.00996 (U)	0.38 (U)	n/a	0.0118	Maximum Detected Concentration
Fluoranthene	90	30	0.0011 (UJ)	0.38 (U)	Nonparametric	0.046	95% KM (t)
Fluorene	90	5	0.0011 (UJ)	0.38 (U)	Nonparametric	0.00166	95% KM (t)
Hexanone[2-]	90	2	0.00162 (U)	0.231	n/a	0.231	Maximum Detected Concentration
Indeno(1,2,3-cd)pyrene	90	15	0.0011 (UJ)	0.38 (U)	Normal	0.0182	95% KM (t)
Isopropyltoluene[4-]	90	2	0.000323 (U)	0.00816 (J-)	n/a	0.00816	Maximum Detected Concentration
Methylene Chloride	90	10	0.00162 (U)	0.0072 (U)	Normal	0.00184	95% KM (t)

Table G-2.3-17 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Methylnaphthalene[1-]	78	1	0.0011 (U)	0.0125 (U)	n/a	0.0025	Maximum Detected Concentration
Methylnaphthalene[2-]	90	1	0.0011 (U)	0.38 (U)	n/a	0.00178	Maximum Detected Concentration
Naphthalene	90	1	0.0011 (UJ)	0.38 (U)	n/a	0.005	Maximum Detected Concentration
Phenanthrene	90	25	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0089	95% KM (t)
Pyrene	90	28	0.0011 (UJ)	0.38 (U)	Nonparametric	0.0344	95% KM (t)
TCDD[2,3,7,8-]c	1	1	1.95E-08	1.95E-08	n/a	1.95E-08	Maximum Detected Concentration
Toluene	90	2	0.000323 (U)	0.0058 (U)	n/a	0.00047	Maximum Detected Concentration
Trimethylbenzene[1,2,4-]	90	1	0.000323 (U)	0.0058 (U)	n/a	0.00046	Maximum Detected Concentration
Xylene[1,3-]+Xylene[1,4-]	78	2	0.000646 (U)	0.00144 (U)	n/a	0.00113	Maximum Detected Concentration
Radionuclides (pCi/g)							
Cesium-137	90	18	-0.0328 (UJ)	0.333	Normal	0.0348	95% KM (t)
Tritium	90	1	-4.23 (U)	3.32 (UJ)	n/a	2.02	Maximum Detected Concentration
Uranium-238	90	88	0.0339 (UJ)	2.84	Nonparametric	1.1	95% KM (t)

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-18
EPCs at SWMU 39-007(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Nitrate	8	2	0.24 (U)	3.57	n/a*	3.57	Maximum Detected Concentration
Zinc	12	12	29.7	108	Nonparametric	58.15	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1248	18	2	0.00365 (U)	0.35 (J)	n/a	0.35	Maximum Detected Concentration
Aroclor-1254	18	6	0.0039 (J)	0.4 (J)	Normal	0.0942	95% KM (t)
Aroclor-1260	18	11	0.0033 (J)	0.086	Normal	0.0305	95% KM (t)
Benzo(k)fluoranthene	8	1	0.0366 (U)	0.46 (U)	n/a	0.042	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	8	3	0.0872 (J)	0.46 (U)	n/a	0.225	Maximum Detected Concentration
Butylbenzylphthalate	8	1	0.077 (J)	0.46 (U)	n/a	0.077	Maximum Detected Concentration
Chrysene	8	1	0.0366 (U)	0.46 (U)	n/a	0.04	Maximum Detected Concentration
Dichlorobenzene[1,4-]	8	2	0.00059 (J)	0.46 (U)	n/a	0.00074	Maximum Detected Concentration
Ethylbenzene	8	2	0.00043 (J)	0.0056 (U)	n/a	0.00043	Maximum Detected Concentration
Fluoranthene	8	1	0.0366 (U)	0.46 (U)	n/a	0.076	Maximum Detected Concentration
Phenanthrene	8	1	0.0366 (U)	0.46 (U)	n/a	0.067	Maximum Detected Concentration
Pyrene	8	1	0.0366 (U)	0.46 (U)	n/a	0.08	Maximum Detected Concentration
Toluene	8	2	0.00041 (J)	0.0056 (U)	n/a	0.00095	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-19
EPCs at SWMU 39-007(a) for Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Nitrate	21	3	0.22 (U)	3.57	n/a*	3.57	Maximum Detected Concentration
Perchlorate	21	1	0.000567 (J)	0.0069 (UJ)	n/a	0.000567	Maximum Detected Concentration
Zinc	25	25	24.6 (J)	108	Nonparametric	49.31	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	21	1	0.00526 (UJ)	0.042 (U)	n/a	0.0103	Maximum Detected Concentration
Aroclor-1248	47	4	0.00114 (U)	0.35 (J)	n/a	0.35	Maximum Detected Concentration
Aroclor-1254	47	11	0.00114 (U)	0.4 (J)	Gamma	0.0629	95% KM Adjusted Gamma
Aroclor-1260	47	20	0.00114 (U)	0.089	Normal	0.0164	95% KM (t)
Benzo(k)fluoranthene	21	1	0.0349 (U)	0.46 (U)	n/a	0.042	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	21	10	0.0872 (J)	0.46 (U)	Normal	0.187	95% KM (t)
Butylbenzylphthalate	21	1	0.077 (J)	0.46 (U)	n/a	0.077	Maximum Detected Concentration
Chrysene	21	1	0.0349 (U)	0.46 (U)	n/a	0.04	Maximum Detected Concentration
Dichlorobenzene[1,4-]	21	2	0.00059 (J)	0.46 (U)	n/a	0.00074	Maximum Detected Concentration
Ethylbenzene	21	3	0.00033 (J)	0.0062 (U)	n/a	0.00043	Maximum Detected Concentration
Fluoranthene	21	1	0.0349 (U)	0.46 (U)	n/a	0.076	Maximum Detected Concentration
Phenanthrene	21	1	0.0349 (U)	0.46 (U)	n/a	0.067	Maximum Detected Concentration
Pyrene	21	1	0.0349 (U)	0.46 (U)	n/a	0.08	Maximum Detected Concentration
Toluene	21	2	0.00041 (J)	0.0062 (U)	n/a	0.00095	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-20
EPCs at SWMU 39-007(a) for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Nitrate	21	3	0.22 (U)	3.57	n/a*	3.57	Maximum Detected Concentration
Perchlorate	21	1	0.000567 (J)	0.0069 (UJ)	n/a	0.000567	Maximum Detected Concentration
Zinc	25	25	24.6 (J)	108	Nonparametric	49.31	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	21	1	0.00526 (UJ)	0.042 (U)	n/a	0.0103	Maximum Detected Concentration
Aroclor-1248	47	4	0.00114 (U)	0.35 (J)	n/a	0.35	Maximum Detected Concentration
Aroclor-1254	47	11	0.00114 (U)	0.4 (J)	Gamma	0.0629	95% KM Adjusted Gamma
Aroclor-1260	47	20	0.00114 (U)	0.089	Normal	0.0164	95% KM (t)
Benzo(k)fluoranthene	21	1	0.0349 (U)	0.46 (U)	n/a	0.042	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	21	10	0.0872 (J)	0.46 (U)	Normal	0.187	95% KM (t)
Butylbenzylphthalate	21	1	0.077 (J)	0.46 (U)	n/a	0.077	Maximum Detected Concentration
Chrysene	21	1	0.0349 (U)	0.46 (U)	n/a	0.04	Maximum Detected Concentration
Dichlorobenzene[1,4-]	21	2	0.00059 (J)	0.46 (U)	n/a	0.00074	Maximum Detected Concentration
Ethylbenzene	21	3	0.00033 (J)	0.0062 (U)	n/a	0.00043	Maximum Detected Concentration
Fluoranthene	21	1	0.0349 (U)	0.46 (U)	n/a	0.076	Maximum Detected Concentration
Phenanthrene	21	1	0.0349 (U)	0.46 (U)	n/a	0.067	Maximum Detected Concentration
Pyrene	21	1	0.0349 (U)	0.46 (U)	n/a	0.08	Maximum Detected Concentration
Toluene	21	2	0.00041 (J)	0.0062 (U)	n/a	0.00095	Maximum Detected Concentration

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-21
EPCs at SWMU 39-010 for the Industrial Scenario

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	54	5	0.097 (U)	2.56 (J+)	Normal	0.343	95% KM (t)
Beryllium	54	54	0.193	3.6	Nonparametric	0.776	95% Student's-t
Copper	54	54	3.26 (J)	1100	Nonparametric	70.62	95% Student's-t
Mercury	54	50	0.0046 (J)	1.06 (J+)	Lognormal	0.227	95% Bootstrap t
Nitrate	54	45	0.22 (UJ)	23.1	Lognormal	3.892	95% BCA Bootstrap
Perchlorate	54	26	0.000442 (U)	0.00893 (J+)	Nonparametric	0.00172	95% KM (t)
Selenium	54	37	0.11 (J-)	2.01	Normal	0.968	95% KM (t)
Organic Chemicals (mg/kg)							
Acenaphthene	54	2	0.0011 (U)	0.39 (U)	n/a*	0.0373	Maximum Detected Concentration
Acetone	42	1	0.00165 (U)	0.175 (U)	n/a	0.00198	Maximum Detected Concentration
Amino-2,6-dinitrotoluene[4-]	52	1	0.0064 (J)	0.5 (U)	n/a	0.0064	Maximum Detected Concentration
Amino-4,6-dinitrotoluene[2-]	52	1	0.0099 (J)	0.5 (U)	n/a	0.0099	Maximum Detected Concentration
Aroclor-1254	54	2	0.00109 (U)	0.039 (U)	n/a	0.00185	Maximum Detected Concentration
Aroclor-1260	54	1	0.00109 (U)	0.039 (U)	n/a	0.0049	Maximum Detected Concentration
Benzo(a)anthracene	54	7	0.0011 (U)	0.39 (U)	Nonparametric	0.00801	95% KM (t)
Benzo(a)pyrene	54	7	0.0011 (U)	0.39 (U)	Nonparametric	0.0102	95% KM (t)
Benzo(b)fluoranthene	54	8	0.0011 (U)	0.39 (U)	Lognormal	0.014	95% Bootstrap t
Benzo(g,h,i)perylene	54	6	0.0011 (U)	0.39 (U)	Nonparametric	0.0067	95% KM (t)
Benzo(k)fluoranthene	54	6	0.0011 (U)	0.39 (U)	Nonparametric	0.00801	95% KM (t)
Benzoic Acid	54	3	0.167 (UJ)	1.9 (U)	n/a	0.332	Maximum Detected Concentration
Bis(2-ethylhexyl)phthalate	54	4	0.01 (UJ)	0.39 (U)	n/a	0.133	Maximum Detected Concentration
Chloromethane	42	2	0.000329 (U)	0.035 (U)	n/a	0.00154	Maximum Detected Concentration
Chrysene	54	7	0.0011 (U)	0.39 (U)	Nonparametric	0.0101	95% KM (t)
Di-n-butylphthalate	54	20	0.0102 (U)	3.67	Nonparametric	0.322	95% KM (t)
Dibenz(a,h)anthracene	54	2	0.0011 (U)	0.39 (U)	n/a	0.00206	Maximum Detected Concentration
Diethylphthalate	54	1	0.01 (UJ)	0.39 (U)	n/a	0.0462	Maximum Detected Concentration

Table G-2.3-21 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Fluoranthene	54	8	0.0011 (U)	0.39 (U)	Nonparametric	0.0155	95% KM (t)
HMX	54	2	0.01 (J-)	0.5 (U)	n/a	0.036	Maximum Detected Concentration
Indeno(1,2,3-cd)pyrene	54	6	0.0011 (U)	0.39 (UJ)	Nonparametric	0.00611	95% KM (t)
Methylene Chloride	42	2	0.00165 (U)	0.175 (U)	n/a	0.0029	Maximum Detected Concentration
Methylnaphthalene[1-]	36	2	0.0011 (U)	0.0207	n/a	0.0207	Maximum Detected Concentration
Methylnaphthalene[2-]	54	4	0.0011 (U)	0.39 (U)	n/a	0.0304	Maximum Detected Concentration
Naphthalene	54	4	0.0011 (U)	0.39 (U)	n/a	0.0984	Maximum Detected Concentration
Phenanthrene	54	6	0.0011 (U)	0.39 (U)	Gamma	0.00717	95% KM Approximate Gamma
Pyrene	54	7	0.0011 (U)	0.39 (U)	Nonparametric	0.0146	95% KM (t)
TATB	54	1	0.279 (U)	1 (U)	n/a	0.401	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	0.0000023	0.0000023	n/a	0.0000023	Maximum Detected Concentration
Toluene	42	7	0.000329 (U)	0.035 (U)	Normal	0.00057853	95% KM (t)
Trimethylbenzene[1,2,4-]	42	1	0.000329 (U)	0.035 (U)	n/a	0.00666	Maximum Detected Concentration
Trimethylbenzene[1,3,5-]	42	1	0.000329 (U)	0.035 (U)	n/a	0.000857	Maximum Detected Concentration
Trinitrotoluene[2,4,6-]	54	1	0.033 (J)	0.5 (U)	n/a	0.033	Maximum Detected Concentration
Radionuclides (pCi/g)							
Americium-241	54	1	-0.524 (UJ)	1.43	n/a	1.43	Maximum Detected Concentration
Cesium-137	54	19	-0.07 (U)	0.431	Normal	0.0572	95% KM (t)
Plutonium-238	54	1	-0.647 (UJ)	0.513 (UJ)	n/a	0.0577	Maximum Detected Concentration
Plutonium-239/240	54	1	-0.421 (UJ)	0.437 (UJ)	n/a	0.0577	Maximum Detected Concentration
Tritium	54	2	-06.54 (U)	92.7 (UJ)	n/a	4.97	Maximum Detected Concentration
Uranium-234	54	43	-0.285 (UJ)	7.3 (J)	Gamma	2.741	95% KM Approximate Gamma
Uranium-235/236	54	26	-0.194 (UJ)	1.23 (UJ)	Normal	0.132	95% KM (t)
Uranium-238	54	45	0.358 (UJ)	56.2 (J)	Lognormal	10.02	95% Bootstrap t

Note: Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

Table G-2.3-22
EPCs at SWMU 39-010 for Residential and Construction Worker Scenarios

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	246	245	5.8 (U)	13500 (J)	Gamma	4674	95% GROS Approximate Gamma
Antimony	246	15	0.096 (U)	3.19 (U)	Lognormal	0.122	95% Bootstrap t
Barium	246	245	2.3 (U)	150 (J+)	Nonparametric	49.58	95% KM (t)
Beryllium	246	245	0.12 (U)	3.9	Nonparametric	0.669	95% KM (t)
Copper	246	245	0.794 (J-)	2530	Nonparametric	48.98	95% KM (t)
Mercury	246	151	0.0046 (J)	11.1 (J)	Nonparametric	0.214	95% KM (t)
Nitrate	246	197	0.18 (J)	76.1	Nonparametric	5.061	95% KM (t)
Perchlorate	246	97	0.000442 (U)	0.00893 (J+)	Nonparametric	0.00102	95% KM (t)
Selenium	246	199	0.088 (J-)	2.26	Nonparametric	0.933	95% KM (t)
Organic Chemicals (mg/kg)							
Acenaphthene	246	7	0.0011 (U)	0.39 (U)	Nonparametric	0.0056	95% KM (t)
Acenaphthylene	246	1	0.0011 (U)	0.39 (U)	n/a[a]	0.00876	Maximum Detected Concentration
Acetone	234	12	0.00143 (U)	3.16 (J)	Nonparametric	0.0409	95% KM (t)
Acetonitrile	192	1	0.00713 (U)	0.917 (U)	n/a	0.00951	Maximum Detected Concentration
Amino-2,6-dinitrotoluene[4-]	243	2	0.0064 (J)	0.5 (U)	n/a	0.016	Maximum Detected Concentration
Amino-4,6-dinitrotoluene[2-]	243	1	0.0099 (J)	0.5 (U)	n/a	0.0099	Maximum Detected Concentration
Anthracene	246	2	0.0011 (U)	0.39 (U)	n/a	0.0202	Maximum Detected Concentration
Aroclor-1242	246	1	0.00109 (U)	0.039 (U)	n/a	0.00494	Maximum Detected Concentration
Aroclor-1254	246	5	0.00109 (U)	0.039 (U)	Normal	0.00134	95% KM (t)
Aroclor-1260	246	5	0.00109 (U)	0.039 (U)	Normal	0.00141	95% KM (t)
Benzo(a)anthracene	246	13	0.0011 (U)	0.39 (U)	Lognormal	0.00432	95% Bootstrap t
Benzo(a)pyrene	246	14	0.0011 (U)	0.39 (U)	Lognormal	0.00459	95% Bootstrap t
Benzo(b)fluoranthene	246	17	0.0011 (U)	0.39 (U)	Gamma	0.00373	95% KM Approximate Gamma

Table G-2.3-22 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(g,h,i)perylene	246	12	0.0011 (U)	0.39 (U)	Lognormal	0.00254	95% Bootstrap t
Benzo(k)fluoranthene	246	10	0.0011 (U)	0.39 (U)	Lognormal	0.00487	95% Bootstrap t
Benzoic Acid	246	10	0.167 (UJ)	1.9 (U)	Normal	0.187	95% KM (t)
Bis(2-ethylhexyl)phthalate	246	35	0.00999 (UJ)	0.84	Gamma	0.033	95% KM Approximate Gamma
Butylbenzylphthalate	246	1	0.00999 (UJ)	0.391 (U)	n/a	0.24	Maximum Detected Concentration
Chloromethane	234	2	0.000285 (U)	0.0366 (U)	n/a	0.00154	Maximum Detected Concentration
Chrysene	246	12	0.0011 (U)	0.39 (U)	Lognormal	0.00428	95% Bootstrap t
Di-n-butylphthalate	246	101	0.00999 (U)	3.8	Nonparametric	0.131	95% KM (t)
Di-n-octylphthalate	246	1	0.00999 (UJ)	0.391 (U)	n/a	0.0214	Maximum Detected Concentration
Dibenz(a,h)anthracene	246	4	0.0011 (U)	0.39 (U)	n/a	0.00674	Maximum Detected Concentration
Diethylphthalate	246	1	0.00999 (UJ)	0.391 (U)	n/a	0.0462	Maximum Detected Concentration
Fluoranthene	246	15	0.0011 (U)	0.39 (U)	Nonparametric	0.00536	95% KM (t)
Hexanone[2-]	234	1	0.00143 (U)	0.183 (U)	n/a	0.0038	Maximum Detected Concentration
HMX	246	12	0.01 (J-)	2.6 (J)	Gamma	0.0822	95% KM Approximate Gamma
Indeno(1,2,3-cd)pyrene	246	11	0.0011 (U)	0.39 (UJ)	Lognormal	0.00232	95% Bootstrap t
Isopropyltoluene[4-]	234	3	0.000285 (U)	0.0366 (U)	n/a	0.00241	Maximum Detected Concentration
Methylene Chloride	234	34	0.00143 (U)	0.183 (U)	Nonparametric	0.00343	95% KM (t)
Methylnaphthalene[1-]	192	3	0.0011 (U)	0.0207	n/a	0.0207	Maximum Detected Concentration
Methylnaphthalene[2-]	246	6	0.0011 (U)	0.39 (U)	Normal	0.0017	95% KM (t)
Naphthalene	246	8	0.0011 (U)	0.39 (U)	Normal	0.00282	95% KM (t)
Phenanthrene	246	12	0.0011 (U)	0.39 (U)	Gamma	0.0029	95% KM Approximate Gamma
Pyrene	246	14	0.0011 (U)	0.39 (U)	Lognormal	0.00724	95% Bootstrap t
RDX	246	6	0.028 (J)	25.3	Normal	0.378	95% KM (t)
TATB	246	3	0.27 (U)	1 (U)	n/a	0.513	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	0.0000023	0.0000023	n/a	0.0000023	Maximum Detected Concentration
Toluene	234	32	0.000285 (U)	0.0366 (U)	Normal	0.000425	95% KM (t)
Trimethylbenzene[1,2,4-]	234	1	0.000285 (U)	0.0366 (U)	n/a	0.00666	Maximum Detected Concentration

Table G-2.3-22 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Trimethylbenzene[1,3,5-]	234	3	0.000285 (U)	0.0366 (U)	n/a	0.000857	Maximum Detected Concentration
Trinitrotoluene[2,4,6-]	246	3	0.0066 (J)	0.5 (U)	n/a	0.293	Maximum Detected Concentration
Radionuclides (pCi/g)							
Americium-241	246	1	-1.35 (U)	1.43	n/a	1.43	Maximum Detected Concentration
Cesium-137	246	31	-0.07 (U)	0.431	n/a	0.431[b]	Maximum Detected Concentration
Cobalt-60	246	1	-0.0835 (U)	1.86 (J)	n/a	1.86	Maximum Detected Concentration
Plutonium-238	246	2	-1.29 (UJ)	3.25	n/a	3.25	Maximum Detected Concentration
Plutonium-239/240	246	2	-1.31 (UJ)	13.8	n/a	13.8	Maximum Detected Concentration
Tritium	246	7	-48.4 (U)	92.7 (UJ)	n/a	4.97[b]	Maximum Detected Concentration
Uranium-234	246	174	-0.685 (U)	55	Nonparametric	2.259	95% KM (t)
Uranium-235/236	246	76	-0.424 (UJ)	10.5	n/a	10.5[b]	Maximum Detected Concentration
Uranium-238	246	175	-0.275 (UJ)	344	Nonparametric	8.925	95% KM (t)

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended UCL was negative, so used maximum detected result.

Table G-2.3-23
EPCs at SWMU 39-010 for Ecological Risk

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	166	10	0.096 (U)	2.56 (J+)	Normal	0.205	95% KM (t)
Beryllium	166	165	0.12 (U)	3.9	Nonparametric	0.718	95% KM (t)
Copper	166	165	1.04 (J+)	2530	Nonparametric	68.86	95% KM (t)
Mercury	166	115	0.0046 (J)	2.47	Nonparametric	0.159	95% KM (t)
Nitrate	166	137	0.18 (J)	71.4	Nonparametric	5.065	95% KM (t)
Perchlorate	166	67	0.000442 (U)	0.00893 (J+)	Nonparametric	0.00113	95% KM (t)
Selenium	166	121	0.088 (J-)	2.22	Normal	0.899	95% KM (t)

Table G-2.3-23 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Organic Chemicals (mg/kg)							
Acenaphthene	166	5	0.0011 (U)	0.39 (U)	Normal	0.00268	95% KM (t)
Acenaphthylene	166	1	0.0011 (U)	0.39 (U)	n/a[a]	0.00876	Maximum Detected Concentration
Acetone	154	8	0.00146 (U)	3.16 (J)	Gamma	0.128	95% KM Approximate Gamma
Amino-2,6-dinitrotoluene[4-]	163	2	0.0064 (J)	0.5 (U)	n/a	0.016	Maximum Detected Concentration
Amino-4,6-dinitrotoluene[2-]	163	1	0.0099 (J)	0.5 (U)	n/a	0.0099	Maximum Detected Concentration
Anthracene	166	1	0.0011 (U)	0.39 (U)	n/a	0.0202	Maximum Detected Concentration
Aroclor-1254	166	4	0.00109 (U)	0.039 (U)	n/a	0.0147	Maximum Detected Concentration
Aroclor-1260	166	5	0.00109 (U)	0.039 (U)	Normal	0.00159	95% KM (t)
Benzo(a)anthracene	166	11	0.0011 (U)	0.39 (U)	Lognormal	0.00642	95% Bootstrap t
Benzo(a)pyrene	166	11	0.0011 (U)	0.39 (U)	Lognormal	0.00562	95% KM Approximate Gamma
Benzo(b)fluoranthene	166	14	0.0011 (U)	0.39 (U)	Gamma	0.00522	95% KM Approximate Gamma
Benzo(g,h,i)perylene	166	9	0.0011 (U)	0.39 (U)	Lognormal	0.00377	95% Bootstrap t
Benzo(k)fluoranthene	166	8	0.0011 (U)	0.39 (U)	Normal	0.00408	95% KM (t)
Benzoic Acid	166	7	0.167 (UJ)	1.9 (U)	Normal	0.194	95% KM (t)
Bis(2-ethylhexyl)phthalate	166	17	0.00999 (U)	0.84	Gamma	0.0389	95% KM Approximate Gamma
Butylbenzylphthalate	166	1	0.00999 (U)	0.391 (U)	n/a	0.24	Maximum Detected Concentration
Chloromethane	154	2	0.000292 (U)	0.0366 (U)	n/a	0.00154	Maximum Detected Concentration
Chrysene	166	10	0.0011 (U)	0.39 (U)	Lognormal	0.00584	95% KM Approximate Gamma
Di-n-butylphthalate	166	62	0.00999 (U)	3.8	Nonparametric	0.166	95% KM (t)
Dibenz(a,h)anthracene	166	3	0.0011 (U)	0.39 (U)	n/a	0.00674	Maximum Detected Concentration
Diethylphthalate	166	1	0.00999 (U)	0.391 (U)	n/a	0.0462	Maximum Detected Concentration
Fluoranthene	166	13	0.0011 (U)	0.39 (U)	Lognormal	0.0122	95% Bootstrap t
Hexanone[2-]	154	1	0.00146 (U)	0.183 (U)	n/a	0.0038	Maximum Detected Concentration
HMX	166	10	0.01 (J-)	2.6 (J)	Normal	0.0975	95% KM (t)
Indeno(1,2,3-cd)pyrene	166	9	0.0011 (U)	0.39 (UJ)	Gamma	0.00319	95% KM Approximate Gamma
Isopropyltoluene[4-]	154	2	0.000292 (U)	0.0366 (U)	n/a	0.00241	Maximum Detected Concentration

Table G-2.3-23 (continued)

COPC	Number of Analyses	Number of Detections	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Methylene Chloride	154	15	0.00146 (U)	0.183 (U)	Lognormal	0.00162	95% Bootstrap t
Methylnaphthalene[1-]	112	2	0.0011 (U)	0.0207	n/a	0.0207	Maximum Detected Concentration
Methylnaphthalene[2-]	166	5	0.0011 (U)	0.39 (U)	Normal	0.00209	95% KM (t)
Naphthalene	166	6	0.0011 (U)	0.39 (U)	Normal	0.00388	95% KM (t)
Phenanthrene	166	10	0.0011 (U)	0.39 (U)	Gamma	0.00393	95% KM Approximate Gamma
Pyrene	166	12	0.0011 (U)	0.39 (U)	Gamma	0.00815	95% KM Approximate Gamma
RDX	166	6	0.028 (J)	25.3	Normal	0.547	95% KM (t)
TATB	166	2	0.272 (U)	1 (U)	n/a	0.513	Maximum Detected Concentration
TCDD[2,3,7,8-]	1	1	0.0000023	0.0000023	n/a	0.0000023	Maximum Detected Concentration
Toluene	154	18	0.000292 (U)	0.0366 (U)	Normal	0.000428	95% KM (t)
Trimethylbenzene[1,2,4-]	154	1	0.000292 (U)	0.0366 (U)	n/a	0.00666	Maximum Detected Concentration
Trimethylbenzene[1,3,5-]	154	3	0.000292 (U)	0.0366 (U)	n/a	0.000857	Maximum Detected Concentration
Trinitrotoluene[2,4,6-]	166	3	0.0066 (J)	0.5 (U)	n/a	0.293	Maximum Detected Concentration
Radionuclides (pCi/g)							
Americium-241	166	1	-0.704 (U)	1.43	n/a	1.43	Maximum Detected Concentration
Cesium-137	166	29	-0.07 (U)	0.431	n/a	0.431[b]	Maximum Detected Concentration
Plutonium-238	166	2	-0.647 (UJ)	3.25	n/a	3.25	Maximum Detected Concentration
Plutonium-239/240	166	2	-1.03 (UJ)	13.8	n/a	13.8	Maximum Detected Concentration
Tritium	166	6	-48.4 (U)	92.7 (UJ)	n/a	4.97[b]	Maximum Detected Concentration
Uranium-234	166	125	-0.527 (UJ)	55	Nonparametric	2.934	95% KM (t)
Uranium-235/236	166	65	-0.261 (UJ)	10.5	Nonparametric	0.179	95% KM (t)
Uranium-238	166	127	0.0866 (UJ)	344	Nonparametric	12.47	95% KM (t)

Note: Data qualifiers are defined in Appendix A.

[a] n/a = Not applicable.

[b] Recommended UCL was negative, so used maximum detected result.

Table G-3.2-1
Physical and Chemical Properties of Inorganic COPCs for the North Ancho Canyon Aggregate Area

COPC	K_d[a] (cm^3/g)	Water Solubility[a,b] (g/L)
Aluminum	1500	Insoluble
Antimony	45	Insoluble
Arsenic	29	Insoluble
Barium	41	Insoluble
Beryllium	790	Insoluble
Cadmium	75	Insoluble
Calcium	na[c]	Soluble
Chromium	850	Insoluble
Cobalt	45	Insoluble
Copper	35	Insoluble
Cyanide	9.9	95
Iron	25	Insoluble
Lead	900	Insoluble
Magnesium	4.5	Insoluble
Manganese	65	Insoluble
Mercury	52	Insoluble
Nickel	65	Insoluble
Nitrate	na	Soluble
Perchlorate	9.9[b]	245
Selenium	5	Insoluble
Silver	8.3	Insoluble
Sodium	100	Insoluble
Thallium	71	Insoluble
Uranium	0.4	Insoluble
Vanadium	1000	Insoluble
Zinc	62	Insoluble

[a] Information from https://rais.ornl.gov/cgi-bn/tools/TOX_search.

[b] Denotes reference information from https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm.

[c] na = Not available.

Table G-3.2-2
Physical and Chemical Properties of
Organic COPCs for the North Ancho Canyon 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	3.90E+00	5.03E+03	3.92E+00	2.15E-03
Acenaphthylene	1.61E+01	5.03E+03	3.94E+00	6.68E-03
Acetone	1.00E+06[b]	2.36E+00	-2.40E-01[b]	2.31E+02[b]
Acetonitrile	1.00E+06	4.67E+00	-3.40E-01	8.88E+01
Amino-2,6-dinitrotoluene[4-]	1.22E+03	2.83E+02	1.84E+00	1.07E-05
Amino-2,6-dinitrotoluene[2-]	1.22E+03	2.83E+02	1.84E+00	1.07E-05
Anthracene	4.34E-02[b]	1.64E+04	4.45E+00[b]	6.53E-06[b]
Aroclor-1242	2.77E-01	7.81E+04	6.34E+00	8.63E-05
Aroclor-1248	1.00E-01	7.65E+04	6.20E+00	4.94E-04
Aroclor-1254	4.30E-02	5.30E+05	6.50E+00	7.71E-05
Aroclor-1260	1.44E-02	3.50E+05	7.55E+00	4.05E-05[b]
Benzene	1.79E+03	1.46E+02	2.13E+00	9.48E+01
Benzo(a)anthracene	9.40E-03[b]	2.31E+05	5.76E+00[b]	1.90E-06[b]
Benzo(a)pyrene	1.62E-03[b]	5.87E+05	6.13E+00[b]	5.49E-09[b]
Benzo(b)fluoranthene	1.50E-03[b]	5.99E+05	5.78E+00[b]	5.00E-07[b]
Benzo(g,h,i)perylene	2.60E-04[b]	1.95E+07	6.63E+00[b]	1.00E-10[b]
Benzo(k)fluoranthene	8.00E-04[b]	5.87E+05	6.10E+00[b]	9.65E-10[b]
Benzoic acid	3.40E+03[b]	6.00E-01	1.87E+00[b]	7.00E-04[b]
Bis(2-ethylhexyl)phthalate	2.70E-01[b]	1.20E+05	7.60E+00[b]	1.42E-07[b]
Butanone[2-]	2.23E+05	3.83E+00	2.90E-01	9.06E+01
Butylbenzylphthalate	2.69E+00	9.36E+03	4.73E+00	8.25E-06
Carbazole	1.80E+00	9.16E+03	3.72E+00	7.50E-07
Chloromethane	5.32E+03	1.32E+01	9.10E-01	4.30E+03
Chloronaphthalene[2-]	1.17E+01	2.48E+03	3.90E+00	1.22E-02
Chrysene	2.00E-03	1.85E+05	5.81E+00[b]	6.23E-09[b]
DDE[4,4'-]	4.00E-02	1.18E+05	6.51E+00	6.00E-06
DDT[4,4'-]	5.50E-03	1.69E+05	6.91E+00	1.60E-07
Di-n-butylphthalate	1.46E+03	4.50E+00	4.70E+00[b]	2.01E-05
Di-n-octylphthalate	2.20E-02	1.45E+05	8.10E+00	1.00E-07
Dibenz(a,h)anthracene	2.49E-03	1.91E+06	6.75E+00	9.55E-10
Dibenzofuran	3.10E+00	9.16E+03	4.12E+00	2.48E-03
Dichlorobenzene[1,2-]	1.56E+02	3.83E+02	3.43E+00	1.36E+00

Table G-3.2-2 (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)
Dichlorobenzene[1,4-]	8.13E+01	3.75E+02	3.44E+00	1.74E+00
Dimethylphthalate	4.00E+03	3.16E+01	1.60E+00	3.08E-03
Diethylphthalate	1.08E+03	1.05E+02	2.42E+00	2.10E-03
Ethylbenzene	1.69E+02	4.46E+02	3.15E+00	9.60E+00
Fluoranthene	2.06E-01[c]	7.09E+04[c]	5.16E+00[c]	9.22E-06[c]
Fluorene	1.69E+00	9.16E+03	4.18E+00	6.00E-04
Hexanone[2-]	1.75E+04	1.30E+01	1.38E+00	1.16E+01
HMX	5.00E+00	5.32E+02	1.60E-01	3.30E-14
Indeno(1,2,3-cd)pyrene	1.90E-04	1.95E+06	6.70E+00	1.25E-12
Iodomethane	1.38E+04	1.32E+01	1.51E+00	4.05E+02
Isopropylbenzene	6.13E+01	6.98E+02	3.66E+00	4.50E+00
Isopropyltoluene[4-]	2.34E+01[b]	1.12E+03	4.10E+00	1.46E+00
Methoxychlor[4,4'-]	1.00E-01	2.69E+04	5.08E+00	2.58E-06
Methylene chloride	1.30E+04[b]	2.17E+01	1.25E+00	4.35E+02
Methylnaphthalene[1-]	2.58E+01	2.53E+03	3.87E+00	6.70E-02
Methylnaphthalene[2-]	2.46E+01	2.48E+03	3.86E+00	5.50E-02
Naphthalene	3.10E+01	1.54E+03	3.30E+00	8.50E-02
Nitroglycerin	1.38E+03	1.16E+02	1.62E+00	4.00E-04
Pentachlorophenol	1.40E+01	5.92E+02	5.12E+00	1.10E-04
PETN	4.30E+01	6.48E+02	2.38E+00	5.45E-09
Phenanthrene	1.15E+00[b]	1.67E+04	4.46E+00[b]	1.21E-04
Phenol	8.28E+04	1.87E+02	1.46E+00	3.50E-01
Pyrene	1.35E-01[b]	5.43E+04	4.88E+00[b]	4.50E-06[b]
RDX	5.97E+01[d]	1.05E+02[d]	8.70E-01[d]	4.10E-09[d]
TATB	2.78E+02[e]	1.68E+03[e]	1.18E+00[e]	644E-06[e]
TCDD [2,3,7,8-]	2.00E-04	2.49E+05	6.80E+00	1.50E-09
Tetrachloroethene	3.06E+02	9.49E+01	3.40E+00	1.85E+01
Tetryl	4.61E+03	7.40E+01	1.64E+00	5.66E-08
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	4.39E+01	2.53E+00	8.03E+02
Trimethylbenzene[1,2,4-]	5.70E+01	6.14E+02	3.63E+00	2.10E+00
Trimethylbenzene[1,3,5-]	4.82E+01	6.02E+02	3.42E+00	2.48E+00

Table G-3.2-2 (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)
Trinitrotoluene[2,4,6-]	1.15E+02	2.81E+03	1.60E+00	8.02E-06
Xylene[1,2-]	1.78E+02	3.83E+02	3.12E+00	6.61E+00
Xylene[1,3]+Xylene[1,4-]	1.62E+02[d]	3.75E+02[f]	3.18E+00[f]	8.57E+00[f]

[a] Information from https://rais.ornl.gov/cgi-bin/tools/TOX_search.

[b] Denotes reference information from https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm.

[c] Information from NMED (2022, 702484).

[d] Information from the National Institutes of Health Hazardous Substances Data Bank (HSDB) found at https://pubchem.ncbi.nlm.nih.gov/ (formerly at https://pubchem.ncbi.nlm.nih.gov/source/11933).

[e] Trinitrobenzene[1,3,5-] is used as a surrogate for TATB based on structural similarity. Information from https://rais.ornl.gov/cgi-bin/tools/TOX_search.

[f] Average of xylene[1,3-] and xylene[1,4-].

Table G-3.2-3
Physical and Chemical Properties of
Radionuclide COPCs for the North Ancho Canyon Aggregate Area

COPC	Soil-Water Partition Coefficient K_d[a] (cm^3/kg)	Water Solubility[b] (g/L)
Cesium-134	1000	Insoluble
Cesium-137	1000	Insoluble
Plutonium-239/240	4500	Insoluble
Tritium	9.9	Soluble
Uranium-234	0.4	Insoluble
Uranium-235/236	0.4	Insoluble
Uranium-238	0.4	Insoluble

[a] Information from Superfund Chemical Data Matrix (EPA 1996, 064708).

[b] Information from https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm.

Table G-4.1-1
Exposure Parameters Used to Calculate Chemical SSLs
for the Industrial, Construction Worker, and Residential Scenarios

Parameters	Industrial Values[a]	Construction Worker Values[a]	Residential Values[a]
Target HQ	1	1	1
Target cancer risk	10^{-5}	10^{-5}	10^{-5}
Averaging time (carcinogen/mutagen)	25,550 days	25,550 days	25,550 days
Averaging time (noncarcinogen)	Exposure duration × 365 days	Exposure duration × 365 days	Exposure duration × 365 days
Skin absorption factor	SVOC[b] = 0.1	SVOC = 0.1	SVOC = 0.1
	Chemical-specific	Chemical-specific	Chemical-specific
Adherence factor–child	n/a[c]	n/a	0.2 mg/cm^2
Body weight–child	n/a	n/a	15 kg (0–6 yr of age)
Cancer slope factor–oral (chemical-specific)	$(mg/kg\text{-}day)^{-1}$	$(mg/kg\text{-}day)^{-1}$	$(mg/kg\text{-}day)^{-1}$
Inhalation unit risk (chemical-specific)	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)^{-1}$
Exposure frequency	225 days/yr	250 days/yr	350 days/yr
Exposure time	8 hr/day	8 hr/day	24 hr/day
Exposure duration–child	n/a	n/a	6 yr[d]
Age-adjusted ingestion factor for carcinogens	n/a	n/a	36,750 mg/kg
Age-adjusted ingestion factor for mutagens	n/a	n/a	25,550 mg/kg
Soil ingestion rate–child	n/a	n/a	200 mg/day
Particulate emission factor	6.61×10^9 m^3/kg	2.1×10^6 m^3/kg	6.61×10^9 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	n/a	n/a	2690 cm^2/day
Age-adjusted skin contact factor for carcinogens	n/a	n/a	112,266 mg/kg
Age-adjusted skin contact factor for mutagens	n/a	n/a	166,833 mg/kg
Volatilization factor for soil (chemical-specific)	(m^3/kg)	(m^3/kg)	(m^3/kg)
Body weight–adult	80 kg	80 kg	80 kg
Exposure duration[e]	25 yr	1 yr	26 yr[f]

Table G-4.1-1 (continued)

Parameters	Industrial Values[a]	Construction Worker Values[a]	Residential Values[a]
Adherence factor–adult	0.12 mg/cm^2	0.3 mg/cm^2	0.07 mg/cm^2
Soil ingestion rate–adult	100 mg/day	330 mg/day	100 mg/day
Exposed surface area–adult	3470 cm^2/day	3470 cm^2/day	6032 cm^2/day

[a] Parameter values from (NMED 2022, 702484) unless otherwise noted.

[b] SVOC = Semivolatile organic compound.

[c] n/a = Not applicable.

[d] The child exposure duration for mutagens is subdivided into 0–2 yr and 2–6 yr.

[e] Exposure duration for lifetime resident is 26 yr. For carcinogens, the exposures are combined for child (6 yr) and adult (20 yr).

[f] The adult exposure duration for mutagens is subdivided into 6–16 yr and 16–26 yr.

Table G-4.1-2
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)	7780[a]	7780[a]
Mass loading (g/m^3)	1.51×10^{-7}[b]	0.000476[c]
Outdoor time fraction	0.2053[d]	0.2282[e]
Indoor time fraction	0[f]	0
Soil ingestion (g/yr)	109.6[g]	362[h]

[a] Calculated as [21.3 m^3/day × 365.25 days/yr], where 21.3 m^3/day is the upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).

[b] Calculated as (1/6.61 × 10^9 m^3/kg) × 1000 g/kg, where 6.61 × 10^9 m^3/kg is the particulate emission factor (NMED 2022, 702484).

[c] Calculated as (1/2.1 × 10^6 m^3/kg) × 1000 g/kg, where 2.1 × 10^6 m^3/kg is the particulate emission factor (NMED 2022, 702484).

[d] Calculated as (8 hr/day × 225 days/yr)/8766 hr/yr, where 8 hr/day is an estimate of the average length of the work day and 225 days/yr is the exposure frequency (NMED 2022, 702484).

[e] Calculated as (8 hr/day × 250 days/yr)/8766 hr/yr, where 8 hr/day is an estimate of the average length of the work day and 250 days/yr is the exposure frequency (NMED 2022, 702484).

[f] The commercial/industrial worker is defined as someone who "spends most of the work day conducting maintenance or manual labor activities outdoors" (NMED 2022, 702484).

[g] The soil-ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil-ingestion pathway. Calculated as [0.1 g/day × 225 days/yr]/[indoor + outdoor time fractions], where 0.1 g/day is the site-related daily adult soil-ingestion rate (NMED 2022, 702484).

[h] The soil-ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as [0.33 g/day × 250 days/yr]/[indoor + outdoor time fractions], where 0.33 g/day is the site-related daily soil ingestion rate for a construction worker (NMED 2022, 702484).

Table G-4.1-3
Parameter Values Used to Calculate
Radionuclide SALs for the Residential Scenario

Parameters	Residential, Child	Residential, Adult
Inhalation rate (m^3/yr)	4712[a]	7780[b]
Mass loading (g/m^3)	1.51×10^{-7}[c]	1.51×10^{-7}[c]
Outdoor time fraction	0.0926[d]	0.0934[e]
Indoor-time fraction	0.8656[f]	0.8648[g]
Soil ingestion (g/yr)	73[h]	36.5[i]

[a] Calculated as 12.9 m^3/day × 365.25 days/yr, where 12.9 m^3/day is the mean upper percentile daily inhalation rate of a child (EPA 2011, 208374, Table 6-1).

[b] Calculated as 21.3 m^3/day × 365.25 days/yr, where 21.3 m^3/day is the mean upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).

[c] Calculated as (1/6.61 × 10^9 m^3/kg) × 1000 g/kg, where 6.6 × 10^9 m^3/kg is the particulate emission factor (NMED 2022, 702484).

[d] Calculated as (2.32 hr/day × 350 day/yr)/8766 hr/yr, where 2.32 hr/day (139 min) is the largest amount of time spent outdoors for child age groups between 1 to less than 3 months and 3 to less than 6 yr (EPA 2011, 208374, Table 16-1) and is comparable with the adult time spent outdoors at a residence (NMED 2022, 702484).

[e] Calculated as (2.34 hr/day × 350 days/yr)/8766 hr/yr, where 4.68 hr/day is the average total time spent outdoors for adults age 18 to less than 65 yr in all environments (EPA 2011, 208374, Table 16-1); 50% of this value (2.34 hr/day) was applied to time spent outdoors at a residence and is similar to mean time outdoors at a residence for this age group (EPA 2011, 208374, Table 16-22).

[f] Calculated as [(24 hr/day–2.32 hr/day) × 350 days/yr]/8766 hr/yr.

[g] Calculated as [(24 hr/day–2.34 hr/day) × 350 days/yr]/8766 hr/yr.

[h] The soil ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as (0.2 g/day × 350 days/yr)/(indoor + outdoor time fractions), where 0.2 g/day is the upper percentile site-related daily child soil ingestion rate (NMED 2022, 702484; EPA 2011, 208374, Table 5-1).

[i] The soil ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as (0.1 g/day × 350 days/yr)/(indoor + outdoor time fractions), where 0.1 g/day is the site-related daily adult soil ingestion rate (NMED 2022, 702484).

Table G-4.2-1
Construction Worker Carcinogenic
Screening Evaluation for SWMU 39-001(a)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Cancer Risk
Aroclor-1242	0.113	85.3	1.32E-08
Aroclor-1254	0.0196	85.3	2.30E-09
Aroclor-1260	0.016	85.3	1.88E-09
Bis(2-ethylhexyl)phthalate	0.25	13,400	1.87E-10
Dibenz(a,h)anthracene	0.037	24	1.54E-08
Indeno(1,2,3-cd)pyrene	0.037	240	1.54E-09
Methylene Chloride	0.00781	89,600	8.72E-13
Nitroglycerin	0.093	11,100	8.38E-11
RDX	0.032	2960	1.08E-10
TCDD[2,3,7,8-]	1.23E-08	0.00172	7.15E-11
		Total Excess Cancer Risk	**3E-08**

* SSLs from NMED (2022, 702484) unless otherwise noted.

Table G-4.2-2
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 39-001(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Antimony	6.2 (U)	142	4.37E-02
Mercury	0.0575	77.1	7.46E-04
Nitrate	2.45	566,000	4.33E-06
Perchlorate	0.00418	248	1.69E-05
Uranium	1.91	277	6.90E-03
Aroclor-1254	0.0196	4.91	3.99E-03
Benzo(g,h,i)perylene	0.041	7530[b]	5.44E-06
Bis(2-ethylhexyl)phthalate	0.25	5380	4.65E-05
Di-n-octylphthalate	0.35	2690[c]	1.30E-04
HMX	0.044	17,400	2.53E-06
Iodomethane	0.0027	17.9[d]	1.51E-04
Methylene Chloride	0.00781	1210	6.45E-06
Nitroglycerin	0.093	26.9	3.46E-03
RDX	0.032	1350	2.37E-05
TCDD[2,3,7,8-]	1.23E-08	0.000226	5.44E-05
		Hazard Index	**0.06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

[d] Bromomethane used as a surrogate based on structural similarity.

Table G-4.2-3
Construction Worker Radionuclide
Screening Evaluation for SWMU 39-001(a)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Cesium-134	0.047	15	7.83E-02
Uranium-238	0.57	470	3.03E-02
		Total Dose	**0.1**

* SALs from LANL (2015, 600929).

Table G-4.2-4
Residential Carcinogenic
Screening Evaluation for SWMU 39-001(a)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Aroclor-1242	0.113	2.43	4.65E-07
Aroclor-1254	0.0196	2.43	8.07E-08
Aroclor-1260	0.016	2.43	6.58E-08
Bis(2-ethylhexyl)phthalate	0.25	380	6.58E-09
Dibenz(a,h)anthracene	0.037	0.15	2.47E-06
Indeno(1,2,3-cd)pyrene	0.037	1.53	2.42E-07
Methylene Chloride	0.00781	766	1.02E-10
Nitroglycerin	0.093	313	2.97E-09
RDX	0.032	83.1	3.85E-09
TCDD[2,3,7,8-]	1.23E-08	0.000049	2.51E-09
		Total Excess Cancer Risk	**3E-06**

* SSLs from NMED (2022, 702484).

Table G-4.2-5
Residential Noncarcinogenic
Screening Evaluation for SWMU 39-001(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Antimony	6.2 (U)	31.3	1.98E-01
Mercury	0.0575	23.5	2.45E-03
Nitrate	2.45	125000	1.96E-05
Perchlorate	0.00418	54.8	7.63E-05
Uranium	1.91	234	8.16E-03
Aroclor-1254	0.0196	1.14	1.72E-02
Benzo(g,h,i)perylene	0.041	1740b	2.36E-05
Bis(2-ethylhexyl)phthalate	0.25	1230	2.03E-04
Di-n-octylphthalate	0.35	630c	5.56E-04
HMX	0.044	3850	1.14E-05
Iodomethane	0.0027	17.7d	1.53E-04
Methylene Chloride	0.00781	409	1.91E-05
Nitroglycerin	0.093	6.16	1.51E-02
RDX	0.032	301	1.06E-04
TCDD[2,3,7,8-]	1.23E-08	0.0000506	2.43E-04
		Hazard Index	**0.2**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.
[b] Pyrene is used as a surrogate based on structural similarity.
[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).
[d] Bromomethane used as a surrogate based on structural similarity.

Table G-4.2-6
Residential Radionuclide
Screening Evaluation for SWMU 39-001(a)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Cesium-134	0.047	5	2.35E-01
Uranium-238	0.57	150	9.50E-02
		Total Dose	**0.3**

* SALs from LANL (2015, 600929).

Table G-4.2-7
Industrial Carcinogenic
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Cancer Risk
Aroclor-1254	0.121	11	1.10E-07
Aroclor-1260	0.0223	11.1	2.01E-08
Benzo(a)anthracene	2.014	32.3	6.24E-07
Benzo(a)pyrene	2.222	23.6	9.42E-07
Benzo(b)fluoranthene	2.375	32.3	7.35E-07
Benzo(k)fluoranthene	1.355	323	4.20E-08
Bis(2-ethylhexyl)phthalate	0.124	1830	6.78E-10
Butylbenzylphthalate	0.0436	12000[b]	3.63E-11
Chrysene	2.357	3230	7.30E-09
Dibenz(a,h)anthracene	0.282	3.23	8.73E-07
Ethylbenzene	0.000718	368	1.95E-11
Indeno(1,2,3-cd)pyrene	1.463	32.3	4.53E-07
Methylene Chloride	0.00287	14400	1.99E-12
Methylnaphthalene[1-]	2.235	813	2.75E-08
Naphthalene	2.803	108	2.60E-07
Pentachlorophenol	1.99	44.5	4.47E-07
RDX	0.38	428	8.88E-09
Trichloroethene	0.000747	112	6.67E-11
Trinitrotoluene[2,4,6-]	1.02	1070	9.53E-09
		Total Excess Cancer Risk	**5E-06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-8
Industrial Noncarcinogenic
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Antimony	0.328	519	6.32E-04
Copper	63.96	51,900	1.23E-03
Cyanide (Total)	20.8	63.3	3.29E-01
Mercury	1.733	389	4.46E-03
Nitrate	2.53	2,080,000	1.22E-06
Perchlorate	0.000963	908	1.06E-06
Selenium	0.775	6490	1.19E-04
Silver	0.345	6490	5.32E-05
Thallium	1.26	13	9.69E-02
Zinc	93.64	389,000	2.41E-04
Acenaphthene	1.23	50,500	2.44E-05
Acenaphthylene	0.096	25,300[b]	3.79E-06
Amino-2,6-dinitrotoluene[4-]	0.171	125	1.37E-03
Anthracene	1.345	253,000	5.32E-06
Aroclor-1254	0.121	16.4	7.38E-03
Benzo(a)pyrene	2.222	251	8.85E-03
Benzo(g,h,i)perylene	1.446	25,300[b]	5.72E-05
Bis(2-ethylhexyl)phthalate	0.124	18,300	6.78E-06
Butylbenzylphthalate	0.0436	160,000[c]	2.73E-07
Carbazole	3.242	1200[c,d]	2.70E-03
Dibenzofuran	0.707	1200[c]	5.89E-04
Dichlorobenzene[1,2-]	0.00043	13,000	3.31E-08
Di-n-butylphthalate	0.53	91,600	5.79E-06
Ethylbenzene	0.000718	29,000	2.48E-08
Fluoranthene	6.72	33,700	1.99E-04
Fluorene	1.383	33,700	4.10E-05
Methylene Chloride	0.00287	5130	5.59E-07
Methylnaphthalene[1-]	2.235	58,900	3.79E-05
Methylnaphthalene[2-]	0.572	3370	1.70E-04
Naphthalene	2.803	843	3.33E-03
Pentachlorophenol	1.99	3180	6.26E-04
Phenanthrene	7.094	27,500	2.58E-04
Pyrene	5.665	25,300	2.24E-04
RDX	0.38	4890	7.77E-05
Tetryl	0.345	2590	1.33E-04

Table G-4.2-8 (continued)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Toluene	0.0233	61,300	3.80E-07
Trichloroethene	0.000747	36.5	2.05E-05
Trimethylbenzene[1,2,4-]	0.00047	1800[c]	2.61E-07
Trinitrotoluene[2,4,6-]	1.02	573	1.78E-03
Xylene[1,2-]	0.000624	3940	1.58E-07
Xylene[1,3-]+Xylene[1,4-]	0.00177	4280[e]	4.14E-07
		Hazard Index	**0.5**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] Dibenzofuran used as a surrogate based on structural similarity.

[e] Total xylene used as a surrogate based on structural similarity.

Table G-4.2-9
Industrial Radionuclide
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.0394	41	2.40E-02
Tritium	0.11291	2,400,000	1.18E-06
Uranium-238	1.889	710	6.65E-02
		Total Dose	**0.09**

* SALs from LANL (2015, 600929).

Table G-4.2-10
Construction Worker Carcinogenic
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Aroclor-1242	0.00169	85.3	1.98E-10
Aroclor-1254	0.0743	85.3	8.71E-09
Aroclor-1260	0.0118	85.3	1.38E-09
Benzo(a)anthracene	0.83	240	3.46E-08
Benzo(a)pyrene	0.906	173	5.24E-08
Benzo(b)fluoranthene	0.98	240	4.08E-08

Table G-4.2-10 (continued)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Benzo(k)fluoranthene	0.497	2310	2.15E-09
Bis(2-ethylhexyl)phthalate	0.0552	13,400	4.12E-11
Butylbenzylphthalate	0.0122	99,100[b]	1.23E-12
Chrysene	0.974	23,100	4.22E-10
Dibenz(a,h)anthracene	0.104	24	4.33E-08
Ethylbenzene	0.000718	1770	4.06E-12
Indeno(1,2,3-cd)pyrene	0.6	240	2.50E-08
Methylene Chloride	0.00186	89,600	2.08E-13
Methylnaphthalene[1-]	0.0753	6060	1.24E-10
Naphthalene	0.835	633	1.32E-08
Pentachlorophenol	1.99	346	5.75E-08
RDX	0.38	2960	1.28E-09
TCDD[2,3,7,8-]	1.83E-07	0.00172	1.06E-09
Trichloroethene	0.00084	5370	1.56E-12
Trinitrotoluene[2,4,6-]	1.02	7500	1.36E-09
		Total Excess Cancer Risk	**3E-07**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-11
Construction Worker Noncarcinogenic
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Antimony	0.168	142	1.18E-03
Copper	26.28	14,200	1.85E-03
Cyanide (Total)	0.732	12.1	6.05E-02
Mercury	1.73	77.1	2.24E-02
Nitrate	2.055	566,000	3.63E-06
Perchlorate	0.00062736	248	2.53E-06
Selenium	0.865	1750	4.94E-04
Silver	0.214	1770	1.21E-04
Thallium	1.26	3.54	3.56E-01

Table G-4.2-11 (continued)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Zinc	59.78	106,000	5.64E-04
Acenaphthene	0.414	15,100	2.74E-05
Acenaphthylene	0.0361	7530[b]	4.79E-06
Amino-2,6-dinitrotoluene[4-]	0.171	17.3	9.88E-03
Anthracene	0.495	75,300	6.57E-06
Aroclor-1254	0.0743	4.91	1.51E-02
Benzo(a)pyrene	0.906	15	6.04E-02
Benzo(g,h,i)perylene	0.594	7530[b]	7.89E-05
Benzoic Acid	0.346	1,080,000[c]	3.20E-07
Bis(2-ethylhexyl)phthalate	0.0552	5380	1.03E-05
Butylbenzylphthalate	0.0122	53800[c]	2.27E-07
Carbazole	0.238	251[c,d]	9.48E-04
Chloronaphthalene[2-]	0.00231	28300	8.16E-08
Dibenzofuran	0.272	354[c]	7.68E-04
Dichlorobenzene[1,2-]	0.0007	2500	2.80E-07
Dimethyl Phthalate	0.0141	269,000	5.24E-08
Di-n-butylphthalate	0.16	26,900	5.95E-06
Di-n-octylphthalate	0.0189	2690[c]	7.03E-06
Ethylbenzene	0.000718	5800	1.24E-07
Fluoranthene	2.792	10,000	2.79E-04
Fluorene	0.451	10,000	4.51E-05
Iodomethane	0.00081	17.9[e]	4.53E-05
Methylene Chloride	0.00186	1210	1.54E-06
Methylnaphthalene[1-]	0.0753	17,600	4.28E-06
Methylnaphthalene[2-]	0.0853	1000	8.53E-05
Naphthalene	0.835	159	5.25E-03
Pentachlorophenol	1.99	989	2.01E-03
Phenanthrene	3.085	8070	3.82E-04
Pyrene	2.362	7530	3.14E-04
RDX	0.38	1350	2.81E-04
TCDD[2,3,7,8-]	0.000000183	0.000226	8.10E-04
Tetryl	0.345	706	4.89E-04
Toluene	0.0233	14,000	1.66E-06
Trichloroethene	0.00084	6.9	1.22E-04
Trimethylbenzene[1,2,4-]	0.00047	504[c]	9.32E-07

Table G-4.2-11 (continued)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Trinitrotoluene[2,4,6-]	1.02	161	6.34E-03
Xylene[1,2-]	0.000624	736	8.48E-07
Xylene[1,3-]+Xylene[1,4-]	0.00177	798[f]	2.22E-06
		Hazard Index	**0.5**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

[d] Dibenzofuran used as surrogate based on structural similarity.

[e] Bromomethane used as surrogate based on structural similarity.

[f] Total xylenes used as surrogate based on structural similarity.

Table G-4.2-12
Construction Worker Radionuclide Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.223	37	1.51E-01
Plutonium-239/240	0.105	200	1.31E-02
Tritium	20.7	1,600,000	3.23E-04
Uranium-238	1.51	470	8.03E-02
		Total Dose	**0.2**

* SALs from LANL (2015, 600929).

Table G-4.2-13
Residential Carcinogenic
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC	Residential SSL[a] (mg/kg)	Cancer Risk
Aroclor-1242	0.00169	2.43	6.95E-09
Aroclor-1254	0.0743	2.43	3.06E-07
Aroclor-1260	0.0118	2.43	4.86E-08
Benzo(a)anthracene	0.83	1.53	5.42E-06
Benzo(a)pyrene	0.906	1.12	8.09E-06
Benzo(b)fluoranthene	0.98	1.53	6.41E-06
Benzo(k)fluoranthene	0.497	15.3	3.25E-07
Bis(2-ethylhexyl)phthalate	0.0552	380	1.45E-09
Butylbenzylphthalate	0.0122	2900[b]	4.21E-11
Chrysene	0.974	153	6.37E-08
Dibenz(a,h)anthracene	0.104	0.153	6.80E-06
Ethylbenzene	0.000718	75.1	9.56E-11
Indeno(1,2,3-cd)pyrene	0.6	1.53	3.92E-06
Methylene Chloride	0.00186	766	2.43E-11
Methylnaphthalene[1-]	0.0753	172	4.38E-09
Naphthalene	0.835	22.6	3.69E-07
Pentachlorophenol	1.99	9.85	2.02E-06
RDX	0.38	83.1	4.57E-08
TCDD[2,3,7,8-]	0.000000183	0.000049	3.73E-08
Trichloroethene	0.00084	15.5	5.42E-10
Trinitrotoluene[2,4,6-]	1.02	211	4.83E-08
		Total Excess Cancer Risk	**3E-05**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-14
Residential Noncarcinogenic Screening
Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Antimony	0.168	31.3	5.37E-03
Copper	26.28	3130	8.40E-03
Cyanide (Total)	0.732	11.2	6.54E-02
Mercury	1.73	23.5	7.36E-02
Nitrate	2.055	125,000	1.64E-05
Perchlorate	0.00062736	54.8	1.14E-05
Selenium	0.865	391	2.21E-03
Silver	0.214	391	5.47E-04
Thallium	1.26	0.782	1.61E+00
Zinc	59.78	23,500	2.54E-03
Acenaphthene	0.414	3480	1.19E-04
Acenaphthylene	0.0361	1740[b]	2.07E-05
Amino-2,6-dinitrotoluene[4-]	0.171	7.64	2.24E-02
Anthracene	0.495	17400	2.84E-05
Aroclor-1254	0.0743	1.14	6.52E-02
Benzo(a)pyrene	0.906	17.4	5.21E-02
Benzo(g,h,i)perylene	0.594	1740[b]	3.41E-04
Benzoic Acid	0.346	250,000[c]	1.38E-06
Bis(2-ethylhexyl)phthalate	0.0552	1230	4.49E-05
Butylbenzylphthalate	0.0122	13000[c]	9.38E-07
Carbazole	0.238	78[c,d]	3.05E-03
Chloronaphthalene[2-]	0.00231	6260	3.69E-07
Dibenzofuran	0.272	78[c]	3.49E-03
Dichlorobenzene[1,2-]	0.0007	2150	3.26E-07
Dimethyl Phthalate	0.0141	61,600	2.29E-07
Di-n-butylphthalate	0.16	6160	2.60E-05
Di-n-octylphthalate	0.0189	630[c]	3.00E-05
Ethylbenzene	0.000718	3930	1.83E-07
Fluoranthene	2.792	2320	1.20E-03
Fluorene	0.451	2320	1.94E-04
Iodomethane	0.00081	17.7[e]	4.58E-05
Methylene Chloride	0.00186	409	4.55E-06
Methylnaphthalene[1-]	0.0753	4060	1.85E-05

Table G-4.2-14 (continued)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Methylnaphthalene[2-]	0.0853	232	3.68E-04
Naphthalene	0.835	162	5.15E-03
Pentachlorophenol	1.99	234	8.50E-03
Phenanthrene	3.085	1850	1.67E-03
Pyrene	2.362	1740	1.36E-03
RDX	0.38	301	1.26E-03
TCDD[2,3,7,8-]	0.000000183	0.0000506	3.62E-03
Tetryl	0.345	156	2.21E-03
Toluene	0.0233	5230	4.46E-06
Trichloroethene	0.00084	6.77	1.24E-04
Trimethylbenzene[1,2,4-]	0.00047	300[c]	1.57E-06
Trinitrotoluene[2,4,6-]	1.02	36	2.83E-02
Xylene[1,2-]	0.000624	805	7.75E-07
Xylene[1,3-]+Xylene[1,4-]	0.00177	871[f]	2.03E-06
		Hazard Index	**2.0**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.
[b] Pyrene used as surrogate based on structural similarity.
[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).
[d] Dibenzofuran used as surrogate based on structural similarity.
[e] Bromomethane used as surrogate based on structural similarity.
[f] Total xylenes used as surrogate based on structural similarity.

Table G-4.2-15
Residential Radionuclide
Screening Evaluation for Area 1 of SWMU 39-002(a)

COPC	EPC (pCi/g)	Residential SAL* (mg/kg)	Dose (mrem/yr)
Cesium-137	0.223	12	4.65E-01
Plutonium-239/240	0.105	79	3.32E-02
Tritium	20.7	1700	3.04E-01
Uranium-238	1.51	150	2.52E-01
		Total Dose	**1.0**

* SALs from LANL (2015, 600929).

Table G-4.2-16
Industrial Carcinogenic
Screening Evaluation for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Cancer Risk
Aroclor-1248	0.0769	10.7	7.19E-08
Aroclor-1254	2.154	11	1.96E-06
Aroclor-1260	0.613	11.1	5.52E-07
Benzo(a)anthracene	0.315	32.3	9.75E-08
Benzo(a)pyrene	0.361	23.6	1.53E-07
Benzo(b)fluoranthene	0.448	32.3	1.39E-07
Benzo(k)fluoranthene	0.166	323	5.14E-09
Bis(2-ethylhexyl)phthalate	0.079	1830	4.32E-10
Butylbenzylphthalate	0.0161	12,000[b]	1.34E-11
Chrysene	0.365	3230	1.13E-09
Dibenz(a,h)anthracene	0.0635	3.23	1.97E-07
Indeno(1,2,3-cd)pyrene	0.24	32.3	7.43E-08
Naphthalene	0.0291	108	2.69E-09
Total Excess Cancer Risk			**3E-06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-17
Industrial Noncarcinogenic
Screening Evaluation for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Copper	480.3	51,900	9.25E-03
Nitrate	1.015	2,080,000	4.88E-07
Zinc	57.52	389,000	1.48E-04
Acenaphthene	0.0585	50,500	1.16E-06
Anthracene	0.0891	253,000	3.52E-07
Aroclor-1254	2.154	16.4	1.31E-01
Benzo(a)pyrene	0.361	251	1.44E-03
Benzo(g,h,i)perylene	0.238	25,300[b]	9.41E-06
Bis(2-ethylhexyl)phthalate	0.079	18,300	4.32E-06
Butylbenzylphthalate	0.0161	160,000[c]	1.01E-07
Di-n-butylphthalate	0.401	91,600	4.38E-06
Diethylphthalate	0.0142	733,000	1.94E-08

Table G-4.2-17 (continued)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Fluoranthene	0.84	33,700	2.49E-05
Fluorene	0.0453	33,700	1.34E-06
Naphthalene	0.0291	843	3.45E-05
Phenanthrene	0.531	27,500	1.93E-05
Pyrene	0.641	25,300	2.53E-05
		Hazard Index	**0.1**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables.

Table G-4.2-18
Construction Worker Carcinogenic
Screening Evaluation for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Aroclor-1248	0.0161	85.3	1.89E-09
Aroclor-1254	1.086	85.3	1.27E-07
Aroclor-1260	0.174	85.3	2.04E-08
Benzo(a)anthracene	0.315	240	1.31E-08
Benzo(a)pyrene	0.361	173	2.09E-08
Benzo(b)fluoranthene	0.448	240	1.87E-08
Benzo(k)fluoranthene	0.166	2310	7.19E-10
Bis(2-ethylhexyl)phthalate	0.0809	13,400	6.04E-11
Butylbenzylphthalate	0.0143	99,100[b]	1.44E-12
Chrysene	0.365	23,100	1.58E-10
Dibenz(a,h)anthracene	0.0635	24	2.65E-08
Indeno(1,2,3-cd)pyrene	0.24	240	1.00E-08
Naphthalene	0.0291	633	4.60E-10
		Total Excess Cancer Risk	**2E-07**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-19
Construction Worker Noncarcinogenic
Screening Evaluation for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Antimony	4.05	142	2.85E-02
Copper	159.6	14,200	1.12E-02
Nitrate	7.463	566,000	1.32E-05
Perchlorate	0.00224	248	9.03E-06
Zinc	49.54	106,000	4.67E-04
Acenaphthene	0.0585	15,100	3.87E-06
Anthracene	0.0891	75,300	1.18E-06
Aroclor-1254	1.086	4.91	2.21E-01
Benzo(a)pyrene	0.361	15	2.41E-02
Benzo(g,h,i)perylene	0.238	7530[b]	3.16E-05
Bis(2-ethylhexyl)phthalate	0.0809	5380	1.50E-05
Butylbenzylphthalate	0.0143	53,800[c]	2.66E-07
Di-n-butylphthalate	0.201	26,900	7.47E-06
Diethylphthalate	0.0137	215,000	6.37E-08
Fluoranthene	0.84	10,000	8.40E-05
Fluorene	0.0453	10,000	4.53E-06
Naphthalene	0.0291	159	1.83E-04
Phenanthrene	0.531	8070	6.58E-05
Pyrene	0.641	7530	8.51E-05
		Hazard Index	**0.3**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-20
Residential Carcinogenic
Screening Evaluation for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
Aroclor-1248	0.0161	2.43	6.63E-08
Aroclor-1254	1.086	2.43	4.474E-06
Aroclor-1260	0.174	2.43	7.16E-07
Benzo(a)anthracene	0.315	1.53	2.06E-06
Benzo(a)pyrene	0.361	1.12	3.22E-06
Benzo(b)fluoranthene	0.448	1.53	2.93E-06
Benzo(k)fluoranthene	0.166	15.3	1.08E-07
Bis(2-ethylhexyl)phthalate	0.0809	380	2.13E-09
Butylbenzylphthalate	0.0143	2900[b]	4.93E-11
Chrysene	0.365	153	2.39E-08
Dibenz(a,h)anthracene	0.0635	0.153	4.15E-06
Indeno(1,2,3-cd)pyrene	0.24	1.53	1.57E-06
Naphthalene	0.0291	22.6	1.29E-08
		Total Excess Cancer Risk	**2E-05**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-21
Residential Noncarcinogenic
Screening Evaluation for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Antimony	4.05	31.3	1.29E-01
Copper	159.6	3130	5.10E-02
Nitrate	7.463	125,000	5.97E-05
Perchlorate	0.00224	54.8	4.09E-05
Zinc	49.54	23,500	2.11E-03
Acenaphthene	0.0585	3480	1.68E-05
Anthracene	0.0891	17,400	5.12E-06
Aroclor-1254	1.086	1.14	9.53E-01
Benzo(a)pyrene	0.361	17.4	2.07E-02
Benzo(g,h,i)perylene	0.238	1740[b]	1.37E-04
Bis(2-ethylhexyl)phthalate	0.0809	1230	6.58E-05
Butylbenzylphthalate	0.0143	13,000[c]	1.10E-06
Di-n-butylphthalate	0.201	6160	3.26E-05

Table G-4.2-21 (continued)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Diethylphthalate	0.0137	49,300	2.78E-07
Fluoranthene	0.84	2320	3.62E-04
Fluorene	0.0453	2320	1.95E-05
Naphthalene	0.0291	162	1.80E-04
Phenanthrene	0.531	1850	2.87E-04
Pyrene	0.641	1740	3.68E-04
		Hazard Index	**1.0**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-22
Industrial Carcinogenic Screening Evaluation for Area 3 of SWMU 39-002(a)

COPC	EPC	Industrial SSL* (mg/kg)	Cancer Risk
Aroclor-1254	0.013	11	1.18E-08
Aroclor-1260	0.0091	11.1	8.27E-09
Benzo(a)anthracene	0.13	32.3	4.02E-08
Benzo(a)pyrene	0.141	23.6	5.97E-08
Benzo(b)fluoranthene	0.117	32.3	3.62E-08
Benzo(k)fluoranthene	0.139	323	4.30E-09
Bis(2-ethylhexyl)phthalate	0.37	1830	2.02E-09
Chrysene	0.149	3230	4.61E-10
Indeno(1,2,3-cd)pyrene	0.079	32.3	2.45E-08
Methylene Chloride	0.002	14,400	1.39E-12
TCDD[2,3,7,8-]	1.13E-06	0.000238	4.75E-08
		Total Excess Cancer Risk	**2E-07**

* SSLs from NMED (2022, 702484).

Table G-4.2-23
Industrial Noncarcinogenic
Screening Evaluation for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Nitrate	5.8	2,080,000	2.79E-06
Anthracene	0.053	253,000	2.09E-07
Aroclor-1254	0.013	16.4	7.93E-04
Benzo(a)pyrene	0.141	251	5.62E-04
Benzo(g,h,i)perylene	0.0788	25,300[b]	3.11E-06
Bis(2-ethylhexyl)phthalate	0.37	18,300	2.02E-05
Di-n-butylphthalate	0.54	91,600	5.90E-06
Fluoranthene	0.255	33,700	7.57E-06
Methylene Chloride	0.002	5130	3.90E-07
Phenanthrene	0.199	27,500	7.24E-06
Pyrene	0.236	25,300	9.33E-06
TCDD[2,3,7,8-]	0.00000113	0.000808	1.40E-03
Trichlorofluoromethane	0.00037	6030	6.14E-08
		Hazard Index	**0.003**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

Table G-4.2-24
Construction Worker Carcinogenic
Screening Evaluation for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Aroclor-1254	0.013	85.3	1.52E-09
Aroclor-1260	0.0091	85.3	1.07E-09
Benzo(a)anthracene	0.128	240	5.33E-09
Benzo(a)pyrene	0.129	173	7.46E-09
Benzo(b)fluoranthene	0.116	240	4.83E-09
Benzo(k)fluoranthene	0.137	2310	5.93E-10
Bis(2-ethylhexyl)phthalate	0.267	13,400	1.99E-10
Chrysene	0.136	23,100	5.89E-11
Indeno(1,2,3-cd)pyrene	0.079	240	3.29E-09
Methylene Chloride	0.00193	89,600	2.15E-13
PETN	0.02	43,800[b]	4.57E-12
TCDD[2,3,7,8-]	0.00000113	0.00172	6.57E-09
		Total Excess Cancer Risk	**3E-08**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-25
Construction Worker Noncarcinogenic
Screening Evaluation for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Nitrate	1.73	56,600	3.06E-05
Acetone	0.013	24,200	5.37E-07
Anthracene	0.053	75,300	7.04E-07
Aroclor-1254	0.013	4.91	2.65E-03
Benzo(a)pyrene	0.129	15	8.60E-03
Benzo(g,h,i)perylene	0.0779	7530[b]	1.03E-05
Bis(2-ethylhexyl)phthalate	0.267	5380	4.96E-05
Di-n-butylphthalate	0.54	26,900	2.01E-05
Fluoranthene	0.187	10,000	1.87E-05
Iodomethane	0.00077	17.9[c]	4.30E-05
Methylene Chloride	0.00193	1210	1.60E-06
PETN	0.02	2420[d]	8.26E-06
Phenanthrene	0.165	8070	2.04E-05
Pyrene	0.183	7530	2.43E-05
TCDD[2,3,7,8-]	0.00000113	0.000226	5.00E-03
Trichlorofluoromethane	0.00037	1130	3.27E-07
		Hazard Index	**0.02**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

[c] Bromomethane used as a surrogate based on structural similarity.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-26
Residential Carcinogenic
Screening Evaluation for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
Aroclor-1254	0.013	2.43	5.35E-08
Aroclor-1260	0.0091	2.43	3.74E-08
Benzo(a)anthracene	0.128	1.53	8.37E-07
Benzo(a)pyrene	0.129	1.12	1.15E-06
Benzo(b)fluoranthene	0.116	1.53	7.58E-07
Benzo(k)fluoranthene	0.137	15.3	8.95E-08
Bis(2-ethylhexyl)phthalate	0.267	380	7.03E-09
Chrysene	0.136	153	8.89E-09
Indeno(1,2,3-cd)pyrene	0.079	1.53	5.16E-07
Methylene Chloride	0.00193	766	2.52E-11
PETN	0.02	1300[b]	1.54E-10
TCDD[2,3,7,8-]	0.00000113	0.000049	2.31E-07
		Total Excess Cancer Risk	**4E-06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-27
Residential Noncarcinogenic
Screening Evaluation for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Nitrate	1.73	125,000	1.38E-05
Acetone	0.013	66,300	1.96E-07
Anthracene	0.053	17,400	3.05E-06
Aroclor-1254	0.013	1.14	1.14E-02
Benzo(a)pyrene	0.129	17.4	7.41E-03
Benzo(g,h,i)perylene	0.0779	1740[b]	4.48E-05
Bis(2-ethylhexyl)phthalate	0.267	1230	2.17E-04
Di-n-butylphthalate	0.54	6160	8.77E-05
Fluoranthene	0.187	2320	8.06E-05
Iodomethane	0.00077	17.7[c]	4.35E-05
Methylene Chloride	0.00193	409	4.72E-06

Table G-4.2-27 (continued)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
PETN	0.02	570[d]	3.51E-05
Phenanthrene	0.165	1850	8.92E-05
Pyrene	0.183	1740	1.05E-04
TCDD[2,3,7,8-]	0.00000113	0.0000506	2.23E-02
Trichlorofluoromethane	0.00037	1230	3.01E-07
		Hazard Index	**0.04**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

[c] Bromomethane used as surrogate based on structural similarity.

[d] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-28
Industrial Carcinogenic Screening Evaluation for AOC 39-002(b)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Cancer Risk
Aroclor-1242	1.01	10.9	9.27E-07
Aroclor-1248	0.111	10.7	1.04E-07
Aroclor-1254	0.0508	11	4.62E-08
Aroclor-1260	0.483	11.1	4.35E-07
Bis(2-ethylhexyl)phthalate	0.984	1830	5.38E-09
Butylbenzylphthalate	0.51	12,000[b]	4.25E-10
Chrysene	0.0305	3230	9.44E-11
TCDD[2,3,7,8-]	0.0000125	0.000238	5.25E-07
		Total Excess Cancer Risk	**2.E-06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-29
Industrial Noncarcinogenic
Screening Evaluation for AOC 39-002(b)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Copper	67.01	51,900	1.29E-03
Mercury	0.374	389	9.61E-04
Nitrate	1.661	2,080,000	7.99E-07
Zinc	62	389,000	1.59E-04
Aroclor-1254	0.0508	16.4	3.10E-03
Benzo(g,h,i)perylene	0.0237	25,300[b]	9.37E-07
Bis(2-ethylhexyl)phthalate	0.984	18,300	5.38E-05
Butylbenzylphthalate	0.51	160,000[c]	3.19E-06
Di-n-butylphthalate	0.0472	91,600	5.15E-07
HMX	0.221	63,300	3.49E-06
TCDD[2,3,7,8-]	0.0000125	0.000808	1.55E-02
		Hazard Index	**0.02**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-30
Industrial Radionuclide
Screening Evaluation for AOC 39-002(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Uranium-234	2.178	3100	1.76E-02
Uranium-235/236	0.153	160	2.39E-02
Uranium-238	6.043	710	2.13E-01
		Total Dose	**0.3**

* SALs from LANL (2015, 600929).

Table G-4.2-31
Construction Worker Carcinogenic
Screening Evaluation for AOC 39-002(b)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Aroclor-1242	0.805	85.3	9.44E-08
Aroclor-1248	2.746	85.3	3.22E-07
Aroclor-1254	1.127	85.3	1.32E-07
Aroclor-1260	0.185	85.3	2.17E-08
Bis(2-ethylhexyl)phthalate	0.984	13,400	7.34E-10
Butylbenzylphthalate	0.51	99,100[b]	5.15E-11
Chrysene	0.0305	23,100	1.32E-11
PETN	0.246	43,800[b]	5.62E-11
RDX	0.481	2960	1.63E-09
TCDD[2,3,7,8-]	3.01E-06	0.00172	1.75E-08
Tetrachloroethene	0.000825	7910	1.04E-12
Trichloroethene	0.00247	5370	4.60E-12
		Total Excess Cancer Risk	**6E-07**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-32
Construction Worker Noncarcinogenic
Screening Evaluation for AOC 39-002(b)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Copper	28.28	14,200	1.99E-03
Mercury	0.147	77.1	1.91E-03
Nitrate	2.477	566,000	4.38E-06
Selenium	1.264	1750	7.22E-04
Zinc	46.09	106,000	4.35E-04
Aroclor-1254	1.127	4.91	2.29E-01
Benzo(g,h,i)perylene	0.0237	7530[b]	3.15E-06
Bis(2-ethylhexyl)phthalate	0.984	5380	1.83E-04
Butylbenzylphthalate	0.51	53,800[c]	9.48E-06
Di-n-butylphthalate	0.164	26,900	6.10E-06
HMX	0.221	17,400	1.27E-05
Isopropyltoluene[4-]	0.00399	2740[d]	1.46E-06

Table G-4.2-32 (continued)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
PETN	0.246	2420[c]	1.02E-04
RDX	0.481	1350	3.56E-04
TCDD[2,3,7,8-]	3.01E-06	0.000226	1.33E-02
Tetrachloroethene	0.000825	120	6.88E-06
Trichloroethene	0.00247	6.9	3.58E-04
		Hazard Index	**0.2**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

[d] Isopropylbenzene used as surrogate based on structural similarity.

Table G-4.2-33
Construction Worker Radionuclide
Screening Evaluation for AOC 39-002(b)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Uranium-234	1.523	1000	3.80E-02
Uranium-235/236	0.0937	130	1.80E-02
Uranium-238	2.948	470	1.57E-01
		Total Dose	**0.2**

* SALs from LANL (2015, 600929).

Table G-4.2-34
Residential Carcinogenic
Screening Evaluation for AOC 39-002(b)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
Aroclor-1242	0.805	2.43	3.31E-06
Aroclor-1248	2.746	2.43	1.13E-05
Aroclor-1254	1.127	2.43	4.64E-06
Aroclor-1260	0.185	2.43	7.61E-07
Bis(2-ethylhexyl)phthalate	0.984	380	2.59E-08
Butylbenzylphthalate	0.51	2900[b]	1.76E-09
Chrysene	0.0305	153	1.99E-09
PETN	0.246	1300[b]	1.89E-09
RDX	0.481	83.1	5.79E-08

Table G-4.2-34 (continued)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
TCDD[2,3,7,8-]	3.01E-06	0.000049	6.14E-07
Tetrachloroethene	0.000825	337	2.45E-11
Trichloroethene	0.00247	15.5	1.59E-09
		Total Excess Cancer Risk	**2E-05**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-35
Residential Noncarcinogenic
Screening Evaluation for AOC 39-002(b)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Copper	28.28	3130	9.04E-03
Mercury	0.147	23.5	6.26E-03
Nitrate	2.477	125,000	1.98E-05
Selenium	1.264	391	3.23E-03
Zinc	46.09	23,500	1.96E-03
Aroclor-1254	1.127	1.14	9.88E-01
Benzo(g,h,i)perylene	0.0237	1740[b]	1.36E-05
Bis(2-ethylhexyl)phthalate	0.984	1230	8.00E-04
Butylbenzylphthalate	0.51	13,000[c]	3.92E-05
Di-n-butylphthalate	0.164	6160	2.66E-05
HMX	0.221	3850	5.74E-05
Isopropyltoluene[4-]	0.00399	2360[d]	1.69E-06
PETN	0.246	570[c]	4.32E-04
RDX	0.481	301	1.60E-03
TCDD[2,3,7,8-]	3.01E-06	0.0000506	5.95E-02
Tetrachloroethene	0.000825	111	7.43E-06
Trichloroethene	0.00247	6.77	3.65E-04
		Hazard Index	**1.0**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene used as surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] Isopropylbenzene used as surrogate based on structural similarity.

Table G-4.2-36
Residential Radionuclide
Screening Evaluation for AOC 39-002(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Uranium-234	1.523	290	1.31E-01
Uranium-235/236	0.0937	42	5.58E-02
Uranium-238	2.948	150	4.92E-01
		Total Dose	**0.7**

* SALs from LANL (2015, 600929).

Table G-4.2-37
Industrial Carcinogenic
Screening Evaluation for SWMU 39-006(a)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Cadmium	1.058	417000	2.54E-11
Aroclor-1254	0.0734	11	6.67E-08
Aroclor-1260	0.0315	11.1	2.84E-08
Benzo(a)pyrene	0.00242	23.6	1.03E-09
Benzo(b)fluoranthene	0.00415	32.3	1.28E-09
Chrysene	0.00415	3230	1.28E-11
Indeno(1,2,3-cd)pyrene	0.00277	32.3	8.58E-10
Methylene Chloride	0.00203	14,400	1.41E-12
		Total Excess Cancer Risk	**1E-07**

* SSLs from NMED (2022, 702484).

Table G-4.2-38
Industrial Noncarcinogenic
Screening Evaluation for SWMU 39-006(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Cadmium	1.058	1110	9.53E-04
Cyanide (Total)	32.58	63.3	5.15E-01
Mercury	0.33	389	8.48E-04
Nitrate	2.485	2,080,000	1.19E-06
Perchlorate	0.001	908	1.10E-06
Selenium	0.983	6490	1.51E-04
Silver	18.79	6490	2.90E-03
Acenaphthene	0.199	50,500	3.94E-06
Aroclor-1254	0.0734	16.4	4.48E-03
Benzo(a)pyrene	0.00242	251	9.64E-06
Benzo(g,h,i)perylene	0.00292	25,300[b]	1.15E-07
Benzoic Acid	0.343	3,300,000[c]	1.04E-07
Di-n-butylphthalate	0.0725	91,600	7.91E-07
Fluoranthene	0.00317	33,700	9.41E-08
Isopropyltoluene[4-]	0.00816	14,200[d]	5.75E-07
Methylene Chloride	0.00203	5130	3.96E-07
Phenanthrene	0.00223	27,500	8.11E-08
Pyrene	0.00301	25,300	1.19E-07
		Hazard Index	**0.5**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene is used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] Isopropylbenzene is used as a surrogate based on structural similarity.

Table G-4.2-39
Industrial Radionuclide
Screening Evaluation for SWMU 39-006(a)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Uranium-238	2.158	710	7.60E-02
		Total Dose	**0.08**

* SAL from LANL (2015, 600929).

Table G-4.2-40
Construction Worker Carcinogenic Screening Evaluation for SWMU 39-006(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Cadmium	0.228	3610	6.32E-10
Aroclor-1254	0.00959	85.3	1.12E-09
Aroclor-1260	0.00369	85.3	4.33E-10
Benzene	0.0088	423	2.08E-10
Benzo(a)anthracene	0.0134	240	5.58E-10
Benzo(a)pyrene	0.014	173	8.09E-10
Benzo(b)fluoranthene	0.0201	240	8.38E-10
Benzo(k)fluoranthene	0.00713	2310	3.09E-11
Bis(2-ethylhexyl)phthalate	0.093	13,400	6.94E-11
Butylbenzylphthalate	0.0112	99,100[b]	1.13E-12
Chrysene	0.0135	23,100	5.84E-12
Dibenz(a,h)anthracene	0.00334	24	1.39E-09
Indeno(1,2,3-cd)pyrene	0.0114	240	4.75E-10
Methylene Chloride	0.00185	89,600	2.06E-13
Methylnaphthalene[1-]	0.00612	6060	1.01E-11
Naphthalene	0.005	633	7.90E-11
TCDD[2,3,7,8-]	1.95E-08	0.00172	1.13E-10
Total Excess Cancer Risk			**7E-09**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-41
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 39-006(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Cadmium	0.228	72.1	3.16E-03
Cyanide (Total)	4.47	12.1	3.69E-01
Mercury	0.0335	77.1	4.35E-04
Nitrate	11.34	566,000	2.00E-05
Perchlorate	0.000596	248	2.40E-06
Selenium	0.58	1750	3.31E-04
Silver	4.841	1770	2.74E-03
Acenaphthene	0.00568	15,100	3.76E-07
Acenaphthylene	0.00618	7530[b]	8.21E-07
Acetone	0.00204	242,000	8.43E-09
Anthracene	0.00554	75,300	7.36E-08
Aroclor-1254	0.00959	4.91	1.95E-03
Benzene	0.0088	142	6.20E-05
Benzo(a)pyrene	0.014	15	9.33E-04
Benzo(g,h,i)perylene	0.0105	7530[b]	1.39E-06
Benzoic Acid	0.183	1,080,000[c]	1.69E-07
Bis(2-ethylhexyl)phthalate	0.093	5380	1.73E-05
Butanone[2-]	0.00248	91,700	2.70E-08
Butylbenzylphthalate	0.0112	53,800[c]	2.08E-07
Carbazole	0.0157	251[d]	6.25E-05
Chloronaphthalene[2-]	0.0421	28,300	1.49E-06
Di-n-butylphthalate	0.0113	26,900	4.20E-07
Di-n-octylphthalate	0.0218	2690[c]	8.10E-06
Diethylphthalate	0.0107	215,000	4.98E-08
Fluoranthene	0.0312	10,000	3.12E-06
Fluorene	0.00135	10,000	1.35E-07
Hexanone[2-]	0.231	584[c]	3.95E-04
Iodomethane	0.0009	17.9[e]	5.03E-05
Isopropyltoluene[4-]	0.00816	2740[f]	2.98E-06
Methylene Chloride	0.00185	1210	1.53E-06
Methylnaphthalene[1-]	0.00612	17,600	3.48E-07
Methylnaphthalene[2-]	0.00612	1000	6.12E-06
Naphthalene	0.005	159	3.14E-05

Table G-4.2-41 (continued)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Phenanthrene	0.00528	8070	6.54E-07
Phenol	0.49	77,400	6.33E-06
Pyrene	0.0233	7530	3.09E-06
TCDD[2,3,7,8-]	1.95E-08	0.000226	8.63E-05
Toluene	0.00048	14,000	3.43E-08
Trimethylbenzene[1,2,4-]	0.00056	504[c]	1.11E-06
Xylene[1,3-]+Xylene[1,4-]	0.00113	798[g]	1.42E-06
		Hazard Index	**0.4**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene is used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

[d] Dibenzofuran is used as a surrogate based on structural similarity.

[e] Bromomethane is used as a surrogate based on structural similarity.

[f] Isopropylbenzene is used as a surrogate based on structural similarity.

[g] Total xylene is used as a surrogate based on structural similarity.

Table G-4.2-42
Construction Worker
Radionuclide Screening Evaluation for SWMU 39-006(a)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.333	37	2.25E-01
Tritium	56.1	1,600,000	8.77E-04
Uranium-238	1.015	470	5.40E-02
Total Dose			**0.3**

* SALs from LANL (2015, 600929).

Table G-4.2-43
Residential Carcinogenic
Screening Evaluation for SWMU 39-006(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
Cadmium	0.228	85,900	2.65E-11
Aroclor-1254	0.00959	2.43	3.95E-08
Aroclor-1260	0.00369	2.43	1.52E-08
Benzene	0.0088	17.8	4.94E-09
Benzo(a)anthracene	0.0134	1.53	8.76E-08
Benzo(a)pyrene	0.014	1.12	1.25E-07
Benzo(b)fluoranthene	0.0201	1.53	1.31E-07
Benzo(k)fluoranthene	0.00713	15.3	4.66E-09
Bis(2-ethylhexyl)phthalate	0.093	380	2.45E-09
Butylbenzylphthalate	0.0112	2900[b]	3.86E-11
Chrysene	0.0135	153	8.82E-10
Dibenz(a,h)anthracene	0.00334	0.153	2.18E-07
Indeno(1,2,3-cd)pyrene	0.0114	1.53	7.45E-08
Methylene Chloride	0.00185	766	2.42E-11
Methylnaphthalene[1-]	0.00612	172	3.56E-10
Naphthalene	0.005	22.6	2.21E-09
TCDD[2,3,7,8-]	1.95E-08	0.000049	3.98E-09
		Total Excess Cancer Risk	**7E-07**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-44
Residential Noncarcinogenic
Screening Evaluation for SWMU 39-006(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Cadmium	0.228	70.5	3.23E-03
Cyanide (Total)	4.47	11.2	3.99E-01
Mercury	0.0335	23.5	1.43E-03
Nitrate	11.34	125,000	9.07E-05
Perchlorate	0.000596	54.8	1.09E-05
Selenium	0.58	391	1.48E-03
Silver	4.841	391	1.24E-02
Acenaphthene	0.00568	3480	1.63E-06
Acenaphthylene	0.00618	1740[b]	3.55E-06

Table G-4.2-44 (continued)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Acetone	0.00204	66,300	3.08E-08
Anthracene	0.00554	17,400	3.18E-07
Aroclor-1254	0.00959	1.14	8.41E-03
Benzene	0.0088	114	7.72E-05
Benzo(a)pyrene	0.014	17.4	8.05E-04
Benzo(g,h,i)perylene	0.0105	1740[b]	6.03E-06
Benzoic Acid	0.183	250,000[c]	7.32E-07
Bis(2-ethylhexyl)phthalate	0.093	1230	7.56E-05
Butanone[2-]	0.00248	37,400	6.63E-08
Butylbenzylphthalate	0.0112	13,000[c]	8.62E-07
Carbazole	0.0157	78[c,d]	2.01E-04
Chloronaphthalene[2-]	0.0421	6260	6.73E-06
Di-n-butylphthalate	0.0113	6160	1.83E-06
Di-n-octylphthalate	0.0218	630[c]	3.46E-05
Diethylphthalate	0.0107	49,300	2.17E-07
Fluoranthene	0.0312	2320	1.34E-05
Fluorene	0.00135	2320	5.82E-07
Hexanone[2-]	0.231	200[c]	1.16E-03
Iodomethane	0.0009	17.7[e]	5.08E-05
Isopropyltoluene[4-]	0.00816	2360[f]	3.46E-06
Methylene Chloride	0.00185	409	4.52E-06
Methylnaphthalene[1-]	0.00612	4060	1.51E-06
Methylnaphthalene[2-]	0.00612	232	2.64E-05
Naphthalene	0.005	162	3.09E-05
Phenanthrene	0.00528	1850	2.85E-06
Phenol	0.49	18,500	2.65E-05
Pyrene	0.0233	1740	1.34E-05
TCDD[2,3,7,8-]	1.95E-08	0.0000506	3.85E-04
Toluene	0.00048	5230	9.18E-08
Trimethylbenzene[1,2,4-]	0.00056	300[c]	1.87E-06
Xylene[1,3-]+Xylene[1,4-]	0.00113	871[g]	1.30E-06
		Hazard Index	**0.4**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene is used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] Dibenzofuran is used as a surrogate based on structural similarity.

[e] Bromomethane is used as a surrogate based on structural similarity.

[f] Isopropylbenzene is used as a surrogate based on structural similarity.

[g] Total xylene is used as a surrogate based on structural similarity.

**Table G-4.2-45
Residential Radionuclide
Screening Evaluation for SWMU 39-006(a)**

COPC	EPC (pCi/g)	Residential SAL* (mg/kg)	Dose (mrem/yr)
Cesium-137	0.333	12	6.94E-01
Tritium	56.1	1700	8.25E-01
Uranium-238	1.015	150	1.69E-01
		Total Dose	**2.0**

* SALs from LANL (2015, 600929).

**Table G-4.2-46
Industrial Carcinogenic
Screening Evaluation for SWMU 39-007(a)**

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Cancer Risk
Aroclor-1248	0.35	10.7	3.27E-07
Aroclor-1254	0.0942	11	8.56E-08
Aroclor-1260	0.0305	11.1	2.75E-08
Benzo(k)fluoranthene	0.042	323	1.30E-09
Bis(2-ethylhexyl)phthalate	0.225	1830	1.23E-09
Butylbenzylphthalate	0.077	12,000[b]	6.42E-11
Chrysene	0.04	3230	1.24E-10
Dichlorobenzene[1,4-]	0.00074	6730	1.10E-12
Ethylbenzene	0.00043	368	1.17E-11
		Total Excess Cancer Risk	**4E-07**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-47
Industrial Noncarcinogenic
Screening Evaluation for SWMU 39-007(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Nitrate	3.57	2,080,000	1.72E-06
Zinc	58.15	389,000	1.49E-04
Aroclor-1254	0.0942	16.4	5.74E-03
Bis(2-ethylhexyl)phthalate	0.225	18,300	1.23E-05
Butylbenzylphthalate	0.077	160,000[b]	4.81E-07
Dichlorobenzene[1,4-]	0.00074	90,800	8.15E-09
Ethylbenzene	0.00043	29,000	1.48E-08
Fluoranthene	0.076	33,700	2.26E-06
Phenanthrene	0.067	27,500	2.44E-06
Pyrene	0.08	25,300	3.16E-06
Toluene	0.00095	61,300	1.55E-08
		Hazard Index	**0.006**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-48
Construction Worker Carcinogenic
Screening Evaluation for SWMU 39-007(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Aroclor-1248	0.35	85.3	4.10E-08
Aroclor-1254	0.0629	85.3	7.37E-09
Aroclor-1260	0.0164	85.3	1.92E-09
Benzo(k)fluoranthene	0.042	2310	1.82E-10
Bis(2-ethylhexyl)phthalate	0.187	13,400	1.40E-10
Butylbenzylphthalate	0.077	99,100[b]	7.77E-12
Chrysene	0.04	23,100	1.73E-11
Dichlorobenzene[1,4-]	0.00074	45,900	1.61E-13
Ethylbenzene	0.00043	1770	2.43E-12
		Total Excess Cancer Risk	**5E-08**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-49
Construction Worker Noncarcinogenic Screening Evaluation for SWMU 39-007(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Nitrate	3.57	566,000	6.31E-06
Perchlorate	0.000567	248	2.29E-06
Zinc	49.31	106,000	4.65E-04
Acetone	0.0103	242,000	4.26E-08
Aroclor-1254	0.0629	4.91	1.28E-02
Bis(2-ethylhexyl)phthalate	0.187	5380	3.48E-05
Butylbenzylphthalate	0.077	53,800[b]	1.43E-06
Dichlorobenzene[1,4-]	0.00074	24,800	2.98E-08
Ethylbenzene	0.00043	5800	7.41E-08
Fluoranthene	0.076	10,000	7.60E-06
Phenanthrene	0.067	8070	8.30E-06
Pyrene	0.08	7530	1.06242E-05
Toluene	0.00095	14,000	6.78571E-08
		Hazard Index	**0.02**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-50
Residential Carcinogenic Screening Evaluation for SWMU 39-007(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
Aroclor-1248	0.35	2.43	1.44E-06
Aroclor-1254	0.0629	2.43	2.59E-07
Aroclor-1260	0.0164	2.43	6.75E-08
Benzo(k)fluoranthene	0.042	15.3	2.75E-08
Bis(2-ethylhexyl)phthalate	0.187	380	4.92E-09
Butylbenzylphthalate	0.077	2900[b]	2.66E-10
Chrysene	0.04	153	2.61E-09
Dichlorobenzene[1,4-]	0.00074	1290	5.74E-12
Ethylbenzene	0.00043	75.1	5.73E-11
		Total Excess Cancer Risk	**2E-06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-51
Residential Noncarcinogenic
Screening Evaluation for SWMU 39-007(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Nitrate	3.57	125,000	2.86E-05
Perchlorate	0.000567	54.8	1.03E-05
Zinc	49.31	23,500	2.10E-03
Acetone	0.0103	66,300	1.55E-07
Aroclor-1254	0.0629	1.14	5.52E-02
Bis(2-ethylhexyl)phthalate	0.187	1230	1.52E-04
Butylbenzylphthalate	0.077	13,000[b]	5.92E-06
Dichlorobenzene[1,4-]	0.00074	5480	1.35E-07
Ethylbenzene	0.00043	3930	1.09E-07
Fluoranthene	0.076	2320	3.28E-05
Phenanthrene	0.067	1850	3.622E-05
Pyrene	0.08	1740	4.598E-05
Toluene	0.00095	5230	1.816E-07
		Hazard Index	**0.06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-52
Industrial Carcinogenic
Screening Evaluation for SWMU 39-010

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Beryllium	0.776	313,000	2.48E-11
Aroclor-1254	0.00185	11	1.68E-09
Aroclor-1260	0.0049	11.1	4.41E-09
Benzo(a)anthracene	0.00801	32.3	2.48E-09
Benzo(a)pyrene	0.0102	23.6	4.32E-09
Benzo(b)fluoranthene	0.014	32.3	4.33E-09
Benzo(k)fluoranthene	0.00801	323	2.48E-10
Bis(2-ethylhexyl)phthalate	0.133	1830	7.27E-10
Chloromethane	0.00154	201	7.66E-11
Chrysene	0.0101	3230	3.13E-11

Table G-4.2-52 (continued)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Dibenz(a,h)anthracene	0.00206	3.23	6.38E-09
Indeno(1,2,3-cd)pyrene	0.00611	32.3	1.89E-09
Methylene Chloride	0.0029	14,400	2.01E-12
Methylnaphthalene[1-]	0.0207	813	2.55E-10
Naphthalene	0.0984	108	9.11E-09
TCDD[2,3,7,8-]	2.30E-06	2.38E-04	9.66E-08
Trinitrotoluene[2,4,6-]	0.033	1070	3.08E-10
		Total Excess Cancer Risk	**1E-07**

* SSLs from NMED (2022, 702484).

Table G-4.2-53
Industrial Noncarcinogenic
Screening Evaluation for SWMU 39-010

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Antimony	0.343	519	6.61E-04
Beryllium	0.776	2580	3.01E-04
Copper	70.62	51,900	1.36E-03
Mercury	0.227	389	5.84E-04
Nitrate	3.892	2,080,000	1.87E-06
Perchlorate	0.00172	908	1.89E-06
Selenium	0.968	6490	1.49E-04
Acenaphthene	0.0373	50,500	7.39E-07
Acetone	0.00198	960,000	2.06E-09
Amino-2,6-dinitrotoluene[4-]	0.0064	125	5.12E-05
Amino-4,6-dinitrotoluene[2-]	0.0099	127	7.80E-05
Aroclor-1254	0.00185	16.4	1.13E-04
Benzo(a)pyrene	0.0102	251	4.06E-05
Benzo(g,h,i)perylene	0.0067	25,300[b]	2.65E-07
Benzoic Acid	0.332	3,300,000[c]	1.01E-07
Bis(2-ethylhexyl)phthalate	0.133	18,300	7.27E-06
Chloromethane	0.00154	1260	1.22E-06
Di-n-butylphthalate	0.322	91,600	3.52E-06
Diethylphthalate	0.0462	733,000	6.30E-08
Fluoranthene	0.0155	33,700	4.60E-07
HMX	0.036	63,300	5.69E-07

Table G-4.2-53 (continued)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	HQ
Methylene Chloride	0.0029	5130	5.65E-07
Methylnaphthalene[1-]	0.0207	58900	3.51E-07
Methylnaphthalene[2-]	0.0304	3370	9.02E-06
Naphthalene	0.0984	843	1.17E-04
Phenanthrene	0.00717	27,500	2.61E-07
Pyrene	0.0146	25,300	5.77E-07
TATB	0.401	32,000[c,d]	1.25E-05
TCDD[2,3,7,8-]	2.30E-06	8.08E-04	2.85E-03
Toluene	0.00057853	61,300	9.44E-09
Trimethylbenzene[1,2,4-]	0.00666	1800[c]	3.70E-06
Trimethylbenzene[1,3,5-]	0.000857	1500[c]	5.71E-07
Trinitrotoluene[2,4,6-]	0.033	573	5.76E-05
		Hazard Index	**0.01**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene is used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] Trinitrobenzene [1,3,5-] is used as a surrogate based on structural similarity.

Table G-4.2-54
Industrial Radionuclide
Screening Evaluation for SWMU 39-010

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.43	1000	3.58E-02
Cesium-137	0.0572	41	3.49E-02
Plutonium-238	0.0577	1300	1.11E-03
Plutonium-239/240	0.0577	1200	1.20E-03
Tritium	4.97	2,400,000	5.18E-05
Uranium-234	2.741	3100	2.21E-02
Uranium-235/236	0.132	160	2.06E-02
Uranium-238	10.02	710	3.53E-01
		Total Dose	**0.5**

* SALs from LANL (2015, 600929).

Table G-4.2-55
Construction Worker Carcinogenic
Screening Evaluation for SWMU 39-010

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Cancer Risk
Beryllium	0.669	2710	2.47E-09
Aroclor-1242	0.00494	85.3	5.79E-10
Aroclor-1254	0.00134	85.3	1.57E-10
Aroclor-1260	0.00141	85.3	1.65E-10
Benzo(a)anthracene	0.00432	240	1.80E-10
Benzo(a)pyrene	0.00459	173	2.65E-10
Benzo(b)fluoranthene	0.00373	240	1.55E-10
Benzo(k)fluoranthene	0.00487	2310	2.11E-11
Bis(2-ethylhexyl)phthalate	0.033	13,400	2.46E-11
Butylbenzylphthalate	0.24	99,100[b]	2.42E-11
Chloromethane	0.00154	956	1.61E-11
Chrysene	0.00428	23,100	1.85E-12
Dibenz(a,h)anthracene	0.00674	24	2.81E-09
Indeno(1,2,3-cd)pyrene	0.00232	240	9.67E-11
Methylene Chloride	0.00343	89,600	3.83E-13
Methylnaphthalene[1-]	0.0207	6060	3.42E-11
Naphthalene	0.00282	633	4.45E-11
RDX	0.378	2960	1.28E-09
TCDD[2,3,7,8-]	2.30E-06	1.72E-03	1.34E-08
Trinitrotoluene[2,4,6-]	0.293	7500	3.91E-10
		Total Excess Cancer Risk	**2E-08**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

Table G-4.2-56
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 39-010

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Aluminum	4674	41,400	1.13E-01
Antimony	0.122	142	8.59E-04
Barium	49.58	4390	1.13E-02
Beryllium	0.669	148	4.52E-03
Copper	48.98	14,200	3.45E-03
Mercury	0.214	77.1	2.78E-03
Nitrate	5.061	566,000	8.94E-06
Perchlorate	0.00102	248	4.11E-06
Selenium	0.933	1750	5.33E-04
Acenaphthene	0.0056	15,100	3.71E-07
Acenaphthylene	0.00876	7530[b]	1.16E-06
Acetone	0.0409	242,000	1.69E-07
Acetonitrile	0.00951	1850[c]	5.14E-06
Amino-2,6-dinitrotoluene[4-]	0.016	17.3	9.25E-04
Amino-4,6-dinitrotoluene[2-]	0.0099	17.3	5.72E-04
Anthracene	0.0202	75,300	2.68E-07
Aroclor-1254	0.00134	4.91	2.73E-04
Benzo(a)pyrene	0.00459	15	3.06E-04
Benzo(g,h,i)perylene	0.00254	7530[b]	3.37E-07
Benzoic Acid	0.187	1,080,000[c]	1.73E-07
Bis(2-ethylhexyl)phthalate	0.033	5380	6.13E-06
Butylbenzylphthalate	0.24	53,800[c]	4.46E-06
Chloromethane	0.00154	235	6.55E-06
Di-n-butylphthalate	0.131	26,900	4.87E-06
Di-n-octylphthalate	0.0214	2690[c]	7.96E-06
Diethylphthalate	0.0462	215,000	2.15E-07
Fluoranthene	0.00536	10,000	5.36E-07
Hexanone[2-]	0.0038	584[c]	6.51E-06
HMX	0.0822	17,400	4.72E-06
Isopropyltoluene[4-]	0.00241	2740[d]	8.80E-07
Methylene Chloride	0.00343	1210	2.83E-06
Methylnaphthalene[1-]	0.0207	17,600	1.18E-06
Methylnaphthalene[2-]	0.0017	1000	1.70E-06

Table G-4.2-56 (continued)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	HQ
Naphthalene	0.00282	159	1.77E-05
Phenanthrene	0.0029	8070	3.59E-07
Pyrene	0.00724	7530	9.61E-07
RDX	0.378	1350	2.80E-04
TATB	0.513	10,000[e]	5.13E-05
TCDD[2,3,7,8-]	2.30E-06	2.26E-04	1.02E-02
Toluene	0.000425	14,000	3.04E-08
Trimethylbenzene[1,2,4-]	0.00666	504[c]	1.32E-05
Trimethylbenzene[1,3,5-]	0.000857	433[c]	1.98E-06
Trinitrotoluene[2,4,6-]	0.293	161	1.82E-03
		Hazard Index	**0.2**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene is used as a surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables) and equation and parameters in NMED (2022, 702484). Calculations are provided in Attachment G-2.

[d] Isopropylbenzene is used as a surrogate based on structural similarity.

[e] Trinitrobenzene[1,3,5-] is used as a surrogate based on structural similarity.

Table G-4.2-57
Construction Worker Radionuclide
Screening Evaluation for SWMU 39-010

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.43	230	1.55E-01
Cesium-137	0.431	37	2.91E-01
Cobalt-60	1.86	8.1	5.74E+00
Plutonium-238	3.25	230	3.53E-01
Plutonium-239/240	13.8	200	1.73E+00
Tritium	4.97	1,600,000	7.77E-05
Uranium-234	2.259	1000	5.65E-02
Uranium-235/236	10.5	130	2.02E+00
Uranium-238	8.925	470	4.75E-01
		Total Dose	**11**

* SALs from LANL (2015, 600929).

Table G-4.2-58
Residential Carcinogenic
Screening Evaluation for SWMU 39-010

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Cancer Risk
Beryllium	0.669	64,400	1.04E-10
Aroclor-1242	0.00494	2.43	2.03E-08
Aroclor-1254	0.00134	2.43	5.51E-09
Aroclor-1260	0.00141	2.43	5.80E-09
Benzo(a)anthracene	0.00432	1.53	2.82E-08
Benzo(a)pyrene	0.00459	1.12	4.10E-08
Benzo(b)fluoranthene	0.00373	1.53	2.44E-08
Benzo(k)fluoranthene	0.00487	15.3	3.18E-09
Bis(2-ethylhexyl)phthalate	0.033	380	8.68E-10
Butylbenzylphthalate	0.24	2900[b]	8.28E-10
Chloromethane	0.00154	41.1	3.75E-10
Chrysene	0.00428	153	2.80E-10
Dibenz(a,h)anthracene	0.00674	0.153	4.41E-07
Indeno(1,2,3-cd)pyrene	0.00232	1.53	1.52E-08
Methylene Chloride	0.00343	766	4.48E-11
Methylnaphthalene[1-]	0.0207	172	1.20E-09
Naphthalene	0.00282	22.6	1.25E-09
RDX	0.378	83.1	4.55E-08
TCDD[2,3,7,8-]	2.30E-06	4.90E-05	4.69E-07
Trinitrotoluene[2,4,6-]	0.293	211	1.39E-08
		Total Excess Cancer Risk	**1E-06**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

Table G-4.2-59
Residential Noncarcinogenic
Screening Evaluation for SWMU 39-010

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Aluminum	4674	78,000	5.99E-02
Antimony	0.122	31.3	3.90E-03
Barium	49.58	15,600	3.18E-03
Beryllium	0.669	156	4.29E-03
Copper	48.98	3130	1.56E-02
Mercury	0.214	23.5	9.11E-03
Nitrate	5.061	125,000	4.05E-05
Perchlorate	0.00102	54.8	1.86E-05
Selenium	0.933	391	2.39E-03
Acenaphthene	0.0056	3480	1.61E-06
Acenaphthylene	0.00876	1740[b]	5.03E-06
Acetone	0.0409	66,300	6.17E-07
Acetonitrile	0.00951	810[c]	1.17E-05
Amino-2,6-dinitrotoluene[4-]	0.016	7.64	2.09E-03
Amino-4,6-dinitrotoluene[2-]	0.0099	7.7	1.29E-03
Anthracene	0.0202	17,400	1.16E-06
Aroclor-1254	0.00134	1.14	1.18E-03
Benzo(a)pyrene	0.00459	17.4	2.64E-04
Benzo(g,h,i)perylene	0.00254	1740[b]	1.46E-06
Benzoic Acid	0.187	250,000[c]	7.48E-07
Bis(2-ethylhexyl)phthalate	0.033	1230	2.68E-05
Butylbenzylphthalate	0.24	13,000[c]	1.85E-05
Chloromethane	0.00154	268	5.75E-06
Di-n-butylphthalate	0.131	6160	2.13E-05
Di-n-octylphthalate	0.0214	630[c]	3.40E-05
Diethylphthalate	0.0462	49,300	9.37E-07
Fluoranthene	0.00536	2320	2.31E-06
Hexanone[2-]	0.0038	200[c]	1.90E-05
HMX	0.0822	3850	2.14E-05
Isopropyltoluene[4-]	0.00241	2360[d]	1.02E-06
Methylene Chloride	0.00343	409	8.39E-06
Methylnaphthalene[1-]	0.0207	4060	5.10E-06
Methylnaphthalene[2-]	0.0017	232	7.33E-06
Naphthalene	0.00282	162	1.74E-05

Table G-4.2-59 (continued)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	HQ
Phenanthrene	0.0029	1850	1.57E-06
Pyrene	0.00724	1740	4.16E-06
RDX	0.378	301	1.26E-03
TATB	0.513	2200[e]	2.33E-04
TCDD[2,3,7,8-]	0.0000023	0.0000506	4.55E-02
Toluene	0.000425	5230	8.13E-08
Trimethylbenzene[1,2,4-]	0.00666	300[c]	2.22E-05
Trimethylbenzene[1,3,5-]	0.000857	270[c]	3.17E-06
Trinitrotoluene[2,4,6-]	0.293	36	8.14E-03
		Hazard Index	**0.2**

[a] SSLs from NMED (2022, 702484) unless otherwise noted.

[b] Pyrene is used as a surrogate based on structural similarity.

[c] SSL from EPA regional screening tables (https://epa.gov/risk/regional-screening-levels-rsls-generic-tables).

[d] Isopropylbenzene is used as a surrogate based on structural similarity.

[e] Trinitrobenzene[1,3,5-] is used as a surrogate based on structural similarity.

Table G-4.2-60
Residential Radionuclide
Screening Evaluation for SWMU 39-010

COPC	EPC (pCi/g)	Residential SAL* (mg/kg)	Dose (mrem/yr)
Americium-241	1.43	83	4.31E-01
Cesium-137	0.431	12	8.98E-01
Cobalt-60	1.86	2.6	1.79E+01
Plutonium-238	3.25	84	9.67E-01
Plutonium-239/240	13.8	79	4.37E+00
Tritium	4.97	1700	7.31E-02
Uranium-234	2.259	290	1.95E-01
Uranium-235/236	10.5	42	6.25E+00
Uranium-238	8.925	150	1.49E+00
		Total Dose	**33**

* SALs from LANL (2015, 600929).

Table G-4.3-1
Summary of Vapor-Intrusion Pathway Designations

SWMU	Brief Description	Vapor Intrusion Pathway Designation	Comments
SWMU 39-001(a)	Inactive landfill	Incomplete	No nearby buildings (nearest building is approximately 50 ft south of former landfill). One location (39-01390) is positioned between former landfill and the building. No organic detections were reported in that sample. No buildings are reasonably anticipated in the future. No further evaluation required.
SWMU 39-002(a)	Inactive Storage Area 1	Potentially Complete	History of solvent storage. Low-level VOCs detected in soil samples. Multiple lines of evidence indicate that no further evaluation is needed.
	Inactive Storage Area 2	Incomplete	No nearby buildings. No buildings are reasonably anticipated in the future. No further evaluation required.
	Inactive Storage Area 3	Incomplete	No nearby buildings. No buildings are reasonably anticipated in the future. No further evaluation required.
AOC 39-002(b)	Inactive Storage Area	Potentially Complete	Structure adjacent to the SWMU. Low-level VOCs detected in soil samples. Multiple lines of evidence indicate that no further evaluation is needed.
SWMU 39-006(a)	Septic system inactive components	Potentially Complete	Structures adjacent to the SWMU at upgradient end of septic lines. Low-level VOCs detected in soil samples. Multiple lines of evidence indicate that no further evaluation is needed.
SWMU 39-007(a)	Former satellite accumulation area at structure 39-63	Potentially Complete	A structure (equipment shed) is adjacent to the SWMU. Low-level VOCs detected in soil samples. Multiple lines of evidence indicate that no further evaluation is needed.
SWMU 39-010	Excavated soil dump from construction of SWMU 39-004(e) firing site	Incomplete	No nearby buildings. No buildings are reasonably anticipated in the future. No further evaluation required.

Table G-4.3-2
Summary of Detected Volatile Organic Compounds, Range of Report Detection Limits and Concentrations, and Indoor Air Vapor-Intrusion SSLs at Area 1 of SWMU 39-002(a)

Compound	Range of Report Detection Limits (mg/kg)	Range of Estimated or Detected Concentrations 0–1 ft bgs (mg/kg)	Range of Estimated or Detected Concentrations >1 ft bgs (mg/kg)	Indoor Air Target (µg/m^3)[a]
Dichlorobenzene[1,2]	0.00103–1.6	No detections	No detections	209
Ethylbenzene	0.00103–0.0065	0.000718	0.00081	11.2
Iodomethane	0.00515–0.00684	No detections	0.00201–0.00345	5.2[b,c]
Methylene chloride	0.00515–0.00684	0.00233–0.00287	0.00249–4.39	626
Naphthalene	0.00339–0.43	0.00753–1.5	No detections	0.826
Toluene	0.00103–0.0065	0.00033–0.0233	0.00084	5210
Trichloroethene	0.00103–0.0065	0.0005–0.00075	No detections	2.09
Trimethylbenzene[1,2,4-]	0.00103–0.0065	0.00047	No detections	63[b]
Xylene[1,2]	0.00103–0.00137	0.0005–0.00062	No detections	104
Xylene[1,3-]+Xylene[1,4-]	0.00206–0.00273	0.00091–0.00177	No detections	104

[a] Residential target level for indoor air used to derive vapor intrusion SSLs (NMED 2022, 702484), lower of cancer or noncancer values.

[b] Value from USEPA vapor intrusion calculator (https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-level-calculator).

[c] Used value for bromomethane based on structural similarity.

Table G-4.3-3
Summary of Detected Volatile Organic Compounds, Range of Report Detection Limits and Concentrations, and Indoor Air Vapor-Intrusion SSLs at AOC 39-002(b)

Compound	Range of Report Detection Limits (mg/kg)	Range of Estimated or Detected Concentrations 0–1 ft bgs (mg/kg)	Range of Estimated or Detected Concentrations >1 ft bgs (mg/kg)	Indoor Air Target (µg/m^3)[a]
Isopropyltoluene[4]	0.00102-0.00122	No detections	0.00399	417[b,c]
Tetrachloroethene	0.00102–0.00122	No detections	0.000457–0.000825	41.7
Trichloroethene	0.00102–0.00122	No detections	0.00247	2.09

[a] Residential target level for indoor air used to derive vapor intrusion SSLs (NMED 2022, 702484), lower of cancer or noncancer values.

[b] Value from USEPA vapor intrusion calculator (https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-level-calculator).

[c] Used value for isopropylbenzene based on structural similarity.

Table G-4.3-4
Summary of Detected Volatile Organic Compounds, Range of Report Detection Limits and Concentrations, and Indoor Air Vapor-Intrusion SSLs at SWMU 39-006(a)

Compound	Range of Report Detection Limits (mg/kg)	Range of Estimated or Detected Concentrations 0–1 ft bgs (mg/kg)	Range of Estimated or Detected Concentrations >1 ft bgs (mg/kg)	Indoor Air Target (µg/m³)[a]
Acetone	0.00485–0.027	No detections	0.00209–0.013	32300
Benzene	0.000969– 0.0067	No detections	0.0088	3.6
Butanone[2-]	0.00485–0.025	No detections	0.0022–0.00248	5210
Hexanone[2-]	0.00485–0.027	No detections	0.00275–0.231	31[b]
Iodomethane	0.00485–0.0122	No detections	0.0009	5.2[b,c]
Isopropyltoluene[4-]	0.000969– 0.0067	0.00169– 0.00816	0.00059	417[b,d]
Methylene Chloride	0.00485–0.0122	0.00203	0.00191–0.00458	626
Naphthalene	0.0011–0.44	No detections	0.0025–0.005	0.826
Toluene	0.000969–0.0067	No detections	0.000461–0.00048	5210
Trimethylbenzene[1,2,4-]	0.000969– 0.0067	No detections	0.00042–0.00056	63[b]
Xylene[1,3-]+Xylene[1,4-]	0.00194–0.00487	No detections	0.000838–0.0011	104

[a] Residential target level for indoor air used to derive vapor intrusion SSLs (NMED 2022, 702484), lower of cancer or noncancer values.

[b] Value from USEPA vapor intrusion calculator (https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-level-calculator).

[c] Used value for bromomethane based on structural similarity.

[d] Used value for isopropylbenzene based on structural similarity.

Table G-4.3-5
Summary of Detected Volatile Organic Compounds, Range of Report Detection Limits and Concentrations, and Indoor Air Vapor-Intrusion SSLs at SWMU 39-007(a)

Compound	Range of Report Detection Limits (mg/kg)	Range of Estimated or Detected Concentrations 0–1 ft bgs (mg/kg)	Range of Estimated or Detected Concentrations >1 ft bgs (mg/kg)	Indoor Air Target (µg/m³)*
Acetone	0.0053–0.042	no detects	0.0103	32300
Dichlorobenzene[1,4]	0.0011–0.46	0.00059–0.00074	no detects	2.55
Ethylbenzene	0.0011–0.0062	0.00043	0.00033	11.2
Toluene	0.0011–0.0062	0.00041–0.0095	no detects	5210

* Residential target level for indoor air used to derive vapor intrusion SSLs (NMED 2022, 702484), lower of cancer or noncancer values.

Table G-4.4-1
Lead Screening Assessment

SWMU	Scenario	COPC	EPC (mg/kg)	Soil Screening Value* (mg/kg)	Ratio
39-001(a)	Lead was not a COPC at this site.				
39-002(a) Area 1	Industrial	Lead	39.33	800	4.92E-02
39-002(a) Area 1	Construction Worker	Lead	32.31	800	4.04E-02
39-002(a) Area 1	Residential	Lead	32.31	400	8.08E-02
39-002(a) Area 2	Lead was not a COPC at this site.				
39-002(a) Area 3	Lead was not a COPC at this site.				
AOC 39-002(b)	Lead was not a COPC at this site.				
39-006(a)	Industrial	Lead	11.14	800	1.39E-02
39-006(a)	Construction Worker	Lead	16.21	800	2.03E-02
39-006(a)	Residential	Lead	16.21	400	4.05E-02
39-007(a)	Lead was not a COPC at this site.				
39-010	Lead was not a COPC at this site.				

* Lead screening values from NMED (2022, 702484).

Table G-4.4-2
Total Petroleum Hydrocarbon Screening Assessment

SWMU	Scenario	EPC (mg/kg)	Soil Screening Value* (mg/kg)	Ratio
39-001(a)	TPH was not a COPC at this site.			
39-002(a) Area 1	Industrial	93.2	3000	3.11E-02
39-002(a) Area 1	Construction Worker	78.14	3000	2.60E-02
39-002(a) Area 1	Residential	78.14	1000	7.81E-02
39-002(a) Area 2	TPH was not a COPC at this site.			
39-002(a) Area 3	TPH was not a COPC at this site.			
AOC 39-002(b)	TPH was not a COPC at this site.			
39-006(a)	TPH was not a COPC at this site.			
39-007(a)	TPH was not a COPC at this site.			
39-010	TPH was not a COPC at this site.			

* TPH screening values from NMED (2022, 702484).

Table G-5.3-1
Ecological Screening Levels for Terrestrial Receptors

COPEC	Gray fox (Mammalian top carnivore)	American kestrel (Avian top carnivore)	American kestrel (insectivore/carnivore)	American robin (Avian herbivore)	American robin (Avian insectivore)	American robin (Avian omnivore)	Mountain cottontail (Mammalian herbivore)	Montane shrew (Mammalian insectivore)	Deer mouse (Mammalian omnivore)	Earthworm (Soil-dwelling invertebrate)	Generic plant (Terrestrial autotroph – producer)
Inorganic Chemicals (mg/kg)											
Arsenic	820	740[a]	100	34	15	21	110	19	32	6.8	18
Barium	41,000	24,000	7500	720	820	770	2900	2100	1800	330	110
Beryllium	420	na[b]	na	na	na	na	89	35	56	40	2.5
Cadmium	550	430	1.3	4.3	0.29	0.54	10	0.27	0.5	140	32
Chromium (total)	1800	860	170	51	23	32	410	63	110	na	na
Cobalt	5400	2300	620	130	76	97	1000	240	400	na	13
Copper	4000	1100	80	34	14	20	260	42	63	80	70
Lead	3700	540	83	18	11	14	310	93	120	1700	120
Manganese	40,000	60,000	24,000	1300	2200	1600	2000	2800	1400	450	220
Mercury (inorganic)	76	0.32	0.058	0.067	0.013	0.022	23	1.7	3	0.05	34
Nickel	1200	2000	110	120	20	35	270	10	20	280	38
Perchlorate Ion	3.3	2	3.9	0.12	31	0.24	0.26	31	0.21	3.5	40
Selenium	92	74	3.7	0.98	0.71	0.83	2.2	0.7	0.82	4.1	0.52
Silver	4400	600	13	10	2.6	4.1	150	14	24	na	560
Thallium	5	100	48	6.9	4.5	5.5	1.2	0.42	0.72	na	0.05
Uranium	4800	26,000	14,000	1500	1100	1200	1000	480	740	na	25
Vanadium	3200	110	56	6.8	4.7	5.5	740	290	470	na	60
Zinc	9600	2600	220	330	47	83	1800	99	170	120	160

Table G-5.3-1 (continued)

COPEC	Gray fox (Mammalian top carnivore)	American kestrel (Avian top carnivore)	American kestrel (insectivore/carnivore)	American robin (Avian herbivore)	American robin (Avian insectivore)	American robin (Avian omnivore)	Mountain cottontail (Mammalian herbivore)	Montane shrew (Mammalian insectivore)	Deer mouse (Mammalian omnivore)	Earthworm (Soil-dwelling invertebrate)	Generic plant (Terrestrial autotroph – producer)
Organic Chemicals (mg/kg)											
Acenaphthene	29,000	na	na	na	na	na	530	130	160	na	0.25
Acenaphthylene	28,000	na	na	na	na	na	540	120	160	na	na
Acetone	7800	66,000	840	7.5	170	14	1.6	15	1.2	na	na
Amino-2,6-dinitrotoluene[4-]	6700	na	na	na	na	na	320	12	23	18	33
Anthracene	38,000	na	na	na	na	na	1200	210	300	na	6.8
Antimony	46	na	na	na	na	na	2.7	7.9	2.3	78	11
Aroclor-1242	100	6.2	0.19	0.92	0.041	0.078	27	0.39	0.75	na	na
Aroclor-1248	1.9	6.3	0.19	0.94	0.041	0.078	0.53	0.0073	0.014	na	na
Aroclor-1254	7.2	7.6	0.19	1.1	0.041	0.079	44	0.45	0.87	na	160
Aroclor-1260	15	400	4.2	37	0.88	1.7	1800	10	20	na	na
Benzo(a)anthracene	110	28	6.4	0.73	0.88	0.8	6.1	4	3.4	na	18
Benzo(a)pyrene	3400	na	na	na	na	na	260	62	84	na	na
Benzo(b)fluoranthene	2400	na	na	na	na	na	130	44	51	na	18
Benzo(g,h,i)perylene	3600	na	na	na	na	na	470	25	46	na	na
Benzo(k)fluoranthene	4300	na	na	na	na	na	330	71	99	na	na
Benzoic Acid	2000	na	na	na	na	na	4.6	1	1.3	na	na
Bis(2-ethylhexyl)phthalate	500	9.3	0.096	16	0.02	0.04	1900	0.6	1.1	na	na
Butyl Benzyl Phthalate	23,000	na	na	na	na	na	2400	90	160	na	na
Carbazole	13,000	na	na	na	na	na	140	110	79	na	na
Chrysene	110	na	na	na	na	na	6.3	3.1	3.1	na	na

Table G-5.3-1 (continued)

COPEC	Gray fox (Mammalian top carnivore)	American kestrel (Avian top carnivore)	American kestrel (insectivore/carnivore)	American robin (Avian herbivore)	American robin (Avian insectivore)	American robin (Avian omnivore)	Mountain cottontail (Mammalian herbivore)	Montane shrew (Mammalian insectivore)	Deer mouse (Mammalian omnivore)	Earthworm (Soil-dwelling invertebrate)	Generic plant (Terrestrial autotroph – producer)
Cyanide (total)	3300	0.59	0.36	0.1	0.098	0.099	790	330	330	na	na
DDE[4,4'-]	1100	20	0.52	4.9	0.11	0.21	540	3.7	7.2	na	na
DDT[4,4'-]	18	83	1.7	24	0.36	0.71	10	0.044	0.088	na	4.1
Dibenzo(a,h)anthracene	850	na	na	na	na	na	84	14	22	na	na
Dibenzofuran	na	na	na	na	na	na	na	na	na	na	6.1
Dichlorobenzene[1,2-]	480	na	na	na	na	na	12	0.92	1.5	na	na
Dichlorobenzene[1,4-]	470	na	na	na	na	na	12	0.89	1.5	1.2	na
Dimethyl Phthalate	48,000	na	na	na	na	na	60	80	38	10	na
Di-n-Butyl Phthalate	62,000	2	0.052	0.38	0.011	0.021	17,000	180	360	na	160
Di-n-octylphthalate	1300	na	na	na	na	na	8400	0.91	1.8	na	na
Fluoranthene	3900	na	na	na	na	na	270	22	38	10	na
Fluorene	50,000	na	na	na	na	na	1100	250	340	3.7	na
HMX	59,000	na	na	na	na	na	410	1100	290	16	2700
Indeno(1,2,3-cd)pyrene	4600	na	na	na	na	na	510	71	110	na	na
Iodomethane	na	46	0.29	0.038	0.062	0.047	na	na	na	na	na
Methoxychlor[4,4'-]	1000	2100	87	110	18	31	83	5.1	9	na	na
Methylene Chloride	4300	na	na	na	na	na	3.8	9.2	2.6	na	1600
Methylnaphthalene[2-]	4900	na	na	na	na	na	110	16	24	na	na
Naphthalene	5800	2100	78	3.4	15	5.7	14	28	9.6	na	1
Nitroglycerine	69,000	na	na	na	na	na	88	1200	70	13	21
Pentachlorophenol	230	57	1.7	29	0.36	0.72	180	0.81	1.5	31	5

Table G-5.3-1 (continued)

COPEC	Gray fox (Mammalian top carnivore)	American kestrel (Avian top carnivore)	American kestrel (insectivore/carnivore)	American robin (Avian herbivore)	American robin (Avian insectivore)	American robin (Avian omnivore)	Mountain cottontail (Mammalian herbivore)	Montane shrew (Mammalian insectivore)	Deer mouse (Mammalian omnivore)	Earthworm (Soil-dwelling invertebrate)	Generic plant (Terrestrial autotroph – producer)
PETN	47,000	na	na	na	na	na	120	1000	100	na	na
Phenanthrene	1900	na	na	na	na	na	62	11	15	5.5	na
Pyrene	3100	3000	160	68	33	44	110	23	31	10	na
RDX	7000	780	11	2.3	2.4	2.3	38	16	16	8.4	na
Tetrachlorodibenzodioxin[2,3,7,8-]	0.0001	na	na	na	na	na	4E-05	3E-07	6E-07	5	na
Tetrachloroethene	120	na	na	na	na	na	9.5	0.18	0.35	na	10
Tetryl	960	na	na	na	na	na	1.8	60	1.5	na	na
Toluene	12000	na	na	na	na	na	66	23	25	na	200
Total Petroleum Hydrocarbon (Fraction 2, Fraction 3)	na	na	na	na	na	na	na	na	na	198	81.2
Trichloroethene	42,000	na	na	na	na	na	190	42	54	na	na
Trichlorofluoromethane	62,000	na	na	na	na	na	1800	52	97	na	na
Trinitrotoluene[2,4,6-]	26,000	3100	1300	7.5	120	14	110	1900	95	32	62
Xylene (Total)	750	13,000	190	89	41	56	7.6	1.4	1.9	na	100

Table G-5.3-1 (continued)

COPEC	Gray fox (Mammalian top carnivore)	American kestrel (Avian top carnivore)	American kestrel (insectivore/carnivore)	American robin (Avian herbivore)	American robin (Avian insectivore)	American robin (Avian omnivore)	Mountain cottontail (Mammalian herbivore)	Montane shrew (Mammalian insectivore)	Deer mouse (Mammalian omnivore)	Earthworm (Soil-dwelling invertebrate)	Generic plant (Terrestrial autotroph – producer)
Radionuclides (pCi/g)											
Cesium-134	730	1000	1000	680	2100	1200	650	1100	1100	1000	700
Cesium-137 + Barium-137	1500	3900	4300	1400	4500	2600	1400	2400	2300	2300	1500
Plutonium-239, 240	51,000	150,000	140,000	4400	10,000	6100	17,000	330,000	280,000	870	1900
Thorium-228	830	1600	1600	1100	1300	1200	770	830	820	43	140
Thorium-230	68,000	170,000	22,000	1200	2200	1400	9400	110,000	78,000	52	200
Thorium-232	14,000	51,000	2900	150	260	170	1100	50,000	19,000	6.2	24
Tritium	220,000	550,000	610,000	300,000	600,000	440,000	250,000	340,000	330,000	48,000	36,000
Uranium-234	110,000	260,000	260,000	14,000	69,000	27,000	12,000	150,000	120,000	2200	440
Uranium-238	2100	4200	4200	3300	4000	3700	1800	2100	2100	1100	400

[a] ESLS are based on NOAELS and were obtained from the ECORISK Database, Version 4.3 (N3B 2022, 702057).

[b] na = Not available.

Table G-5.3-2
Minimum ESL Comparison for SWMU 39-001(a)

COPEC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	6.2 (U)	2.3	Deer mouse	**2.70E+00**
Mercury	0.0781	0.013	American robin (insectivore)	**6.01E+00**
Perchlorate	0.0045	0.12	American robin (herbivore)	3.75E-02
Uranium	1.91	25	Generic plant	7.64E-02
Organic Chemicals (mg/kg)				
Aroclor-1242	0.027	0.041	American robin (insectivore)	**6.59E-01**
Aroclor-1254	0.0246	0.041	American robin (insectivore)	**6.00E-01**
Bis(2-ethylhexyl)phthalate	0.076	0.02	American robin (insectivore)	**3.80E+00**
HMX	0.044	16	Earthworm	2.75E-03
Iodomethane	0.0027	0.038	American robin (herbivore)	7.11E-02
Methylene Chloride	0.014	2.6	Deer mouse	5.38E-03
RDX	0.032	2.3	American robin (herbivore)	1.39E-02
TCDD[2,3,7,8-]	1.23E-08	2.9E-07	Montane shrew	4.24E-02
Radionuclides (pCi/g)				
Uranium-238	0.816	400	Generic plant	2.04E-03

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-3
HI Analysis Using NOAEL-Based ESLs for SWMU 39-001(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Antimony	6.2 (U)	1.35E-01	na*	na	na	na	na	**2.30E+00**	**7.85E-01**	**2.70E+00**	7.95E-02	**5.64E-01**
Mercury	0.0781	1.03E-03	2.44E-01	**1.35E+00**	**1.17E+00**	**3.55E+00**	**6.01E+00**	3.40E-03	4.59E-02	2.60E-02	**1.56E+00**	2.30E-03
Aroclor-1242	0.027	2.70E-04	4.35E-03	1.42E-01	2.93E-02	**3.46E-01**	**6.59E-01**	1.00E-03	6.92E-02	3.60E-02	Na	na
Aroclor-1254	0.0246	3.42E-03	3.24E-03	1.29E-01	2.24E-02	**3.11E-01**	**6.00E-01**	5.59E-04	5.47E-02	2.83E-02	Na	1.54E-04
Bis(2-ethylhexyl) phthalate	0.076	1.52E-04	8.17E-03	**7.92E-01**	4.75E-03	**1.90E+00**	**3.80E+00**	4.00E-05	1.27E-01	6.91E-02	Na	na
HI		1E-01	3E-01	**2E+00**	1E+00	**6E+00**	**1E+01**	**2E+00**	1E+00	**3E+00**	**2E+00**	6E-01

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available.

Table G-5.3-4
Minimum ESL Comparison for Area 1 of SWMU 39-002(a)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.168	2.3	Deer mouse (Mammalian omnivore)	7.30E-02
Copper	26.28	14	American robin (Avian insectivore)	**1.88E+00**
Cyanide (Total)	0.732	0.098	American robin (Avian insectivore)	**7.47E+00**
Lead	32.31	11	American robin (Avian insectivore)	**2.94E+00**
Mercury	1.73	0.013	American robin (Avian insectivore)	**1.33E+02**
Perchlorate	0.000627	0.12	American robin (Avian herbivore)	5.23E-03
Selenium	0.865	0.52	Generic plant (Terrestrial autotroph – producer)	**1.66E+00**
Silver	0.214	2.6	American robin (Avian insectivore)	8.23E-02
Thallium	1.26	0.05	Generic plant (Terrestrial autotroph – producer)	**2.52E+01**
Zinc	59.78	47	American robin (Avian insectivore)	**1.27E+00**
Organic Chemicals (mg/kg)				
Acenaphthene	0.414	0.25	Generic plant (Terrestrial autotroph – producer)	**1.66E+00**
Acenaphthylene	0.0361	120	Montane shrew (Mammalian insectivore)	3.01E-04
Amino-2,6-dinitrotoluene[4-]	0.171	12	Montane shrew (Mammalian insectivore)	1.43E-02
Anthracene	0.495	6.8	Generic plant (Terrestrial autotroph – producer)	7.28E-02
Aroclor-1242	0.00169	0.041	American robin (Avian insectivore)	4.12E-02
Aroclor-1254	0.0743	0.041	American robin (Avian insectivore)	**1.81E+00**
Aroclor-1260	0.0118	0.88	American robin (Avian insectivore)	1.34E-02
Benzo(a)anthracene	0.83	0.73	American robin (Avian herbivore)	**1.14E+00**
Benzo(a)pyrene	0.906	62	Montane shrew (Mammalian insectivore)	1.46E-02
Benzo(b)fluoranthene	0.98	18	Generic plant (Terrestrial autotroph – producer)	5.44E-02
Benzo(g,h,i)perylene	0.594	25	Montane shrew (Mammalian insectivore)	2.38E-02
Benzo(k)fluoranthene	0.497	71	Montane shrew (Mammalian insectivore)	7.00E-03
Benzoic Acid	0.346	1	Montane shrew (Mammalian insectivore)	**3.46E-01**
Bis(2-ethylhexyl)phthalate	0.0552	0.02	American robin (Avian insectivore)	**2.76E+00**
Butylbenzylphthalate	0.0122	90	Montane shrew (Mammalian insectivore)	1.36E-04
Carbazole	0.238	79	Deer mouse (Mammalian omnivore)	3.01E-03
Chrysene	0.974	3.1	Deer mouse (Mammalian omnivore)	**3.14E-01**
Dibenz(a,h)anthracene	0.104	14	Montane shrew (Mammalian insectivore)	7.43E-03
Dibenzofuran	0.272	6.1	Generic plant (Terrestrial autotroph – producer)	4.46E-02
Dichlorobenzene[1,2-]	0.0007	0.92	Montane shrew (Mammalian insectivore)	7.61E-04

Table G-5.3-4 (continued)

COPC	EPC	ESL	Receptor	HQ
Dimethyl Phthalate	0.0141	10	Earthworm (Soil-dwelling invertebrate)	1.41E-03
Di-n-butylphthalate	0.16	0.011	American robin (Avian insectivore)	**1.45E+01**
Di-n-octylphthalate	0.0189	0.91	Montane shrew (Mammalian insectivore)	2.08E-02
Fluoranthene	2.792	10	Earthworm (Soil-dwelling invertebrate)	2.79E-01
Fluorene	0.451	3.7	Earthworm (Soil-dwelling invertebrate)	1.22E-01
Indeno(1,2,3-cd)pyrene	0.6	71	Montane shrew (Mammalian insectivore)	8.45E-03
Iodomethane	0.00081	0.038	American robin (Avian herbivore)	2.13E-02
Methylene Chloride	0.00186	2.6	Deer mouse (Mammalian omnivore)	7.15E-04
Methylnaphthalene[2-]	0.0853	16	Montane shrew (Mammalian insectivore)	5.33E-03
Naphthalene	0.835	1	Generic plant (Terrestrial autotroph – producer)	**8.35E-01**
Pentachlorophenol	1.99	0.36	American robin (Avian insectivore)	**5.53E+00**
Phenanthrene	3.085	5.5	Earthworm (Soil-dwelling invertebrate)	**5.61E-01**
Pyrene	2.362	10	Earthworm (Soil-dwelling invertebrate)	2.36E-01
RDX	0.38	2.3	American robin (Avian herbivore)	1.65E-01
TCDD[2,3,7,8-]	0.000000183	0.00000029	Montane shrew (Mammalian insectivore)	**6.31E-01**
Tetryl	0.345	1.5	Deer mouse (Mammalian omnivore)	2.30E-01
Toluene	0.0233	23	Montane shrew (Mammalian insectivore)	1.01E-03
Total Petroleum Hydrocarbons – Diesel Range Organics	78.14	81.2	Generic plant (Terrestrial autotroph – producer)	**9.62E-01**
Trichloroethene	0.00084	42	Montane shrew (Mammalian insectivore)	2.00E-05
Trinitrotoluene[2,4,6-]	1.02	7.5	American robin (Avian herbivore)	1.36E-01
RDX	0.000624	1.4	Montane shrew (Mammalian insectivore)	4.46E-04
Xylene[1,3-]+Xylene[1,4-]	0.00177	1.4	Montane shrew (Mammalian insectivore)	1.26E-03
Radionuclides (pCi/g)				
Cesium-137	0.223	1400	American robin (Avian herbivore)	1.59E-04
Plutonium-239/240	0.105	870	Earthworm (Soil-dwelling invertebrate)	1.21E-04
Tritium	20.7	36,000	Generic plant (Terrestrial autotroph – producer)	5.75E-04
Uranium-238	1.51	400	Generic plant (Terrestrial autotroph – producer)	3.78E-03

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-5
HI Analysis Using NOAEL-Based ESLs for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	2.63E+01	6.57E-03	2.39E-02	**3.29E-01**	**7.73E-01**	**1.31E+00**	**1.88E+00**	1.01E-01	**6.26E-01**	**4.17E-01**	**3.29E-01**	**3.75E-01**
Cyanide (Total)	7.32E-01	2.22E-04	**1.24E+00**	**2.03E+00**	**7.32E+00**	**7.39E+00**	**7.47E+00**	9.27E-04	2.22E-03	2.22E-03	na*	na
Lead	3.23E+01	8.73E-03	5.98E-02	**3.89E-01**	**1.80E+00**	**2.31E+00**	**2.94E+00**	1.04E-01	**3.47E-01**	2.69E-01	1.90E-02	2.69E-01
Mercury	1.73E+00	2.28E-02	**5.41E+00**	**2.98E+01**	**2.58E+01**	**7.86E+01**	**1.33E+02**	7.52E-02	**1.02E+00**	**5.77E-01**	**3.46E+01**	5.09E-02
Selenium	8.65E-01	9.40E-03	1.17E-02	2.34E-01	**8.83E-01**	**1.04E+00**	**1.22E+00**	**3.93E-01**	**1.24E+00**	**1.05E+00**	2.11E-01	**1.66E+00**
Thallium	1.26E+00	2.52E-01	1.26E-02	2.63E-02	1.83E-01	2.29E-01	2.80E-01	**1.05E+00**	**3.00E+00**	**1.75E+00**	na	**2.52E+01**
Zinc	5.98E+01	6.23E-03	2.30E-02	2.72E-01	1.81E-01	**7.20E-01**	**1.27E+00**	3.32E-02	**6.04E-01**	**3.52E-01**	**4.98E-01**	**3.74E-01**
Acenaphthene	4.14E-01	1.43E-05	na	na	na	na	na	7.81E-04	3.18E-03	2.59E-03	na	**1.66E+00**
Aroclor-1254	7.43E-02	1.03E-02	9.78E-03	**3.91E-01**	6.75E-02	**9.41E-01**	**1.81E+00**	1.69E-03	1.65E-01	8.54E-02	na	4.64E-04
Benzo(a)anthracene	8.30E-01	7.55E-03	2.96E-02	1.30E-01	**1.14E+00**	**1.04E+00**	**9.43E-01**	1.36E-01	2.08E-01	2.44E-01	na	4.61E-02
Benzoic Acid	3.46E-01	1.73E-04	na	na	na	na	na	7.52E-02	**3.46E-01**	2.66E-01	na	na
Bis(2-ethylhexyl)phthalate	5.52E-02	1.10E-04	5.94E-03	**5.75E-01**	3.45E-03	**1.38E+00**	**2.76E+00**	2.91E-05	9.20E-02	5.02E-02	na	na
Chrysene	9.74E-01	8.85E-03	na	na	na	na	na	1.55E-01	**3.14E-01**	**3.14E-01**	na	na
Di-n-butylphthalate	1.60E-01	2.58E-06	8.00E-02	**3.08E+00**	**4.21E-01**	**7.62E+00**	**1.45E+01**	9.41E-06	8.89E-04	4.44E-04	na	1.00E-03
Naphthalene	8.35E-01	1.44E-04	3.98E-04	1.07E-02	2.46E-01	1.46E-01	5.57E-02	5.96E-02	2.98E-02	8.70E-02	na	**8.35E-01**
Pentachlorophenol	1.99E+00	8.65E-03	3.49E-02	**1.17E+00**	6.86E-02	**2.76E+00**	**5.53E+00**	1.11E-02	**2.46E+00**	**1.33E+00**	6.42E-02	**3.98E-01**
Phenanthrene	3.09E+00	1.62E-03	na	na	na	na	na	4.98E-02	2.80E-01	2.06E-01	**5.61E-01**	Na
TCDD[2,3,7,8-]	1.83E-07	1.83E-03	na	na	na	na	na	4.58E-03	**6.31E-01**	**3.16E-01**	3.66E-08	Na
HI		3E-01	**7E+00**	**4E+01**	**4E+01**	**1E+02**	**2E+02**	**2E+00**	**1E+01**	**7E+00**	**4E+01**	**3E+01**

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available.

Table G-5.3-6
Minimum ESL Comparison for Area 2 of SWMU 39-002(a)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	4.05	2.3	Deer mouse (Mammalian omnivore)	**1.76E+00**
Copper	159.6	14	American robin (Avian insectivore)	**1.14E+01**
Perchlorate	0.00224	0.12	American robin (Avian herbivore)	1.87E-02
Zinc	49.54	47	American robin (Avian insectivore)	**1.05E+00**
Organic Chemicals (mg/kg)				
Acenaphthene	0.0585	0.25	Generic plant (Terrestrial autotroph – producer)	2.34E-01
Anthracene	0.0891	6.8	Generic plant (Terrestrial autotroph – producer)	1.31E-02
Aroclor-1248	0.0169	0.0073	Montane shrew (Mammalian insectivore)	**2.32E+00**
Aroclor-1254	1.155	0.041	American robin (Avian insectivore)	**2.82E+01**
Aroclor-1260	0.181	0.88	American robin (Avian insectivore)	2.06E-01
Benzo(a)anthracene	0.315	0.73	American robin (Avian herbivore)	**4.32E-01**
Benzo(a)pyrene	0.361	62	Montane shrew (Mammalian insectivore)	5.82E-03
Benzo(b)fluoranthene	0.448	18	Generic plant (Terrestrial autotroph – producer)	2.49E-02
Benzo(g,h,i)perylene	0.238	25	Montane shrew (Mammalian insectivore)	9.52E-03
Benzo(k)fluoranthene	0.166	71	Montane shrew (Mammalian insectivore)	2.34E-03
Bis(2-ethylhexyl)phthalate	0.0809	0.02	American robin (Avian insectivore)	**4.05E+00**
Butylbenzylphthalate	0.0143	90	Montane shrew (Mammalian insectivore)	1.59E-04
Chrysene	0.365	3.1	Deer mouse (Mammalian omnivore)	1.18E-01
Di-n-butylphthalate	0.201	0.011	American robin (Avian insectivore)	**1.83E+01**
Dibenz(a,h)anthracene	0.0635	14	Montane shrew (Mammalian insectivore)	4.54E-03
Diethylphthalate	0.0137	100	Generic plant (Terrestrial autotroph – producer)	1.37E-04
Fluoranthene	0.84	10	Earthworm (Soil-dwelling invertebrate)	8.40E-02
Fluorene	0.0453	3.7	Earthworm (Soil-dwelling invertebrate)	1.22E-02
Indeno(1,2,3-cd)pyrene	0.24	71	Montane shrew (Mammalian insectivore)	3.38E-03
Naphthalene	0.0291	1	Generic plant (Terrestrial autotroph – producer)	2.91E-02
Phenanthrene	0.531	5.5	Earthworm (Soil-dwelling invertebrate)	9.65E-02
Pyrene	0.641	10	Earthworm (Soil-dwelling invertebrate)	6.41E-02

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-7
HI Analysis Using NOAEL-Based ESLs for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Antimony	4.05E+00	8.80E-02	na*	na	na	na	na	**1.50E+00**	**5.13E-01**	**1.76E+00**	5.19E-02	**3.68E-01**
Copper	1.60E+02	3.99E-02	1.45E-01	**2.00E+00**	**4.69E+00**	**7.98E+00**	**1.14E+01**	**6.14E-01**	**3.80E+00**	**2.53E+00**	**2.00E+00**	**2.28E+00**
Zinc	4.95E+01	5.16E-03	1.91E-02	2.25E-01	1.50E-01	**5.97E-01**	**1.05E+00**	2.75E-02	**5.00E-01**	2.91E-01	**4.13E-01**	**3.10E-01**
Aroclor-1248	1.69E-02	8.89E-03	2.68E-03	8.89E-02	1.80E-02	2.17E-01	**4.12E-01**	3.19E-02	**2.32E+00**	**1.21E+00**	na	na
Aroclor-1254	1.16E+00	1.60E-01	1.52E-01	**6.08E+00**	**1.05E+00**	**1.46E+01**	**2.82E+01**	2.63E-02	**2.57E+00**	**1.33E+00**	na	7.22E-03
Benzo(a)anthracene	3.15E-01	2.86E-03	1.13E-02	4.92E-02	**4.32E-01**	**3.94E-01**	**3.58E-01**	5.16E-02	7.88E-02	9.26E-02	na	1.75E-02
Bis(2-ethylhexyl)phthalate	8.09E-02	1.62E-04	8.70E-03	**8.43E-01**	5.06E-03	**2.02E+00**	**4.05E+00**	4.26E-05	1.35E-01	7.35E-02	na	na
Di-n-butylphthalate	2.01E-01	3.24E-06	1.01E-01	**3.87E+00**	**5.29E-01**	**9.57E+00**	**1.83E+01**	1.18E-05	1.12E-03	5.58E-04	na	1.26E-03
	HI	3E-01	4E-01	**1E+01**	**7E+00**	**4E+01**	**6E+01**	**2E+00**	**1E+01**	**7E+00**	**2E+00**	**3E+00**

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available.

Table G-5.3-8
Minimum ESL Comparison for Area 3 of SWMU 39-002(a)

COPC	EPC	ESL	Receptor	HQ
Organic Chemicals (mg/kg)				
Acetone	0.013	1.2	Deer mouse	1.08E-02
Anthracene	0.053	6.8	Generic plant	7.79E-03
Aroclor-1254	0.013	0.041	American robin (insectivore)	**3.17E-01**
Aroclor-1260	0.0091	0.88	American robin (insectivore)	1.03E-02
Benzo(a)anthracene	0.128	0.73	American robin (herbivore)	1.75E-01
Benzo(a)pyrene	0.129	62	Montane shrew	2.08E-03
Benzo(b)fluoranthene	0.116	18	Generic plant	6.44E-03
Benzo(g,h,i)perylene	0.0779	25	Montane shrew	3.12E-03
Benzo(k)fluoranthene	0.137	71	Montane shrew	1.93E-03
Bis(2-ethylhexyl)phthalate	0.267	0.02	American robin (insectivore)	**1.34E+01**
Chrysene	0.136	3.1	Montane shrew	4.39E-02
Di-n-butyl phthalate	0.54	0.011	American robin (insectivore)	**4.91E+01**
Fluoranthene	0.187	10	Earthworm	1.87E-02
Indeno(1,2,3-cd)pyrene	0.079	71	Montane shrew	1.11E-03
Iodomethane	0.00077	0.038	American robin (herbivore)	2.03E-02
Methylene Chloride	0.00193	2.6	Deer mouse	7.42E-04
PETN	0.02	100	Deer mouse	2.00E-04
Phenanthrene	0.165	5.5	Earthworm	3.00E-02
Pyrene	0.183	10	Earthworm	1.83E-02
TCDD[2,3,7,8-]	1.13E-06	2.90E-07	Montane shrew	**3.90E+00**
Trichlorofluoromethane	0.00037	52	Montane shrew	7.12E-06

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-9
HI Analysis Using NOAEL-Based ESLs for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Aroclor-1254	0.013	1.81E-03	1.71E-03	6.84E-02	1.18E-02	1.65E-01	**3.17E-01**	2.95E-04	2.89E-02	1.49E-02	na*	8.13E-05
Bis(2-ethylhexyl)phthalate	0.267	5.34E-04	2.87E-02	**2.78E+00**	1.67E-02	**6.68E+00**	1.34E+01	1.41E-04	**4.45E-01**	2.43E-01	na	na
Di-n-butyl phthalate	0.54	8.71E-06	2.70E-01	**1.04E+01**	**1.42E+00**	**2.57E+01**	**4.91E+01**	3.18E-05	3.00E-03	1.50E-03	na	3.38E-03
TCDD[2,3,7,8-]	1.13E-06	1.13E-02	na	na	na	na	na	2.83E-02	**3.90E+00**	**1.95E+00**	2.26E-07	na
	HI	1E-02	3E-01	**1E+01**	**1E+00**	**3E+01**	**6E+01**	3E-02	**4E+00**	**2E+00**	2E-07	3E-03

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available

Table G-5.3-10
Minimum ESL Comparison for AOC 39-002(b)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Copper	40.84	14	American robin (Avian insectivore)	**2.92E+00**
Mercury	0.446	0.013	American robin (Avian insectivore)	**3.43E+01**
Zinc	48.76	47	American robin (Avian insectivore)	**1.04E+00**
Organic Chemicals (mg/kg)				
Aroclor-1242	0.726	0.041	American robin (Avian insectivore)	**1.77E+01**
Aroclor-1248	1.801	0.0073	Montane shrew (Mammalian insectivore)	**2.47E+02**
Aroclor-1254	1.09	0.041	American robin (Avian insectivore)	**2.66E+01**
Aroclor-1260	0.281	0.88	American robin (Avian insectivore)	**3.19E-01**
Benzo(g,h,i)perylene	0.0237	25	Montane shrew (Mammalian insectivore)	9.48E-04
Bis(2-ethylhexyl)phthalate	0.984	0.02	American robin (Avian insectivore)	**4.92E+01**
Butylbenzylphthalate	0.51	90	Montane shrew (Mammalian insectivore)	5.67E-03
Chrysene	0.0305	3.1	Deer mouse (Mammalian omnivore)	9.84E-03
Di-n-butylphthalate	0.233	0.011	American robin (Avian insectivore)	**2.12E+01**
HMX	0.221	16	Earthworm (Soil-dwelling invertebrate)	1.38E-02
PETN	0.246	100	Deer mouse (Mammalian omnivore)	2.46E-03
TCDD[2,3,7,8-]	0.00000496	2.9E-07	Montane shrew (Mammalian insectivore)	**1.71E+01**
Tetrachloroethene	0.000825	0.18	Montane shrew (Mammalian insectivore)	4.58E-03
Trichloroethene	0.00247	42	Montane shrew (Mammalian insectivore)	5.88E-05
Radionuclides (pCi/g)				
Uranium-234	1.727	440	Generic plant (Terrestrial autotroph – producer)	3.93E-03
Uranium-235/236	0.122	440	Generic plant (Terrestrial autotroph – producer)	2.77E-04
Uranium-238	3.798	400	Generic plant (Terrestrial autotroph – producer)	9.50E-03

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-11
HI Analysis Using NOAEL-Based ESLs for AOC 39-002(b)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	4.08E+01	1.02E-02	3.71E-02	**5.11E-01**	**1.20E+00**	**2.04E+00**	**2.92E+00**	1.57E-01	**9.72E-01**	**6.48E-01**	**5.11E-01**	**5.83E-01**
Mercury	4.46E-01	5.87E-03	**1.39E+00**	**7.69E+00**	**6.66E+00**	**2.03E+01**	**3.43E+01**	1.94E-02	2.62E-01	1.49E-01	**8.92E+00**	1.31E-02
Zinc	4.88E+01	5.08E-03	1.88E-02	2.22E-01	1.48E-01	**5.87E-01**	**1.04E+00**	2.71E-02	**4.93E-01**	2.87E-01	**4.06E-01**	**3.05E-01**
Aroclor-1242	7.26E-01	7.26E-03	1.17E-01	**3.82E+00**	**7.89E-01**	**9.31E+00**	**1.77E+01**	2.69E-02	**1.86E+00**	**9.68E-01**	na*	na
Aroclor-1248	1.80E+00	**9.48E-01**	2.86E-01	**9.48E+00**	**1.92E+00**	**2.31E+01**	**4.39E+01**	**3.40E+00**	**2.47E+02**	**1.29E+02**	na	na
Aroclor-1254	1.09E+00	1.51E-01	1.43E-01	**5.74E+00**	**9.91E-01**	**1.38E+01**	**2.66E+01**	2.48E-02	**2.42E+00**	**1.25E+00**	na	6.81E-03
Aroclor-1260	2.81E-01	1.87E-02	7.03E-04	6.69E-02	7.59E-03	1.65E-01	**3.19E-01**	1.56E-04	2.81E-02	1.41E-02	na	na
Bis(2-ethylhexyl)phthalate	9.84E-01	1.97E-03	1.06E-01	**1.03E+01**	6.15E-02	**2.46E+01**	**4.92E+01**	5.18E-04	**1.64E+00**	**8.95E-01**	na	na
Di-n-butylphthalate	2.33E-01	3.76E-06	1.17E-01	**4.48E+00**	**6.13E-01**	**1.11E+01**	**2.12E+01**	1.37E-05	1.29E-03	6.47E-04	na	1.46E-03
TCDD[2,3,7,8-]	4.96E-06	4.96E-02	na	na	na	na	na	1.24E-01	**1.71E+01**	**8.55E+00**	9.92E-07	na
	HI	**1E+00**	**2E+00**	**4E+01**	**1E+01**	**1E+02**	**2E+02**	**4E+00**	**3E+02**	**1E+02**	**1E+01**	1E+00

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available.

Table G-5.3-12
Minimum ESL Comparison for SWMU 39-006(a)

COPC	EPC (mg/kg)	Minimum ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Cadmium	0.248	0.27	Montane shrew (Mammalian insectivore)	**9.19E-01**
Cyanide (Total)	9.192	0.098	American robin (Avian insectivore)	**9.38E+01**
Lead	30.29	11	American robin (Avian insectivore)	**2.75E+00**
Mercury	0.0662	0.013	American robin (Avian insectivore)	**5.09E+00**
Perchlorate	0.00086012	0.12	American robin (Avian herbivore)	7.17E-03
Selenium	0.64	0.52	Generic plant (Terrestrial autotroph – producer)	**1.23E+00**
Silver	3.88	2.6	American robin (Avian insectivore)	**1.49E+00**
Organic Chemicals (mg/kg)				
Acenaphthene	0.0129	0.25	Generic plant (Terrestrial autotroph – producer)	5.16E-02
Acenaphthylene	0.00962	120	Montane shrew (Mammalian insectivore)	8.02E-05
Anthracene	0.00872	6.8	Generic plant (Terrestrial autotroph – producer)	1.28E-03
Aroclor-1254	0.0183	0.041	American robin (Avian insectivore)	**4.46E-01**
Aroclor-1260	0.00745	0.88	American robin (Avian insectivore)	8.47E-03
Benzo(a)anthracene	0.0214	0.73	American robin (Avian herbivore)	2.93E-02
Benzo(a)pyrene	0.0227	62	Montane shrew (Mammalian insectivore)	3.66E-04
Benzo(b)fluoranthene	0.0327	18	Generic plant (Terrestrial autotroph – producer)	1.82E-03
Benzo(g,h,i)perylene	0.0167	25	Montane shrew (Mammalian insectivore)	6.68E-04
Benzo(k)fluoranthene	0.0111	71	Montane shrew (Mammalian insectivore)	1.56E-04
Benzoic Acid	0.192	1	Montane shrew (Mammalian insectivore)	1.92E-01
Bis(2-ethylhexyl)phthalate	0.0752	0.02	American robin (Avian insectivore)	**3.76E+00**
Butylbenzylphthalate	0.0112	90	Montane shrew (Mammalian insectivore)	1.24E-04
Carbazole	0.0157	79	Deer mouse (Mammalian omnivore)	1.99E-04
Chrysene	0.0218	3.1	Deer mouse (Mammalian omnivore)	7.03E-03
Di-n-butylphthalate	0.0146	0.011	American robin (Avian insectivore)	**1.33E+00**
Di-n-octylphthalate	0.0218	0.91	Montane shrew (Mammalian insectivore)	2.40E-02
Dibenz(a,h)anthracene	0.00499	14	Montane shrew (Mammalian insectivore)	3.56E-04
Fluoranthene	0.046	10	Earthworm (Soil-dwelling invertebrate)	4.60E-03
Fluorene	0.00166	3.7	Earthworm (Soil-dwelling invertebrate)	4.49E-04
Hexanone[2-]	0.231	0.36	American robin (Avian insectivore)	**6.42E-01**
Indeno(1,2,3-cd)pyrene	0.0182	71	Montane shrew (Mammalian insectivore)	2.56E-04
Methylene Chloride	0.00184	2.6	Deer mouse (Mammalian omnivore)	7.08E-04
Methylnaphthalene[2-]	0.00178	16	Montane shrew (Mammalian insectivore)	1.11E-04
Naphthalene	0.005	1	Generic plant (Terrestrial autotroph – producer)	5.00E-03
Phenanthrene	0.0089	5.5	Earthworm (Soil-dwelling invertebrate)	1.62E-03
Pyrene	0.0344	10	Earthworm (Soil-dwelling invertebrate)	3.44E-03

Table G-5.3-12 (continued)

COPC	EPC (mg/kg)	Minimum ESL (mg/kg)	Receptor	HQ
TCDD[2,3,7,8-]	1.95E-08	2.9E-07	Montane shrew (Mammalian insectivore)	6.72E-02
Toluene	0.00047	23	Montane shrew (Mammalian insectivore)	2.04E-05
Xylene[1,3-]+Xylene[1,4-]	0.00113	1.4	Montane shrew (Mammalian insectivore)	8.07E-04
Radionuclides (pCi/g)				
Cesium-137	0.0348	1400	American robin (Avian herbivore)	2.49E-05
Tritium	2.02	36,000	Generic plant (Terrestrial autotroph – producer)	5.61E-05
Uranium-238	1.1	400	Generic plant (Terrestrial autotroph – producer)	2.75E-03

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-13
HI Analysis Using NOAEL-Based ESLs for SWMU 39-006(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Cadmium	2.48E-01	4.51E-04	5.77E-04	1.91E-01	5.77E-02	**4.59E-01**	**8.55E-01**	2.48E-02	**9.19E-01**	**4.96E-01**	1.77E-03	7.75E-03
Cyanide (Total)	9.19E+00	2.79E-03	**1.56E+01**	**2.55E+01**	**9.19E+01**	**9.28E+01**	**9.38E+01**	1.16E-02	2.79E-02	2.79E-02	na*	na
Lead	3.03E+01	8.19E-03	5.61E-02	**3.65E-01**	**1.68E+00**	**2.16E+00**	**2.75E+00**	9.77E-02	**3.26E-01**	**2.52E-01**	1.78E-02	**2.52E-01**
Mercury	6.62E-02	8.71E-04	2.07E-01	**1.14E+00**	**9.88E-01**	**3.01E+00**	**5.09E+00**	2.88E-03	3.89E-02	2.21E-02	**1.32E+00**	1.95E-03
Selenium	6.40E-01	6.96E-03	8.65E-03	1.73E-01	**6.53E-01**	**7.71E-01**	**9.01E-01**	2.91E-01	**9.14E-01**	**7.80E-01**	1.56E-01	**1.23E+00**
Silver	3.88E+00	8.82E-04	6.47E-03	2.98E-01	**3.88E-01**	**9.46E-01**	**1.49E+00**	2.59E-02	2.77E-01	1.62E-01	na	6.93E-03
Aroclor-1254	1.83E-02	2.54E-03	2.41E-03	9.63E-02	1.66E-02	2.32E-01	**4.46E-01**	4.16E-04	4.07E-02	2.10E-02	na	1.14E-04
Bis(2-ethylhexyl)phthalate	7.52E-02	1.50E-04	8.09E-03	**7.83E-01**	4.70E-03	**1.88E+00**	**3.76E+00**	3.96E-05	1.25E-01	6.84E-02	na	na
Di-n-butylphthalate	1.46E-02	2.35E-07	7.30E-03	2.81E-01	3.84E-02	**6.95E-01**	**1.33E+00**	8.59E-07	8.11E-05	4.06E-05	na	9.13E-05
Hexanone [2-]	2.31E-01	3.92E-05	7.97E-04	1.36E-01	**4.91E-01**	**5.63E-01**	**6.42E-01**	1.36E-02	4.28E-02	3.79E-02	na	na
	HI	2E-02	**2E+01**	**3E+01**	**1E+02**	**1E+02**	**1E+02**	5E-01	**3E+00**	**2E+00**	**1E+00**	**2E+00**

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available.

Table G-5.3-14
Minimum ESL Comparison for SWMU 39-007(a)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Perchlorate	0.000567	0.12	American robin (Avian herbivore)	4.73E-03
Zinc	49.3	47	American robin (Avian insectivore)	**1.05E+00**
Organic Chemicals (mg/kg)				
Acetone	0.0103	1.2	Deer mouse	8.58E-03
Aroclor-1248	0.35	0.0073	Montane shrew	**4.79E+01**
Aroclor-1254	0.0629	0.041	American robin (Avian insectivore)	**1.53E+00**
Aroclor-1260	0.0164	0.88	American robin (Avian insectivore)	1.86E-02
Benzo(k)fluoranthene	0.042	71	Montane shrew	5.92E-04
Bis(2-ethylhexyl)phthalate	0.187	0.02	American robin (Avian insectivore)	**9.35E+00**
Butyl benzyl phthalate	0.077	90	Montane shrew	8.56E-04
Chrysene	0.04	3.1	Montane shrew	1.29E-02
Dichlorobenzene[1,4-]	0.00074	0.89	Montane shrew	8.31E-04
Fluoranthene	0.076	10	Earthworm	7.60E-03
Phenanthrene	0.067	5.5	Earthworm	1.22E-02
Pyrene	0.08	10	Earthworm	8.00E-03
Toluene	0.00095	23	Montane shrew	4.13E-05

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-15
HI Analysis Using NOAEL-Based ESLs for SWMU 39-007(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Zinc	49.31	na*	1.90E-02	2.24E-01	1.49E-01	**5.94E-01**	**1.05E+00**	2.74E-02	**4.98E-01**	2.90E-01	**4.11E-01**	**3.08E-01**
Aroclor-1248	0.35	1.84E-01	5.56E-02	**1.84E+00**	**3.72E-01**	**4.49E+00**	**8.54E+00**	**6.60E-01**	**4.79E+01**	**2.50E+01**	na	na
Aroclor-1254	0.0629	8.74E-03	8.28E-03	**3.31E-01**	5.72E-02	**7.96E-01**	**1.53E+00**	1.43E-03	1.40E-01	7.23E-02	na	3.93E-04
Bis(2-ethylhexyl)phthalate	0.187	3.74E-04	2.01E-02	**1.95E+00**	1.17E-02	**4.68E+00**	**9.35E+00**	9.84E-05	**3.12E-01**	1.70E-01	na	na
HI		2E-01	1E-01	**4E+00**	6E-01	**1E+01**	**2E+01**	7E-01	**5E+01**	**3E+01**	4E-01	3E-01

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.
* na = Not available.

Table G-5.3-16
Minimum ESL Comparison for SWMU 39-010

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.205	2.3	Deer mouse (Mammalian omnivore)	8.91E-02
Beryllium	0.718	2.5	Generic plant (Terrestrial autotroph – producer)	2.87E-01
Copper	68.86	14	American robin (Avian insectivore)	**4.92E+00**
Mercury	0.159	0.013	American robin (Avian insectivore)	**1.22E+01**
Perchlorate	0.00113	0.12	American robin (Avian herbivore)	9.42E-03
Selenium	0.899	0.52	Generic plant (Terrestrial autotroph – producer)	**1.73E+00**
Organic Chemicals (mg/kg)				
Acenaphthene	0.00268	0.25	Generic plant (Terrestrial autotroph – producer)	1.07E-02
Acenaphthylene	0.00876	120	Montane shrew (Mammalian insectivore)	7.30E-05
Acetone	0.128	1.2	Deer mouse (Mammalian omnivore)	1.07E-01
Amino-2,6-dinitrotoluene[4-]	0.016	12	Montane shrew (Mammalian insectivore)	1.33E-03
Amino-4,6-dinitrotoluene[2-]	0.0099	14	Generic plant (Terrestrial autotroph – producer)	7.07E-04
Anthracene	0.0202	6.8	Generic plant (Terrestrial autotroph – producer)	2.97E-03
Aroclor-1254	0.0147	0.041	American robin (Avian insectivore)	**3.59E-01**
Aroclor-1260	0.00159	0.88	American robin (Avian insectivore)	1.81E-03
Benzo(a)anthracene	0.00642	0.73	American robin (Avian herbivore)	8.79E-03
Benzo(a)pyrene	0.00562	62	Montane shrew (Mammalian insectivore)	9.06E-05
Benzo(b)fluoranthene	0.00522	18	Generic plant (Terrestrial autotroph – producer)	2.90E-04
Benzo(g,h,i)perylene	0.00377	25	Montane shrew (Mammalian insectivore)	1.51E-04
Benzo(k)fluoranthene	0.00408	71	Montane shrew (Mammalian insectivore)	5.75E-05
Benzoic Acid	0.194	1	Montane shrew (Mammalian insectivore)	1.94E-01
Bis(2-ethylhexyl)phthalate	0.0389	0.02	American robin (Avian insectivore)	**1.95E+00**
Butylbenzylphthalate	0.24	90	Montane shrew (Mammalian insectivore)	2.67E-03
Chrysene	0.00584	3.1	Deer mouse (Mammalian omnivore)	1.88E-03
Di-n-butylphthalate	0.166	0.011	American robin (Avian insectivore)	**1.51E+01**
Dibenz(a,h)anthracene	0.00674	14	Montane shrew (Mammalian insectivore)	4.81E-04
Diethylphthalate	0.0462	100	Generic plant (Terrestrial autotroph – producer)	4.62E-04
Fluoranthene	0.0122	10	Earthworm (Soil-dwelling invertebrate)	1.22E-03
Hexanone[2-]	0.0038	0.36	American robin (Avian insectivore)	1.06E-02
HMX	0.0975	16	Earthworm (Soil-dwelling invertebrate)	6.09E-03
Indeno(1,2,3-cd)pyrene	0.00319	71	Montane shrew (Mammalian insectivore)	4.49E-05
Methylene Chloride	0.00162	2.6	Deer mouse (Mammalian omnivore)	6.23E-04
Methylnaphthalene[2-]	0.00209	16	Montane shrew (Mammalian insectivore)	1.31E-04
Naphthalene	0.00388	1	Generic plant (Terrestrial autotroph – producer)	3.88E-03
Phenanthrene	0.00393	5.5	Earthworm (Soil-dwelling invertebrate)	7.15E-04

Table G-5.3-16 (continued)

COPC	EPC	ESL	Receptor	HQ
Pyrene	0.00815	10	Earthworm (Soil-dwelling invertebrate)	8.15E-04
RDX	0.547	2.3	American robin (Avian herbivore)	2.38E-01
TCDD[2,3,7,8-]	0.0000023	2.9E-07	Montane shrew (Mammalian insectivore)	**7.93E+00**
Toluene	0.000428	23	Montane shrew (Mammalian insectivore)	1.86E-05
Trinitrotoluene[2,4,6-]	0.293	7.5	American robin (Avian herbivore)	3.91E-02
Americium-241	1.43	190	Earthworm (Soil-dwelling invertebrate)	7.53E-03
Cesium-137	0.431	1400	American robin (Avian herbivore)	3.08E-04
Plutonium-238	3.25	820	Earthworm (Soil-dwelling invertebrate)	3.96E-03
Plutonium-239/240	13.8	870	Earthworm (Soil-dwelling invertebrate)	1.59E-02
Tritium	4.97	36,000	Generic plant (Terrestrial autotroph – producer)	1.38E-04
Uranium-234	2.934	440	Generic plant (Terrestrial autotroph – producer)	6.67E-03
Uranium-235/236	0.179	440	Generic plant (Terrestrial autotroph – producer)	4.07E-04
Uranium-238	12.47	400	Generic plant (Terrestrial autotroph – producer)	3.12E-02

Note: Bolded values indicate HQs greater than 0.3.

Table G-5.3-17
HI Analysis Using NOAEL-Based ESLs for SWMU 39-010

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	68.86	1.72E-02	6.26E-02	**8.61E-01**	**2.03E+00**	**3.44E+00**	**4.92E+00**	2.65E-01	**1.64E+00**	**1.09E+00**	**8.61E-01**	**9.84E-01**
Mercury	0.159	2.09E-03	**4.97E-01**	**2.74E+00**	**2.37E+00**	**7.23E+00**	**1.22E+01**	6.91E-03	9.35E-02	5.30E-02	**3.18E+00**	4.68E-03
Selenium	0.899	9.77E-03	1.21E-02	2.43E-01	**9.17E-01**	**1.08E+00**	**1.27E+00**	**4.09E-01**	**1.28E+00**	**1.10E+00**	2.19E-01	**1.73E+00**
Aroclor-1254	0.0147	2.04E-03	1.93E-03	7.74E-02	1.34E-02	1.86E-01	**3.59E-01**	3.34E-04	3.27E-02	1.69E-02	na*	9.19E-05
Bis(2-ethylhexyl)phthalate	0.0389	7.78E-05	4.18E-03	**4.05E-01**	2.43E-03	**9.73E-01**	**1.95E+00**	2.05E-05	6.48E-02	3.54E-02	na	na
Di-n-butylphthalate	0.166	2.68E-06	8.30E-02	**3.19E+00**	**4.37E-01**	**7.90E+00**	1.51E+01	9.76E-06	9.22E-04	4.61E-04	na	1.04E-03
TCDD[2,3,7,8-]	0.0000023	2.30E-02	na	na	na	na	na	5.75E-02	**7.93E+00**	**3.97E+00**	4.60E-07	na
	HI	6E-02	7E-01	**8E+00**	**6E+00**	**2E+01**	**4E+01**	8E-01	**1E+01**	**6E+00**	**4E+00**	**3E+00**

Note: Bolded values indicate HQs greater than 0.3 or HIs greater than 1.

* na = Not available.

Table G-5.4-1
Mexican Spotted Owl AUFs
for North Ancho Canyon Aggregate Area

Site	Site Area (ha)	AUF*
SWMU 39-001(a)	0.1109	3.03E-04
SWMU 39-002(a) Area 1	0.0135	3.69E-05
SWMU 39-002(a) Area 2	0.0295	8.06E-05
SWMU 39-002(a) Area 3	0.025	6.83E-05
AOC 39-002(b)	0.0018	4.92E-06
SWMU 39-006(a)	0.22	6.01E-04
SWMU 39-007(a)	0.0077	2.10E-05
SWMU 39-010	1.27	3.46E-03

* AUF is calculated as the area of the site divided by the owl HR of 366 ha.

Table G-5.4-2
PAUFs for Ecological Receptors for SWMU 39-001(a)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	2.62E-05
American Robin	0.42	16.8	6.60E-03
Deer Mouse	0.077	3	3.70E-02
Mountain Cottontail	3.1	124	8.94E-04
Montane Shrew	0.39	15.6	7.11E-03
Gray Fox	1038	41,520	2.67E-06

[a] Values from EPA (1993, 059384)

[b] PAUF is calculated as the area of the site (0.1109 ha) divided by the population area. The population area can be derived by p(3.6√HR)2 or approximately 40 HR.

Table G-5.4-3
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for SWMU 39-001(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Antimony	6.2 (U)	3.60E-07	na*	na	na	na	na	2.05E-03	5.58E-03	9.96E-02	7.95E-02	**5.64E-01**
Mercury	0.0781	2.74E-09	6.38E-06	3.52E-05	7.69E-03	2.34E-02	3.97E-02	3.04E-06	3.27E-04	9.62E-04	**1.56E+00**	2.30E-03
Aroclor-1242	0.027	7.21E-10	1.14E-07	3.72E-06	1.94E-04	2.29E-03	4.35E-03	8.94E-07	4.92E-04	1.33E-03	na	na
Aroclor-1254	0.0246	9.13E-09	8.47E-08	3.39E-06	1.48E-04	2.06E-03	3.96E-03	5.00E-07	3.89E-04	1.05E-03	na	1.54E-04
Bis(2-ethylhexyl)phthalate	0.076	4.06E-10	2.14E-07	2.07E-05	3.14E-05	1.25E-02	2.51E-02	3.58E-08	9.00E-04	2.55E-03	na	na
	HI	4E-07	7E-06	6E-05	8E-03	4E-02	7E-02	2E-03	8E-03	1E-01	**2E+00**	6E-01

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

* na = Not available.

Table G-5.4-4
PAUFs for Ecological Receptors for Area 1 of SWMU 39-002(a)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	3.18E-06
American Robin	0.42	16.8	8.04E-04
Deer Mouse	0.077	3	4.50E-03
Mountain Cottontail	3.1	124	1.09E-04
Montane Shrew	0.39	15.6	8.65E-04
Gray Fox	1038	41,520	3.25E-07

[a] Values from EPA (EPA 1993, 059384)

[b] PAUF is calculated as the area of the site (0.0135 ha) divided by the population area. The population area can be derived by p$(3.6\sqrt{HR})^2$ or approximately 40 HR.

Table G-5.4-5
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	2.63E+01	2.14E-09	7.61E-08	1.05E-06	6.21E-04	1.06E-03	1.51E-03	1.10E-05	5.41E-04	1.88E-03	**3.29E-01**	**3.75E-01**
Cyanide (Total)	7.32E-01	7.21E-11	3.95E-06	6.47E-06	5.88E-03	5.94E-03	6.00E-03	1.01E-07	1.92E-06	9.98E-06	na*	na
Lead	3.23E+01	2.84E-09	1.91E-07	1.24E-06	1.44E-03	1.85E-03	2.36E-03	1.13E-05	3.01E-04	1.21E-03	1.90E-02	**2.69E-01**
Mercury	1.73E+00	7.40E-09	1.72E-05	9.50E-05	2.07E-02	6.32E-02	**1.07E-01**	8.19E-06	8.81E-04	2.60E-03	**3.46E+01**	**5.09E-02**
Selenium	8.65E-01	3.06E-09	3.72E-08	7.44E-07	7.09E-04	8.37E-04	9.79E-04	4.28E-05	1.07E-03	4.75E-03	**2.11E-01**	**1.66E+00**
Thallium	1.26E+00	8.19E-08	4.01E-08	8.36E-08	1.47E-04	1.84E-04	2.25E-04	1.14E-04	2.60E-03	7.88E-03	na	**2.52E+01**
Zinc	5.98E+01	2.02E-09	7.32E-08	8.65E-07	1.46E-04	5.79E-04	1.02E-03	3.62E-06	5.23E-04	1.58E-03	**4.98E-01**	**3.74E-01**
Acenaphthene	4.14E-01	4.64E-12	na	na	na	na	na	8.50E-08	2.76E-06	1.16E-05	na	**1.66E+00**
Aroclor-1254	7.43E-02	3.36E-09	3.11E-08	1.25E-06	5.43E-05	7.56E-04	1.46E-03	1.84E-07	1.43E-04	3.84E-04	na	4.64E-04
Benzo(a)anthracene	8.30E-01	2.45E-09	9.44E-08	4.13E-07	9.14E-04	8.34E-04	7.58E-04	1.48E-05	1.80E-04	1.10E-03	na	4.61E-02
Benzoic Acid	3.46E-01	5.63E-11	na	na	na	na	na	8.19E-06	2.99E-04	1.20E-03	na	na
Bis(2-ethylhexyl)phthalate	5.52E-02	3.59E-11	1.89E-08	1.83E-06	2.77E-06	1.11E-03	2.22E-03	3.16E-09	7.96E-05	2.26E-04	na	na
Chrysene	9.74E-01	2.88E-09	na	na	na	na	na	1.68E-05	2.72E-04	1.41E-03	na	na
Di-n-butylphthalate	1.60E-01	8.39E-13	2.55E-07	9.80E-06	3.38E-04	6.12E-03	1.17E-02	1.02E-09	7.69E-07	2.00E-06	na	1.00E-03
Naphthalene	8.35E-01	4.68E-11	1.27E-09	3.41E-08	1.97E-04	1.18E-04	4.47E-05	6.49E-06	2.58E-05	3.91E-04	na	**8.35E-01**
Pentachlorophenol	1.99E+00	2.81E-09	1.11E-07	3.73E-06	5.51E-05	2.22E-03	4.44E-03	1.20E-06	2.13E-03	5.97E-03	6.42E-02	**3.98E-01**

Table G-5.4-5 (continued)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Phenanthrene	3.09E+00	5.28E-10	na	na	na	na	na	5.42E-06	2.43E-04	9.26E-04	**5.61E-01**	na
TCDD[2,3,7,8-]	1.83E-07	5.95E-10	na	na	na	na	na	4.98E-07	5.46E-04	1.42E-03	3.66E-08	na
Total Petroleum Hydrocarbons Diesel Range Organics	7.81E+01	na	na	na	na	na	na	na	na	na	**3.95E-01**	**9.62E-01**
PAUF-Adjusted HI		1E-07	2E-05	1E-04	3E-02	8E-02	1E-01	2E-04	1E-02	3E-02	**4E+01**	**3E+01**

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

* na = Not available.

Table G-5.4-6
PAUFs for Ecological Receptors for Area 2 of SWMU 39-002(a)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	6.96E-06
American Robin	0.42	16.8	1.76E-03
Deer Mouse	0.077	3	9.83E-03
Mountain Cottontail	3.1	124	2.38E-04
Montane Shrew	0.39	15.6	1.89E-03
Gray Fox	1038	41,520	7.11E-07

[a] Values from EPA (1993, 059384)

[b] PAUF is calculated as the area of the site (0.0295 ha) divided by the population area. The population area can be derived by p(3.6√HR)^2 or approximately 40 HR.

Table G-5.4-7
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Antimony	4.05E+00	6.26E-08	na*	na	na	na	na	3.57E-04	9.69E-04	1.73E-02	5.19E-02	**3.68E-01**
Copper	1.60E+02	2.83E-08	1.01E-06	1.39E-05	8.24E-03	1.40E-02	2.00E-02	1.46E-04	7.19E-03	2.49E-02	**2.00E+00**	**2.28E+00**
Zinc	4.95E+01	3.67E-09	1.33E-07	1.57E-06	2.64E-04	1.05E-03	1.85E-03	6.55E-06	9.46E-04	2.87E-03	**4.13E-01**	**3.10E-01**
Aroclor-1248	1.69E-02	6.32E-09	1.87E-08	6.19E-07	3.16E-05	3.80E-04	7.24E-04	7.59E-06	4.38E-03	1.19E-02	na	na
Aroclor-1254	1.16E+00	1.14E-07	1.06E-06	4.23E-05	1.84E-03	2.57E-02	4.95E-02	6.24E-06	4.58E-03	1.31E-02	na	7.22E-03
Benzo(a)anthracene	3.15E-01	2.03E-09	7.83E-08	3.42E-07	7.58E-04	6.91E-04	6.29E-04	1.23E-05	1.49E-04	9.11E-04	na	1.75E-02
Bis(2-ethylhexyl)phthalate	8.09E-02	1.15E-10	6.05E-08	5.86E-06	8.88E-06	3.55E-03	7.10E-03	1.01E-08	2.55E-04	7.23E-04	na	na
Di-n-butylphthalate	2.01E-01	2.30E-12	6.99E-07	2.69E-05	9.29E-04	1.68E-02	3.21E-02	2.81E-09	2.11E-06	5.49E-06	na	1.26E-03
	HI	2E-07	3E-06	9E-05	1E-02	6E-02	1E-01	5E-04	2E-02	7E-02	**2E+00**	**3E+00**

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.
* n/a = Not available.

Table G-5.4-8
PAUFs for Ecological Receptors for Area 3 of SWMU 39-002(a)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	5.90E-06
American Robin	0.42	16.8	1.49E-03
Deer Mouse	0.077	3	8.33E-03
Mountain Cottontail	3.1	124	2.02E-04
Montane Shrew	0.39	15.6	1.60E-03
Gray Fox	1038	41,520	6.02E-07

[a] Values from EPA (1993, 059384)

[b] PAUF is calculated as the area of the site (0.025 ha) divided by the population area. The population area can be derived by p(3.6√HR)^2 or approximately 40 HR.

Table G-5.4-9
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for Area 3 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Aroclor-1254	0.013	1.09E-09	1.01E-08	4.05E-07	1.77E-05	2.46E-04	4.74E-04	5.98E-08	4.65E-05	1.25E-04	na*	8.13E-05
Bis(2-ethylhexyl)phthalate	0.267	3.23E-10	1.70E-07	1.65E-05	2.49E-05	9.97E-03	1.99E-02	2.84E-08	7.16E-04	2.03E-03	na	na
Di-n-butylphthalate	0.54	5.26E-12	1.60E-06	6.15E-05	2.12E-03	3.84E-02	7.33E-02	6.43E-09	4.83E-06	1.25E-05	na	3.38E-03
TCDD[2,3,7,8-]	1.13E-06	6.83E-09	na	na	na	na	na	5.72E-06	6.23E-03	1.63E-02	2.26E-07	na
	HI	8E-09	2E-06	8E-05	2E-03	5E-02	9E-02	6E-06	7E-03	2E-02	2E-07	3E-03

* na = Not available.

Table G-5.4-10
PAUFs for Ecological Receptors for AOC 39-002(b)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	4.25E-07
American Robin	0.42	16.8	1.07E-04
Deer Mouse	0.077	3	6.00E-04
Mountain Cottontail	3.1	124	1.45E-05
Montane Shrew	0.39	15.6	1.15E-04
Gray Fox	1038	41,520	4.34E-08

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.0018 ha) divided by the population area. The population area can be derived by $\pi(3.6\sqrt{HR})^2$ or approximately 40 HR.

Table G-5.4-11
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for AOC 39-002(b)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	4.08E+01	4.43E-10	1.58E-08	2.17E-07	1.29E-04	2.19E-04	3.13E-04	2.28E-06	1.12E-04	3.89E-04	**5.11E-01**	**5.83E-01**
Mercury	4.46E-01	2.54E-10	5.92E-07	3.26E-06	7.13E-04	2.17E-03	3.68E-03	2.81E-07	3.03E-05	8.92E-05	**8.92E+00**	1.31E-02
Zinc	4.88E+01	2.20E-10	7.96E-09	9.41E-08	1.58E-05	6.29E-05	1.11E-04	3.93E-07	5.68E-05	1.72E-04	**4.06E-01**	**3.05E-01**
Aroclor-1242	7.26E-01	3.15E-10	4.97E-08	1.62E-06	8.45E-05	9.97E-04	1.90E-03	3.90E-07	2.15E-04	5.81E-04	na*	na
Aroclor-1248	1.80E+00	4.11E-08	1.21E-07	4.02E-06	2.05E-04	2.47E-03	4.71E-03	4.93E-05	2.85E-02	7.72E-02	na	na
Aroclor-1254	1.09E+00	6.56E-09	6.09E-08	2.44E-06	1.06E-04	1.48E-03	2.85E-03	3.60E-07	2.79E-04	7.52E-04	na	6.81E-03
Aroclor-1260	2.81E-01	8.12E-10	2.98E-10	2.84E-08	8.14E-07	1.77E-05	3.42E-05	2.27E-09	3.24E-06	8.43E-06	na	na
Bis(2-ethylhexyl)phthalate	9.84E-01	8.53E-11	4.49E-08	4.35E-06	6.59E-06	2.64E-03	5.27E-03	7.52E-09	1.89E-04	5.37E-04	na	na
Di-n-butylphthalate	2.33E-01	1.63E-13	4.95E-08	1.90E-06	6.57E-05	1.19E-03	2.27E-03	1.99E-10	1.49E-07	3.88E-07	na	1.46E-03
TCDD[2,3,7,8-]	4.96E-06	2.15E-09	na	na	na	na	na	1.80E-06	1.97E-03	5.13E-03	9.92E-07	na
	PAUF-Adjusted HI	5E-08	9E-07	2E-05	1E-03	1E-02	2E-02	6E-05	3E-02	9E-02	**1E+01**	9E-01

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

* na = Not available.

Table G-5.4-12
PAUFs for Ecological Receptors for SWMU 39-006(a)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	5.19E-05
American Robin	0.42	16.8	1.31E-02
Deer Mouse	0.077	3	7.33E-02
Mountain Cottontail	3.1	124	1.77E-03
Montane Shrew	0.39	15.6	1.41E-02
Gray Fox	1038	41,520	5.30E-06

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.22 ha) divided by the population area. The population area can be derived by p$(3.6\sqrt{HR})^2$ or approximately 40 HR.

Table G-5.4-13
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for SWMU 39-006(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Cadmium	2.48E-01	2.39E-09	2.99E-08	9.90E-06	7.55E-04	6.01E-03	1.12E-02	4.40E-05	1.30E-02	3.64E-02	1.77E-03	7.75E-03
Cyanide (Total)	9.19E+00	1.48E-08	8.08E-04	1.32E-03	**1.20E+00**	**1.22E+00**	**1.23E+00**	2.06E-05	3.93E-04	2.04E-03	na*	na
Lead	3.03E+01	4.34E-08	2.91E-06	1.89E-05	2.20E-02	2.83E-02	3.61E-02	1.73E-04	4.59E-03	1.85E-02	1.78E-02	**2.52E-01**
Mercury	6.62E-02	4.62E-09	1.07E-05	5.92E-05	1.29E-02	3.94E-02	6.67E-02	5.11E-06	5.49E-04	1.62E-03	**1.32E+00**	1.95E-03
Selenium	6.40E-01	3.69E-08	4.49E-07	8.98E-06	8.55E-03	1.01E-02	1.18E-02	5.16E-04	1.29E-02	5.72E-02	**1.56E-01**	**1.23E+00**
Silver	3.88E+00	4.67E-09	3.36E-07	1.55E-05	5.08E-03	1.24E-02	1.95E-02	4.59E-05	3.91E-03	1.19E-02	na	6.93E-03
Aroclor-1254	1.83E-02	1.35E-08	1.25E-07	5.00E-06	2.18E-04	3.03E-03	5.84E-03	7.38E-07	5.74E-04	1.54E-03	na	1.14E-04
Bis(2-ethylhexyl)phthalate	7.52E-02	7.97E-10	4.20E-07	4.06E-05	6.15E-05	2.46E-02	4.92E-02	7.02E-08	1.77E-03	5.01E-03	na	na
Di-n-butylphthalate	1.46E-02	1.25E-12	3.79E-07	1.46E-05	5.03E-04	9.10E-03	1.74E-02	1.52E-09	1.14E-06	2.97E-06	na	9.13E-05
Hexanone[2-]	2.31E-01	2.07E-10	4.13E-08	7.05E-06	6.44E-03	7.38E-03	8.40E-03	2.41E-05	6.03E-04	2.78E-03	na	na
PAUF-Adjusted HI		1E-07	8E-04	2E-03	**1E+00**	**1E+00**	**1E+00**	8E-04	4E-02	1E-01	**1E+00**	**2E+00**

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

* na = Not available.

Table G-5.4-14
PAUFs for Ecological Receptors for SWMU 39-007(a)

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	1.82E-06
American Robin	0.42	16.8	4.58E-04
Deer Mouse	0.077	3	2.57E-03
Mountain Cottontail	3.1	124	6.21E-05
Montane Shrew	0.39	15.6	4.94E-04
Gray Fox	1038	41,520	1.85E-07

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.0077 ha) divided by the population area. The population area can be derived by $p(3.6\sqrt{HR})^2$ or approximately 40 HR.

Table G-5.4-15
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for SWMU 39-007(a)

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Zinc	49.31	9.53E-10	3.44E-08	4.07E-07	6.85E-05	2.72E-04	4.81E-04	1.70E-06	2.46E-04	7.44E-04	4.11E-01	3.08E-01
Aroclor-1248	0.35	3.42E-08	1.01E-07	3.35E-06	1.71E-04	2.06E-03	3.91E-03	4.10E-05	2.37E-02	6.42E-02	na*	na
Aroclor-1254	0.0629	1.62E-09	1.50E-08	6.01E-07	2.62E-05	3.65E-04	7.03E-04	8.88E-08	6.90E-05	1.86E-04	na	3.93E-04
Bis(2-ethylhexyl)phthalate	0.187	6.94E-11	3.65E-08	3.54E-06	5.36E-06	2.14E-03	4.29E-03	6.11E-09	1.54E-04	4.36E-04	na	na
PAUF-Adjusted HI		4E-08	2E-07	8E-06	3E-04	5E-03	9E-03	4E-05	2E-02	7E-02	4E-01	3E-01

* na = Not available.

Table G-5.4-16
PAUFs for Ecological Receptors for SWMU 39-010

Receptor	HR (ha)[a]	Population Area (ha)	PAUF[b]
American Kestrel	106	4240	3.00E-04
American Robin	0.42	16.8	7.56E-02
Deer Mouse	0.077	3	4.23E-01
Mountain Cottontail	3.1	124	1.02E-02
Montane Shrew	0.39	15.6	8.14E-02
Gray Fox	1038	41,520	3.06E-05

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (1.27 ha) divided by the population area. The population area can be derived by p(3.6√HR)^2 or approximately 40 HR.

Table G-5.4-17
PAUF-Adjusted HI Analysis Using NOAEL-Based ESLs for SWMU 39-010

COPC	EPC (mg/kg)	Gray Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Mountain Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	68.86	5.27E-07	1.88E-05	2.58E-04	1.53E-01	**2.60E-01**	**3.72E-01**	2.71E-03	**1.33E-01**	**4.63E-01**	**8.61E-01**	**9.84E-01**
Mercury	0.159	6.40E-08	1.49E-04	8.21E-04	**1.79E-01**	**5.46E-01**	**9.25E-01**	7.08E-05	7.61E-03	2.24E-02	**3.18E+00**	4.68E-03
Selenium	0.899	2.99E-07	3.64E-06	7.28E-05	6.93E-02	8.19E-02	9.57E-02	4.19E-03	**1.05E-01**	**4.64E-01**	**2.19E-01**	**1.73E+00**
Aroclor-1254	0.0147	6.24E-08	5.79E-07	2.32E-05	1.01E-03	1.41E-02	2.71E-02	3.42E-06	2.66E-03	7.15E-03	n/a*	9.19E-05
Bis(2-ethylhexyl)phthalate	0.0389	2.38E-09	1.25E-06	1.21E-04	1.84E-04	7.35E-02	**1.47E-01**	2.10E-07	5.28E-03	1.50E-02	n/a	n/a
Di-n-butylphthalate	0.166	8.19E-11	2.49E-05	9.56E-04	3.30E-02	**5.98E-01**	**1.14E+00**	1.00E-07	7.51E-05	1.95E-04	n/a	1.04E-03
TCDD[2,3,7,8-]	0.0000023	7.04E-07	n/a	n/a	n/a	n/a	n/a	5.89E-04	**6.46E-01**	**1.68E+00**	4.60E-07	n/a
PAUF-Adjusted HI		2E-06	2E-04	2E-03	4E-01	**2E+00**	**3E+00**	8E-03	9E-01	**3E+00**	**4E+00**	**3E+00**

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

* na = Not available.

Table G-5.4-18
Summary of LOAEL-Based ESLs for Terrestrial Receptors

COPEC	Gray fox (Mammalian top carnivore)	American kestrel (Avian top carnivore)	American kestrel (insectivore / carnivore)	American robin (Avian herbivore)	American robin (Avian insectivore)	American robin (Avian omnivore)	Mountain cottontail (Mammalian herbivore)	Montane shrew (Mammalian insectivore)	Deer mouse (Mammalian omnivore)	Earthworm (Soil-dwelling invertebrate)	Generic plant (Terrestrial autotroph – producer)
Antimony	460	na*	na	na	na	na	27	79	23	780	58
Barium	190,000	44,000	13,000	1200	1400	1300	14,000	10,000	8700	3200	260
Copper	6700	3500	240	100	43	60	430	70	100	530	490
Lead	7000	1000	160	36	23	28	600	170	230	8400	570
Mercury (inorganic)	760	3.2	0.58	0.67	0.13	0.22	230	17	30	0.5	64
Selenium	130	140	7.5	1.9	1.4	1.6	3.4	1	1.2	41	3
Thallium	50	1000	480	69	45	55	12	4.2	7.2	na	0.5
Zinc	94,000	7000	590	870	120	220	18,000	980	1700	930	810
Acenaphthene	290,000	na	na	na	na	na	5300	1300	1600	na	2
Aroclor-1254	72	76	1.9	11	0.41	0.79	240	2.4	4.8	na	620
Bis(2-ethylhexyl)phthalate	5000	93	0.96	160	0.2	0.4	19,000	6	11	na	na
Di-n-Butyl Phthalate	140,000	20	0.52	3.8	0.11	0.21	40,000	450	860	na	600
Naphthalene	16,000	21,000	780	34	150	57	40	79	27	na	10
Pentachlorophenol	2300	570	17	290	3.6	7.2	1800	8.1	15	150	50
Phenanthrene	19,000	na	na	na	na	na	620	110	150	12	na
Tetrachlorodibenzodioxin[2,3,7,8-]	0.0007	na	na	na	na	na	0.0003	2E-06	4E-06	10	na

Note: ESLS are based on LOAELS and were obtained from the ECORISK Database, Version 4.3 (N3B 2022, 702331).

* na = Not available.

Table G-5.4-19
HI Analysis Using
LOAEL-Based ESLs for SWMU 39-001(a)

COPC	EPC (mg/kg)	Earthworm (soil-dwelling invertebrate)
Mercury	0.0781	**1.56E-01**
	HI	2E-01

Note: Bolded value indicates HQ greater than 0.1.

Table G-5.4-20
HI Analysis Using
LOAEL-Based ESLs for Area 1 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Mercury	1.73E+00	**3.46E+00**	n/a[a]
Selenium	8.65E-01	n/a	**2.88E-01**
Thallium	1.26E+00	na[b]	**2.52E+00**
Acenaphthene	4.14E-01	na	**2.07E-01**
Phenanthrene	3.09E+00	**2.57E-01**	na
Total Petroleum Hydrocarbons Diesel Range Organics	7.81E+01	n/a	**1.86E-01**
	HI	**4E+00**	**4E+00**

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

[a] n/a = Not applicable.

[b] na = Not available.

Table G-5.4-21
HI Analysis Using LOAEL-Based ESLs for Area 2 of SWMU 39-002(a)

COPC	EPC (mg/kg)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Antimony	4.05E+00	n/a*	6.98E-02
Copper	1.60E+02	3.01E-01	3.26E-01
Zinc	4.95E+01	5.33E-02	6.12E-02
	PAUF-Adjusted HI	4E-01	5E-01

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

* n/a = Not applicable.

Table G-5.4-22
HI Analysis Using LOAEL-Based ESLs for AOC 39-002(b)

COPC	EPC (mg/kg)	Earthworm (soil-dwelling invertebrate)
Copper	4.08E+01	7.71E-02
Mercury	4.46E-01	**8.92E-01**
Zinc	4.88E+01	5.24E-02
	HI	1E+00

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

Table G-5.4-23
HI Analysis Using LOAEL-Based ESLs for SWMU 39-006(a)

COPC	EPC (mg/kg)	Generic Plant (terrestrial autotroph – producer)
Lead	3.03E+01	5.31E-02
Selenium	6.40E-01	**2.13E-01**
	HI	3E-01

Note: Bolded value indicates HQ greater than 0.1 or HI greater than 1.

Table G-5.4-24
HI Analysis Using LOAEL-Based ESLs for SWMU 39-010

COPC	EPC (mg/kg)	American Robin (avian omnivore)	American Robin (avian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil-dwelling invertebrate)	Generic Plant (terrestrial autotroph – producer)
Copper	68.86	**1.15E+00**	**1.60E+00**	**6.89E-01**	**1.30E-01**	**1.41E-01**
Mercury	0.159	**7.23E-01**	**1.22E+00**	n/a [a]	**3.18E-01**	n/a
Selenium	0.899	n/a	n/a	**7.49E-01**	2.19E-02	**3.00E-01**
Bis(2-ethylhexyl)phthalate	0.0389	n/a	**1.95E-01**	n/a	na[b]	na
Di-n-butylphthalate	0.166	**7.90E-01**	**1.51E+00**	n/a	na	n/a
TCDD[2,3,7,8-]	0.0000023	na	na	**6.05E-01**	n/a	na
	HI	**3E+00**	**5E+00**	**2E+00**	5E-01	4E-01

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

[a] n/a = Not applicable.

[b] na = Not available.

Table G-5.4-25
PAUF-Adjusted HI Analysis Using LOAEL-Based ESLs for SWMU 39-010

COPC	EPC (mg/kg)	American Robin (avian omnivore)	American Robin (avian insectivore)	Deer Mouse (mammalian omnivore)
Copper	68.86	8.68E-02	**1.21E-01**	**2.92E-01**
Mercury	0.159	5.46E-02	9.25E-02	n/a
Selenium	0.899	n/a[a]	n/a	**3.17E-01**
Bis(2-ethylhexyl)phthalate	0.0389	n/a	1.47E-02	n/a
Di-n-butylphthalate	0.166	5.98E-02	**1.14E-01**	n/a
TCDD[2,3,7,8-]	0.0000023	na[b]	na	**2.56E-01**
PAUF-Adjusted HI		2E-01	3E-01	9E-01

Note: Bolded values indicate HQs greater than 0.1 or HIs greater than 1.

[a] n/a = Not applicable.

[b] na = Not available.

Attachment G-1

ProUCL Files
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Attachment G-2

Chlorinated Dioxin/Furan
Toxicity Equivalent Calculations
(on CD included with this document)

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Attachment G-3

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Attachment G-4

Ecological Scoping Checklists

G4-1.0 SWMU 39-001(A) AND 39-006(A)

G4-1.1 Part A—Scoping Meeting Documentation

Site IDs	**Solid Waste Management Units (SWMUs) 39-001(a) and 39-006(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.	The Phase II Investigation addresses 6 sites in Technical Area (TA-39) located in North Ancho Canyon Aggregate Area. A summary of operational information for SWMUs 39-001(a) and 39-006(a) is provided below. **SWMU 39-001(a)** is a former landfill north of the light gas-gun facility (building 39-69) at TA-39. The 1990 SWMU report identified the site as consisting of two 80-long × 20-wide × 10-ft-deep trenches(LANL 1990, 007513). Materials disposed of in this area included firing-site debris, empty chemical containers, and office waste. Interviews of site workers indicated that the landfill was used for disposal from 1953 to 1979 (LANL 1993, 015316; LANL 1997, 055633). SWMU 39-001(a) was excavated during the 2009 investigation (LANL 2010, 108500.11). **SWMU 39-006(a)** consists of a septic system with inactive and active components located east and south of building 39-2. The inactive portion of the septic system was constructed in 1953 and received discharges from building 39-2. The inactive portion of the septic system included an 1800-gal. septic tank (former structure 39-12), sections of drain lines, a subsurface sand filter, a chemical seepage pit, and an outfall. The septic tank was located 100 ft east of building 39-2 and was connected to a sand filter north of New Mexico State Road 4 (NM 4). The sand filter discharged to an outfall south of NM 4 in North Ancho Canyon. In 1973, the septic tank was enlarged, a new subsurface sand filter was installed on the south side of NM 4, and use of the old sand filter was discontinued (LANL 1993, 015316). By 1978, the new sand filter south of NM 4 became clogged and was redesigned and replaced. In 1985, the original septic tank (former structure 39-12) was abandoned in place; the septic tank was emptied and filled with sand, and the drain line was rerouted through the abandoned septic tank to a new 2500-gal. concrete septic tank (structure 39-104), which discharged via a drain line to a new sand filter installed south of NM 4 (replacing the sand filter in the location south of NM 4 for the second time). Septic tank 39-104, the new sand filter south of NM 4, and the still active drain lines are part of SWMU 39-006(a) active components. In 1989, the outlet from the new sand filter was plugged, eliminating the discharge to the outfall (LANL 1993, 015316).
Form of site releases (cont.)	**Surface soil –** X **Surface water/sediment –** NA **Subsurface –** X **Groundwater –** NA **Other, explain –** NA
List of Primary Impacted Media (Indicate all that apply.)	**Water** – NA **Bare ground/unvegetated** – X **Spruce/fir/aspen/mixed conifer** – NA **Ponderosa pine –** X **Piñon juniper/juniper savannah** – X **Grassland/shrubland** – X **Developed** – X **Burned –** NA

Vegetation Class Based on GIS Vegetation Coverage **(Indicate all that apply.)**	Ponderosa pine woodland, juniper woodland, and developed areas.
Is T&E habitat present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	No. The North Ancho Canyon Aggregate Area lies outside of the mapped threatened and endangered (T&E) species core or buffer habitats (LANL 2017, 701039).
Provide list of neighboring/ contiguous/upgradient sites, include a brief summary of COPCs and the form of releases for relevant sites, and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	The North Ancho Canyon Aggregate Area includes sites only located in TA-39. The activities and types of contaminants overlap greatly across TA-39 and, therefore, the ecological exposure pathways are discussed for the entire collection of sites in the North Ancho Canyon Aggregate Area.
Surface Water Erosion Potential Information	Surface water erosion potential is based on site observations.

G4-1.2 Part B—Site Visit Documentation

Site ID	SWMUs 39-001(a), SWMUs 39-006(a).
Date of Site Visit	11/09/2022
Site Visit Conducted by	Henry Wood, North Wind Site Services and Carolyn Fordham, TerranearPMC (TPMC)

Receptor Information:

Estimate cover	**Relative vegetative cover (high, medium, low, none)** = None to High **Relative wetland cover (high, medium, low, none)** = None **Relative structures/asphalt, etc., cover (high, medium, low, none)** = None to High
Field Notes on the GIS Vegetation Class to Assist in Verifying the Arcview Information	North Ancho Canyon Aggregate Area includes areas that are still active and some that are inactive or decommissioned. There is, in general, a medium relative vegetative cover across the sites. The aggregate area includes piñon-juniper woodland, ponderosa pine woodland, shrubs, and grasses.
Are ecological receptors present at the site (yes/no/uncertain)? **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	Yes. Terrestrial receptors, including mammals and birds, are present at the vegetated sites and could use the areas for both foraging and nesting. The site visit occurred in late fall when the vegetation was dormant. Some animal tracks (deer, coyote) were noted in the arroyo. Song birds were plentiful. Only terrestrial habitats and species were observed. No wetland vegetation was noted.

Contaminant Transport Information:

Surface Water Transport/Field Notes on the Erosion Potential, Including a Discussion of the Terminal Point of Surface Water Transport (if applicable)	The topography at these sites is relatively flat and no evidence of significant erosional areas was noted. Any erosion from the sites within the North Ancho Canyon Aggregate Area would migrate toward and eventually flow down the arroyo located generally in the center of the canyon. Some drainage areas, including storm water barriers, are located proximal to several of the sites. Some sites were flat and paved with little to no potential for runoff.
Are there any off-site transport pathways (surface water, air, or groundwater) (yes/no/uncertain)? **Provide explanation.**	Yes. There may be some air dispersion when the area is dry, but it is a minor transport pathway. A pathway to groundwater is unlikely, because regional groundwater is greater than 300 ft below ground surface (bgs) to the aquifer. Intermediate groundwater may exist in some areas at a depth of more than 50 ft bgs. Surface water run-on to the sites and runoff leaving the sites would migrate toward and eventually flow down the arroyo located generally in the center of the canyon.

Ecological Effects Information:

Physical Disturbance **(Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.)**	Many of the sites in the North Ancho Canyon Aggregate Area are on developed land and have been disturbed in the past. A few sites remain under asphalt or concrete pads.
Are there obvious ecological effects (yes/no/uncertain)? **Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).**	No obvious ecological effects were noted during the site visit.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors on-site 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. Not applicable

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination (yes/no/uncertain)? **Provide explanation (consider whether the maximum value was captured by existing sample data).**	Yes. The sampling approach in the approved Phase II investigation work plan (LANL 2011, 201561; NMED 2010, 108675) included biased sampling to determine the nature and extent of contamination at the sites being investigated.

Do existing or proposed data for the site address potential transport pathways of site contamination (yes/ no/uncertain)? **Provide explanation (consider whether other sites should be aggregated to characterize potential ecological risk).**	Yes. Existing and planned data from samples collected within the SWMUs and areas of concern (AOCs) address potential transport pathways and characterize the potential ecological risk. The results indicate that the nature and extent of contamination at the sites has been defined, or will be defined through the data evaluation process being used for this aggregate area.

Additional Field Notes:

Provide additional field notes on the site setting and potential ecological receptors.
SWMU 39-001(a) – The southernmost section (nearest to building) is paved but a majority of the former landfill is covered with grasses, brush, and small trees. The periphery of the landfill contains mature ponderosa pines. The arroyo is located east of the former landfill area. Mule deer tracks were observed in the arroyo.
SWMU 39-006(a) – A former septic drain system. The northernmost portion of this SMWU is in the paved, developed area with minimal habitat. Central and southern areas of the SWMU are in ponderosa pine and juniper woodland habitats containing mature trees as well as numerous grasses and shrubs.

G4-1.3 Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

<u>Question A:</u>

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): Unlikely

Provide explanation: Volatile organic compounds (VOCs) were detected. Most of the detected concentrations were below or similar to the estimated quantitation limits.

<u>Question B:</u>

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: Some chemicals of potential concern (COPCs) were detected in the surface interval.

<u>**Question C:**</u>

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 whether aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: No aquatic communities are present in the aggregate area or in close proximity.

<u>**Question D:**</u>

Is contaminated groundwater potentially available to biological receptors through seeps, springs, or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential exists 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: A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs. Intermediate groundwater may exist in some areas at a depth of more than 50 ft bgs. No seeps or springs are in the vicinity of the sites being investigated.

<u>**Question E:**</u>

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential exists for contaminants to migrate to groundwater.**
- **The potential exists 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: A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs. Intermediate groundwater may exist in some areas at a depth of more than 50 ft bgs. No seeps or springs are in the vicinity of the sites being investigated.

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 erodibility of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: The sites under investigation are located at the bottom of the canyon, so mass wasting is not relevant. The sites show minimal evidence of erosion.

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:** 1

Provide explanation: VOCs were detected but at low concentrations. Much of the areal extent was hardpacked, graveled, or paved. Presence of burrows was not observed within the SWMU boundaries.

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: 3

Terrestrial Animals: 3

Provide explanation: Surface soil contamination is/may be present at each site.

<u>Question I:</u>

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 is 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: 3

Provide explanation: Surface soil contamination is present.

<u>Question J:</u>

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: 3

Provide explanation: COPCs are present in the surface soil.

<u>Question K:</u>

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 groom themselves clean of soil.**

Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):

Terrestrial Animals: 3

Provide explanation: COPCs are present in the surface soil.

<u>Question L:</u>

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: Low to moderate concentrations of lipophilic COPCs were detected in surface soil at select sites.

<u>Question M:</u>

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: Some radionuclides were identified as COPCs but not at all locations.

<u>Question N:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question O:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question P:</u>

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, then 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: No water or sediment with aquatic pathways is present.

<u>Question Q:</u>

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, then 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: No water or sediment with aquatic pathways is present.

<u>Question R:</u>

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: No water or sediment with aquatic pathways is present.

Question S:

Could contaminants bioconcentrate in free-floating aquatic plants, 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 is no aquatic habitat at the sites.

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 is no aquatic habitat at the sites.

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 is no aquatic habitat at the sites.

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):

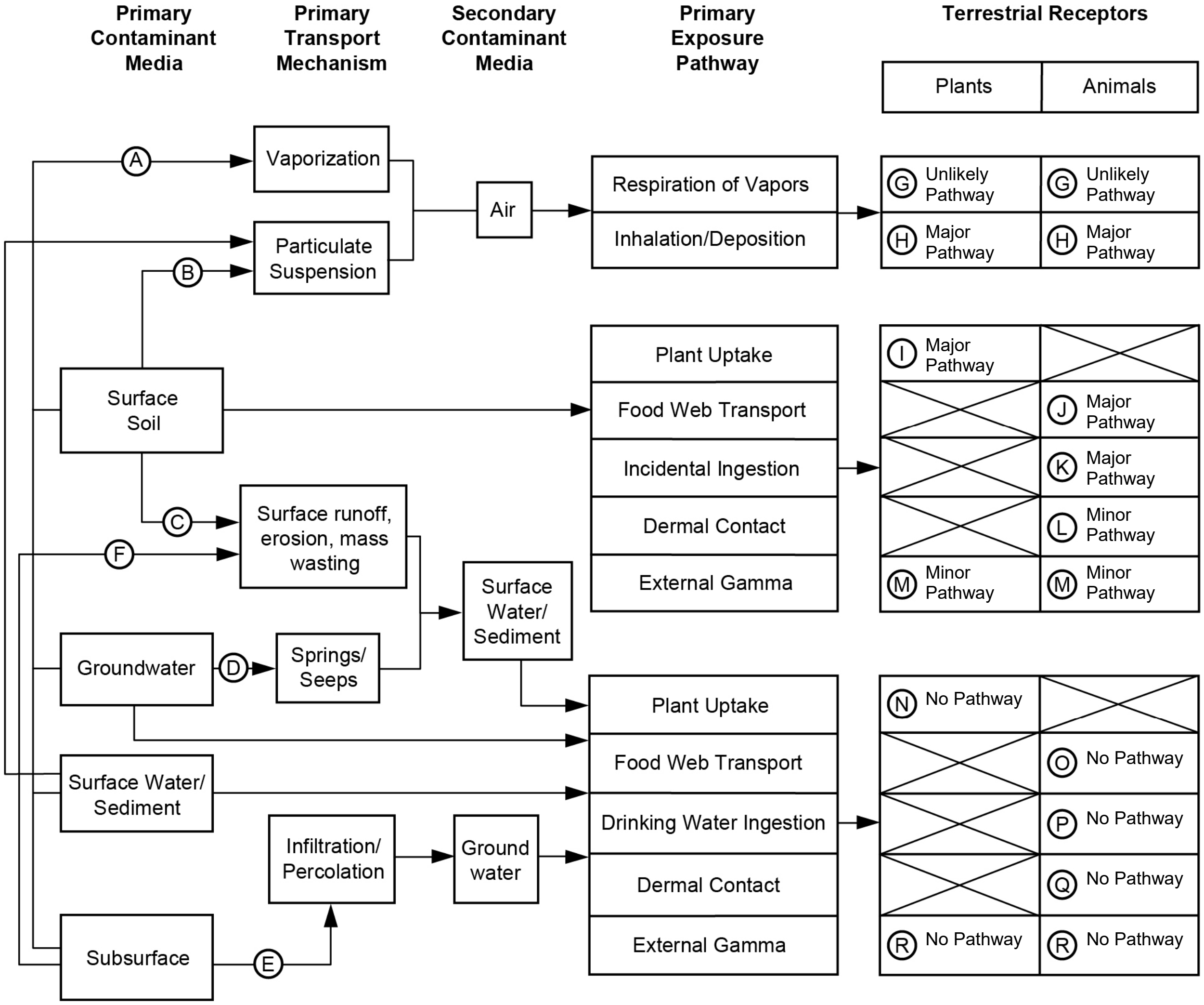
Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There is no aquatic habitat at the sites.

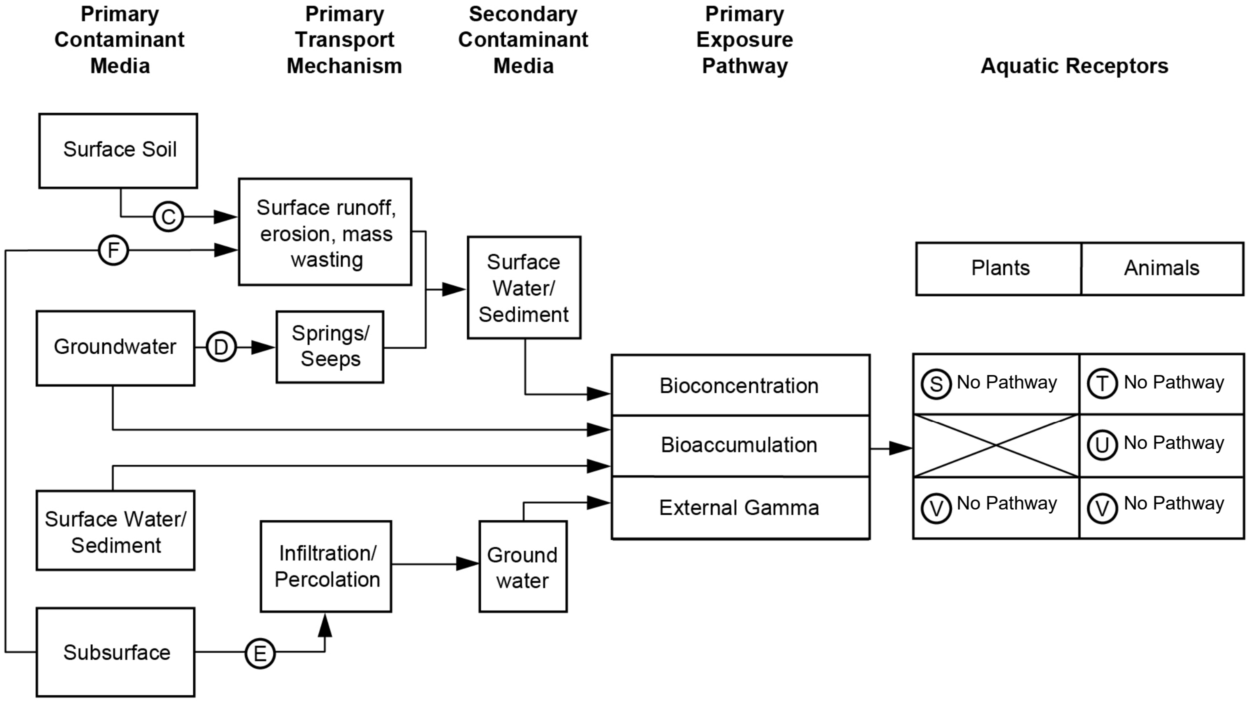
Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions on the scoping checklist.



Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions on the scoping checklist.



SIGNATURES AND CERTIFICATION

Checklist completed by:

Name (printed): Thomas Henry Wood/Carolyn Fordham

Name (signature): Thomas Henry Wood Digitally signed by Thomas Henry Wood Date: 2023.07.28 12:41:44 -06'00'

Organization: North Wind Site Services and TerranearPMC (TPMC)

Date completed: 11/9/2022

Checklist reviewed by:

Name (printed): Patricia Wald-Hopkins

Name (signature): Patricia Wald-Hopkins Digitally signed by Patricia Wald-Hopkins Date: 2023.07.28 14:06:17 -06'00'

Organization: Newport News Nuclear BWXT-Los Alamos, LLC (N3B)

Date reviewed: 6/22/2023

G4-2.0 AOC 39-002(B)

G4-2.1 Part A—Scoping Meeting Documentation

Site ID	**Area of Concern (AOC) 39-002(b).**
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.	The Phase II Investigation addresses 8 sites in Technical Area (TA-39) located in North Ancho Canyon Aggregate Area. A summary of operational information for AOC 39-002(b) is provided below. **AOC 39-002(b)** is the former location of a satellite accumulation area (SAA) on a 5- × 5-ft concrete pad adjacent to a firing site support building (structure 39-6). AOC 39-002(b) was used for storage before it became an SAA. The date the storage area began operating as an SAA is not known; however, the SAA was removed from service in 1993.
Form of site releases (cont.)	**Surface soil –** X **Surface water/sediment –** NA **Subsurface –** X **Groundwater –** NA **Other, explain –** NA
List of Primary Impacted Media **(Indicate all that apply.)**	**Water** – NA **Bare ground/unvegetated** – X **Spruce/fir/aspen/mixed conifer** – NA **Ponderosa pine –** NA **Piñon juniper/juniper savannah** – NA **Grassland/shrubland** – X **Developed** – X **Burned –** NA
Vegetation Class Based on GIS Vegetation Coverage **(Indicate all that apply.)**	Sparse juniper woodland.
Is T&E habitat present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	No. The North Ancho Canyon Aggregate Area lies outside of the mapped threatened and endangered (T&E) species core or buffer habitats (LANL 2017, 701039).
Provide list of neighboring/ contiguous/upgradient sites, include a brief summary of COPCs and the form of releases for relevant sites, and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	The North Ancho Canyon Aggregate Area includes sites only located in TA-39. The activities and types of contaminants overlap greatly across TA-39 and, therefore, the ecological exposure pathways are discussed for the entire collection of sites in the North Ancho Canyon Aggregate Area.
Surface Water Erosion Potential Information	Surface water erosion potential is based on site observations.

G4-2.2 Part B—Site Visit Documentation

Site ID	AOC 39-002(b).
Date of Site Visit	11/09/2022
Site Visit Conducted by	Henry Wood, North Wind Site Services and Carolyn Fordham, TerranearPMC (TPMC)

Receptor Information:

Estimate cover	**Relative vegetative cover (high, medium, low, none)** = None **Relative wetland cover (high, medium, low, none)** = None **Relative structures/asphalt, etc., cover (high, medium, low, none)** = High
Field Notes on the GIS Vegetation Class to Assist in Verifying the Arcview Information	North Ancho Canyon Aggregate Area includes areas that are still active and some that are inactive or decommissioned. There is, in general, a medium relative vegetative cover across the sites. The aggregate area includes piñon-juniper woodland, ponderosa pine woodland, shrubs, and grasses.
Are ecological receptors present at the site (yes/no/uncertain)? **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	No. AOC-39-002(b) is a small paved area next to an existing structure and presents minimal ecological habitat.

Contaminant Transport Information:

Surface Water Transport/Field Notes on the Erosion Potential, Including a Discussion of the Terminal Point of Surface Water Transport (if applicable)	The topography at this site is relatively flat and no evidence of significant erosional areas was noted. Any erosion from the sites within the North Ancho Canyon Aggregate Area would migrate toward and eventually flow down the arroyo located generally in the center of the canyon.
Are there any off-site transport pathways (surface water, air, or groundwater) (yes/no/uncertain)? **Provide explanation.**	Yes. There may be some air dispersion when the area is dry, but it is a minor transport pathway. A pathway to groundwater is unlikely, because regional groundwater is greater than 300 ft bgs to the aquifer. Intermediate groundwater may exist in some areas at depths of more than 50 ft bgs. Surface water run-on to the sites and runoff leaving the sites would migrate toward and eventually flow down the arroyo located generally in the center of the canyon.

Ecological Effects Information:

Physical Disturbance **(Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.)**	Many of the sites in the North Ancho Canyon Aggregate Area are on developed land and have been disturbed in the past. A few sites remain under asphalt or concrete pads.
Are there obvious ecological effects (yes/no/uncertain)? **Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).**	No obvious ecological effects were noted during the site visit.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors on-site 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. Not applicable

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination (yes/no/uncertain)? **Provide explanation (consider whether the maximum value was captured by existing sample data).**	Yes. The sampling approach in the approved Phase II investigation work plan (LANL 2011, 201561; NMED 2010, 108675) included biased sampling to determine the nature and extent of contamination at the sites being investigated.
Do existing or proposed data for the site address potential transport pathways of site contamination (yes/no/uncertain)? **Provide explanation (consider whether other sites should be aggregated to characterize potential ecological risk).**	Yes. Existing and planned data from samples collected within the SWMUs and AOCs address potential transport pathways and characterize the potential ecological risk. The results indicate that the nature and extent of contamination at the sites has been defined, or will be defined through the data evaluation process being used for this aggregate area.

Additional Field Notes:

Provide additional field notes on the site setting and potential ecological receptors. **AOC 39-002(b)** – Former storage area. Concrete and asphalt paved area immediately next to building. Minimal habitat.

G4-2.3 Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

<u>Question A:</u>

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): Unlikely

Provide explanation: Volatile organic compounds (VOCs) were detected. Most of the detected concentrations were below or similar to the estimated quantitation limits.

<u>Question B:</u>

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: Some chemicals of potential concern (COPCs) were detected in the surface interval.

<u>Question C:</u>

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 whether aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: No aquatic communities are present in the aggregate area or in close proximity.

<u>**Question D:**</u>

Is contaminated groundwater potentially available to biological receptors through seeps, springs, or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential exists 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: A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs. Intermediate groundwater may exist in some areas at a depth of more than 50 ft bgs. There No seeps or springs are in the vicinity of the sites being investigated.

<u>**Question E:**</u>

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential exists for contaminants to migrate to groundwater.**
- **The potential exists 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: A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs. Intermediate groundwater may exist in some areas at depths of more than 50 ft bgs. No seeps or springs are in the vicinity of the sites being investigated.

<u>**Question F:**</u>

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 erodibility of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: The sites under investigation are located at the bottom of the canyon, so mass wasting is not relevant. The sites show minimal evidence of erosion.

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:** 1

Provide explanation: VOCs were detected but at low concentrations. Much of the areal extent was hardpacked, graveled, or paved. Presence of burrows was not observed within the boundaries of the SWMUs or AOCs.

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: 3

Terrestrial Animals: 3

Provide explanation: Surface soil contamination may be present at each site.

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 is 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: 3

Provide explanation: Surface soil contamination is present.

<u>Question J:</u>

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: 3

Provide explanation: COPCs are present in the surface soil.

<u>Question K:</u>

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 groom themselves clean of soil.**

Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):

Terrestrial Animals: 3

Provide explanation: COPCs are present in the surface soil.

<u>Question L:</u>

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: Low to moderate concentrations of lipophilic COPCs were detected in surface soil at selected sites.

<u>Question M:</u>

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: Some radionuclides were identified as COPCs but not at all locations.

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: No water or sediment with aquatic pathways is present.

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: No water or sediment with aquatic pathways is present.

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: No water or sediment with aquatic pathways is present.

<u>**Question Q:**</u>

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: No water or sediment with aquatic pathways is present.

<u>**Question R:**</u>

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: No water or sediment with aquatic pathways is present.

<u>**Question S:**</u>

Could contaminants bioconcentrate in free-floating aquatic plants, 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 is no aquatic habitat at the sites.

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 is no aquatic habitat at the sites.

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 is no aquatic habitat at the sites.

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

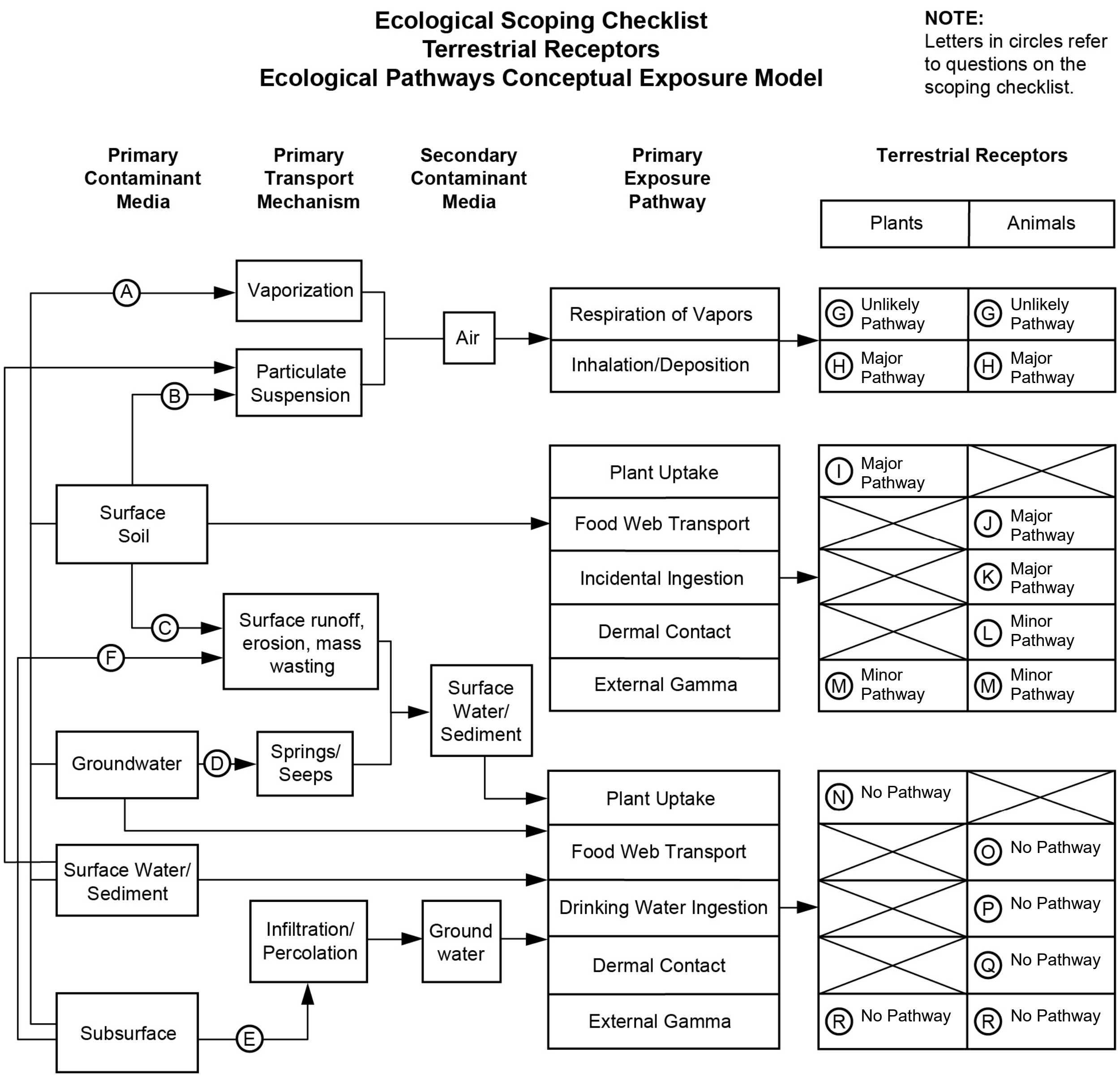
- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment-dwelling organisms.**

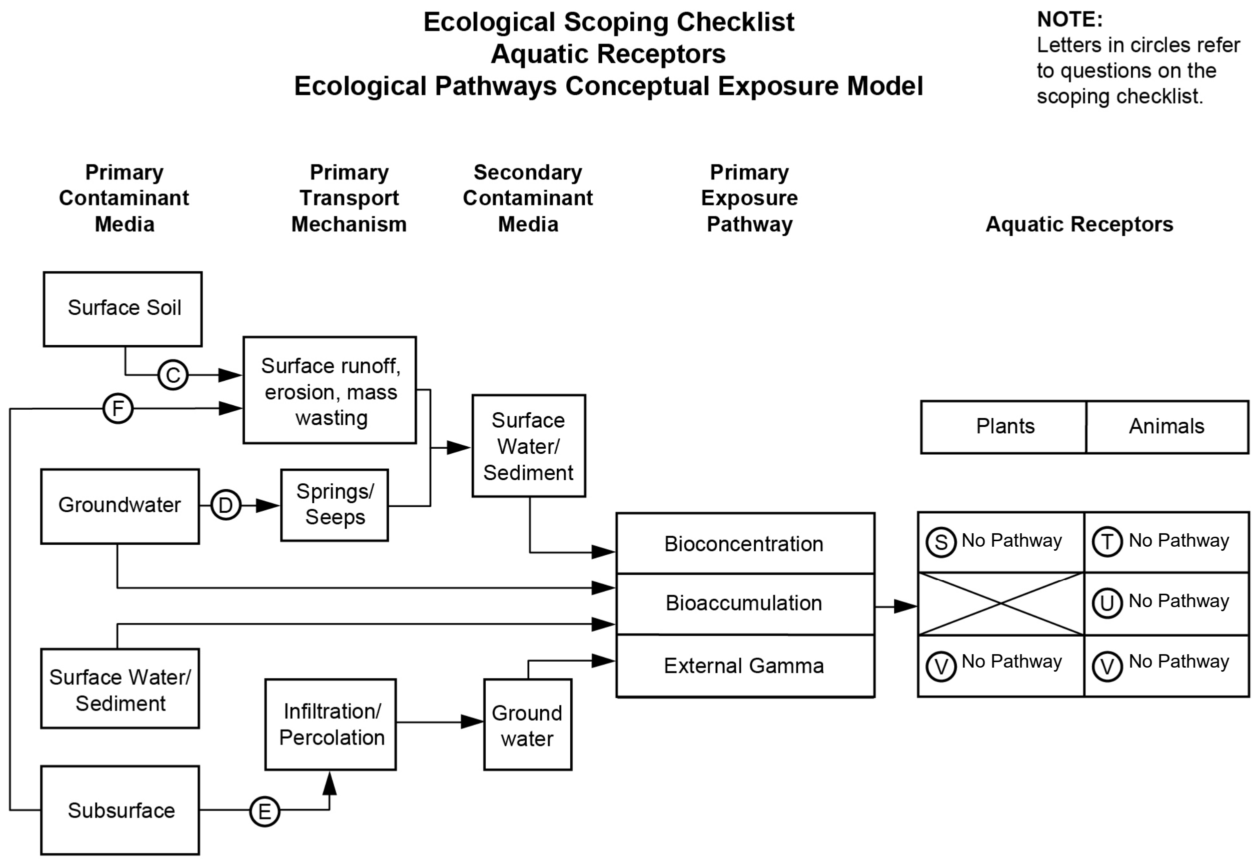
Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):

Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There is no aquatic habitat at the sites.


Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model
NOTE:
Letters in circles refer to questions on the scoping checklist.
Primary Contaminant Media
Primary Transport Mechanism
Secondary Contaminant Media
Primary Exposure Pathway
Terrestrial Receptors
Plants
Animals
A
Vaporization
Particulate Suspension
B
Air
Respiration of Vapors
Inhalation/Deposition
G Unlikely Pathway
G Unlikely Pathway
H Major Pathway
H Major Pathway
Surface Soil
Plant Uptake
Food Web Transport
Incidental Ingestion
Dermal Contact
External Gamma
I Major Pathway
J Major Pathway
K Major Pathway
L Minor Pathway
M Minor Pathway
M Minor Pathway
C
Surface runoff, erosion, mass wasting
F
Surface Water/ Sediment
Groundwater
D
Springs/ Seeps
Surface Water/ Sediment
Infiltration/ Percolation
Ground water
Subsurface
E
Plant Uptake
Food Web Transport
Drinking Water Ingestion
Dermal Contact
External Gamma
N No Pathway
O No Pathway
P No Pathway
Q No Pathway
R No Pathway
R No Pathway


Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model
NOTE:
Letters in circles refer to questions on the scoping checklist.
Primary Contaminant Media
Primary Transport Mechanism
Secondary Contaminant Media
Primary Exposure Pathway
Aquatic Receptors
Surface Soil
C
F
Surface runoff, erosion, mass wasting
Surface Water/ Sediment
Plants
Animals
Groundwater
D
Springs/ Seeps
Bioconcentration
Bioaccumulation
External Gamma
S No Pathway
T No Pathway
U No Pathway
V No Pathway
V No Pathway
Surface Water/ Sediment
Infiltration/ Percolation
Ground water
Subsurface
E

SIGNATURES AND CERTIFICATION

Checklist completed by:

Name (printed): Thomas Henry Wood/Carolyn Fordham

Name (signature): Thomas Henry Wood Digitally signed by Thomas Henry Wood Date: 2023.07.28 12:42:13 -06'00'

Organization: North Wind Site Services and TerranearPMC (TPMC)

Date completed: 11/9/2022

Checklist reviewed by:

Name (printed): Patricia Wald-Hopkins

Name (signature): Patricia Wald-Hopkins Digitally signed by Patricia Wald-Hopkins Date: 2023.07.28 14:06:44 -06'00'

Organization: Newport News Nuclear BWXT-Los Alamos, LLC (N3B)

Date reviewed: 6/22/2023

G4-3.0 SWMUS 39-002(A) AREA 1, 39-002(A) AREA 2, 39-002(A) AREA 3, 39-007(A), AND 39-010

G4-3.1 Part A—Scoping Meeting Documentation

Site IDs	Solid Waste Management Units (SWMUs) 39-002(a) Area 1, 39-002(a) Area 2, 39-002(a) Area 3, 39-007(a), 39-010.
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.	The Phase II Investigation addresses 8 sites in Technical Area (TA-39) located in North Ancho Canyon Aggregate Area. A summary of operational information for sites 39-002(a) Area 1, 39-002(a) Area 2, 39-002(a) Area 3, 39-007(a), and 39-010 is provided below. **SWMU 39-002(a) Area 1** is a former unpaved, outdoor storage area and satellite accumulation area (SAA) next to the northwest corner of building 39-2. The site measured approximately 25 × 30 ft and was used for storage for approximately 10 yr before being registered as an SAA (LANL 2007, 098281). A 30-gal. drum with small quantities of solvents (acetone and ethanol) and adhesives, along with rags and paper wipes contaminated with solvents or adhesives was stored at the site. The area was also used to store lead-containing materials and damaged capacitors and transformers that may have contained PCBs. This SAA was removed from service in April 1993. **SWMU 39-002(a) Area 2** is a former indoor SAA located in room 18-A of former building 39-2 that was used for storing waste chemicals from photographic processing. The building that previously housed Area 2 was demolished. **SWMU 39-002(a) Area 3** is a former outdoor SAA and holding/ receiving area that was located on the asphalt driveway at the north end of the loading dock on the southeast side of former building 39-2, and measured approximately 5 ft wide × 5 ft long. **SWMU 39-007(a)** is the location of a former storage area on a concrete pad under a covered porch outside the east side of an equipment shelter (structure 39-63). The dates of operation of the storage area are not known. Used oil that contained lead and solvents was stored at this area. The area around the concrete pad is relatively flat but slopes eastward to a drainage near the adjacent road. A portion of the site was remediated during a 1995 voluntary corrective action to remove PCB-contaminated soil (LANL 1996, 053786). **SWMU 39-010** is an area used for staging soil excavated during the 1978 construction of a firing site at TA-39. During construction of the firing site, large quantities of soil were removed and deposited in the canyon east of the firing site, forming SWMU 39-010 (LANL 1993, 015316). The site has been inactive since 1978.
Form of site releases (cont.)	**Surface soil –** X **Surface water/sediment –** NA **Subsurface –** X **Groundwater –** NA **Other, explain –** NA

List of Primary Impacted Media **(Indicate all that apply.)**	**Water** – NA **Bare ground/unvegetated** – X **Spruce/fir/aspen/mixed conifer** – NA **Ponderosa pine –** X **Piñon juniper/juniper savannah** – X **Grassland/shrubland** – X **Developed** – X **Burned –** NA
Vegetation Class Based on GIS Vegetation Coverage **(Indicate all that apply.)**	Ponderosa pine woodland, juniper woodland, non-forested riparian, and developed areas.
Is T&E habitat present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	No. The North Ancho Canyon Aggregate Area lies outside of the mapped threatened and endangered (T&E) species core or buffer habitats (LANL 2017, 701039).
Provide list of neighboring/ contiguous/upgradient sites, include a brief summary of COPCs and the form of releases for relevant sites, and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	The North Ancho Canyon Aggregate Area includes sites only located in TA-39. The activities and types of contaminants overlap greatly across TA-39 and, therefore, the ecological exposure pathways are discussed for the entire collection of sites in the North Ancho Canyon Aggregate Area.
Surface Water Erosion Potential Information	Surface water erosion potential is based on site observations.

G4-3.2 Part B—Site Visit Documentation

Site ID	SWMUs 39-002(a) Area 1, 39-002(a) Area 2, 39-002(a) Area 3, 39-007(a), 39-010.
Date of Site Visit	11/09/2019
Site Visit Conducted by	Henry Wood, North Wind Site Services and Carolyn Fordham, TerranearPMC (TPMC)

Receptor Information:

Estimate cover	**Relative vegetative cover (high, medium, low, none)** = None to High **Relative wetland cover (high, medium, low, none)** = None **Relative structures/asphalt, etc., cover (high, medium, low, none)** = None to High
Field Notes on the GIS Vegetation Class to Assist in Verifying the Arcview Information	North Ancho Canyon Aggregate Area includes areas that are still active and some that are inactive or decommissioned. There is, in general, a medium relative vegetative cover across the sites. The aggregate area includes piñon-juniper woodland, ponderosa pine woodland, shrubs, and grasses.
Are ecological receptors present at the site (yes/no/uncertain)? **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	Yes. Terrestrial receptors, including mammals and birds, are present at the vegetated sites and could use the areas for both foraging and nesting. The site visit occurred in late fall when the vegetation was dormant. Some animal tracks (deer, coyote) were noted in the arroyo. Song birds were plentiful. A chipmunk was observed at site SWMU 39-010. Only terrestrial habitats and species were observed. No wetland vegetation was noted.

Contaminant Transport Information:

Surface Water Transport/Field Notes on the Erosion Potential, Including a Discussion of the Terminal Point of Surface Water Transport (if applicable)	The topography at these sites is relatively flat and no evidence of significant erosional areas were noted. Any erosion from the sites within the North Ancho Canyon Aggregate Area would migrate toward and eventually flow down the arroyo located generally in the center of the canyon. There are some drainage areas including storm water barriers located proximal to several of the sites. Some sites were flat and paved with little to no potential for runoff.
Are there any off-site transport pathways (surface water, air, or groundwater) (yes/no/uncertain)? Provide explanation.	Yes. There may be some air dispersion when the area is dry, but it is a minor transport pathway. A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs to the aquifer. Intermediate groundwater may exist in some areas at depths of more than 50 ft bgs. Surface water run-on to the sites and runoff leaving the sites would migrate toward and eventually flow down the arroyo located generally in the center of the canyon.

Ecological Effects Information:

Physical Disturbance (Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.)	Many of the sites in the North Ancho Canyon Aggregate Area are on developed land and have been disturbed in the past. A few sites remain under asphalt or concrete pads.
Are there obvious ecological effects (yes/no/uncertain)? Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).	No obvious ecological effects were noted during the site visit.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors on-site 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.
Not applicable

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination (yes/ no/uncertain)? **Provide explanation (consider whether the maximum value was captured by existing sample data).**	Yes. The sampling approach in the approved Phase II investigation work plan (LANL 2011, 201561; NMED 2010, 108675) included biased sampling to determine the nature and extent of contamination at the sites being investigated.
Do existing or proposed data for the site address potential transport pathways of site contamination (yes/no/uncertain)? **Provide explanation (consider whether other sites should be aggregated to characterize potential ecological risk).**	Yes. Existing and planned data from samples collected within the SWMUs and AOCs address potential transport pathways and characterize the potential ecological risk. The results indicate that the nature and extent of contamination at the sites has been defined, or will be defined through the data evaluation process being used for this aggregate area.

Additional Field Notes:

Provide additional field notes on the site setting and potential ecological receptors.
SWMU 39-002(a) Area 1 – Former storage area that is now bare ground, gravel, and limited grasses immediately adjacent to building. Minimal ecological habitat.
SWMU 39-002(a) Area 2 – Laydown area consisting of bare ground, gravel, and limited grasses. Minimal ecological habitat.
SWMU 39-002(a) Area 3 – Small area in the center of a paved asphalt drive. Minimal ecological habitat.
SWMU 33-007(a) – Former storage area next to an equipment shed and road. Ponderosa pine, juniper, and grasses surround the site. The sampling area is sparsely vegetated with grasses and shrubs.
SWMU 39-010 – Former soil stockpile area is positioned between the paved road and the arroyo. The area is classified as a riparian area and is heavily vegetated with grasses, shrubs, and trees (Juniper spp. and ponderosa pine). Reportedly, this area is very green during the growing season, indicating it is likely an important local foraging area. No wetland vegetation was identified during the site reconnaissance. Many song birds and one chipmunk were noted.

G4-3.3 Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

<u>Question A:</u>

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): Unlikely

Provide explanation: Volatile organic compounds (VOCs) were detected. Most of the detected concentrations were below or similar to the estimated quantitation limits.

<u>Question B:</u>

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: Some chemicals of potential concern (COPCs) were detected in the surface interval.

<u>Question C:</u>

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 whether aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: No aquatic communities are present in the aggregate area or in close proximity.

<u>Question D:</u>

Is contaminated groundwater potentially available to biological receptors through seeps, springs, or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential exists 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: A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs. Intermediate groundwater may exist in some areas at depths of more than 50 ft bgs. No seeps or springs are in the vicinity of the sites being investigated.

<u>**Question E:**</u>

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential exists for contaminants to migrate to groundwater.**
- **The potential exists 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: A pathway to groundwater is unlikely because regional groundwater is greater than 300 ft bgs. Intermediate groundwater may exist in some areas at a depth of more than 50 ft bgs. No seeps or springs are in the vicinity of the sites being investigated.

<u>**Question F:**</u>

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 erodibility of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: The sites under investigation are located at the bottom of the canyon, so mass wasting is not relevant. The sites show minimal evidence of erosion.

<u>**Question G:**</u>

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:** 1

Provide explanation: VOCs were detected but at low concentrations. Much of the areal extent was hardpacked, graveled, or paved. Presence of burrows was not observed within the SWMUs/AOC boundaries.

<u>Question H:</u>

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: 3

Terrestrial Animals: 3

Provide explanation: Surface soil contamination may be present at each site.

<u>Question I:</u>

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 is 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: 3

Provide explanation: Surface soil contamination is present.

<u>Question J:</u>

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: 3

Provide explanation: COPCs are present in the surface soil.

<u>Question K:</u>

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 groom themselves clean of soil.**

Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):

Terrestrial Animals: 3

Provide explanation: COPCs are present in the surface soil.

<u>Question L:</u>

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: Low to moderate concentrations of lipophilic COPCs were detected in surface soil at select sites.

<u>Question M:</u>

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: Some radionuclides were identified as COPCs but not at all locations.

<u>Question N:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question O:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question P:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question Q:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question R:</u>

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: No water or sediment with aquatic pathways is present.

<u>Question S:</u>

Could contaminants bioconcentrate in free-floating aquatic plants, 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 is no aquatic habitat at the sites.

<u>Question T:</u>

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 is no aquatic habitat at the sites.

<u>Question U:</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 is no aquatic habitat at the sites.

<u>Question V:</u>

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):

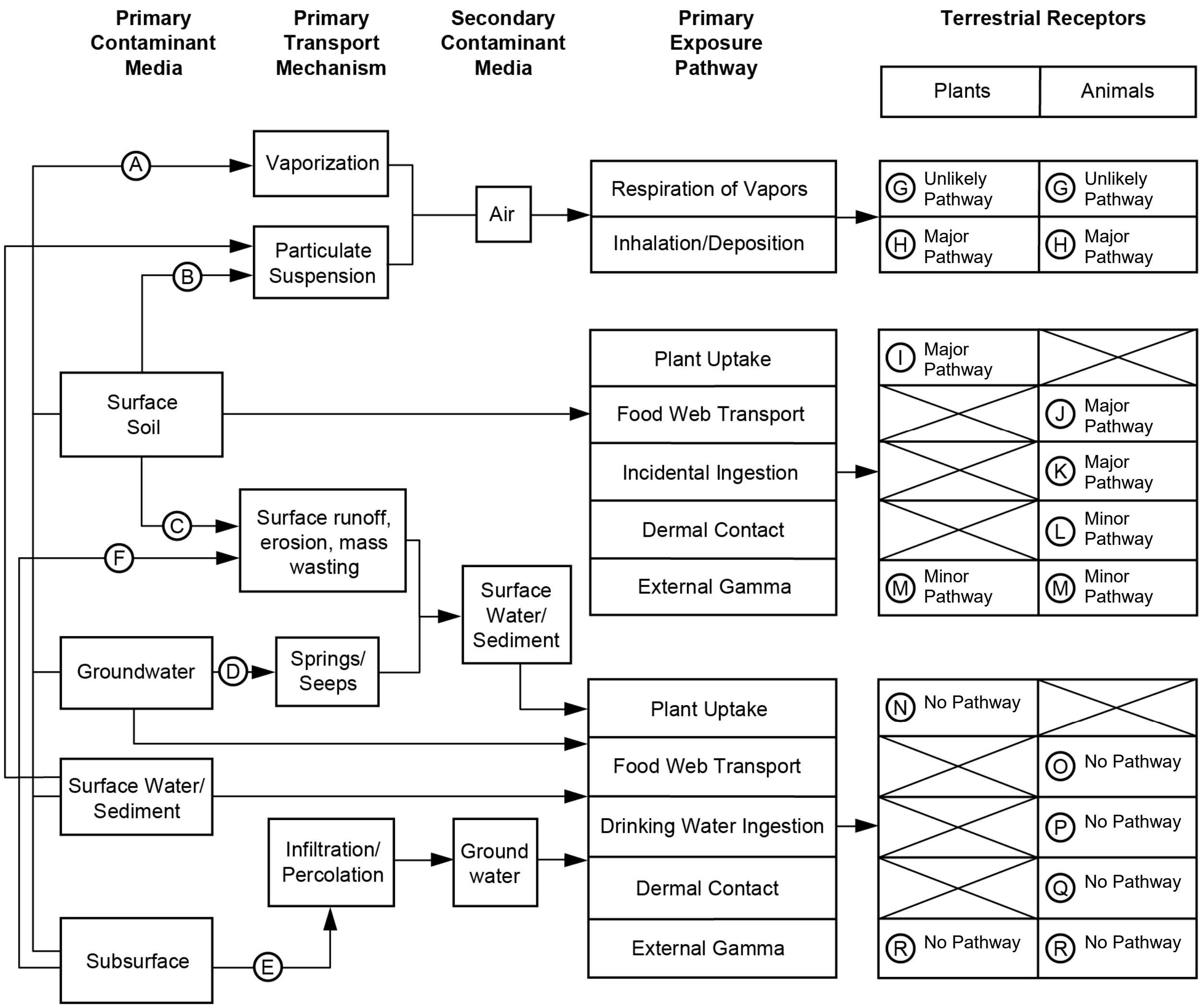
Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There is no aquatic habitat at the sites.

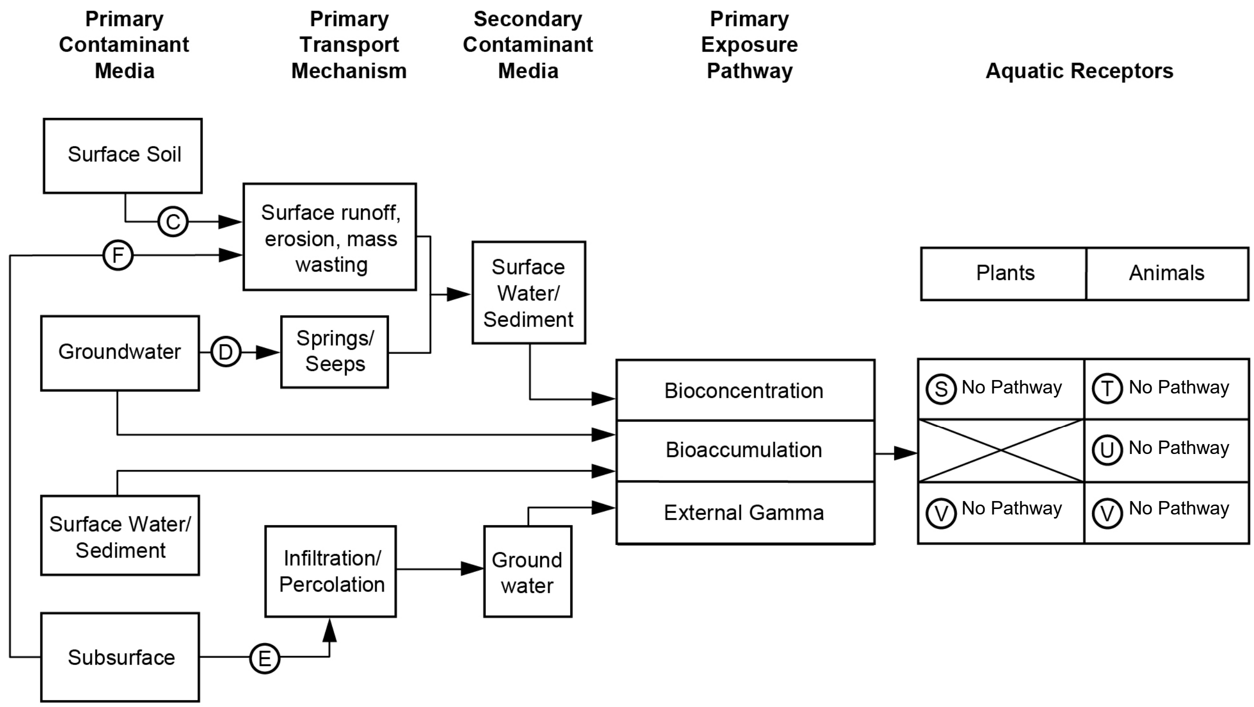
Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions on the scoping checklist.



Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions on the scoping checklist.



SIGNATURES AND CERTIFICATION

Checklist completed by:

Name (printed): Thomas Henry Wood/Carolyn Fordham

Name (signature): Thomas Henry Wood Digitally signed by Thomas Henry Wood Date: 2023.07.28 12:42:32 -06'00'

Organization: North Wind Site Services and TerranearPMC (TPMC)

Date completed: 11/9/2022

Checklist reviewed by:

Name (printed): Patricia Wald-Hopkins

Name (signature): Patricia Wald-Hopkins Digitally signed by Patricia Wald-Hopkins Date: 2023.07.28 14:07:06 -06'00'

Organization: Newport News Nuclear BWXT-Los Alamos, LLC (N3B)

Date reviewed: 6/22/23

G4-4.0 REFERENCES

The following reference list includes documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. ERIDs were assigned by Los Alamos National Laboratory's (the Laboratory's) Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory's Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B (IDs 700000 and above).

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