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Phase II Investigation Work Plan for North Ancho Canyon Aggregate Area, Revision 1

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Prepared by the Environmental Programs Directorate

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March 2011

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EXECUTIVE SUMMARY

The North Ancho Canyon Aggregate Area includes a total of 44 solid waste management units (SWMUs) and areas of concern (AOCs) located in Technical Area 39 (TA-39) and TA-49 at Los Alamos National Laboratory. Of the 26 sites located in TA-39, 20 have been previously investigated and/or remediated, deferred, delayed, or approved for no further action or corrective action complete. This Phase II investigation work plan identifies and describes the activities needed to complete the investigation and/or remediation of the remaining five SWMUs [SWMUs 39-001(a); 39-002(a), Area 1; 39-006(a), inactive components; 39-007(a); and 39-010] and one AOC [AOC 39-002(b)]. This Phase II investigation work plan also includes the abandonment of 5 shallow wells and 12 angled boreholes at SWMUs 39-001(a) and 39-001(b), and final removal of remaining waste and contaminated media at SWMUs 39-001(a) and 39-001(b).

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1.0 INTRODUCTION

Los Alamos National Laboratory (LANL or the Laboratory) is a multidisciplinary research facility owned by the U.S. Department of Energy (DOE) and managed by Los Alamos National Security, LLC. The Laboratory is located in north-central New Mexico approximately 60 mi northeast of Albuquerque and 20 mi northwest of Santa Fe. The Laboratory site covers 40 mi^2 of the Pajarito Plateau, which consists of a series of fingerlike mesas separated by deep canyons containing perennial and intermittent streams running from west to east. Mesa tops range in elevation from approximately 7200 to 7800 ft above mean sea level.

The Laboratory is participating in a national effort by DOE to clean up sites and facilities formerly involved in weapons research and development. The goal of the Laboratory'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 this Phase II investigation work plan are potentially contaminated with both hazardous and radioactive components. Corrective actions at the Laboratory are subject to a Compliance Order on Consent (the Consent Order). Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to the New Mexico Environment Department (NMED) in accordance with DOE policy.

1.1 Work Plan Overview

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 (Figure 1.1-1). 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, 098281) and the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675). 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 (Figure 1.1-2). The status of the remaining six sites at TA-39 is referenced in Table 1.1-1. This 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).

Section 2 provides summaries of previous investigations and data collected and presents the scope of proposed activities for each site. Section 3 describes investigation methods for proposed field activities. Ongoing monitoring and sampling programs in the North Ancho Canyon Aggregate Area are summarized in section 4. Section 5 is an overview of the anticipated schedule of the investigation and reporting activities. The references cited in this Phase II work plan and the map data sources are provided in section 6. Appendix A of this work plan includes a list of acronyms and abbreviations, a metric conversion table, and a data qualifier definitions table. Appendix B describes the management of investigation-derived waste (IDW). Appendix C provides photographs of the pad and transportainers, which were installed at SWMU 39-002(a), Area 1 since the 2009 investigation. Appendix D (on CD included with this document) contains analytical data for samples analyzed since the investigation report was submitted (LANL 2010, 108500.11). Appendix E (on CD included with this document) provides information on the management of wastes generated during cleanup of SWMUs 39-001(a) and 39-001(b), including waste profiles, waste characterization strategy forms (WCSFs), and summaries of waste shipments.

1.2 Work Plan Objectives

The objectives of this work plan are to

- complete the determination of the extent of contamination at five sites [SWMUs 39-001(a); 39-006(a), inactive components; 39-007(a); and 39-010 and AOC 39-002(b)];
- plug and abandon shallow wells and angled boreholes at SWMUs 39-001(a) and 39-001(b); and
- remove waste and contaminated environmental media at SWMUs 39-001(a), 39-001(b), and 39-007(a).

SWMU 39-002(a), Area 1 is not accessible for additional sampling or soil removal because of placement of a pad and transportainers at the site (Appendix C). Site characterization and remediation are therefore proposed to be delayed until decontamination and decommissioning (D&D).

To accomplish these objectives, this work plan

- presents summaries of site background and current site conditions;
- describes the scope of activities proposed for each site based on recommendations in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675);
- identifies appropriate methods and protocols for collecting, analyzing, and evaluating data to finalize characterization of these sites;
- identifies appropriate methods and protocols for remediating select sites; and
- provides a proposed schedule for conducting the investigation and remediation activities and reporting the results.

1.3 Cleanup Levels

As specified in section VIII.B.1 of the Consent Order, NMED soil screening levels (SSLs) (NMED 2009, 108070) will be used as soil cleanup levels for inorganic and organic chemicals unless they are determined to be impractical or unless values do not exist for the current and reasonably foreseeable future land use scenarios. In some cases where NMED SSLs do not exist, U.S. Environmental Protection Agency (EPA) regional screening values are used. The Consent Order also specifies a default cleanup level of 1 mg/kg for polychlorinated biphenyls (PCBs) if risk-based cleanup levels are not used. The Laboratory screening action levels (SALs) (LANL 2009, 107655) will be used as soil cleanup levels for radionuclides. The approval of an area of contamination designation for North Ancho Canyon Aggregate Area sites requires that soil not be returned to the point of origin unless contaminant concentrations are less than residential cleanup levels (NMED 2008, 104332). Based on this requirement, all surface soil at SWMUs 39-001(a) and 39-001(b) where remediation wastes were staged cannot contain contamination in excess of residential SSLs or the PCB cleanup level.

1.4 Site Conditions

Surface and subsurface features and geologic characteristics of the North Ancho Canyon Aggregate Area are described in detail in the approved investigation work plan (LANL 2007, 101894; NMED 2007, 098948). Conditions at the sites included in this Phase II investigation work plan are predominantly influenced by

- a semiarid climate with low precipitation and a high evapotranspiration rate that limits the extent of subsurface moisture percolation and therefore the amount of moisture available to transport radionuclides or hazardous waste constituents in the subsurface

- a thick, relatively dry unsaturated (vadose) zone that greatly restricts or prevents downward migration of contaminants to the regional aquifer.

Topographically, the area consists of the alluvial floodplain and hill slopes of North Ancho Creek, which is an ephemeral stream, and its tributary drainages. The North Ancho Canyon Aggregate Area is primarily composed of firing sites for testing of high explosives and associated support facilities and waste disposal areas. Active facilities 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.

These and other elements of the environmental setting in the North Ancho Canyon Aggregate Area are considered when evaluating investigation data with respect to the fate and transport of contaminants.

2.0 SITE DESCRIPTIONS AND PROPOSED INVESTIGATION ACTIVITIES

This section presents a brief description and operational history, summary of the nature and extent of contamination, and proposed investigation activities for each site within the North Ancho Canyon Aggregate Area requiring additional investigation. More complete descriptions of the sites and previous investigations are presented 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). Additional sampling proposed in this section is based upon recommendations made in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675). In addition, this section provides proposed abandonment activities for shallow wells and angled boreholes in TA-39, and final cleanup activities for the areas at SWMUs 39-001(a) and 39-001(b) where remediation wastes were stockpiled and handled.

2.1 SWMU 39-001(a), Inactive Landfill

2.1.1 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 (Figure 2.1-1). The 1990 SWMU report identified the site as consisting of two 80- × 20- × 10-ft-deep rectangular 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).

2.1.2 Nature and Extent of Contamination

Based on the data presented in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675), the vertical extent of contamination is not defined at SWMU 39-001(a) for the following:

- mercury at sample locations 39-01387 and 39-604362
- Aroclor-1242 at sample locations 39-604349 and AN-607964, and Aroclor-1254 at sample locations 39-608121 and 39-01387
- uranium-238 at sample location 39-604362.

The lateral and vertical extent of all other inorganic chemicals, organic chemicals, and radionuclides are defined for the site. Samples collected during previous investigations and analyses requested are presented in Table 2.1-1. Decision-level data for inorganic chemicals, organic chemicals, and radionuclides at SWMU 39-001(a) are presented in Tables 2.1-2 through 2.1-4, respectively. Sampling locations and results for inorganic chemicals detected above background values (BVs), detected organic

chemicals, and radionuclides detected or detected above BVs/fallout values (FVs) are shown in Figures 2.1-2 through 2.1-4, respectively.

2.1.3 Proposed Activities at SWMU 39-001(a)

Subsurface samples will 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 ft below and one depth interval 10 ft below the deepest interval previously sampled at these five sample locations. Samples at SWMU 39-001(a) will be analyzed as follows:

- Samples collected from location 39-01387 will be analyzed for mercury and PCBs.
- Samples collected from location 39-604362 will be analyzed for mercury and isotopic uranium.
- Samples collected from locations 39-604349, 39-608121, and AN-607964 will be analyzed for PCBs.

Proposed sampling locations for SWMU 39-001(a) are shown in Figure 2.1-5. Table 2.1-5 summarizes proposed sampling locations, depths, and analytical suites.

2.2 SWMU 39-002(a), Area 1, Storage Area

2.2.1 Site Description and Operational History

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 at TA-39 (Figure 2.2-1). 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.

2.2.2 Nature and Extent of Contamination

Based on the data presented in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675), the vertical extent is not defined at SWMU 39-002(a), Area 1 for the following:

- mercury at sample locations 39-604813 and 39-01496
- zinc at sample location 39-604813
- copper, lead, and Aroclor-1254 at sample location 39-604815.

The potential risk at SWMU 39-002(a), Area 1 exceeds the NMED target risk level of 1×10^{-5} (NMED 2009, 108070) for the industrial and residential scenarios as a result of benzo(a)pyrene exceeding the industrial and residential SSLs. Additionally, dibenz[a,h]anthracene exceeds the residential SSL at one location.

Samples collected during previous investigations and analyses requested are presented in Table 2.2-1. Decision-level data for inorganic chemicals, organic chemicals, and radionuclides at SWMU 39-002(a), Area 1 are presented in Tables 2.2-2 through 2.2-4, respectively. Sampling locations and results for inorganic chemicals detected above BVs, detected organic chemicals, and radionuclides detected or detected above BVs/FVs are shown in Figure 2.2-2, on Plate 1, and in Figure 2.2-3, respectively.

2.2.3 Delayed Site Investigation Rationale, SWMU 39-002(a), Area 1

The approved investigation report proposed additional sampling to define vertical extent at three sample locations and the removal of the upper 1 ft of soil from a 2-ft radius around six sampling locations where benzo(a)pyrene exceeded industrial SSLs at SWMU 39-002(a), Area 1 (LANL 2010, 108500.11; NMED 2010, 108675). Since the completion of the investigation activities, SWMU 39-002(a), Area 1 has been leveled and covered with a pad consisting of 0.5 to 1.0 ft of compacted base course material. In addition, two large transportainers were placed on the new pad in support of facility operations in buildings 39-2 and 39-62 (see photographs in Appendix C). The site is, therefore, not accessible for additional sampling or soil removal at this time. The residual contamination is located beneath the pad and transportainers, effectively preventing exposure to receptors and contact with infiltrating precipitation that could cause migration of contaminants. For these reasons, site characterization and remediation are proposed to be delayed until operations have ceased and D&D of the new pad and adjacent buildings 39-2 and 39-62 have been completed.

2.3 AOC 39-002(b), Former Storage Area

2.3.1 Site Description and Operational History

AOC 39-002(b) is the former location of an 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 (Figure 2.3-1). 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.

2.3.2 Nature and Extent of Contamination

AOC 39-002(b) was proposed for investigation in the approved work plan (LANL 2007, 101894; NMED 2007, 098948). However, the proposed investigation activities could not be implemented because of ongoing activities at the site (LANL 2010, 108500.11). No decision-level data are available for the site.

2.3.3 Proposed Activities at AOC 39-002(b)

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 below ground surface [bgs]) at two sample locations (2b-1 and 2b-2) adjacent to the east side of the concrete pad and at two sample locations downgradient of the pad (2b-3 and 2b-4) along the access road east of the site. All samples will be analyzed for pH, target analyte list (TAL) metals, cyanide, nitrate, perchlorate, explosive compounds, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), PCBs, dioxins and furans, isotopic plutonium, isotopic uranium, americium-241, tritium, and gamma-emitting radionuclides. The proposed analyses are the same as originally presented in the approved work plan (LANL 2007, 101894). Proposed sampling locations for AOC 39-002(b) are shown in Figure 2.3-2. Table 2.3-1 summarizes the proposed sampling locations, depths, and analytical suites.

2.4 SWMU 39-006(a), Septic System—Inactive Components

2.4.1 Site Description and Operational History

SWMU 39-006(a) consists of a septic system with inactive and active components located east and south of building 39-2 at TA-39 (Figure 2.4-1). 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 drainlines, 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 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 drainline was rerouted through the abandoned septic tank to a new 2500-gal. concrete septic tank (structure 39-104), which discharged via a drainline 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 drainlines 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).

Photographic processing chemicals from building 39-2 were routinely discharged to former septic tank 39-12, eventually causing the septic tank to malfunction. To correct the problem, a 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 12.0 ft deep and filled with cobble. A corrugated metal pipe approximately 1 ft in diameter runs vertically through the center of the seepage pit (LANL 2007, 098281). The inactive septic tank (former structure 39-12), inactive chemical seepage pit, and the original sand filter were removed during 2009 field activities.

2.4.2 Nature and Extent of Contamination

Based on the data presented in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675), the lateral and vertical extent of inorganic chemicals, organic chemicals, and radionuclides are not defined at several sample locations in the following areas:

Former Chemical Seepage Pit

- Vertical extent of cadmium and silver are not defined at sample locations 39-604868 and 39-604872.
- Vertical extent of cyanide is not defined at sample locations 39-604869 and 39-604871.
- Vertical extent of tritium is not defined at sample location 39-604872.

Former Septic Tank

- Vertical extent of cyanide is not defined at sample location 39-604877.
- Lateral extent of tritium is not defined at sample locations 39-604874 and 39-604877.

Former Sand Filter

- Lateral and vertical extents of silver are not defined at sample locations 39-604887 and 39-604888.
- Lateral and vertical extents of cyanide are not defined at sample locations 39-604885, 39-604887, and 39-604888.
- Vertical extent of perchlorate is not defined at sample location 39-604892.
- Lateral and vertical extents of Aroclor-1254 are not defined at sample locations 39-604887 and 39-604888.

- Lateral extent of tritium is not defined at sample location 39-604883.
- Lateral extent of cyanide and tritium is not defined at sample location 39-604893.

The extent of all other inorganic chemicals, organic chemicals, and radionuclides is defined. Samples collected and analyses requested during previous investigations are presented in Table 2.4-1. Decision-level data for inorganic chemicals, organic chemicals, and radionuclides at SWMU 39-006(a) inactive components are presented in Tables 2.4-2 through 2.4-4, respectively. Sampling locations and results for inorganic chemicals detected above BVs, detected organic chemicals, and radionuclides detected or detected above BVs/FVs are shown in Figures 2.4-2 through 2.4-4, respectively.

2.4.3 Proposed Activities at SWMU 39-006(a)

At the inactive chemical seepage pit, subsurface samples will be collected at four previously sampled locations (locations 39-604868, 39-604869, 39-604871, and 39-604872), 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 four sample locations. Samples from the inactive seepage pit at SWMU 39-006(a) will be analyzed as follows:

- Samples collected from location 39-604868 will be analyzed for cadmium and silver.
- Samples collected from location 39-604872 will be analyzed for cadmium, silver, and tritium.
- Samples collected from locations 39-604869 and 39-604871 will be analyzed for cyanide.

At the former septic tank location, subsurface samples will be collected at one previously sampled location (location 39-604877), extending the depth at this sample location to define the vertical extent of cyanide. 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 sample location 39-604877. Both samples will be analyzed for cyanide.

Samples will also be collected at three new locations (6a-1, 6a-2, and 6a-3) to define the lateral extent of tritium around the former septic tank location. Sample locations will be 2.0 ft outside of the 2009 septic tank excavation area to the west, east, and south. Samples will be collected at depths of 9.0 to 10.0 ft and 15.0 to 16.0 ft bgs and analyzed for tritium.

At the former sand filter location, subsurface samples will be collected at four previously sampled locations (39-604885, 39-604887, 39-604888, and 39-604892), 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 four sample locations. Samples from the former sand filter location at SWMU 39-006(a) will be analyzed as follows:

- Samples collected from location 39-604885 will be analyzed for cyanide.
- Samples collected from locations 39-604887 and 39-604888 will be analyzed for cyanide, silver, and PCBs.
- Samples collected from location 39-604892 will be analyzed for perchlorate.

Samples will also be collected at six new locations (6a-4 through 6a-9) around the former sand filter location to define lateral extent for silver, cyanide, Aroclor-1254, and tritium. Each of the six new sample locations will step out approximately 10.0 ft from sample locations 39-604883, 39-604885, 39-604886, 39-604887, 39-604888, 39-604891, and 39-604893. Samples from all lateral extent sample locations will

be collected outside the 2009 excavation area. Step out samples will be collected at depths of 3.0 to 4.0 ft and 9.0 to 10.0 ft bgs. Samples collected north and west (6a-4, 6a-5, and 6a-6) of the former sand filter location will be analyzed for silver, cyanide, and PCBs. The samples collected south of the former sand filter location (6a-7) will be analyzed for silver and cyanide. The samples collected southeast of location 39-604883 (6a-8) will be analyzed for tritium. The samples collected near the northeast corner of the former sand filter location (6a-9) will be analyzed for cyanide and tritium. Proposed sampling locations for SWMU 39-006(a) are shown in Figure 2.4-5. Table 2.4-5 summarizes the proposed sampling locations, depths, and analytical suites.

2.5 SWMU 39-007(a), Former Storage Area

2.5.1 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 2.5-1). 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 voluntary corrective action to remove PCB-contaminated soil (LANL 1996, 053786).

2.5.2 Nature and Extent of Contamination

Lateral and vertical extent of the inorganic chemicals and organic chemicals were defined at SWMU 39-007(a) during the 2009 investigation (LANL 2010, 108500.11). However, industrial and residential SSLs were exceeded for Aroclor-1254 and Aroclor-1260. Samples collected and analyses requested during previous investigations are presented in Table 2.5-1. Decision-level data for inorganic chemicals and organic chemicals at SWMU 39-007(a) are presented in Tables 2.5-2 and 2.5-3, respectively. Sampling locations and results for inorganic chemicals detected above BVs and detected organic chemicals are shown in Figures 2.5-2 and 2.5-3, respectively.

2.5.3 Proposed Activities at SWMU 39-007(a)

The upper 2.0 ft of soil will be removed within a 4-ft radius around sample locations 39-10019 and 39-604854 where Aroclor-1254 and Aroclor-1260 concentrations were detected above 1.0 mg/kg. Following soil removal, confirmation samples will be collected at six new locations (7a-1 to 7a-6) around the outside edge of the excavation to confirm cleanup to less than 1 mg/kg PCBs. Confirmation samples will be collected at depths of 0.0 to 1.0 ft, 2.0 to 3.0 ft, and 4.0 to 5.0 ft bgs. Confirmation samples will also be collected from the bottom of the excavation at sample locations 39-10019 and 39-604854 at depths of 0.0 to 1.0 ft and 2.0 to 3.0 ft below the bottom of the excavation. All samples will be analyzed for PCBs. Proposed sampling locations for SWMU 39-007(a) are shown in Figure 2.5-4. Table 2.5-4 summarizes the proposed sampling locations, depths, and analytical suites.

2.6 SWMU 39-010, Excavated Soil Dump

2.6.1 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 (Figure 2.6-1). 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.

2.6.2 Nature and Extent of Contamination

Based on the data presented in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675), the lateral and vertical extent are not defined at SWMU 39-010 for the following inorganic chemicals, organic chemicals, and radionuclides:

- Vertical extent is not defined for copper at sample locations 39-604426, 39-604433, 39-604439; for lead at sample locations 39-604426, 39-604432, and 39-604433; and for mercury at sample locations 39-604426 and 39-604432.
- Vertical extent is not defined for benzo(a)pyrene at sample location 39-604441; for bis(2-ethylhexyl)phthalate at sample locations 39-604426, 39-604437, and 39-604439; and for 1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) at sample location 39-604426.
- Vertical extent is not defined for di-n-butylphthalate at sample location 39-604437. Note: The investigation report (LANL 2010, 108500.11) correctly states that the lateral extent is defined for di-n-butylphthalate in section 5.18.5.2 but incorrectly states that lateral extent is not defined for di-n-butylphthalate in section 5.18.5.4. Therefore, no additional sampling and analysis for lateral extent of di-n-butylphthalate is proposed.
- Vertical extent is not defined for uranium-234, uranium-235/236, and uranium-238 at nine sample locations across the site (locations 39-604426, 39-604428, 39-604430, 39-604432, 39-604433, 39-604437, 39-604439, 39-604441, and 39-604442), and lateral extent for these radionuclides is not defined at sample locations across the site.
- Vertical extent is not defined for tritium at sample location 39-604428.

The extent of all other inorganic chemicals, organic chemicals, and radionuclides is defined. Samples collected and analyses requested during previous investigations are presented in Table 2.6-1. Decision-level data for inorganic chemicals, organic chemicals, and radionuclides at SWMU 39-010 are presented in Tables 2.6-2 through 2.6-4, respectively. Sampling locations and results for inorganic chemicals detected above BVs, detected organic chemicals, and radionuclides detected or detected above BVs/FVs are shown in Figures 2.6-2 through 2.6-4, respectively.

2.6.3 Proposed Activities at SWMU 39-010

Subsurface samples will be collected at nine previously sampled locations (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. 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. Samples from SWMU 39-010 will be analyzed as follows:

- Samples collected from location 39-604426 will be analyzed for copper, lead, mercury, bis(2-ethylhexyl)phthalate, HMX, and isotopic uranium.
- Samples collected from location 39-604428 will be analyzed for isotopic uranium and tritium.
- Samples collected from locations 39-604430 and 39-604442 will be analyzed for isotopic uranium.
- Samples collected from location 39-604432 will be analyzed for lead, mercury, and isotopic uranium.
- Samples collected from location 39-604433 will be analyzed for copper, lead, and isotopic uranium.

- Samples collected from location 39-604437 will be analyzed for bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and isotopic uranium.
- Samples collected from location 39-604439 will be analyzed for copper, bis(2-ethylhexyl)phthalate, and isotopic uranium.
- Samples collected from location 39-604441 will be analyzed for benzo(a)pyrene and isotopic uranium.

Six new sample locations (10-1 through 10-6) will be sampled to define the lateral extent of uranium-234, uranium-235/236, and uranium-238. The six new sample locations at SWMU 39-010 include one on the west side of the site between Ancho Road and the soil piles (10-1), one on the east side of SWMU 39-010 (10-2), three south of SWMU 39-010 across the alluvial terrace (10-3, 10-4, and 10-5), and one downgradient of the entire site in the main drainage channel (10-6). Samples will be collected at depths of 0.0 to 1.0 ft, 2.0 to 3.0 ft, and 6.0 to 7.0 ft bgs. All 18 samples will be analyzed for isotopic uranium. Proposed sampling locations for SWMU 39-010 are shown in Figure 2.6-5. Table 2.6-5 summarizes the proposed sampling locations, depths, and analytical suites.

2.7 Wells and Boreholes at SWMU 39-001(a)

Three shallow wells (DMB-1, DM-2, and DM-4) and four angled boreholes (ASC-0, ASC-2, ASC-3, and ASC-4) were installed at SWMU 39-001(a) in 1994. The wells were installed vertically and completed with a 4-in.-diameter polyvinyl chloride (PVC) casing. The boreholes were installed at a 45-degree angle and completed with a 2-in.-diameter PVC casing as part of the investigation of SWMU 39-001(a). The existing well and borehole locations at SWMU 39-001(a) are shown in Figure 2.7-1. Table 2.7.1 summarizes well and borehole installation and construction details, depth, and current status.

During the 2009 investigation and remediation of SWMU 39-001(a), the PVC casing of borehole ASC-3 was cut (LANL 2010, 108592). A bentonite plug was placed over the protruding 2-in. PVC casing in accordance with borehole abandonment procedures discussed in section 3.12. Following the 2009 investigation and remediation activities, water levels were measured in the shallow wells and angled boreholes at SWMU 39-001(a) (LANL 2010, 108592). The remaining angled boreholes at SWMU 39-001(a) were reported with measurable water (ASC-0, ASC-2, and ASC-4), shallow well DM-4 contained no measurable water, and shallow wells DMB-1 and DM-2 were not measured because they are located downgradient of the site and could not be located during the water-level check.

As proposed in the approved investigation work plan, three shallow wells (DMB-1, DM-2, and DM-4) and three angled boreholes (ASC-0, ASC-2, and ASC-4) will be abandoned during the Phase II investigation at SWMU 39-001(a) (LANL 2010, 108500.11; NMED 2010, 108675). The wells and boreholes 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 (Appendix B). One week after purging, the water levels in each well and borehole will be checked to determine whether water levels have recovered. If any of the wells or boreholes have recharged, NMED will be notified. Borehole abandonment procedures are discussed in section 3.12.

2.8 Wells and Boreholes at SWMU 39-001(b)

Two shallow wells (DM-6 and UM-3) and nine boreholes (ASC-11, ASC-12, ASC-13, ASC-14, ASC-15, ASC-16, ASC-17, ASC-18, ASC-19) were installed at SWMU 39-001(b) in 1994. The wells were installed vertically and completed with a 4-in.-diameter PVC casing (with the exception of UM-3, which was completed with stainless-steel casing). The boreholes were installed at a 45-degree angle and completed

with a 2-in.-diameter PVC casing as part of the investigation of SWMU 39-001(b). The existing well and borehole locations at SWMU 39-001(b) are shown in Figure 2.8-1. Table 2.7-1 summarizes well and borehole installation and construction details, depth, and current status.

Following the 2009 investigation and remediation activities, water levels were measured in the shallow wells and angled boreholes at SWMU 39-001(b) (LANL 2010, 108592). Eight of the angled boreholes at SWMU 39-001(b) were reported with measurable water (ASC-12, ASC-13, ASC-14, ASC-15, ASC-16, ASC-17, ASC-18, ASC-19), shallow well DM-6 and angled borehole ASC-11 contained no measurable water, and shallow well UM-3 was not measured.

As proposed in the approved investigation work plan, the wells and boreholes at SWMU 39-001(b) will be abandoned during the Phase II investigation at SWMU 39-001(b) (LANL 2010, 108500.11; NMED 2010, 108675). The wells and boreholes are not being used, and they are potential conduits for subsurface contamination. Before abandonment, the wells and boreholes will be measured to determine if 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 (Appendix B). One week after purging, the water levels in each well and borehole will be checked to determine whether water levels have recovered. If any of the wells or boreholes have recharged, NMED will be notified. Borehole abandonment procedures are discussed in section 3.12.

2.9 Removal of Waste and Environmental Media at SWMUs 39-001(a) and 39-001(b)

The scope of the 2009 investigation of North Ancho Canyon Aggregate Area included the remediation of SWMUs 39-001(a) and 39-001(b). Remediation activities included excavation of debris and soil associated with the former landfills composing SWMUs 39-001(a) and 39-001(b). As part of the remediation activities, the Laboratory requested approval for establishing areas of contamination at each site (LANL 2008, 105015). 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 Resource Conservation and Recovery Act requirements. The request for establishment of these areas of contamination was approved by NMED (NMED 2008, 104332). The Laboratory later requested expansion of the two areas of contamination (LANL 2009, 105720), which was subsequently approved by NMED (NMED 2009, 105597).

2.9.1 Waste Characterization and Soil Sampling Results

Activities conducted during the cleanup of SWMUs 39-001(a) and 39-001(b) included excavation and stockpiling debris and contaminated soil from the disposal trenches and packaging and shipping this waste material for off-site disposal. This section describes sampling and analysis associated with these activities. The contaminated soil in the waste stockpile areas was sampled to collect data needed to characterize the soil for transportation and off-site disposal. The results of this sampling are described in section 2.9.1.1. Following removal of all waste and contaminated soil from the waste stockpile areas, sampling was performed within and around the footprints of the former waste stockpiles to characterize residual contamination associated with waste management activities. The results of this sampling are described in section 2.9.1.2. Section 2.9.1.2 also describes the results of sampling performed in response to a release of PCBs during waste-handling activities. The data from these sampling activities are provided in Appendix D (on CD included with this document). Confirmation sampling to verify removal of wastes from the SWMU 39-001(a) and 39-001(b) disposal trenches was previously described in the approved investigation report (LANL 2010, 108500.11; NMED 2010, 108675)

2.9.1.1 Waste Characterization Sampling

The soil and debris removed from disposal trenches at SWMUs 39-001(a) and 39-001(b) were stockpiled within the area of contamination at each site. At both sites, the waste stockpiles were established north of the trench excavations (Figures 2.9.1 and 2.9.2). The waste stockpile for SWMU 39-001(a) consisted of approximately 2800 yd^3 of material and covered an irregularly shaped area of 8345 ft^2. The waste stockpile for SWMU 39-001(b) consisted of approximately 9450 yd^3 of material and covered an irregularly shaped area of about 24,212 ft^2.

As part of waste characterization activities specified in the WCSF (Appendix E), soil samples were collected from the waste stockpile at each site. Samples were collected at a frequency of approximately 1 sample per 100 yd^3 of soil. Thirty-four samples were collected from the waste stockpile at SWMU 39-001(a), and 92 samples were collected from the waste stockpile at SWMU 39-001(b). All samples from the SWMU 39-001(a) waste stockpile were submitted for laboratory analysis of americium-241, cyanide (total), explosive compounds, gamma-emitting radionuclides, herbicides (total and toxicity characteristic leaching procedure [TCLP]), isotopic plutonium, isotopic uranium, metals (TAL and TCLP), nitrate, PCBs, perchlorate, pesticides (total and TCLP), strontium-90, SVOCs (total and TCLP), tritium, and VOCs (total and TCLP). All samples from the SWMU 39-001(b) waste stockpile were submitted for laboratory analysis of americium-241, cyanide (total), gamma-emitting radionuclides, herbicides (total), isotopic plutonium, isotopic uranium, metals (TAL and TCLP), nitrate, perchlorate, strontium-90, and tritium, and all samples but one were analyzed for explosive compounds, herbicides (TCLP), PCBs, pesticides (total and TCLP), SVOCs (total and TCLP), and VOCs (total and TCLP). All samples from SWMU 39-001(a) and 76 samples from SWMU 39-001(b) were incorrectly analyzed for total petroleum hydrocarbon–gasoline range organics (TPH-GRO), and 10 samples from SWMU 39-001(b) were also incorrectly analyzed for total petroleum hydrocarbon–diesel range organics (TPH-DRO). The WCSF specified analysis of samples for TPH-DRO or TPH-GRO only if there was evidence of a petroleum release. Because there was no evidence of a petroleum release, these analyses were crossed out on the respective sample collection logs and should not have been conducted. However, the above samples were inadvertently analyzed for TPH-DRO and/or TPH-GRO because of a misunderstanding of the instructions calling for these analyses to not be performed. The samples collected and analyses requested are summarized in Tables 2.9-1 and 2.9-2 for SWMUs 39-001(a) and 39-001(b), respectively.

The results of the sampling for the SWMU 39-001(a) waste stockpile showed the soil was not hazardous waste and that residential SSLs and SALs were exceeded only for Aroclor-1242, Aroclor-1254, lead, and uranium-238. Results for detected PCBs and lead and uranium-238 above BVs are presented in Tables 2.9-3, 2.9-4, and 2.9-5, respectively. PCBs were detected in 31 of 34 samples and were detected above the 1 mg/kg cleanup level in 10 samples. Lead was detected above the soil BV in 3 of 34 samples and was detected above the residential SSL in one sample. Uranium-238 was detected above the soil BV in 12 samples and was detected above the residential SAL in 1 sample. Waste characterization data for the SWMU 39-001(a) waste stockpile are provided in Appendix D (on CD included with this document).

The results of the sampling for the SWMU 39-001(b) waste stockpile showed the soil was not hazardous waste and that residential SSLs were exceeded only for Aroclor-1016, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, and indeno[1,2,3-cd]pyrene. Results are presented in Tables 2.9-6 and 2.9-7 for PCBs and SVOCs, respectively. PCBs were detected in 74 of 92 samples and were detected above the 1 mg/kg cleanup level in 10 samples. One or more SVOCs were detected in 59 of 92 samples, and residential SSLs were exceeded in 25 samples. Waste characterization data for the SWMU 39-001(b) waste pile are provided in Appendix D (on CD included with this document).

2.9.1.2 Previous Soil Sampling

Soil sampling was directed toward confirming cleanup of two capacitor staging areas and characterizing residual contamination associated with the areas used for stockpiling and handling waste and contaminated soil at SWMUs 39-001(a) and 39-001(b). These sampling activities are described below.

Capacitor Staging Areas

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 (Figure 2.9-3). 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 specified in 40 Code of Federal Regulations (40 CFR) 761.61(a). The capacitors were removed from each staging area, and all soil with visible oil staining was removed and containerized. Each capacitor staging area was then divided into 5-ft × 5-ft decision units (Figure 2.9-3), with eight decision units established at the north staging area and nine in the south staging area. A decision unit was not established at the north corner of the north staging area because of the presence of a tree at this location. Visual inspection determined that this location had not been impacted by the release. Multi-increment (MI) samples were collected from four decision units in the northern capacitor staging area and from nine decision units in the southern capacitor staging area and submitted for laboratory analysis of PCBs. Each MI sample consisted of 49 aliquots collected from a depth of 0.0 to 0.17 ft bgs. Two ft of soil was excavated from eight decision units in the northern capacitor staging area and from nine decision units in the southern capacitor staging area where PCBs were detected above 1 mg/kg or where soil staining had been observed because of leakage from the capacitors. Excavated soil was placed in the waste stockpile at SWMU 39-001(a). Following excavation, a second round of MI samples was collected from each of the eight excavated decision units in the northern capacitor staging area and the nine excavated decision units in the southern capacitor staging area. Each MI sample consisted of 49 aliquots collected from a depth of 2.0 to 2.17 ft bgs. In addition, MI samples were collected from the outermost sidewall of the excavation at two locations in the northern staging area and three locations in the southern staging area. Each sidewall MI sample consisted of 49 aliquots collected from the sidewalls over the depth interval 0.0 to 2.0 ft bgs.

During collection of MI samples, equal-volume aliquots were collected and placed in a stainless-steel bowl. The material in the bowl was then homogenized and placed in a sample container. Aliquot volumes were selected so that the entire sample volume would be used with no excess. All samples were submitted for laboratory analysis of PCBs.

Based on the results of the second round of MI sampling, an additional 2.0 ft of soil was removed from one decision unit in the northern capacitor staging area and from two decision units in the southern capacitor staging area where PCBs were detected above 1 mg/kg. 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. Following excavation, a third round of MI samples was collected from each of these three decision units and submitted for laboratory analysis of PCBs. Each MI sample consisted of 49 aliquots collected from a depth of 4.0 to 4.17 ft bgs. Because the results from the third round of confirmation samples showed PCB concentrations of less than 1 mg/kg at all locations, the excavated areas were then backfilled with clean soil. The samples collected and analyses requested from the capacitor staging areas are summarized in Table 2.9-8. Results of detected PCBs in confirmatory samples are presented in Table 2.9-9. Data from the MI sampling conducted at the capacitor staging areas are presented in Appendix D (on CD included with this document).

Waste Stockpile Areas

The contaminated soil in the waste stockpile areas was transported off-site by truck for disposal the Energy Solutions, LLC, disposal facility in Clive, UT. The volume of soil removed from the SWMU 39-001(a) waste stockpile area was 2792 yd^3, and the volume of soil removed from the SWMU 39-001(b) waste stockpile area was 9452 yd^3. Following completion of packaging and transportation of wastes from the waste stockpile areas, the Laboratory collected samples from the areas where contaminated soil had been stockpiled and handled. The objective of this sampling was to characterize residual PCB contamination remaining on the surface after completion of waste management activities to determine whether additional cleanup was required. This sampling is unrelated to the sampling performed during the 2009 investigation to characterize the nature and extent of contamination at the associated SWMUs, and the results of the sampling do not affect the conclusions of the 2009 investigation. The sampling approach for the former waste stockpile areas at SWMUs 39-001(a) and 39-001(b) was based on collection of MI samples. To implement the MI sampling approach, the former waste stockpile areas were divided into 25-ft × 25-ft decision units. Each decision unit within the areas where waste or spoils had been stockpiled or handled was sampled. Figures 2.9-1 and 2.9-2 show the decision units sampled at each site.

Each MI sample consisted of 50 aliquots collected from the decision unit at depths of 0.0 ft to 0.17 ft bgs. At each decision unit, 10 equally spaced transects were marked and five sample aliquots were collected along each transect. The aliquot volume was selected so that 50 aliquots would provide the necessary sample volume, with no excess. The aliquots for each decision unit were placed in a stainless-steel bowl and homogenized before placing the sample into a sample container. Note that the boundaries of some of the decision units at each site extend onto Ancho Road. For these decision units, all MI subsamples were collected from the area adjacent to Ancho Road and not from the road itself.

Based on the frequency of detection of contaminants above residential SSLs and SALs in the waste characterization sampling, and the magnitude of sample results above SSLs and SALs, PCBs were determined to the best indicator of residual contamination. That is, PCBs were detected above residential SSLs most frequently and at the highest concentrations above SSLs. Therefore, all MI samples were submitted for laboratory analysis of PCBs. The samples collected and analyses requested are presented in Tables 2.9-10 and 2.9-11, respectively, for the former waste stockpile areas at SWMUs 39-001(a) and 39-001(b).

Results of the MI sampling are presented in Table 2.9-12 and Figure 2.9-4 for SWMU 39-001(a) and in Table 2.9-13 and Figure 2.9-5 for SWMU 39-001(b). Thirty-nine of the 46 decision units at SWMU 39-001(a) and 4 of the 80 decision units at SWMU 39-001(b) had PCBs greater than 1 mg/kg. At each of these decision units, Aroclor-1254 was detected at a concentration greater than 1 mg/kg. Aroclor-1016 was also detected at greater than 1 mg/kg at two of these locations. No other Aroclors were detected. Data from the MI sampling conducted at both former waste stockpile areas are presented in Appendix D (on CD included with this document).

2.9.2 Proposed Activities

Proposed activities include additional soil removal, sampling to verify removal of all contaminated soil from the two waste stockpile areas, and sampling to confirm cleanup of the two capacitor staging areas.

2.9.2.1 Waste Stockpile Areas

The approval of the area of contamination designation for sites in North Ancho Canyon Aggregate Area requires that soil not be returned to the point of origin unless contaminant concentrations are less than residential cleanup levels (NMED 2008, 104332). Based on this requirement, all surface soil within the former waste stockpile areas should not contain contamination in excess of residential SSLs/SALs. The

source of the residual contamination detected in the MI samples within these areas is the soil that was stockpiled in these areas. Based on the waste characterization sampling described in section 2.9.1, the only contaminants present above residential SSLs/SALs were PCBs, lead, and uranium-238 at the SWMU 39-001(a) stockpile, and PCBs and SVOCs at the SWMU 39-001(b) stockpile. Therefore, the objective of the additional cleanup activities at these sites will be to ensure that concentrations of lead, uranium-238, and SVOCs are below residential SSLs/SALs and the default Consent Order cleanup level of 1 mg/kg for PCBs. As described in section 2.9.1, PCBs exceeded cleanup levels by the greatest amount and PCB results from the previous MI decision-unit sampling will be used to direct cleanup.

The sampling results indicated the presence of contaminated soil on the surface of the former waste stockpile areas. Therefore, additional soil removal is required at both waste stockpile areas. A discrete, grid-based sampling approach will be used to define the locations requiring additional soil removal and to confirm cleanup to residential SSLs and the 1 mg/kg PCB cleanup level. Samples will be collected using the same 25 ft × 25 ft grid used previously.

At both waste stockpile areas at SWMUs 39-001(a) and 39-001(b), PCBs were detected at concentrations greater than 1 mg/kg in some of the outermost decision units. Additional sample locations have been established adjacent to those outermost decision units to define the lateral extent of contaminated soil with greater than 1 mg/kg PCBs. These new step-out sample locations were established using additional 25-ft × 25-ft grid cells and are shown in Figures 2.9-6 and 2.9-7 for SWMUs 39-001(a) and 39-001(b), respectively. Discrete samples will be collected from a depth of 0.0 ft to 1.0 ft bgs at these new step-out locations and analyzed for PCBs to confirm the extent of the area that must be excavated. If PCBs are detected at greater than 1 mg/kg in any of these samples, additional step-out sample locations will be added and sampled until data from all of the outermost sample locations show less than 1 mg/kg PCBs. The former waste stockpile areas at both SWMUs 39-001(a) and 39-001(b) are adjacent to Ancho Road. Because the road was not used to handle wastes or stockpile spoils, the road will define the westernmost extent of the area to be excavated and no sample locations will be established on the road itself.

After sampling has defined the extent of the area with greater than 1 mg/kg PCBs, PCB-contaminated soil will be removed. At each previous decision unit location and each new grid location where PCBs were detected at greater than 1 mg/kg, the top 1 ft of soil will be removed for off-site disposal. If any residual debris is encountered during the removal of the remaining contaminated soil, it will also be removed as described in the IDW management plan (Appendix B).

Confirmation samples will be collected following excavation of the top 1 ft of soil from decision units/grid cells with PCB concentrations greater than 1 mg/kg, Contamination currently at the sites is associated with waste stored on the surface of the stockpile areas. Confirmation sampling is intended to confirm that all residual waste has been removed from the sites and that the original, native soil surface has been reached. Therefore, defining vertical extent is not an objective and samples will be collected only at one depth. One discrete confirmation sample will be collected from a depth of 0.0 ft to 1.0 ft bgs from each decision unit/grid cell unless preexcavation MI or discrete sampling results detected PCBs greater than 1 mg/kg. If PCBs are above 1 mg/kg, two confirmation samples will be collected from a depth of 0.0 ft to 1.0 ft bgs. Each of these confirmation samples will be analyzed for PCBs [SWMUs 39-001(a) and 39-001(b)], lead [SWMU 39-001(a) only], isotopic uranium [SWMU 39-001(a) only], and SVOCs [SWMU 39-001(b) only]. Sample locations and proposed analyses are summarized in Table 2.9-14. Analysis for constituents other than lead, isotopic uranium, and/or SVOCs will not be performed because waste characterization sampling showed all other constituents to be present below residential SSLs/SALs. If sampling results show total PCB concentrations to be greater than 1 mg/kg, lead or SVOCs greater than residential SSLs, or uranium-238 greater than the residential SAL, an additional 1 ft of soil will be removed from the decision unit/grid cell and the location will be resampled. This process will

be repeated until all confirmation sample results show PCB concentrations to be less than 1 mg/kg and concentrations of lead, isotopic uranium, and/or SVOCs to be less than the residential SSLs/SALs.

2.9.2.2 Capacitor Staging Areas

Discrete soil samples will be collected at the two former capacitor staging areas using the previous MI sampling grid (Figure 2.9-8). One sample will be collected at the center of each decision unit/grid cell at a depth of 0.0 ft to 1.0 ft below the depth at which the decision unit was excavated during the previous cleanup activities (i.e., 2.0 ft to 3.0 ft bgs or 4.0 ft to 5.0 ft bgs). Step-out samples will also be collected 5 ft out from the center of decision units/grid cells along the north, east, and south sides of the two grid areas. Samples at these locations will be collected at depths of 0.0 ft to 1.0 ft bgs, 2.0 ft to 3.0 ft bgs, and 4.0 ft to 5.0 ft bgs. All samples from the former capacitor staging areas will be analyzed for PCBs. Should PCBs be found greater than 1 mg/kg in any decision unit/grid cell, an additional 1 ft of soil will be removed from the base of the previous excavation and the location will be resampled. This process will be repeated until all confirmation sample results show PCB concentrations to be less than 1 mg/kg. Sample locations and proposed analyses are summarized in Table 2.9-14.

3.0 INVESTIGATION METHODS

Table 3.0-1 presents a summary of the investigation methods to be implemented. The standard operating procedures (SOPs) used to implement these methods are available at http://www.lanl.gov/environment/all/qa.shtml. Summaries of the field-investigation methods are provided below. Additional procedures may be added as necessary to describe and document quality-affecting activities.

Chemical and radionuclide analyses will be performed in accordance with the analytical statement of work (LANL 2008, 109962). Accredited contract analytical laboratories will use the most recent EPA- and industry-accepted extraction and analytical methods for analyses of the samples.

3.1 Establishment of Sampling Locations

Proposed sampling locations are identified for each site based on engineering drawings, surveyed locations of existing structures (from the geographic information system database), previous sampling locations, and topography or other features identified in the field (e.g., drainage channels, sediment accumulation areas, etc.). The coordinates of proposed new sampling locations will be obtained by georeferencing the points from the proposed sampling maps. The coordinates will be located and flagged or otherwise marked in the field using a differential global positioning system (GPS) unit. If any proposed sampling locations are moved because of field conditions, utilities, or other unexpected reasons, the new locations will be surveyed immediately following sample collection as described in section 3.2.

3.2 Geodetic Surveys

Geodetic surveys will be conducted by a land surveyor in accordance with the latest version of SOP-5028, Coordinating and Evaluating Geodetic Surveys, to locate historical structures and to document field activities such as sampling and excavation locations. The surveyors will use a Trimble GeoXT handheld GPS or equivalent for the surveys. The coordinate values will be expressed in the New Mexico State Plane Coordinate System (transverse mercator), Central Zone, North American Datum 1983. Elevations will be reported per the National Geodetic Vertical Datum of 1929. All GPS equipment used will meet the accuracy requirements specified in SOP-5028.

3.3 Field Screening

Because sampling is primarily being conducted to finalize nature and extent based on previous investigations, field screening will be conducted for health and safety purposes. However, if elevated field-

screening levels are observed for the deepest sample collected from a specific sampling location, sample collection will continue until field-screening results show no elevated readings. The Laboratory's proposed field-screening approach will be to (1) visually examine all samples for evidence of contamination, (2) screen for organic vapors, and (3) screen for radioactivity. The field-screening methods are discussed below.

3.3.1 Organic Vapors

Based on 2009 investigation results, significant VOC contamination is not expected to be encountered, and screening will be conducted for health and safety purposes.

Screening will be conducted using a photoionization detector (PID) capable of measuring quantities as low as 1.0 ppm. Vapor screening of soil, sediment, and subsurface core will be conducted using a PID equipped with an 11.7 electron volt lamp. All samples will be screened for organic vapors in headspace gas in accordance with SOP-06.33, Headspace Vapor Screening with a Photo Ionization Detector.

The PID will be calibrated daily to the manufacturer's standard for instrument operation, and the daily calibration results will be documented in the field logbooks. All instrument background checks, background ranges, and calibration procedures will be documented daily in the field logbooks in accordance with SOP-5181, Notebook and Logbook Documentation for Environmental Directorate Technical and Field Activities.

3.3.2 Radioactivity

Field screening for radioactivity will be conducted for health and safety purposes. Radiological screening will target gross-alpha, -beta, and -gamma radiation. Field screening for alpha, beta, and gamma radiation will be conducted within 6 in. from the sample material and will be performed using appropriate field instruments calibrated in accordance with the Laboratory's Health Physics Operations Group procedures. All instrument calibration activities will be documented daily in the field logbooks in accordance with SOP-5181, Notebook and Logbook Documentation for Environmental Directorate Technical and Field Activities.

3.4 Sample Collection

Soil and tuff samples will be collected by the most efficient and least invasive method practicable. The methods will be determined by the field team based on-site conditions such as topography, the nature of the material to be sampled, the depth intervals required, accessibility, and the level of disruption to Laboratory activities. Typically, samples will be collected using spade and scoop, hand auger, or drill rig methods.

Samples will be placed in appropriate containers in accordance with SOP-5056, Sample Containers and Preservation. Quality assurance/quality control (QA/QC) samples will include field duplicate samples, equipment/rinsate blanks, and trip blanks. These samples will be collected following the current version of SOP-5059, Field Quality Control Samples and will comply with a frequency of 10% of total samples collected for field duplicates and rinsate blanks. Trip blanks will be supplied and remain with analytical samples when samples are collected for VOC analysis. QA/QC samples are used to monitor the validity of the sample collection procedures.

3.4.1 Surface Samples

Samples will be placed in appropriate containers in accordance with SOP-5056, Sample Containers and Preservation. QA/QC samples will include field duplicate samples, equipment blanks, and trip blanks. These samples will be collected following the current version of SOP-5059, Field Quality Control Samples and will comply with a frequency of 10% of total samples collected for field duplicates and rinsate blanks.

Trip blanks will be supplied and remain with analytical samples when samples are collected for VOC analysis. QA/QC samples are used to monitor the validity of the sample collection procedures.

Surface and shallow subsurface soil and sediment samples will be collected in accordance with SOP-06.09, Spade and Scoop Method for Collection of Soil Samples. Stainless-steel shovels, spades, scoops, and bowls will be used for ease of decontamination. Decontamination will be completed using a dry decontamination method with disposable paper towels and an over-the-counter cleaner, such as Fantastik or an equivalent. If the surface location is at bedrock, an axe or hammer and chisel will be used to collect samples.

3.4.2 Subsurface Samples

Subsurface samples will be collected using hand- or hollow-stem auger or direct-push methods, depending on the depth of the samples and the material being sampled. A brief description of these methods is provided below.

3.4.2.1 Hand Auger

Hand augers may be used to bore shallow holes (e.g., 0.0 to 10.0 ft bgs). The hand auger is advanced by turning or pounding the auger into the soil until the barrel is filled. The auger is removed and the sample is dumped out into a clean bowl. Hand-auger samples will be collected in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler.

3.4.2.2 Direct Push

Direct push is a subsurface sampling method that pushes a tool string into the ground using the weight of a truck in combination with a hydraulic ram or hammer. Various tool strings can be used to collect discrete samples, continuous samples, both discrete and continuous samples, and groundwater samples. The direct-push core samples collected in this investigation will be continuous. The inside of the continuous sampler is exposed to the subsurface environment as it is advanced to the sampling interval. This is a dual-tube sampler, so named because it uses two sets of rods to collect soil cores. The outer rods receive the driving force from the hydraulic pushing method and provide a sealed hole from which soil samples may be recovered without the threat of cross-contamination or cave-in. The inner set of rods is placed within the outer rods and holds a sampler in place as the outer rods are driven to the sample interval. The inner rods are then retracted to retrieve the soil core. The direct-push methods will follow the American Society of Testing and Materials D18 Subcommittee on Direct Push Sampling (D18.21.01) (ASTM 1997, 057511).

3.4.2.3 Hollow-Stem Auger

Hollow-stem augers are used to collect subsurface samples where hand-augering is impractical because of the depth or the material being sampled. The hollow-stem auger consists of a hollow-steel shaft with a continuous spiraled steel flight welded onto the exterior of the stem. The stem is connected to an auger bit; when the auger is rotated, it transports cuttings to the surface. The hollow stem of the auger allows insertion of drill rods, split-spoon core barrels, Shelby tubes, and other samplers through the center of the auger so samples may be retrieved during drilling operations.

During sampling, the auger will be advanced to just above the desired sampling interval. The sample will then be collected by driving a split-spoon sampler into undisturbed soil/tuff to the desired depth in accordance with SOP-06.26, Core Barrel Sampling for Subsurface Earth Materials. All borehole cuttings will be managed as IDW, as described in Appendix B of this work plan.

Field documentation will include detailed borehole logs for each borehole drilled. The borehole logs will document the matrix material in detail and will include the results of all field screening; fractures and matrix samples will be assigned unique identifiers. All field documentation will be completed in accordance with the current version of SOP-12.01, Field Logging, Handling, and Documentation of Borehole Materials.

3.5 Borehole Abandonment

All hollow-stem auger boreholes will be abandoned in accordance with SOP-5034, Monitor Well and RFI Borehole Abandonment, by one of the following methods.

- Shallow boreholes with a total depth of 20 ft or less will be abandoned by filling the borehole with bentonite chips and then hydrating the chips in 1- to 2-ft lifts. The borehole will be visually inspected as the bentonite chips are being added to ensure bridging does not occur.
- Boreholes greater than 20 ft in depth will be pressure-grouted from the bottom of the borehole to the surface using the tremie pipe method. Acceptable grout materials include cement or bentonite grout, neat cement, or concrete.

The use of backfill materials such as bentonite and grout will be documented in a field logbook with respect to volumes (calculated and actual), intervals of placement, and additives used to enhance backfilling. All borehole abandonment information will be presented in the investigation report.

3.6 Quality Assurance/Quality Control Samples

QA/QC samples will include field duplicate, equipment rinsate, and field trip blank samples. Field duplicate and rinsate blank samples will be collected at an overall frequency of at least 1 for every 10 regular samples as directed by the current version of SOP-5059, Field Quality Control Samples.

3.7 Chain of Custody for Samples

The collection, screening, and transport of samples will be documented on standard forms generated by the Laboratory's Sample Management Office (SMO). These include sample collection logs, chain-of-custody forms, and sample container labels. Sample collection logs will be completed at the time of sample collection and signed by the sampler and a reviewer who will verify the logs for completeness and accuracy. Corresponding labels will be initialed and applied to each sample container, and custody seals will be placed around container lids or openings. Chain-of-custody forms will be completed and signed to verify that the samples are not left unattended.

3.8 Laboratory Analytical Methods

The analytical suites for laboratory analyses are summarized in Table 3.7-1. All analytical methods are presented in the statement of work for analytical laboratories (LANL 2008, 109962). Sample collection and analysis will be coordinated with the SMO.

Alternative methods may be used for supplemental analyses of some samples in cases where additional information is desired or results from the standard analytical method appear inconsistent with other results. For example, uranium-235/236 results by the isotopic uranium method (alpha spectroscopy, HASL-300:ISOU) may indicate slightly elevated results for a single uranium isotope that are not consistent with site history or process knowledge. In such cases, a supplemental analysis (for example, uranium-235/236 by mass spectrometry) may be requested in addition to the standard analysis.

3.9 Health and Safety

The field investigations described in this investigation work plan will comply with all applicable requirements pertaining to worker health and safety. An integrated work document and a site-specific health and safety plan will be in place before fieldwork is performed.

3.10 Equipment Decontamination

Equipment for drilling and sampling will be decontaminated before and after drilling and sampling activities (as well as between drilling boreholes) to minimize the potential for cross-contamination. Dry decontamination methods are preferred and will be given priority because they do not generate liquid wastes. Residual material adhering to the equipment will be removed using dry decontamination methods, including wire-brushing and scraping, as described in SOP-5061, Field Decontamination of Equipment. Dry decontamination of sampling equipment may include use of a nonphosphate detergent such as Fantastik on a paper towel, and the equipment is wiped so no liquid waste is generated.

If dry decontamination methods are not effective, the equipment may be decontaminated by steam-cleaning or hot water pressure-washing, as described in SOP-5061. Wet decontamination methods will be conducted on a high-density polyethylene liner on a temporary decontamination pad. Cleaning solutions and wash water will be collected and contained for proper disposal. Decontamination solutions will be sampled and analyzed to determine the final disposition of the wastewater and the effectiveness of the decontamination procedures.

3.11 Investigation-Derived Waste

The IDW generated during field-investigation activities may include, but is not limited to, drill cuttings; contaminated soil; excavated debris; contaminated personal protective equipment (PPE), sampling supplies, and plastic; fluids from the decontamination of PPE and sampling equipment; and all other waste that has potentially come into contact with contaminants.

All IDW generated during field-investigation activities will be managed in accordance with applicable SOPs that incorporate the requirements of all applicable EPA and NMED regulations, DOE orders, and Laboratory implementation requirements. Appendix B presents the IDW management plan.

3.12 Well and Angled Borehole Abandonment

Before abandonment, each shallow well and borehole will be manually measured to determine if water is present within the casing. Manual measurements will be performed in accordance with SOP-5223, Manual Groundwater Level Measurements. If water is present, the borehole will be purged to determine if recharge will occur. Purge water will be containerized and sampled for waste characterization purposes.

Wells and boreholes specified in sections 2.7 and 2.8 will be abandoned in accordance with SOP-5034, Monitoring Well and RFI Borehole Abandonment, and will be consistent with Section X.D of the Consent Order.

Wells and boreholes will be abandoned by filling the hole with grout from the bottom of the borehole to within 2 ft of the surface using a tremie pipe or other appropriate method. Acceptable grout materials include a cement/bentonite mixture, neat cement, or concrete. Surface appurtenances will be removed from the well site, including concrete pads and bollards. The casing will be cut off approximately 2 ft bgs. A 2-ft × 2-ft × 2-ft-deep concrete pad with brass marker will be installed at ground surface over the well. The marker will be surveyed in accordance with the Section IX.B.2.f of the Consent Order, which states that pertinent structures may be horizontally located within a global-positioning system with an accuracy of +/-0.5 ft.

The use of backfill materials, such as bentonite and grout, will be documented in a field logbook with regard to volume (calculated and actual), intervals of placement, and additives used to enhance backfilling. All borehole abandonment information will be provided in the investigation report.

3.13 Soil Excavation Activities

Portions of SWMU 39-007(a) and the waste-staging areas at SWMUs 39-001(a) and 39-001(b) are proposed for additional investigation and remediation during the Phase II investigation. Excavation of contaminated media, waste disposition, and confirmation sampling will be completed at these sites. The general sequence of activities for waste excavation, transportation, disposal, and confirmation sampling is summarized below.

3.13.1 Removal of Contaminated Soil, Rock, and Sediment

The general sequence of removal activities (as appropriate) is as follows:

- Mobilize
    - ❖ Assemble construction documents
    - ❖ Conduct construction readiness assessment
    - ❖ Conduct preconstruction meeting
    - ❖ Construct access roads
    - ❖ Construct staging area
    - ❖ Install temporary field trailers
    - ❖ Determine boundaries of waste. The original waste limit coordinates will be surveyed and staked.
    - ❖ Identify underground utilities
    - ❖ Mobilize heavy equipment to site
- Prepare Site
    - ❖ Install fencing
    - ❖ Install stormwater controls
    - ❖ Abandon/relocate utilities, if necessary
    - ❖ Conduct preexcavation survey
    - ❖ Remove contaminated soil and residual surface debris
    - ❖ Excavate
    - ❖ Stockpile and load directly into appropriate waste containers
    - ❖ Characterize waste for dispositioning
    - ❖ Transport waste to authorized off-site disposal facility
    - ❖ Survey boundaries of excavation
    - ❖ Conduct confirmation sampling
    - ❖ Establish subgrade and conduct survey

- Backfill
    - ❖ Backfill and compact
    - ❖ Survey finished surface
- Restore Site In Accordance with Storm Water Pollution Prevention Plan Requirements
    - ❖ Vegetate surface
    - ❖ Install best management practices as necessary
- Demobilize

3.13.2 Waste Management and Disposal

Management of all IDW, including waste generated during cleanup, is described in Appendix B.

3.13.3 Transportation

All waste will be hauled in U.S Department of Transportation–approved containers directly to the approved disposal facility.

3.13.4 Confirmation Sampling

Confirmation sampling will be performed at all remediated sites as described in sections 2 and 3.4 of this work plan.

4.0 MONITORING PROGRAMS

Groundwater, sediment, and surface-water monitoring is occurring within the North Ancho Canyon Aggregate Area as part of other environmental activities. This monitoring at TA-39 is summarized briefly below.

4.1 Groundwater

Groundwater-monitoring activities in the Ancho Canyon Watershed are performed in accordance with the Laboratory's Interim Facility-Wide Groundwater Monitoring Plan, which is updated annually. This includes semiannual monitoring near or downstream from areas of past Laboratory weapons-testing activities. These monitoring locations include four regional wells (DT-5A, DT-9, DT-10, and R-31). Note that the upper screen of well R-31 is set in an intermediate perched zone that has produced no water.

4.2 Stormwater

SWMUs 39-001(b), 39-006(a), and 39-010 and AOC 39-002(b) are subject to the stormwater monitoring requirements of the Laboratory's National Pollution Discharge Elimination System individual permit (IP) for stormwater discharges from SWMUs and AOCs. Monitoring under the IP is performed using site-monitoring areas (SMAs) that monitor stormwater runoff from individual SWMUs and AOCs or groups of SWMUs and AOCs. The SMAs in the North Ancho Canyon Aggregate Area monitored under the IP and the corresponding SWMUs and AOCs are A-SMA-2.5 (SWMU 39-010), A-SMA-2.8 [SWMU 39-001(b)], A-SMA-3 [AOC 39-002(b)], and A-SMA-3.5 [SWMU 39-006(a)]. Monitoring results are reported to EPA on an annual basis.

5.0 SCHEDULE

Preparation for investigation activities is anticipated to begin in October 2011. Fieldwork is expected to begin in November 2011 and be completed in May 2012. A submittal date of no later than September 30, 2012, is proposed for the Phase II investigation report.

6.0 REFERENCES AND MAP DATA SOURCES

6.1 References

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

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

ASTM (American Society for Testing and Materials), June 1997. "D6001 Standard Guide for Direct-Push Water Sampling for Geoenvironmental Investigations," in *Annual Book of ASTM Standards*, Vol. 04.09 Soil and Rock (II), ASTM, West Conshohocken, Pennsylvania. (ASTM 1997, 057511)

LANL (Los Alamos National Laboratory), November 1990. "Solid Waste Management Units Report," Vol. III of IV (TA-26 through TA-50), Los Alamos National Laboratory document LA-UR-90-3400, Los Alamos, New Mexico. (LANL 1990, 007513)

LANL (Los Alamos National Laboratory), June 1993. "RFI Work Plan for Operable Unit 1132," Los Alamos National Laboratory document LA-UR-93-768, Los Alamos, New Mexico. (LANL 1993, 015316)

LANL (Los Alamos National Laboratory), January 1996. "Voluntary Corrective Action Completion Report for Potential Release Site 39-007(a), Waste Container Storage Area, Revision 1," Los Alamos National Laboratory document LA-UR-96-445, Los Alamos, New Mexico. (LANL 1996, 053786)

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)," Los Alamos National Laboratory document LA-UR-97-1408, Los Alamos, New Mexico. (LANL 1997, 055633)

LANL (Los Alamos National Laboratory), September 2007. "Historical Investigation Report for North Ancho Canyon Aggregate Area," Los Alamos National Laboratory document LA-UR-07-5948, Los Alamos, New Mexico. (LANL 2007, 098281)

LANL (Los Alamos National Laboratory), December 2007. "Investigation Work Plan for North Ancho Canyon Aggregate Area, Revision 1," Los Alamos National Laboratory document LA-UR-07-8272, Los Alamos, New Mexico. (LANL 2007, 101894)

LANL (Los Alamos National Laboratory), June 30, 2008. "Exhibit "D" Scope of Work and Technical Specifications, Analytical Laboratory Services for General Inorganic, Organic, Radiochemical, Asbestos, Low-Level Tritium, Particle Analysis, Bioassay, Dissolved Organic Carbon Fractionation, and PCB Congeners," Los Alamos National Laboratory document RFP No. 63639-RFP-08, Los Alamos, New Mexico. (LANL 2008, 109962)

LANL (Los Alamos National Laboratory), December 12, 2008. "Submittal of Request for Approval of Areas of Contamination for the Investigation and Remediation of Solid Waste Management Units 39-001(a), 39-001(b), and 39-006(a) at Technical Area 39," Los Alamos National Laboratory letter (EP2008-0625) to J.P. Bearzi (NMED-HWB) from M.J. Graham (LANL) and D.R. Gregory (DOE-LASO), Los Alamos, New Mexico. (LANL 2008, 105015)

LANL (Los Alamos National Laboratory), April 1, 2009. "Request for Approval of Expanded Boundaries for Areas of Contamination for the Investigation and Remediation of Solid Waste Management Units 39-001(a) and 39-001(b) at Technical Area 39," Los Alamos National Laboratory letter (EP2009-0180) to J.P. Bearzi (NMED-HWB) from M.J. Graham (LANL) and D.R. Gregory (DOE-LASO), Los Alamos, New Mexico. (LANL 2009, 105720)

LANL (Los Alamos National Laboratory), December 2009. "Radionuclide Screening Action Levels (SALs) from RESRAD, Version 6.5," Los Alamos National Laboratory document LA-UR-09-8111, Los Alamos, New Mexico. (LANL 2009, 107655)

LANL (Los Alamos National Laboratory), January 2010. "Investigation Report for North Ancho Canyon Aggregate Area, Revision 1," Los Alamos National Laboratory document LA-UR-10-0125, Los Alamos, New Mexico. (LANL 2010, 108500.11)

LANL (Los Alamos National Laboratory), February 2010. "Information Concerning the Angled Boreholes Associated with Past Environmental Investigations at Technical Area 39," Los Alamos National Laboratory document LA-UR-10-0579, Los Alamos, New Mexico. (LANL 2010, 108592)

NMED (New Mexico Environment Department), December 21, 2007. "Approval with Modifications for the Investigation Work Plan for North Ancho Canyon Aggregate Area," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED HWB), Santa Fe, New Mexico. (NMED 2007, 098948)

NMED (New Mexico Environment Department), December 30, 2008. "Approval of an Area of Contamination for the Investigation and Remediation of Solid Waste Management Units (SWMUs), 39-001(a), 39-001(b), and 39-006(a) at Technical Area 39," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2008, 104332)

NMED (New Mexico Environment Department), April 6, 2009. "Approval of Expanded Boundaries for Areas of Contamination for the Investigation and Remediation of Solid Waste Management Units (SWMUs) 39-001(a) and 39-001(b), at Technical Area 39," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 105597)

NMED (New Mexico Environment Department), December 2009. "Technical Background Document for Development of Soil Screening Levels, Revision 5.0," with revised Table A-1, New Mexico Environment Department, Hazardous Waste Bureau and Ground Water Quality Bureau Voluntary Remediation Program, Santa Fe, New Mexico. (NMED 2009, 108070)

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. Graham (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2010, 108675)

6.2 Map Data Sources

Hypsography; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991.

Point Feature Locations of the Environmental Restoration Project Database; Los Alamos National Laboratory, Waste and Environmental Services Division, EP2009-0162; 13 March 2009.

Ponds; County of Los Alamos, Information Services; as published 16 May 2006.

Potential Release Site Affected Areas; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; Unknown publication date.

Roads and Streets; County of Los Alamos, Information Services; as published 16 May 2006.

Road Centerlines for the County of Los Alamos; County of Los Alamos, Information Services; as published 04 March 2009.

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

Paved Parking; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 12 August 2002; as published 15 January 2009.

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

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

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

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

Structures; County of Los Alamos, Information Services; as published 29 October 2007.

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

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

Former Structures of the Los Alamos Site, Line Feature Representation; Los Alamos National Laboratory, Environment and Remediation Support Services Division, EP2007-0566; 1:2,500 Scale Data; 16 April 2008.

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

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

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

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

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

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

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

Sewer Line System Maintained by the County of Los Alamos; County of Los Alamos, Information Services; as published 04 March 2009.

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

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

Water Utility Distribution System Maintained by the County of Los Alamos; County of Los Alamos, Information Services; as published 04 March 2009.

Primary Industrial Waste Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 15 October 2008

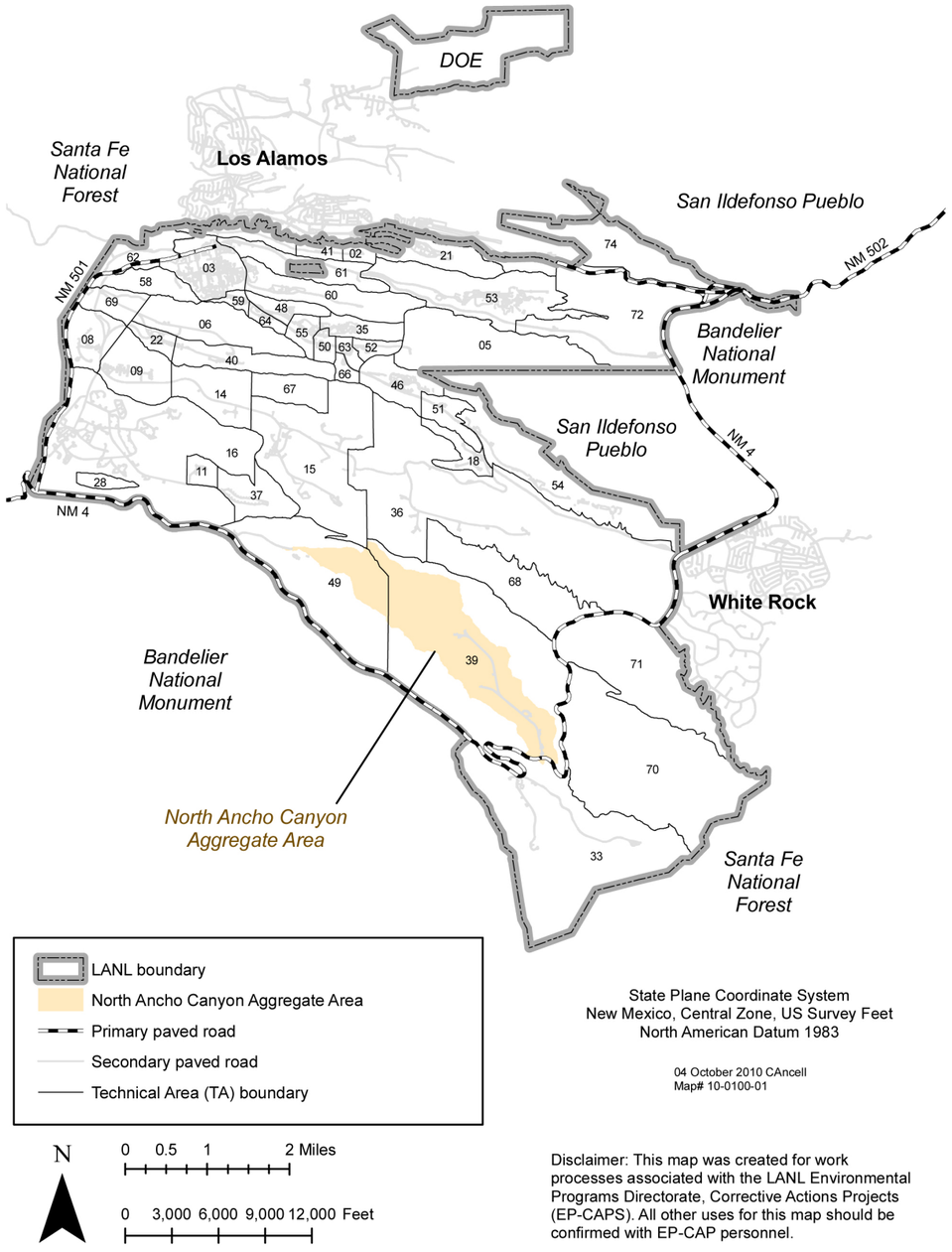

Figure 1.1-1 Location of North Ancho Canyon Aggregate Area with respect to Laboratory technical areas and surrounding land holdings

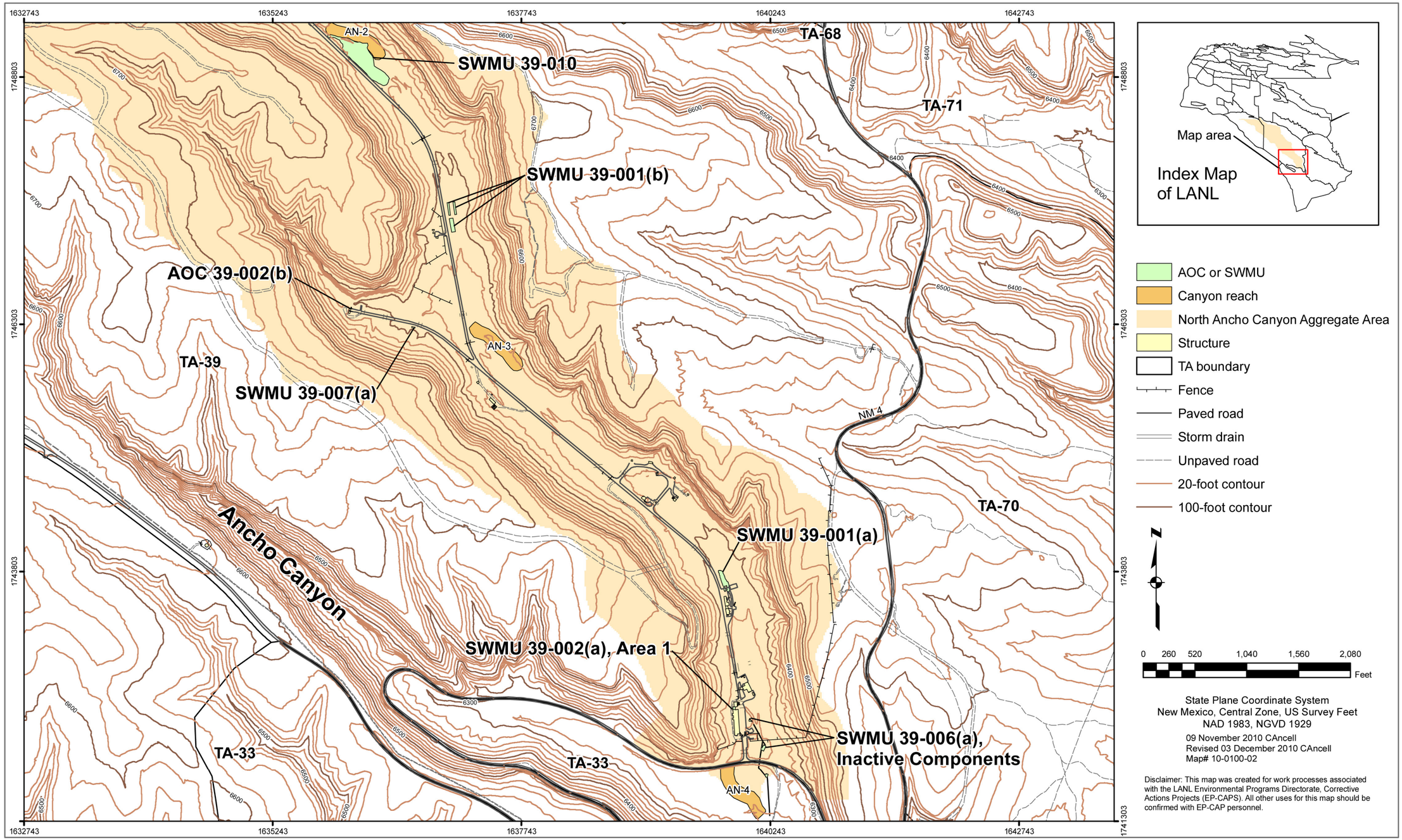

Figure 1.1-2 Location of remaining SWMUs and AOC to be investigated at TA-39

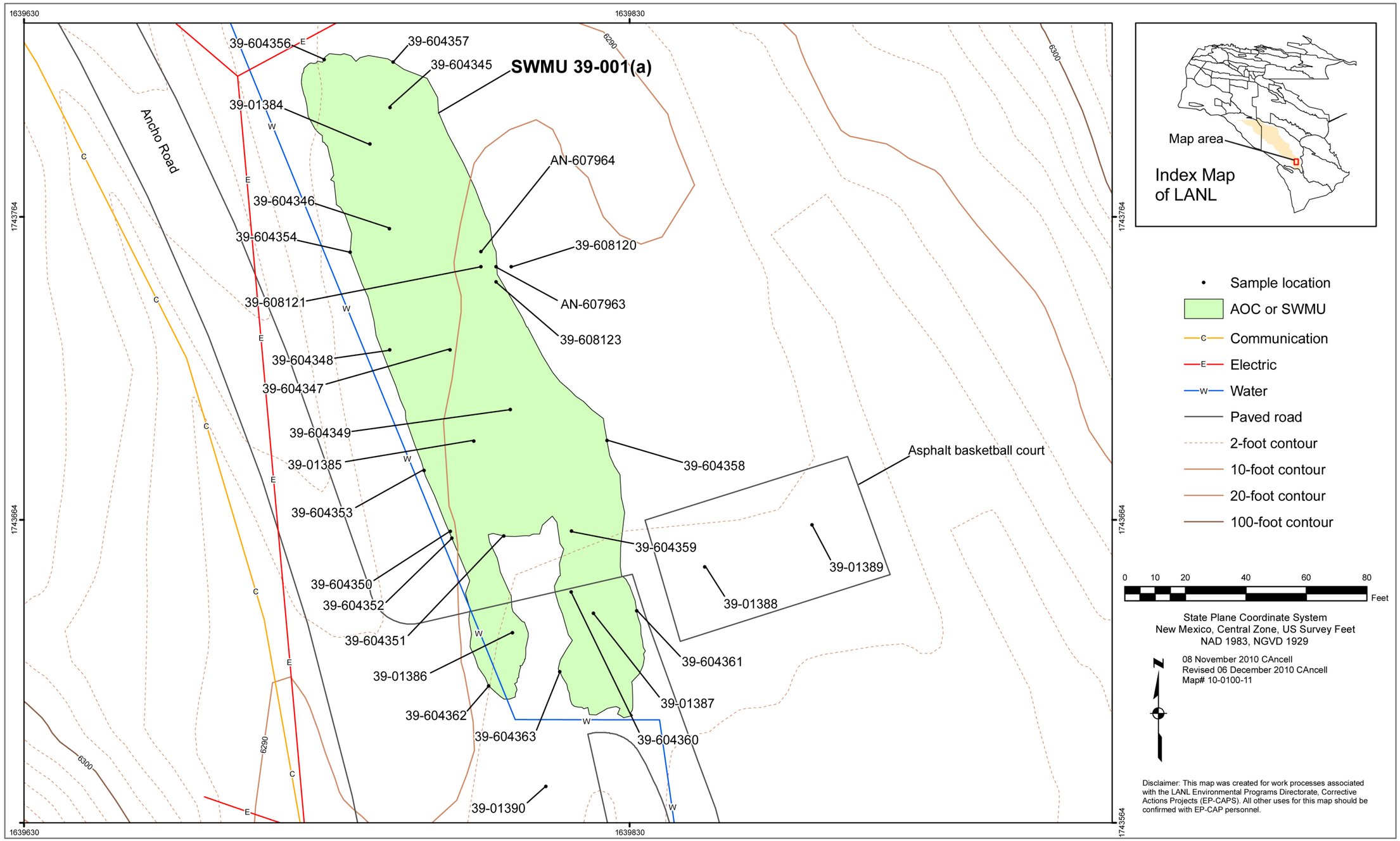

Figure 2.1-1 Site features for SWMU 39-001(a)

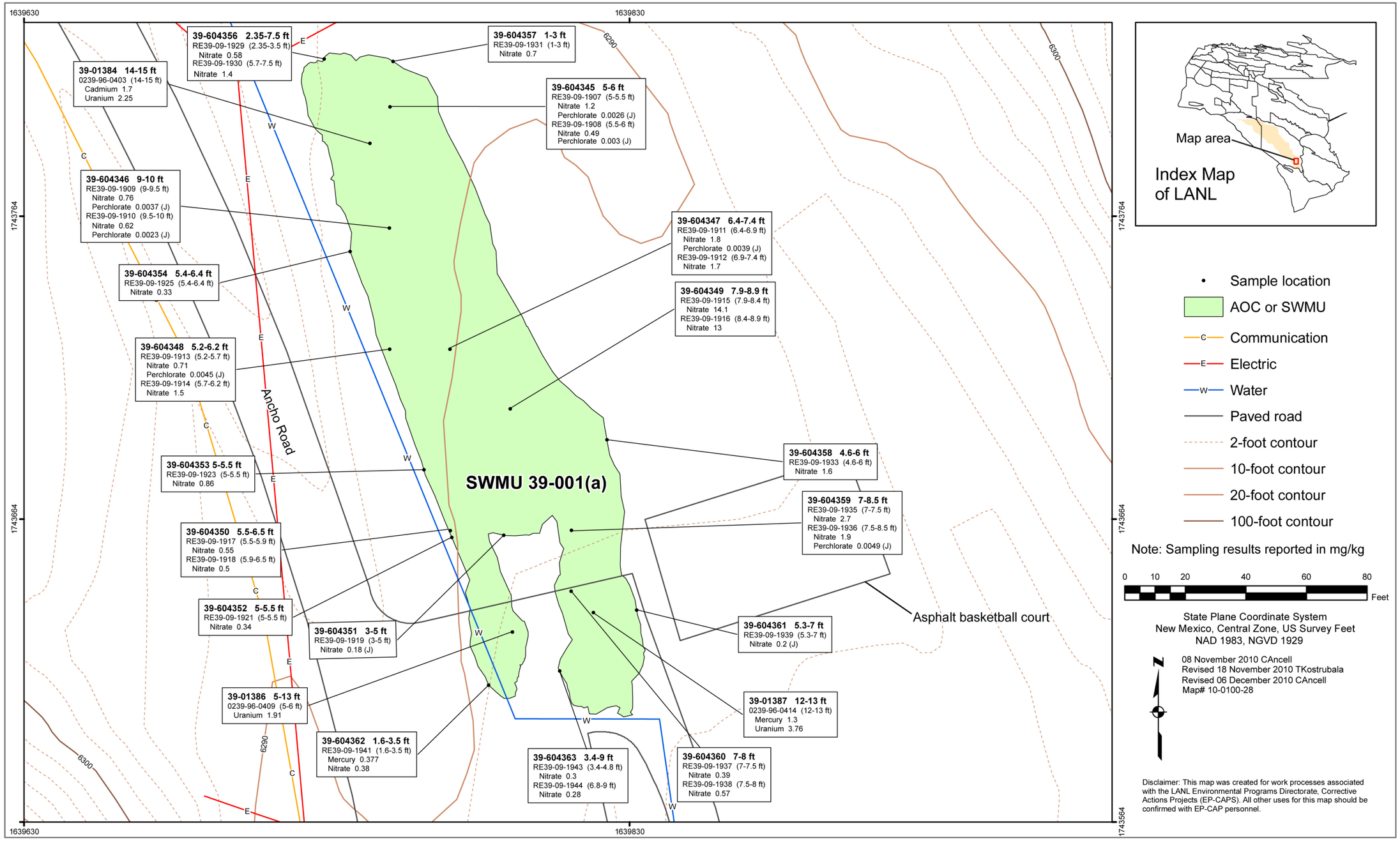

Figure 2.1-2 Inorganic chemicals detected above BVs at SWMU 39-001(a)

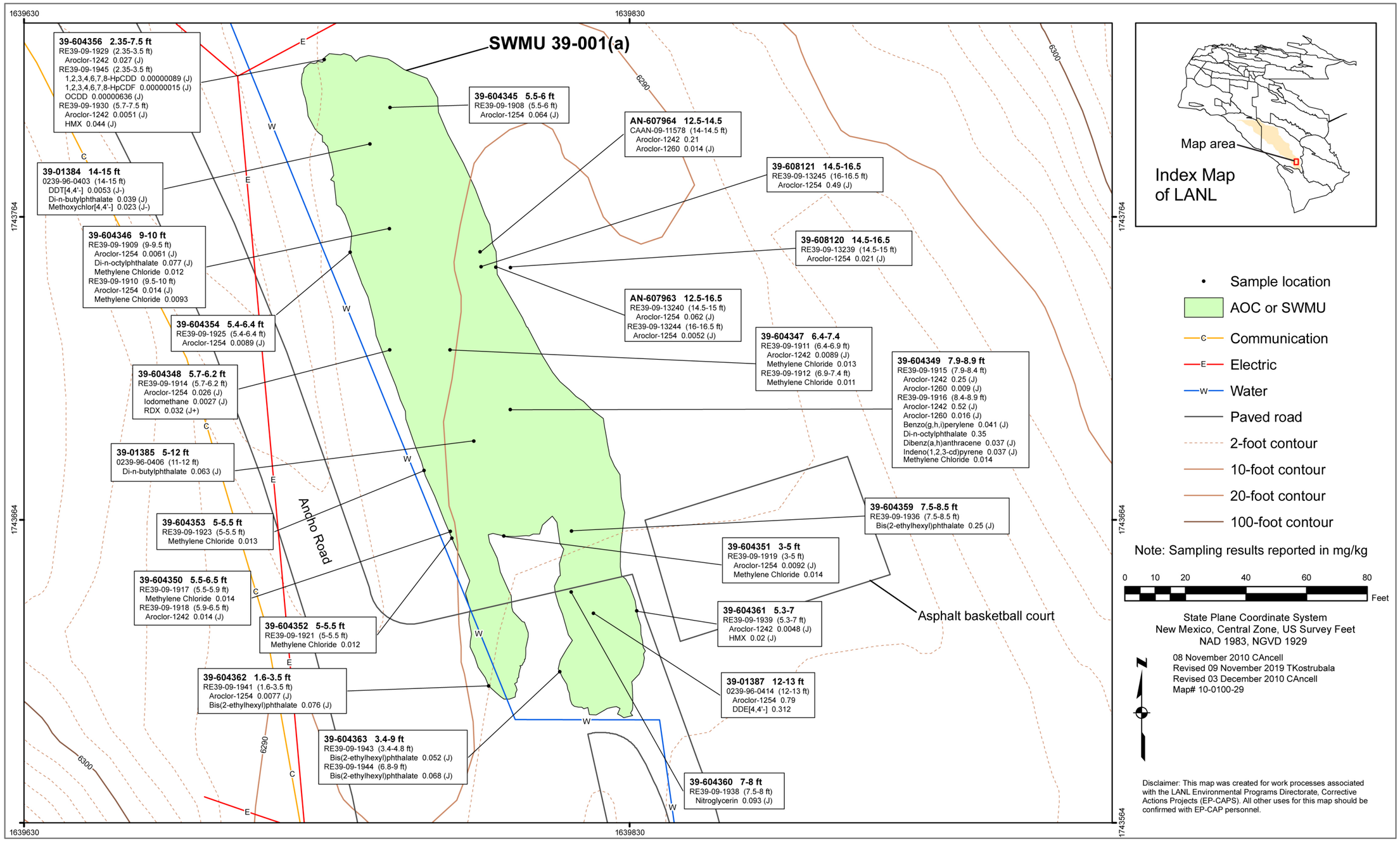

Figure 2.1-3 Organic chemicals detected at SWMU 39-001(a)

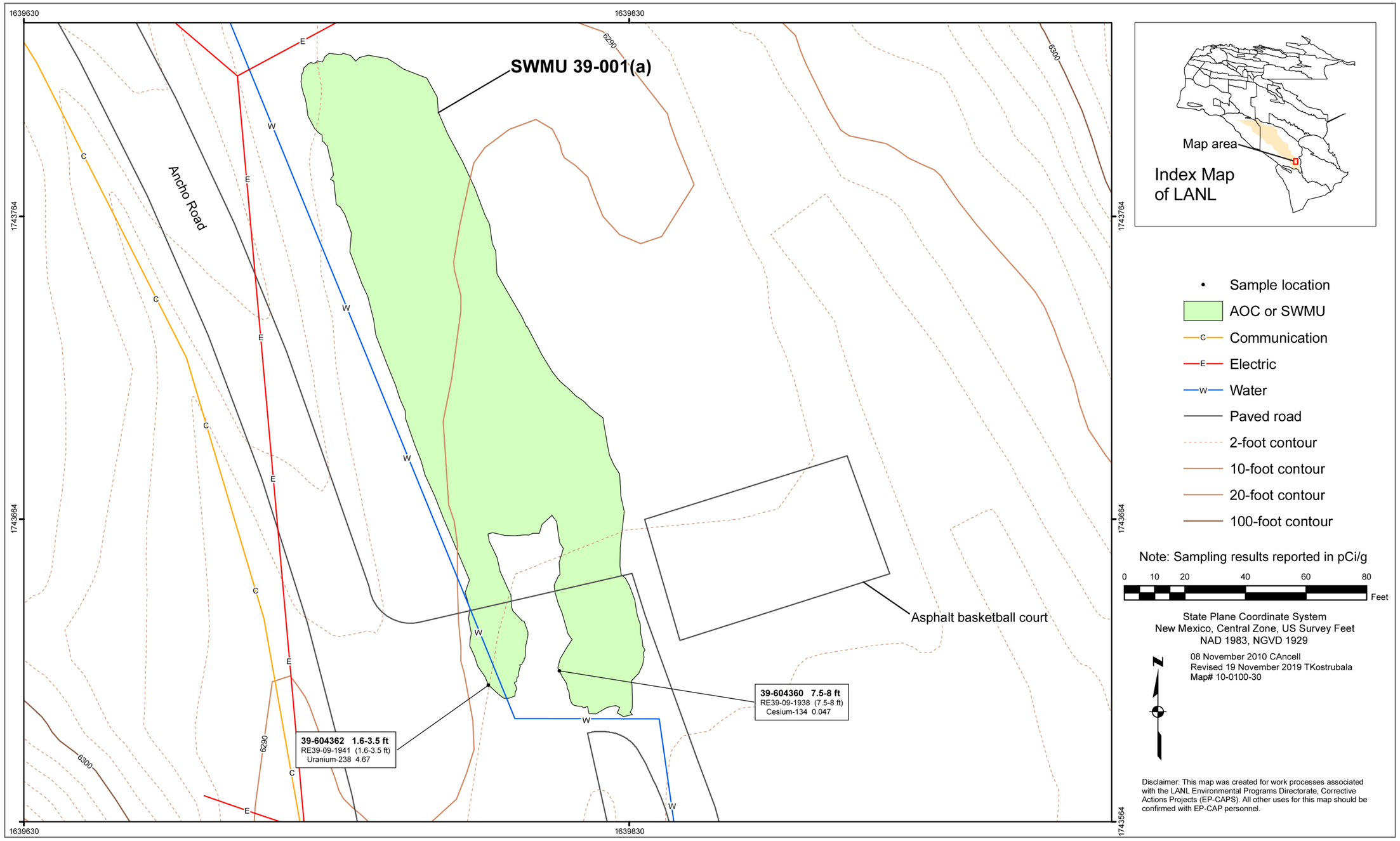

Figure 2.1-4 Radionuclides detected or detected above BVs/FVs at SWMU 39-001(a)

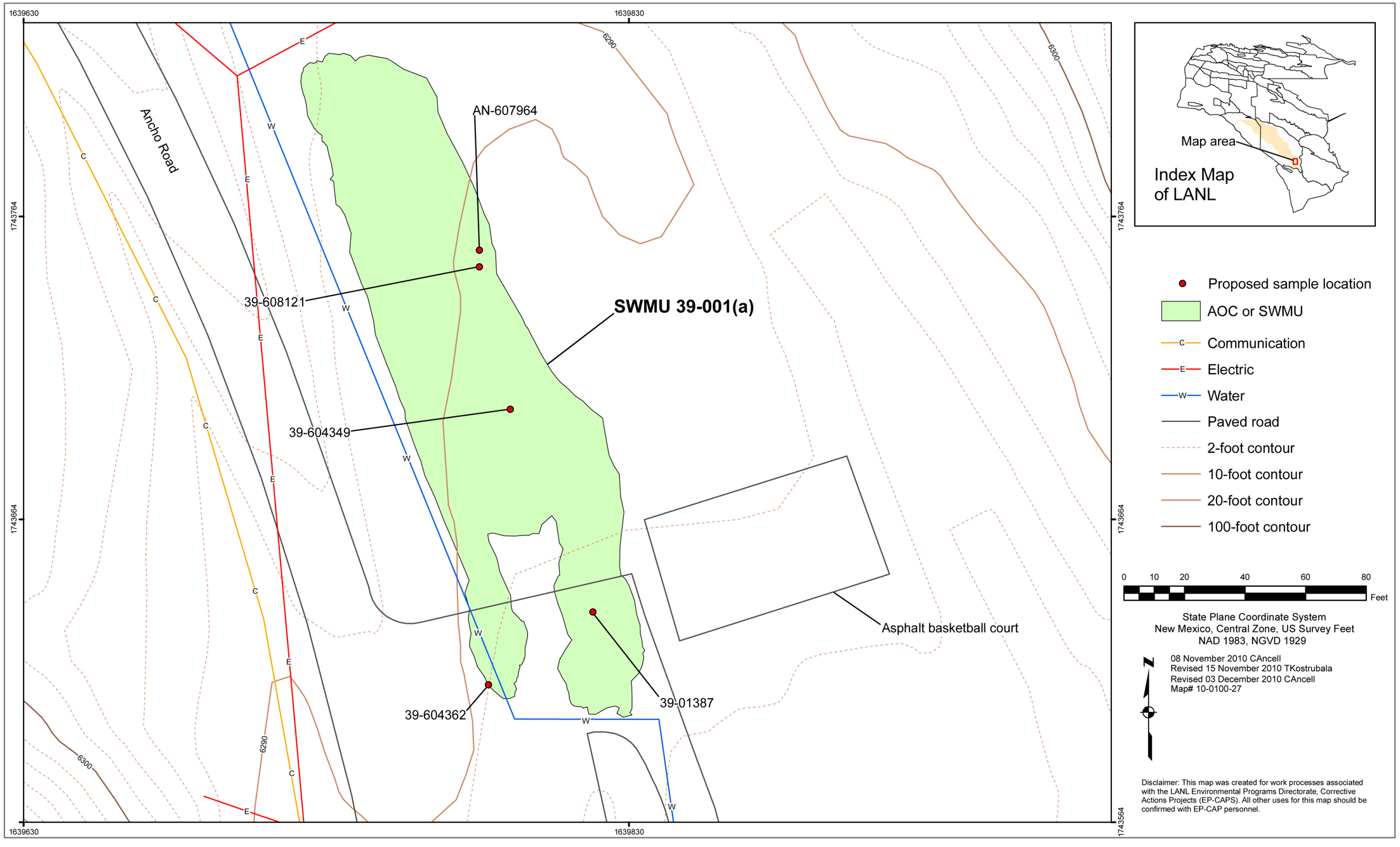

Figure 2.1-5 Proposed locations of surface and subsurface samples at SWMU 39-001(a)

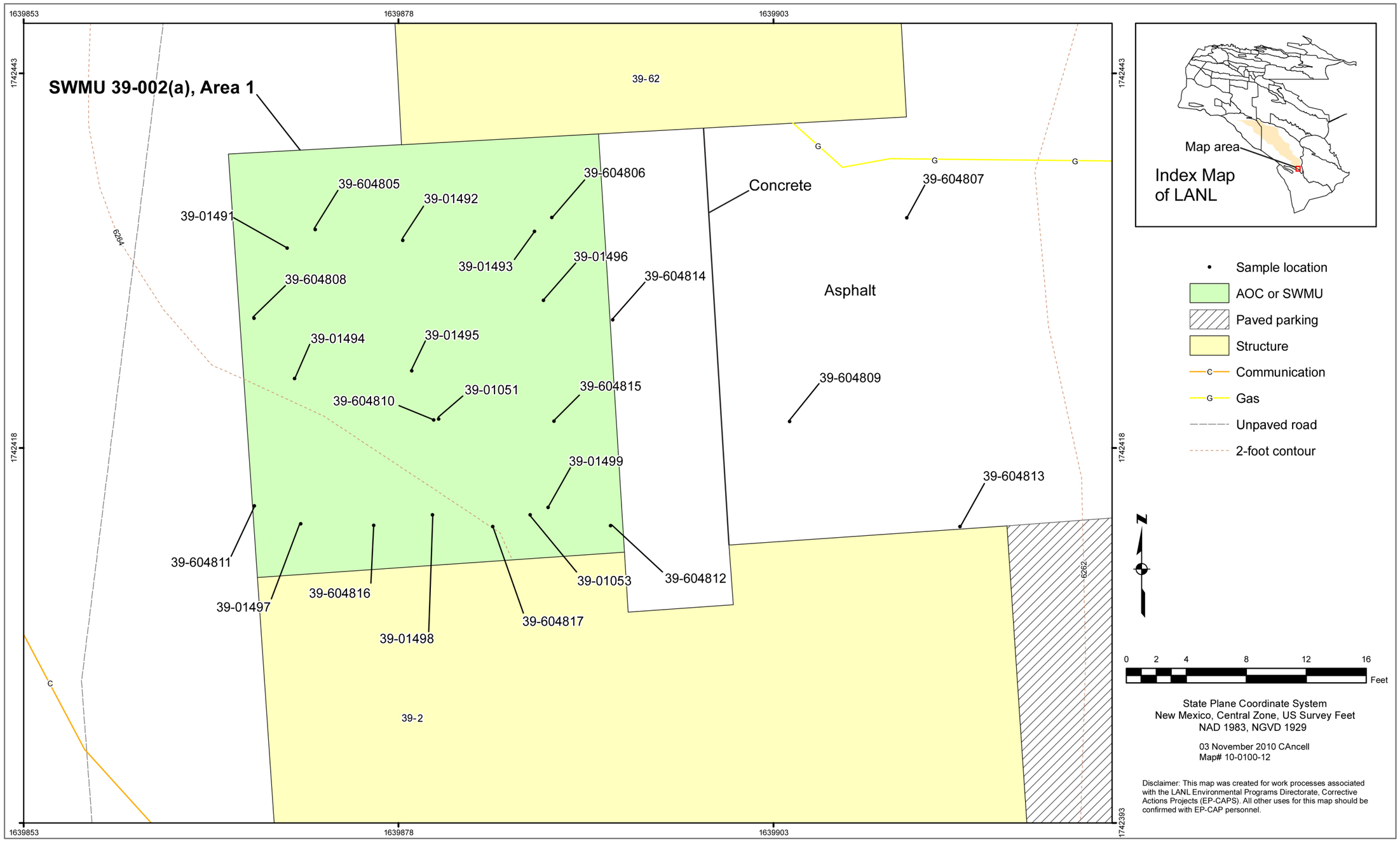

Figure 2.2-1 Site features for SWMU 39-002(a), Area 1

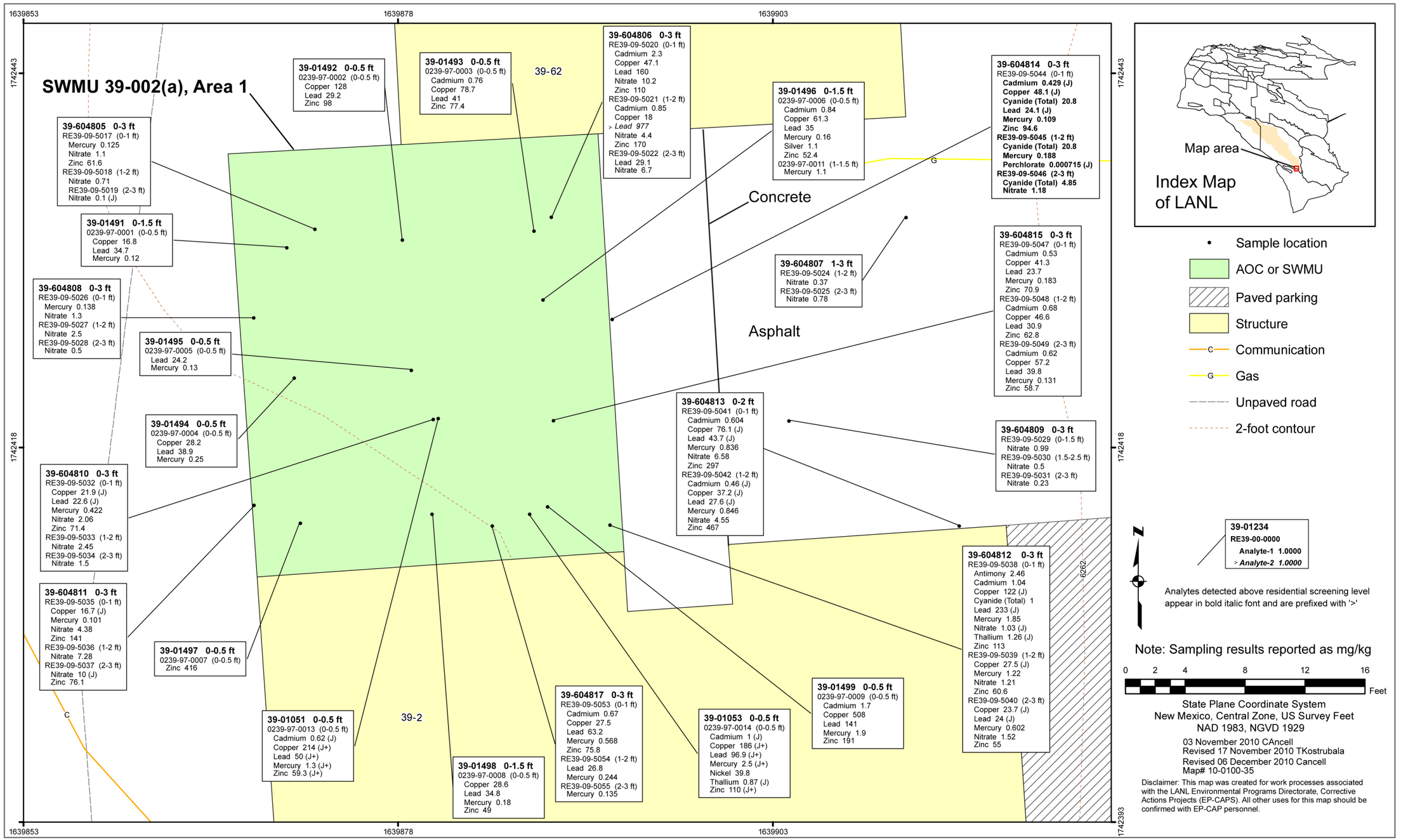

Figure 2.2-2 Inorganic chemicals detected above BVs at SWMU 39-002(a), Area 1

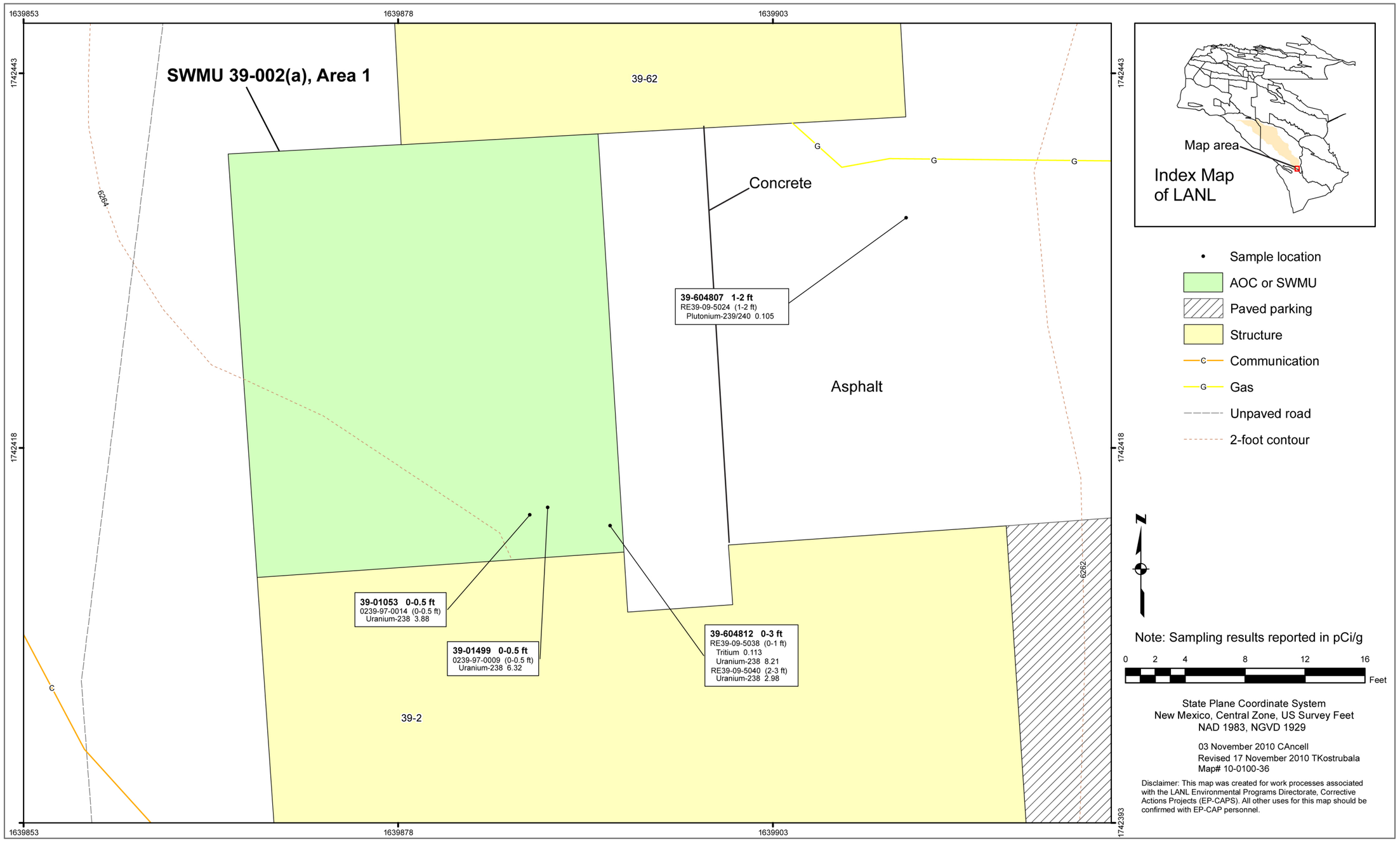

Figure 2.2-3 Radionuclides detected or detected above BVs/FVs at SWMU 39-002(a), Area 1

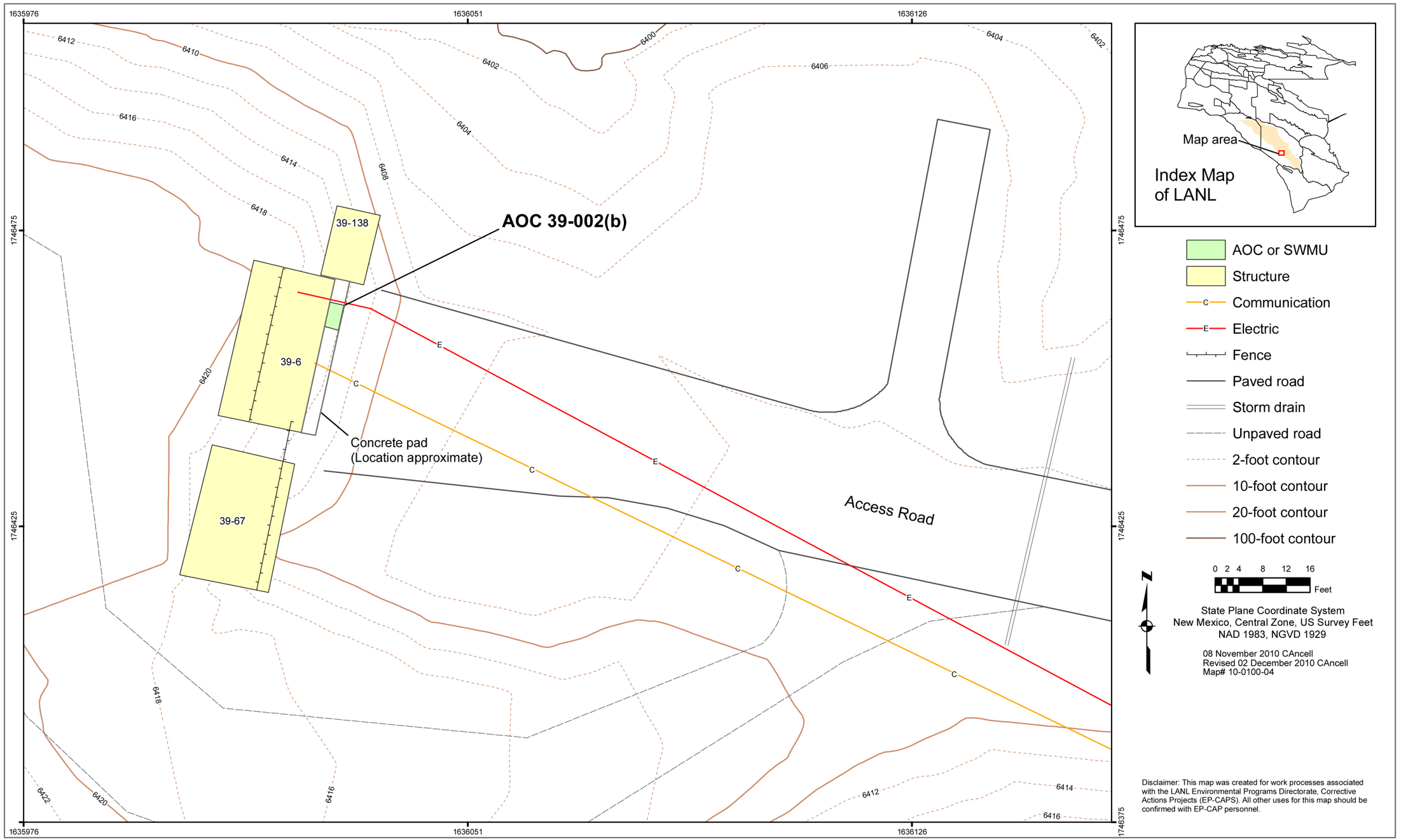

Figure 2.3-1 Site features for AOC 39-002(b)

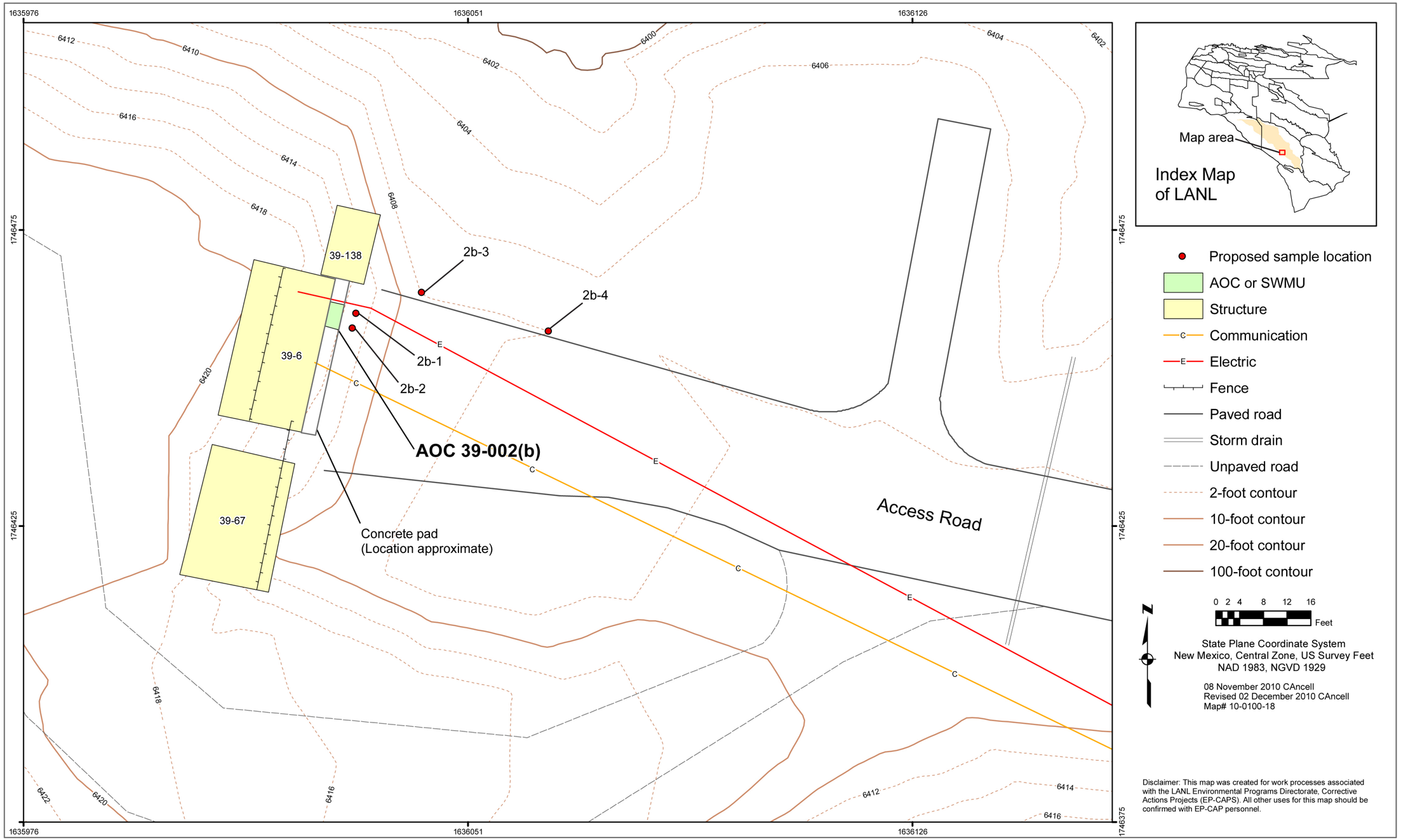

Figure 2.3-2 Proposed locations of surface and subsurface samples at AOC 39-002(b)

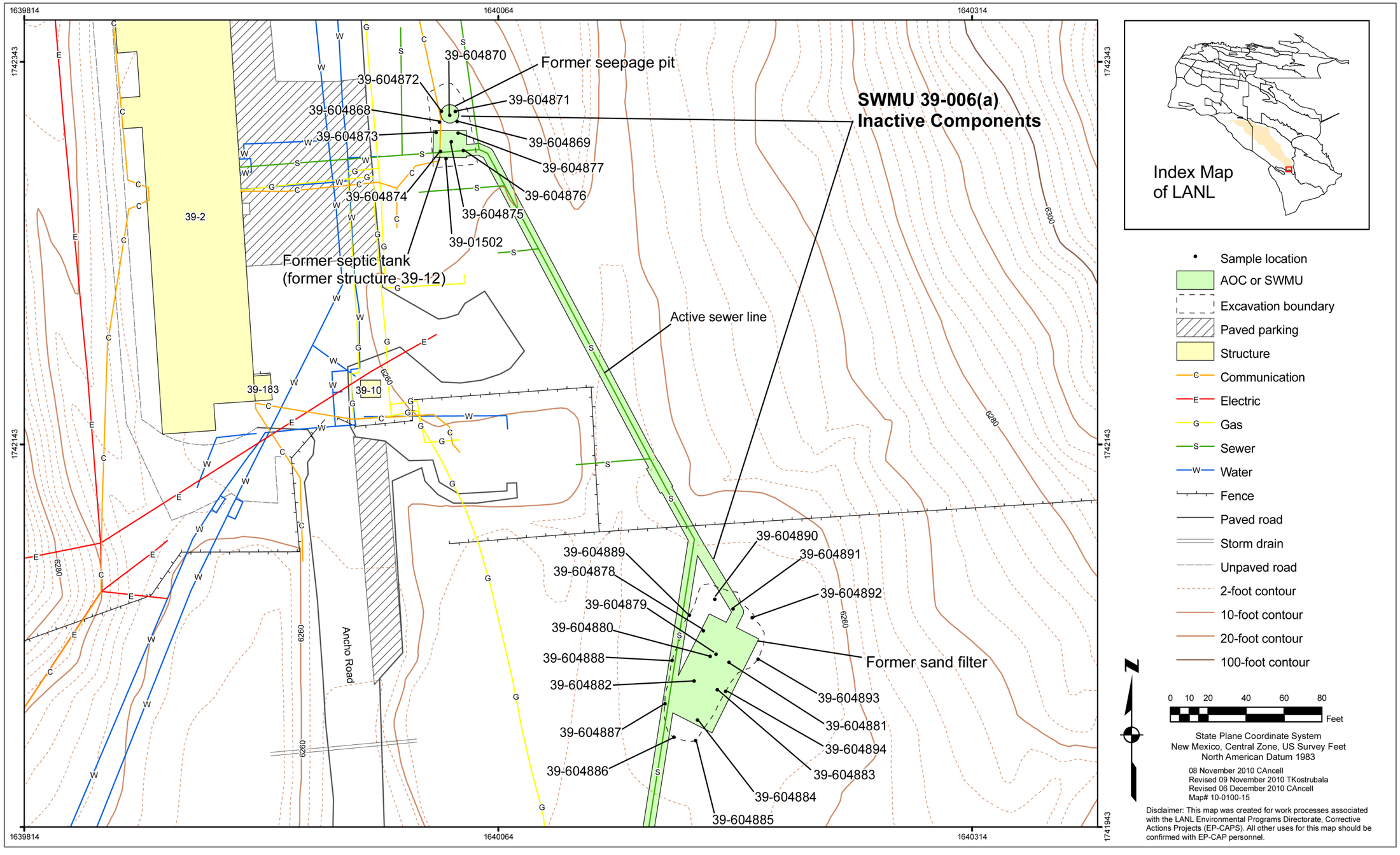

Figure 2.4-1 Site features for SWMU 39-006(a), inactive components

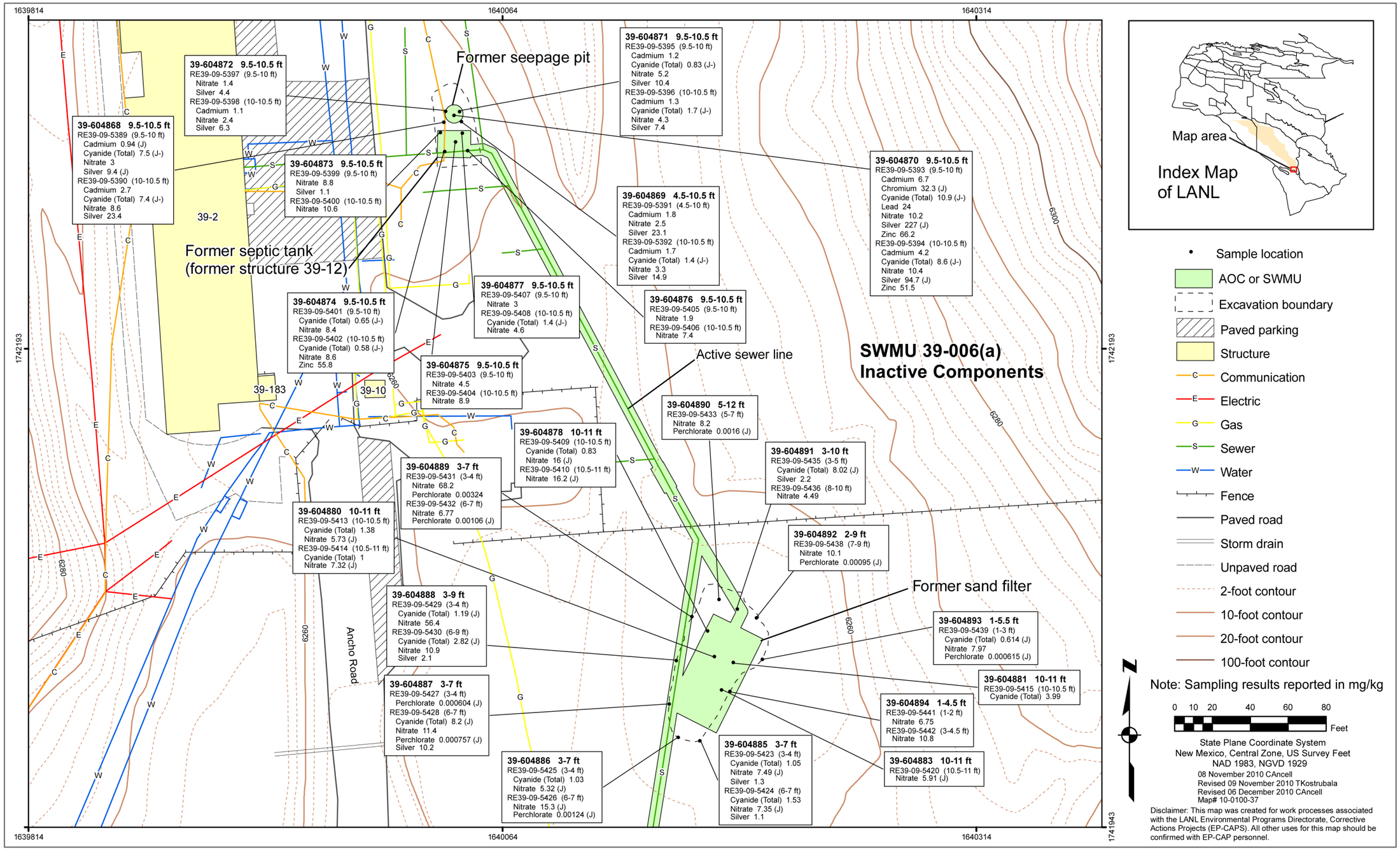

Figure 2.4-2 Inorganic chemicals detected above BVs at SWMU 39-006(a), inactive components

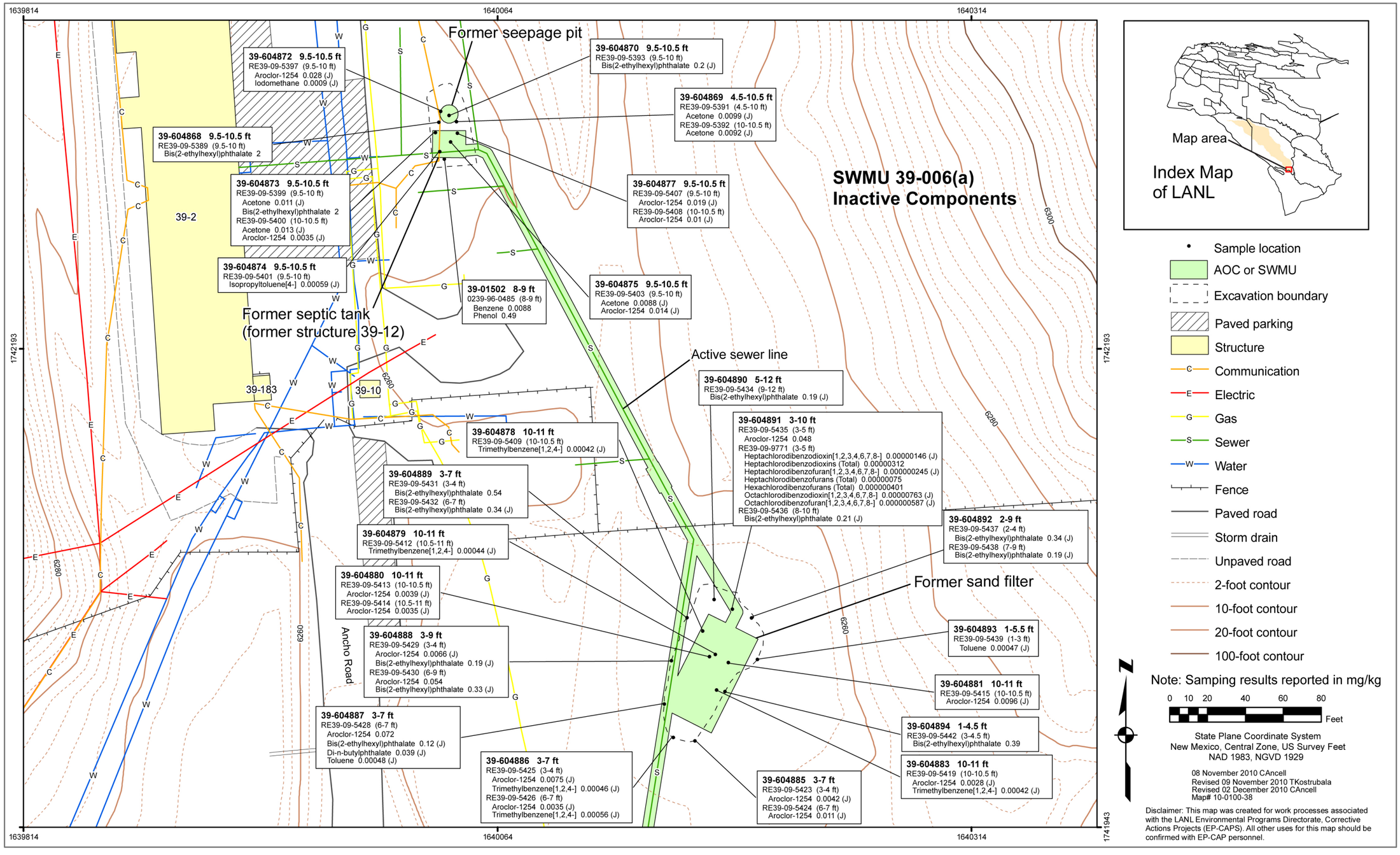

Figure 2.4-3 Organic chemicals detected at SWMU 39-006(a), inactive components

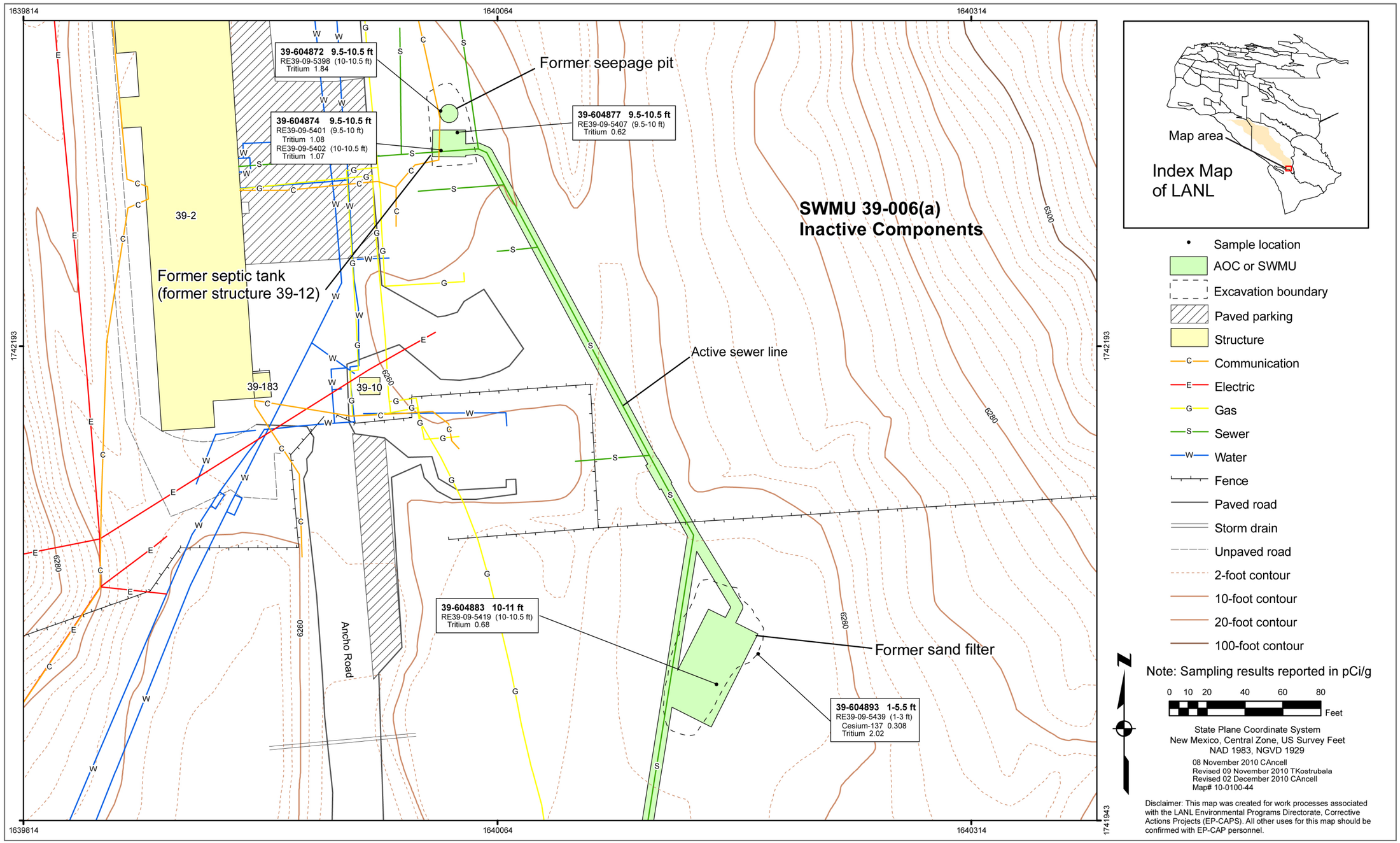

Figure 2.4-4 Radionuclides detected or detected above BVs/FVs at SWMU 39-006(a), inactive components

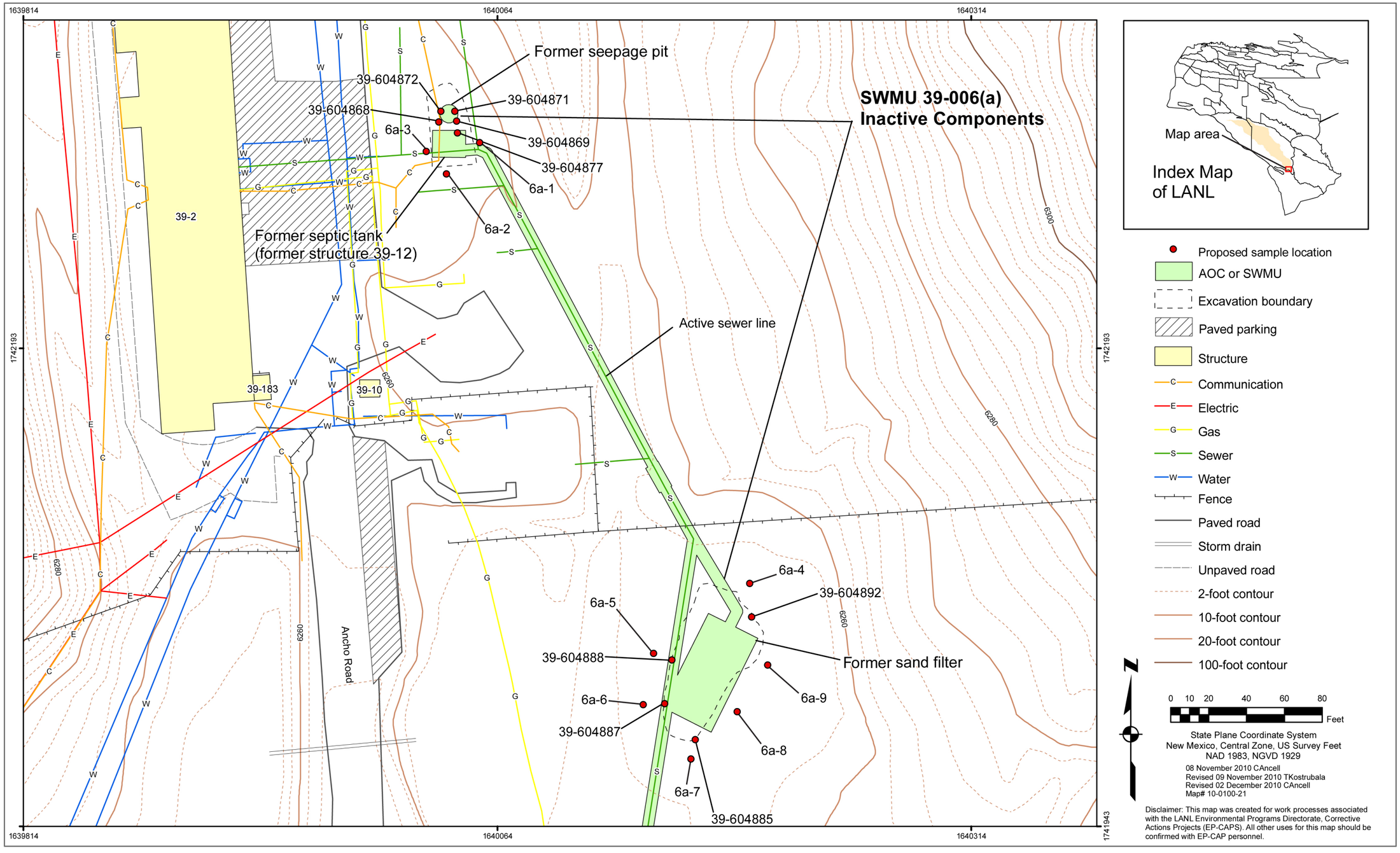

Figure 2.4-5 Proposed locations of surface and subsurface samples at SWMU 39-006(a), inactive components

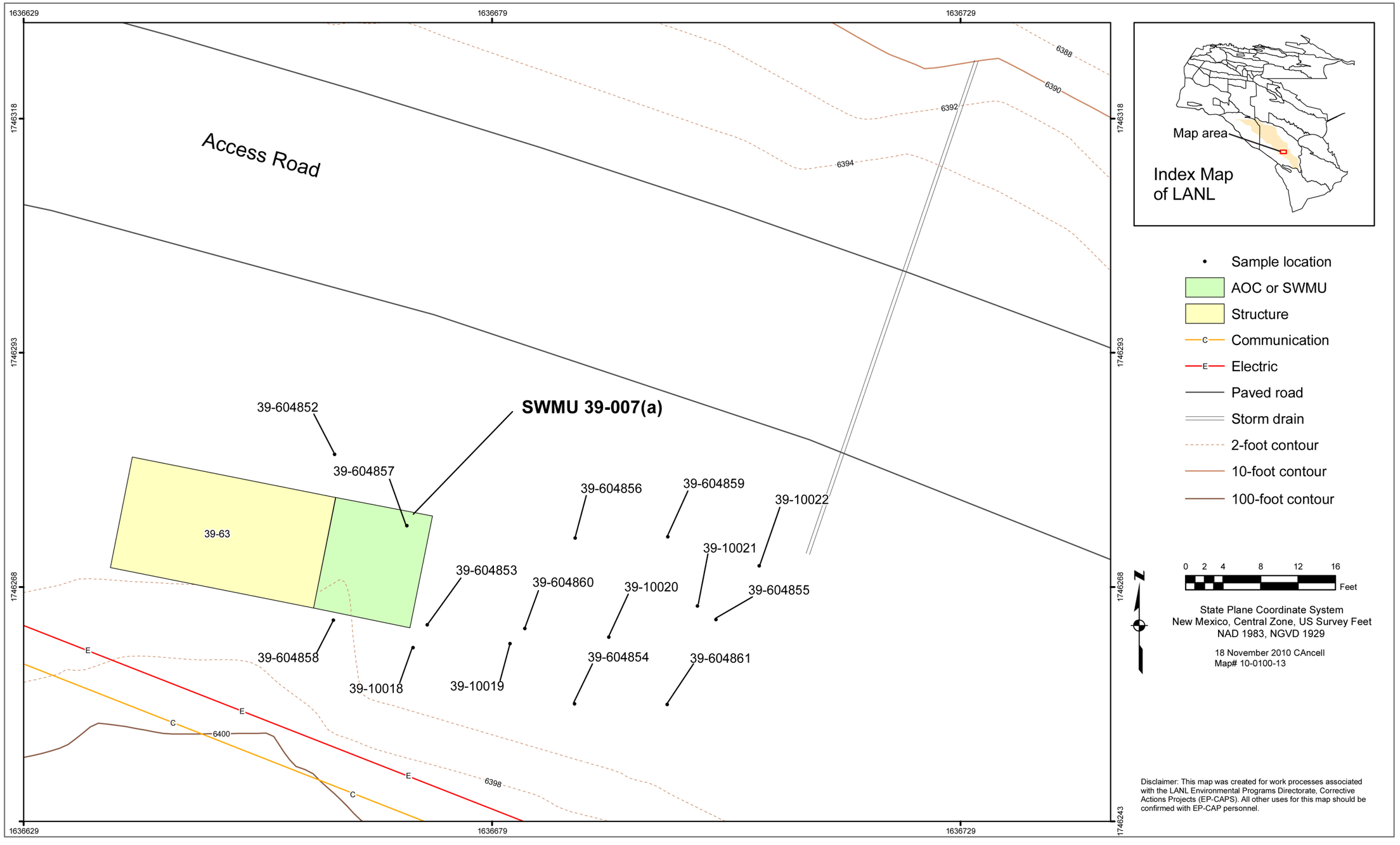

Figure 2.5-1 Site features for SWMU 39-007(a)

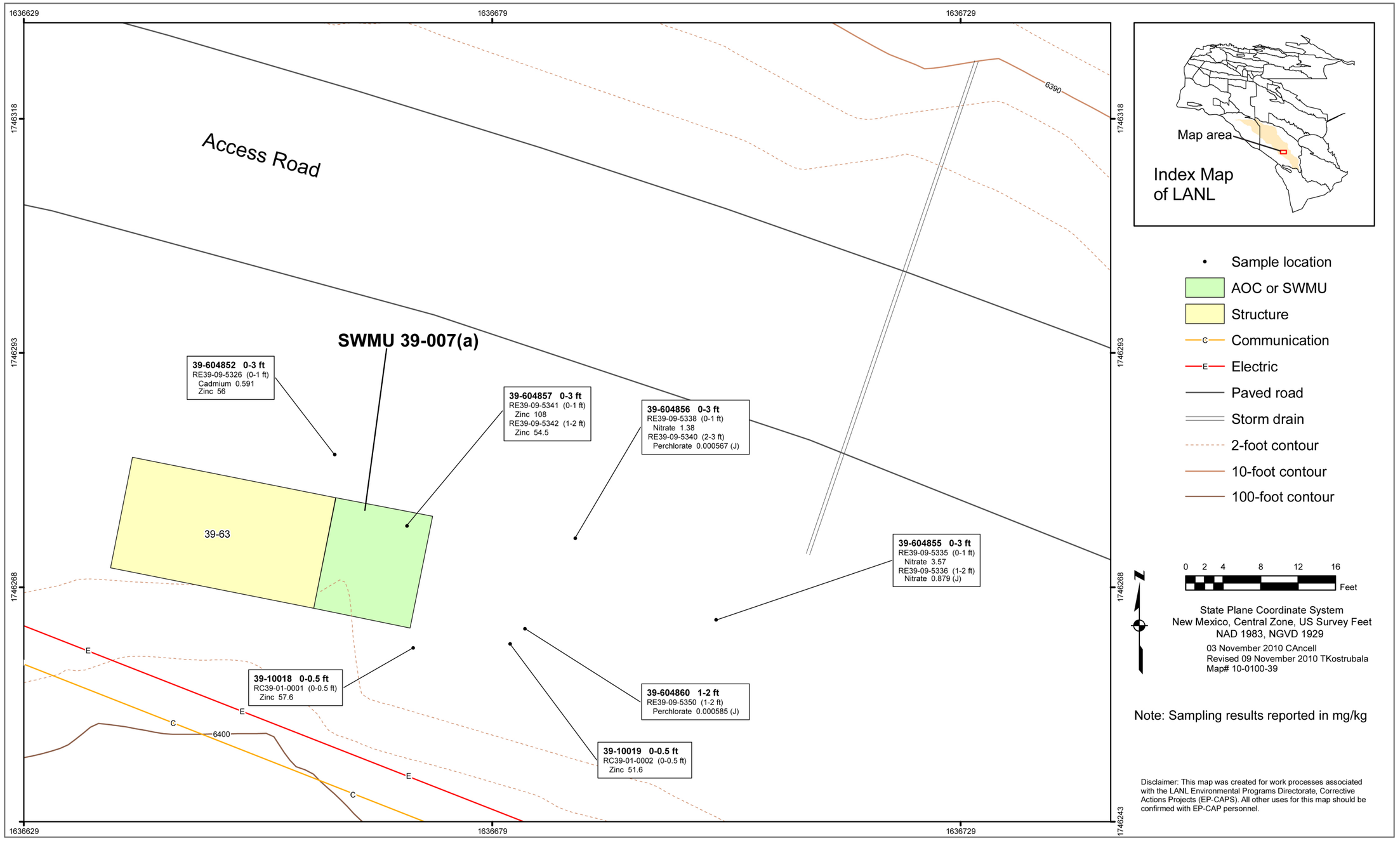

Figure 2.5-2 Inorganic chemicals detected above BVs at SWMU 39-007(a)

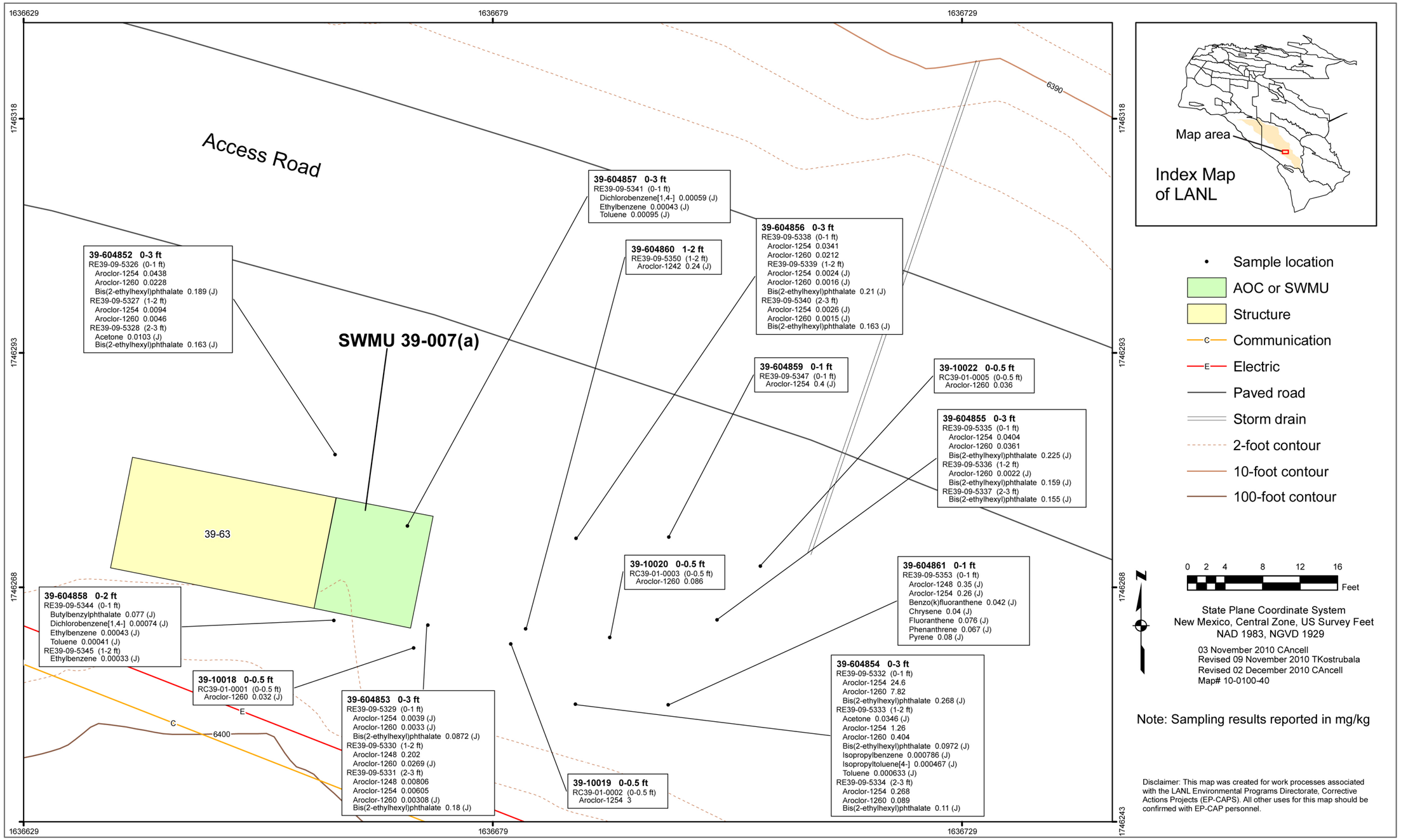

Figure 2.5-3 Organic chemicals detected at SWMU 39-007(a)

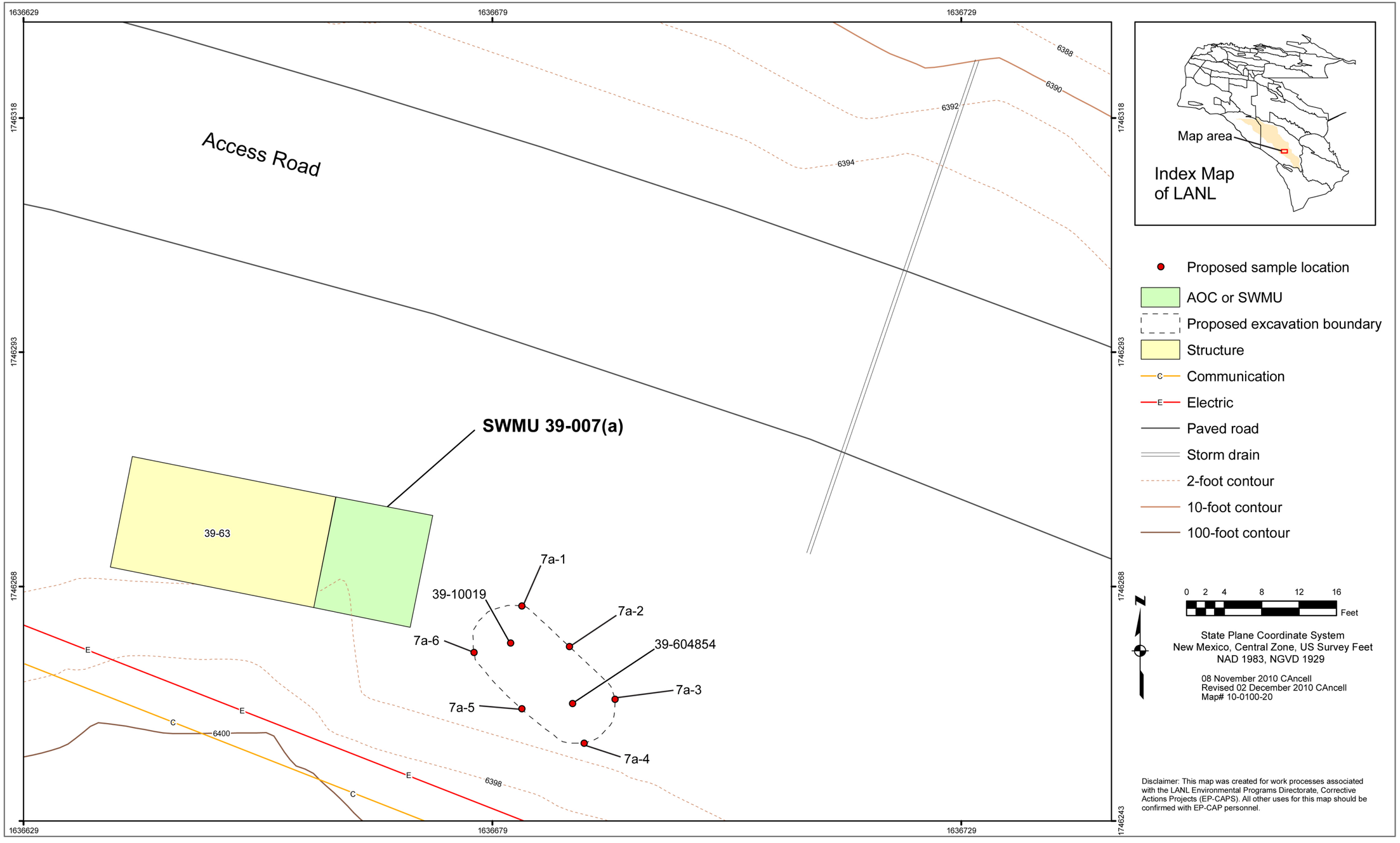

Figure 2.5-4 Proposed locations of surface and subsurface samples at SWMU 39-007(a)

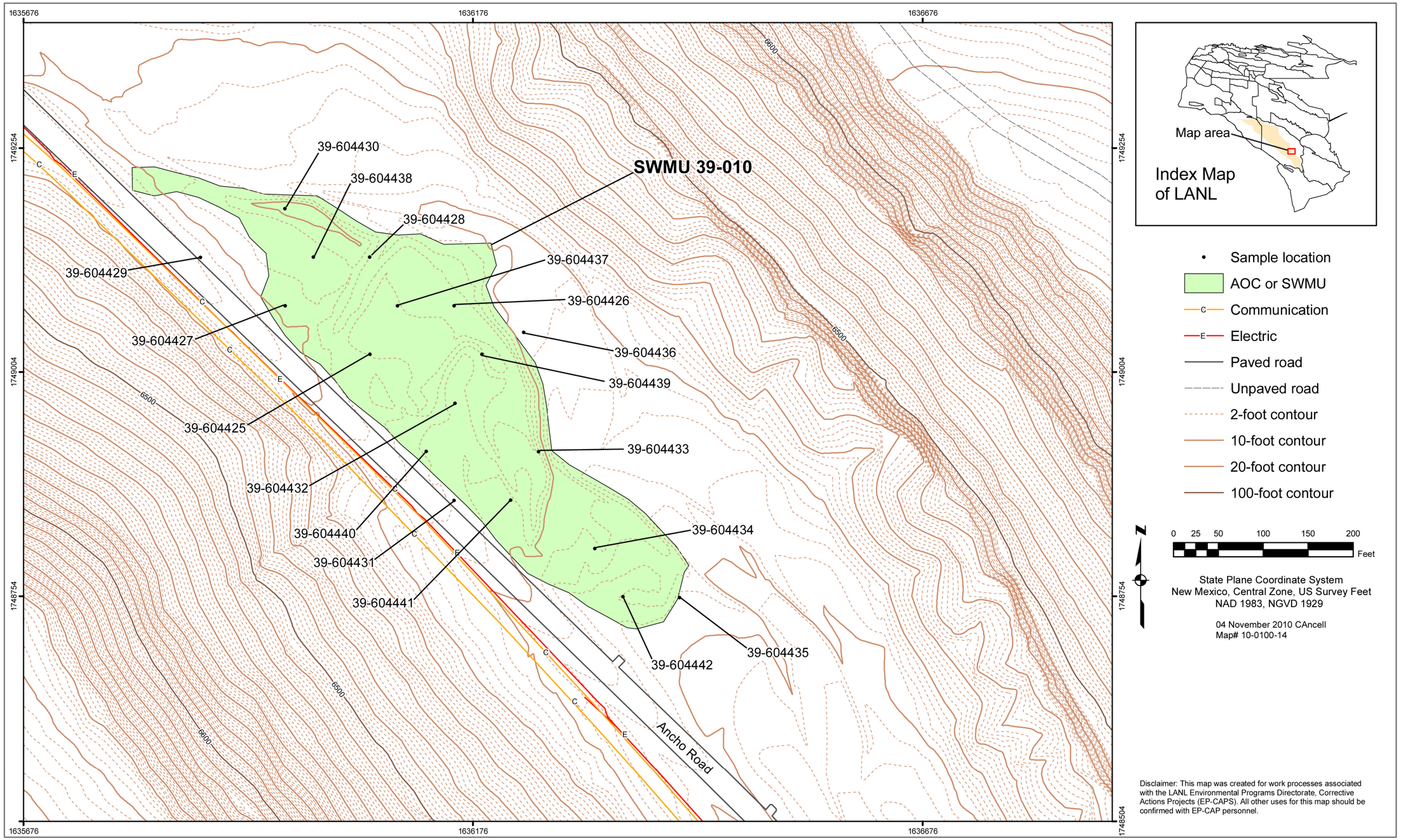

Figure 2.6-1 Site features for SWMU 39-010

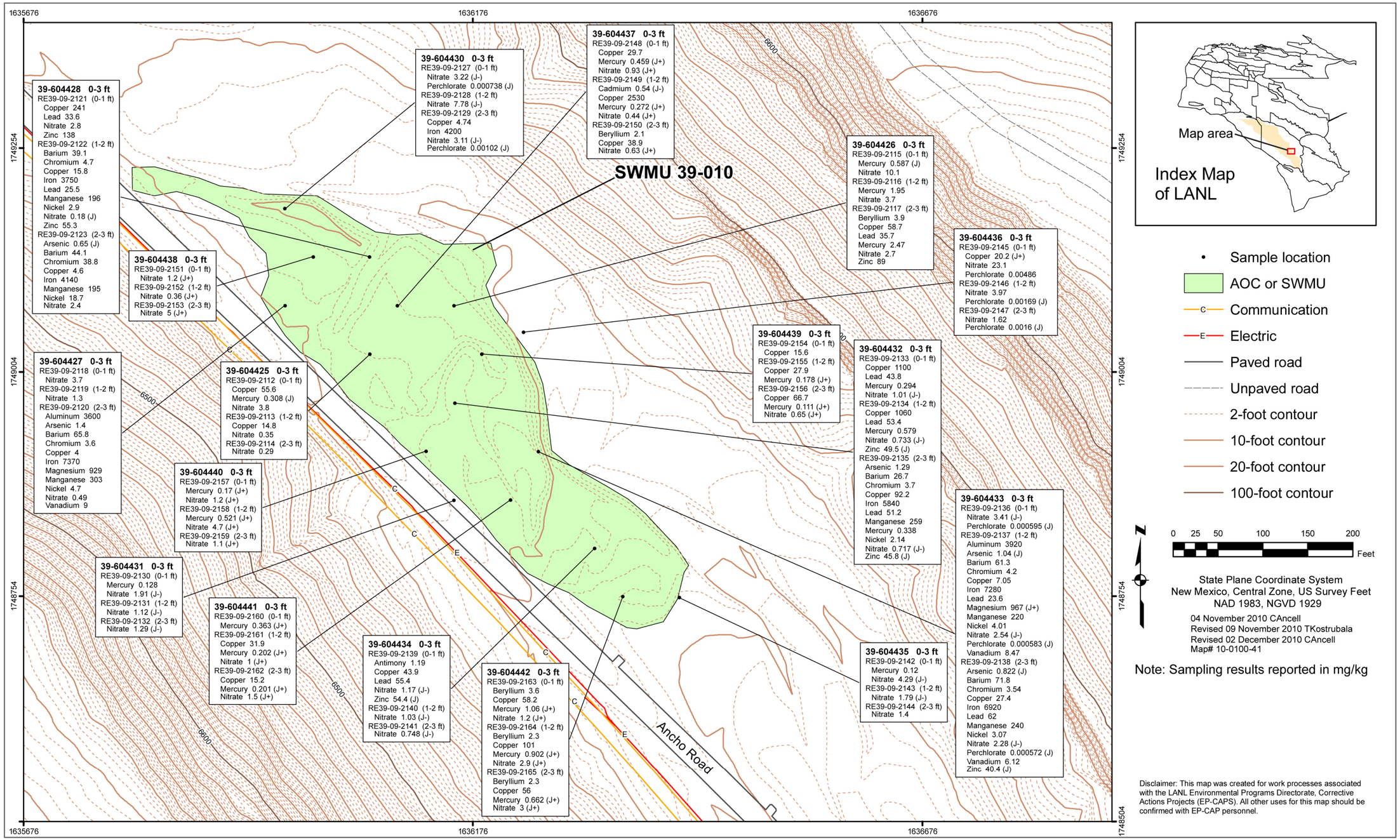

Figure 2.6-2 Inorganic chemicals detected above BVs at SWMU 39-010

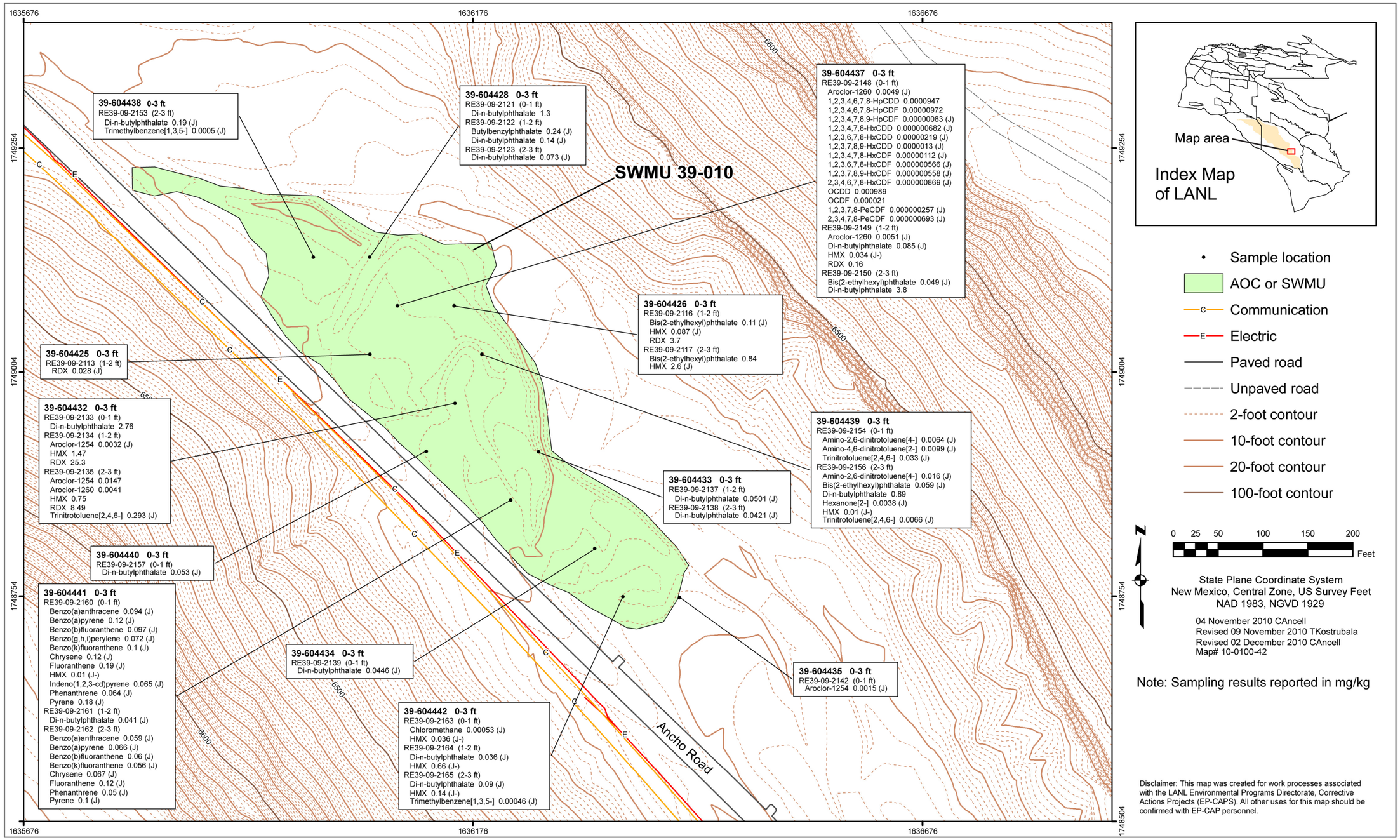

Figure 2.6-3 Organic chemicals detected at SWMU 39-010

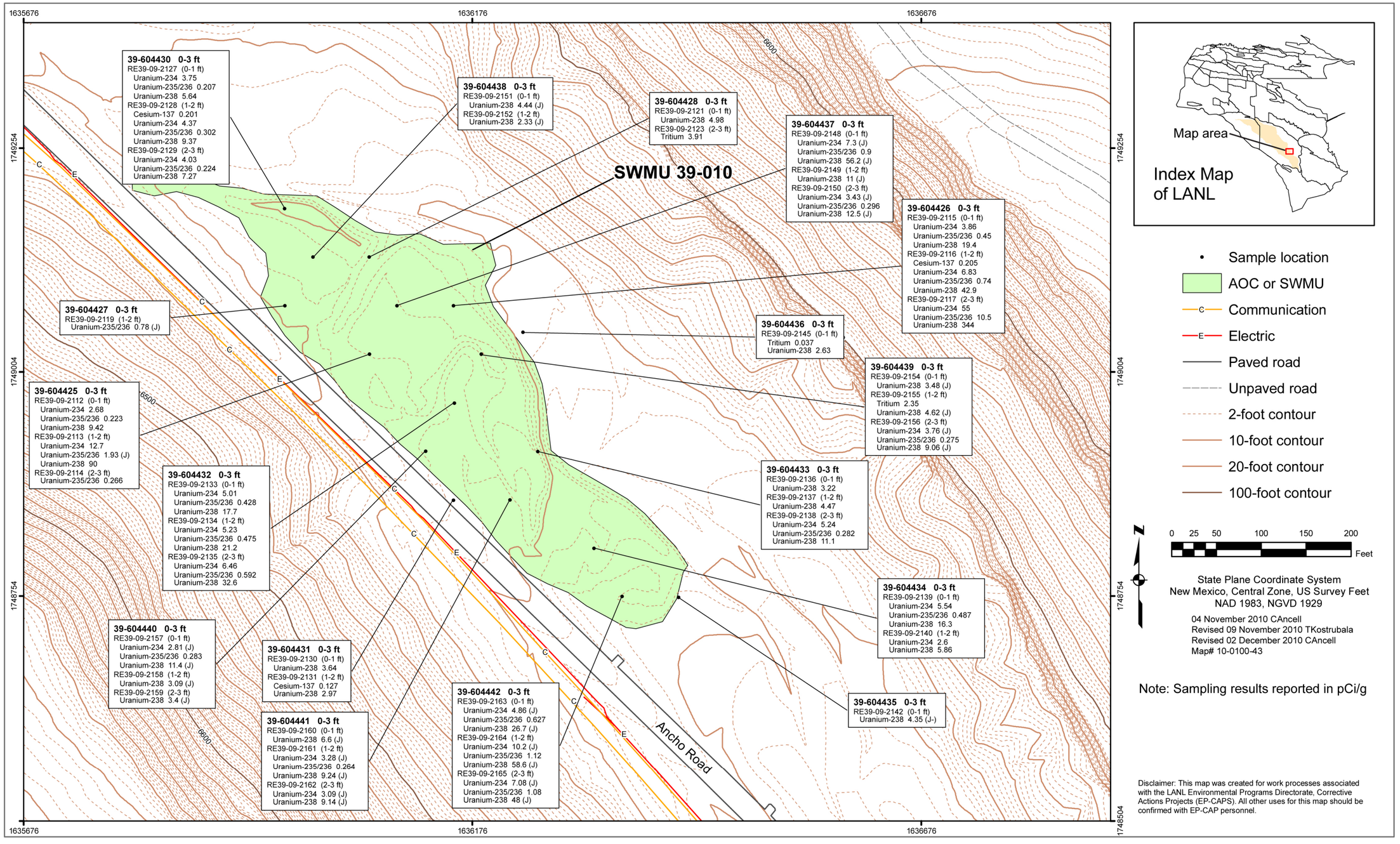

Figure 2.6-4 Radionuclides detected or detected above BVs/FVs at SWMU 39-010

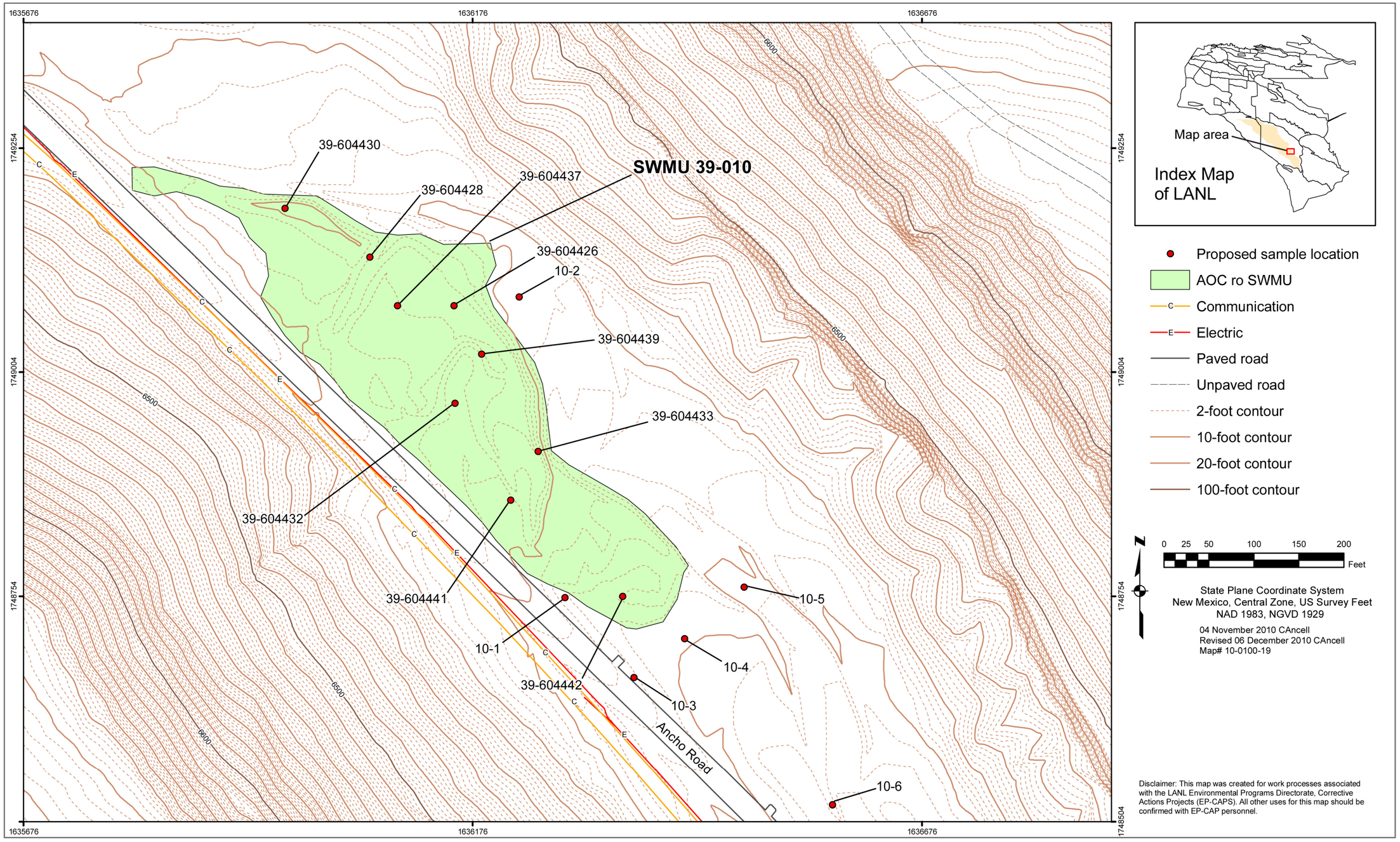

Figure 2.6-5 Proposed locations of surface and subsurface samples at SWMU 39-010

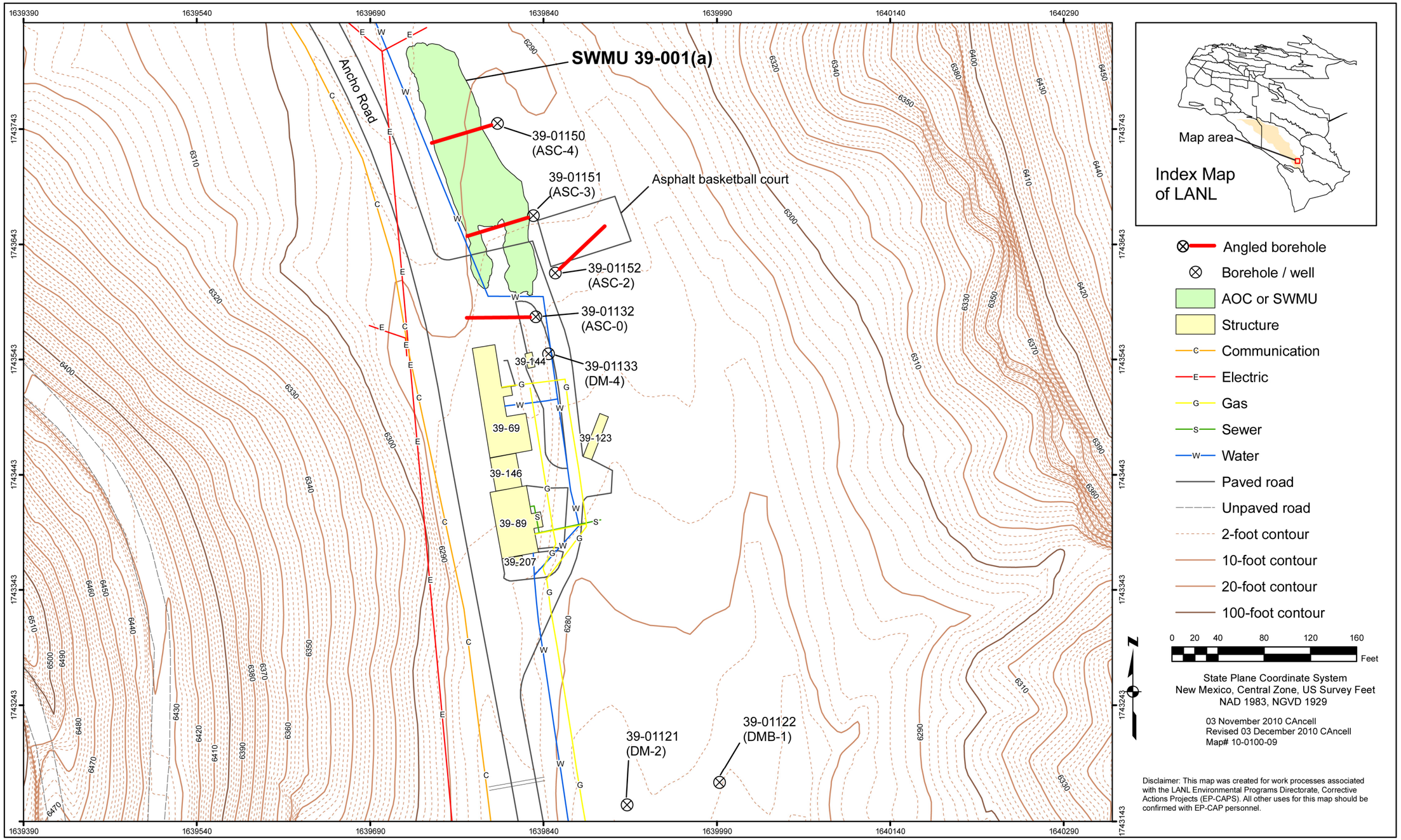

Figure 2.7-1 Well and borehole locations at SWMU 39-001(a)

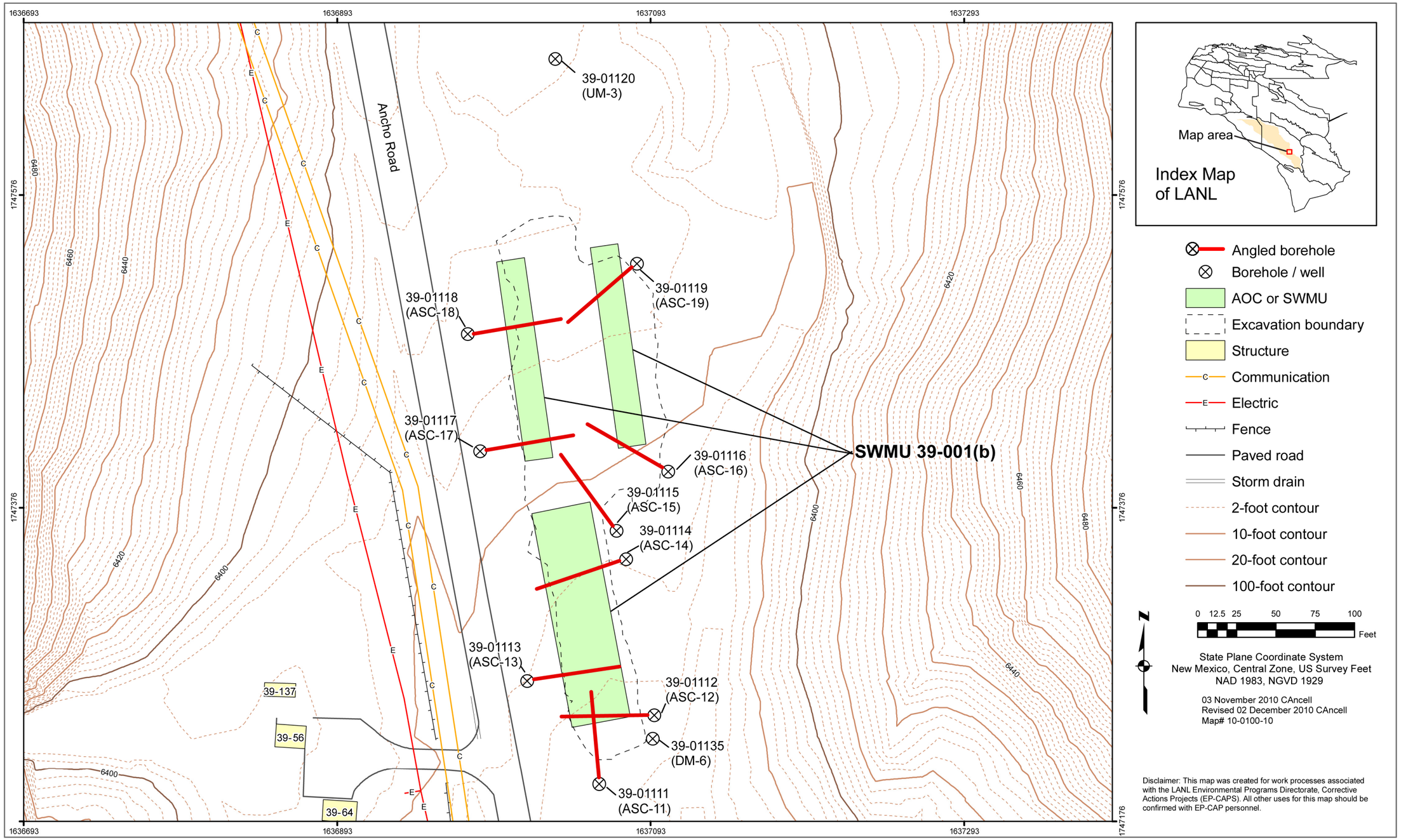

Figure 2.8-1 Well and borehole locations at SWMU 39-001(b)

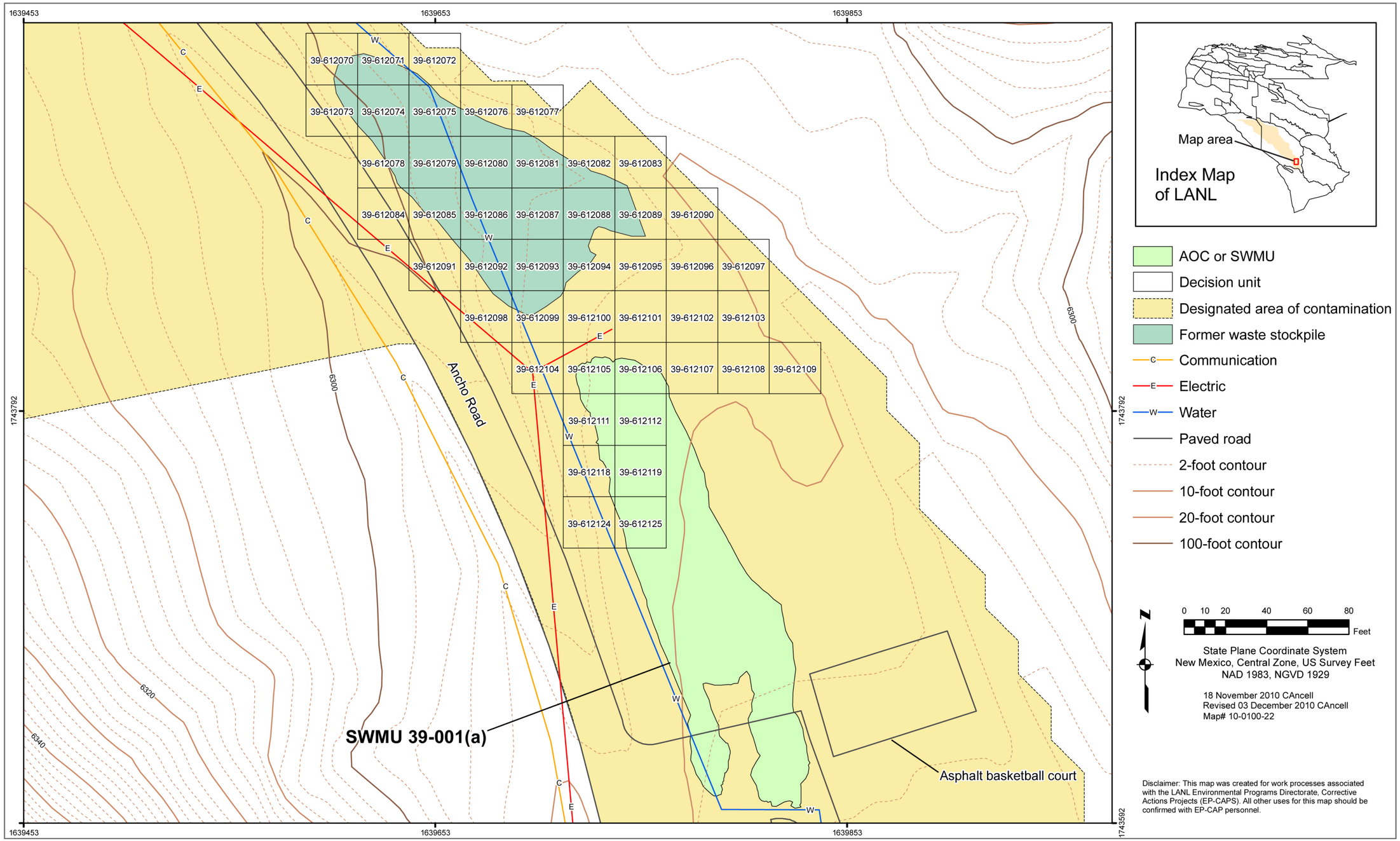

Figure 2.9-1 MI sample locations at the waste stockpile area at SWMU 39-001(a)

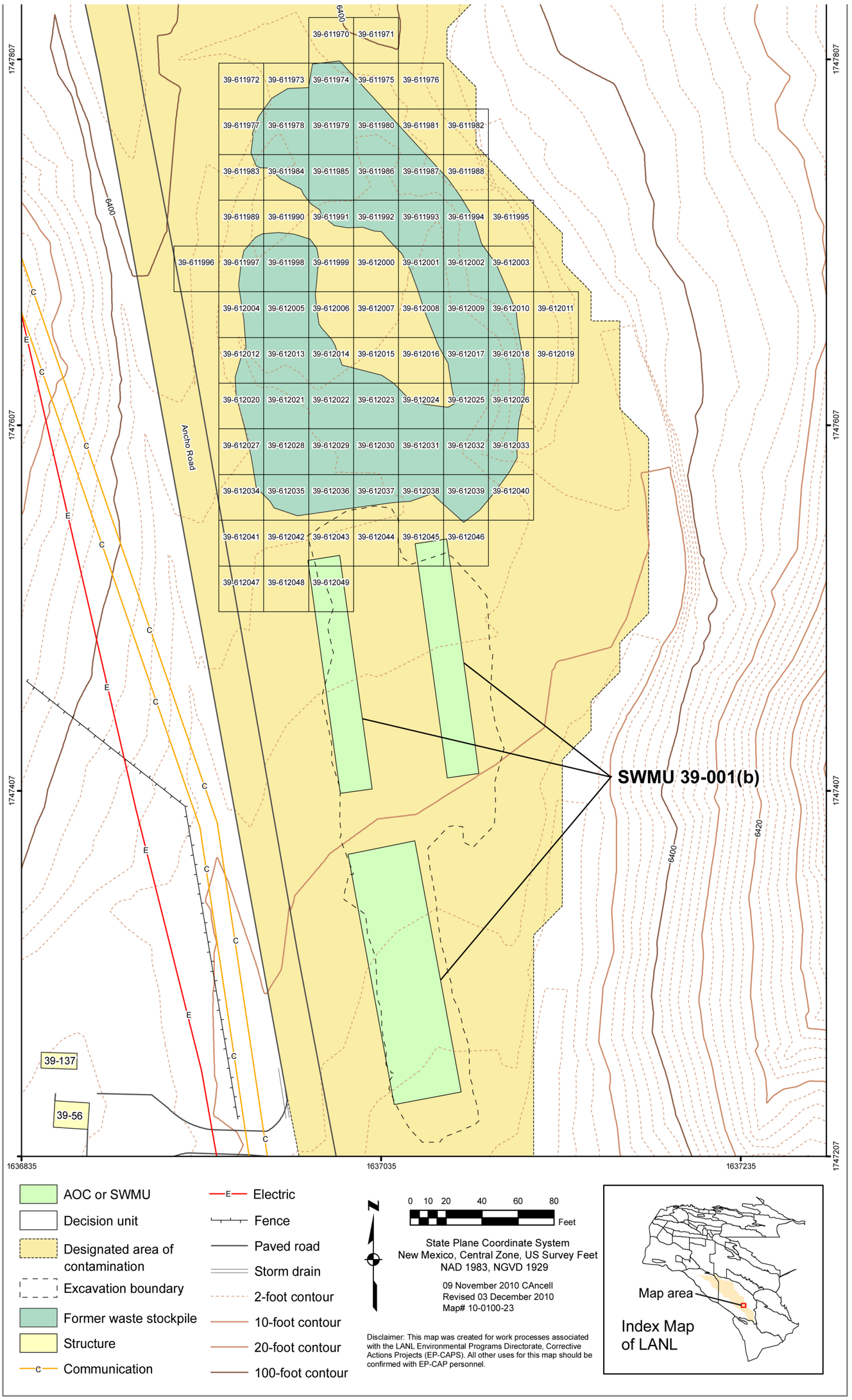

Figure 2.9-2 MI sample locations at the waste stockpile area at SWMU 39-001(b)

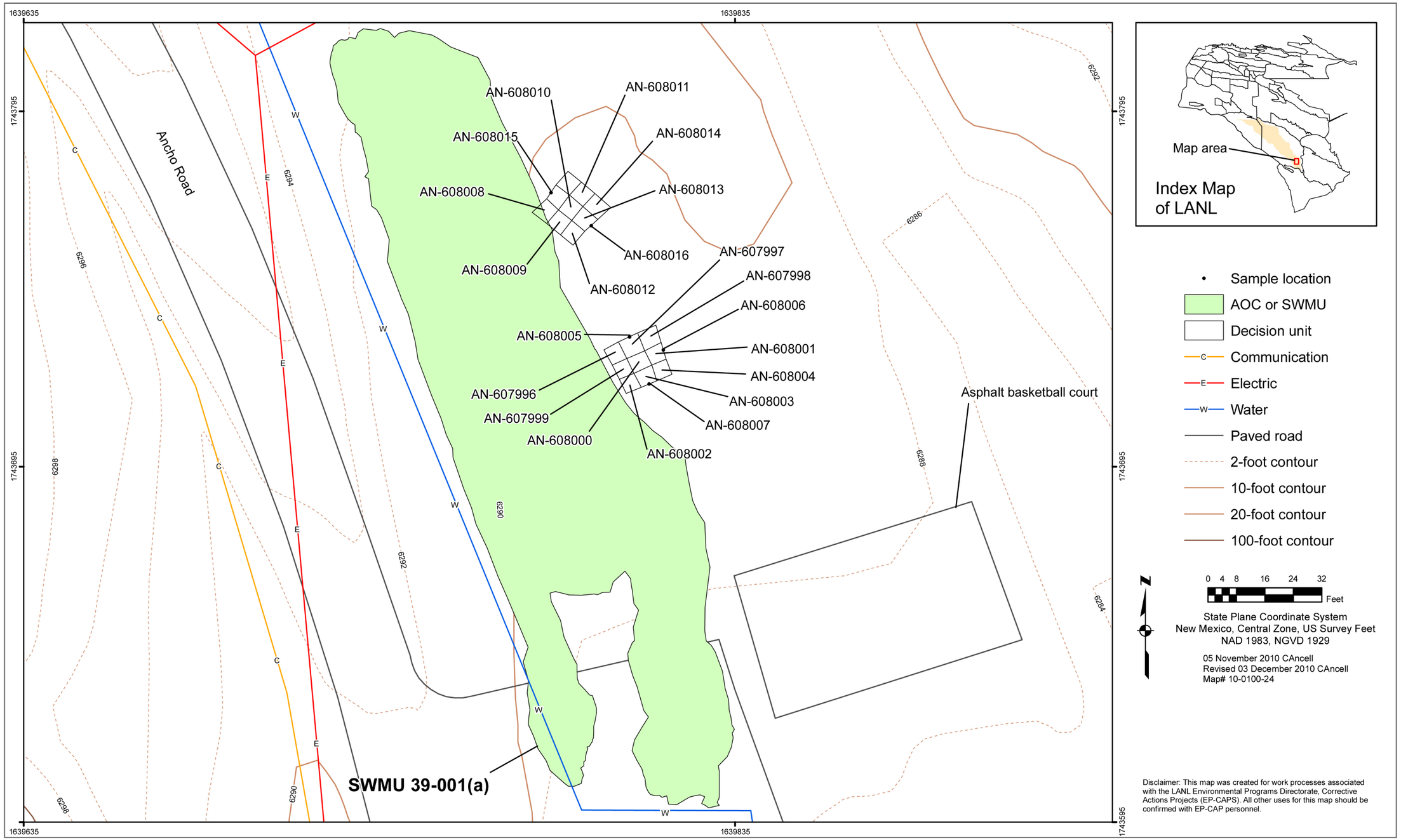

Figure 2.9-3 MI sample locations at capacitor staging areas at SWMU 39-001(a)

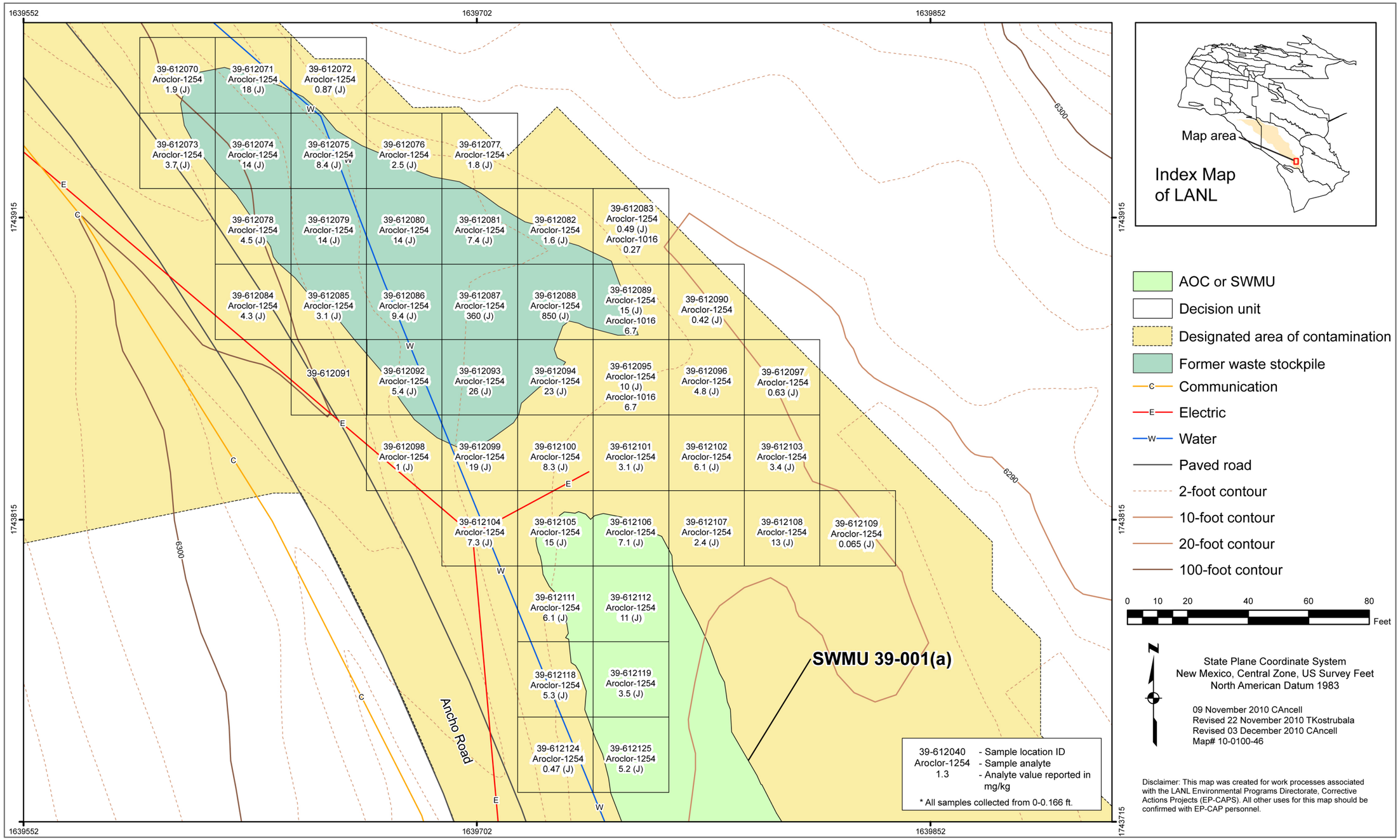

Figure 2.9-4 PCBs detected at the waste stockpile area at SWMU 39-001(a)

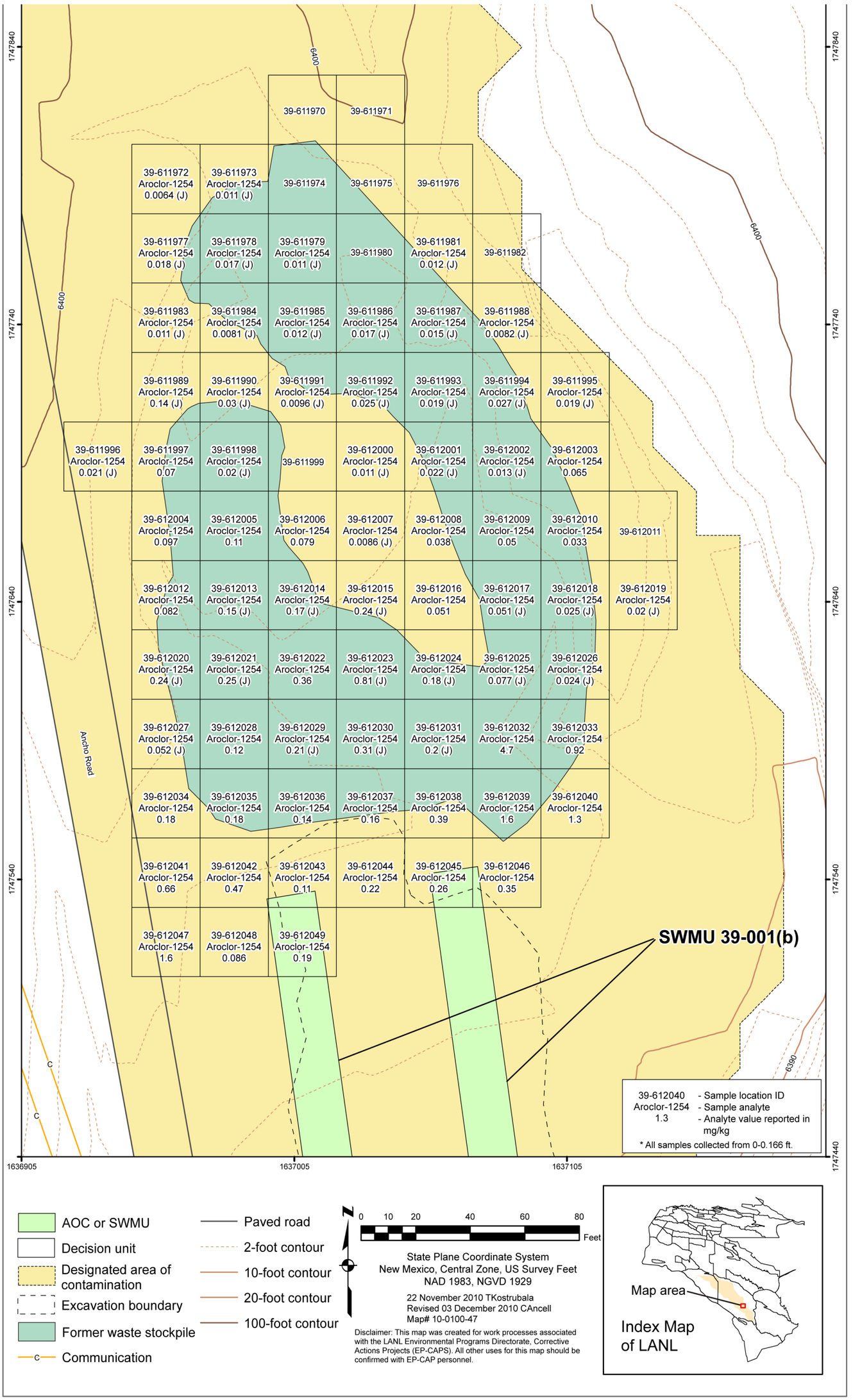

Figure 2.9-5 PCBs detected at the waste stockpile area at SWMU 39-001(b)

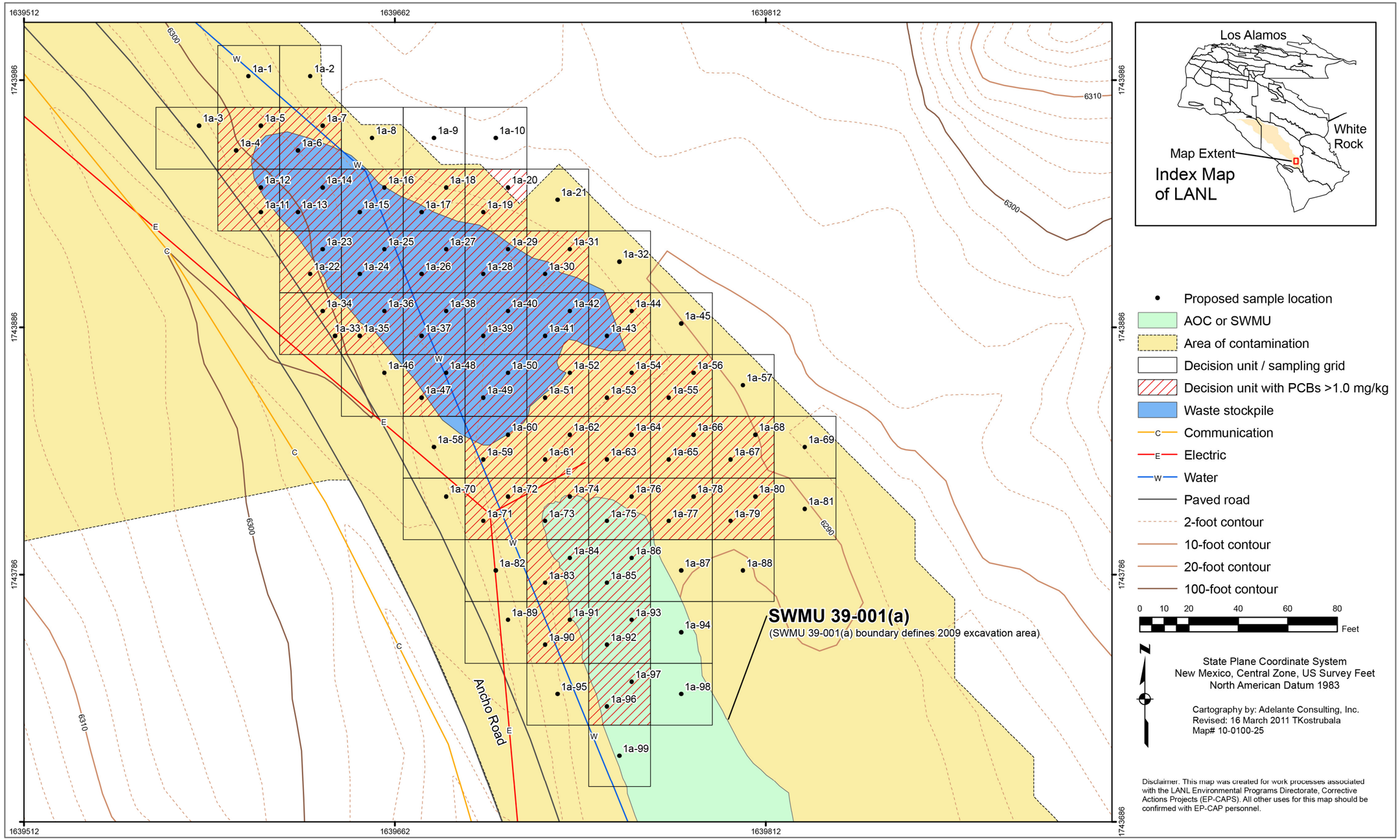

Figure 2.9-6 Proposed confirmatory sampling at the waste stockpile area at SWMU 39-001(a)

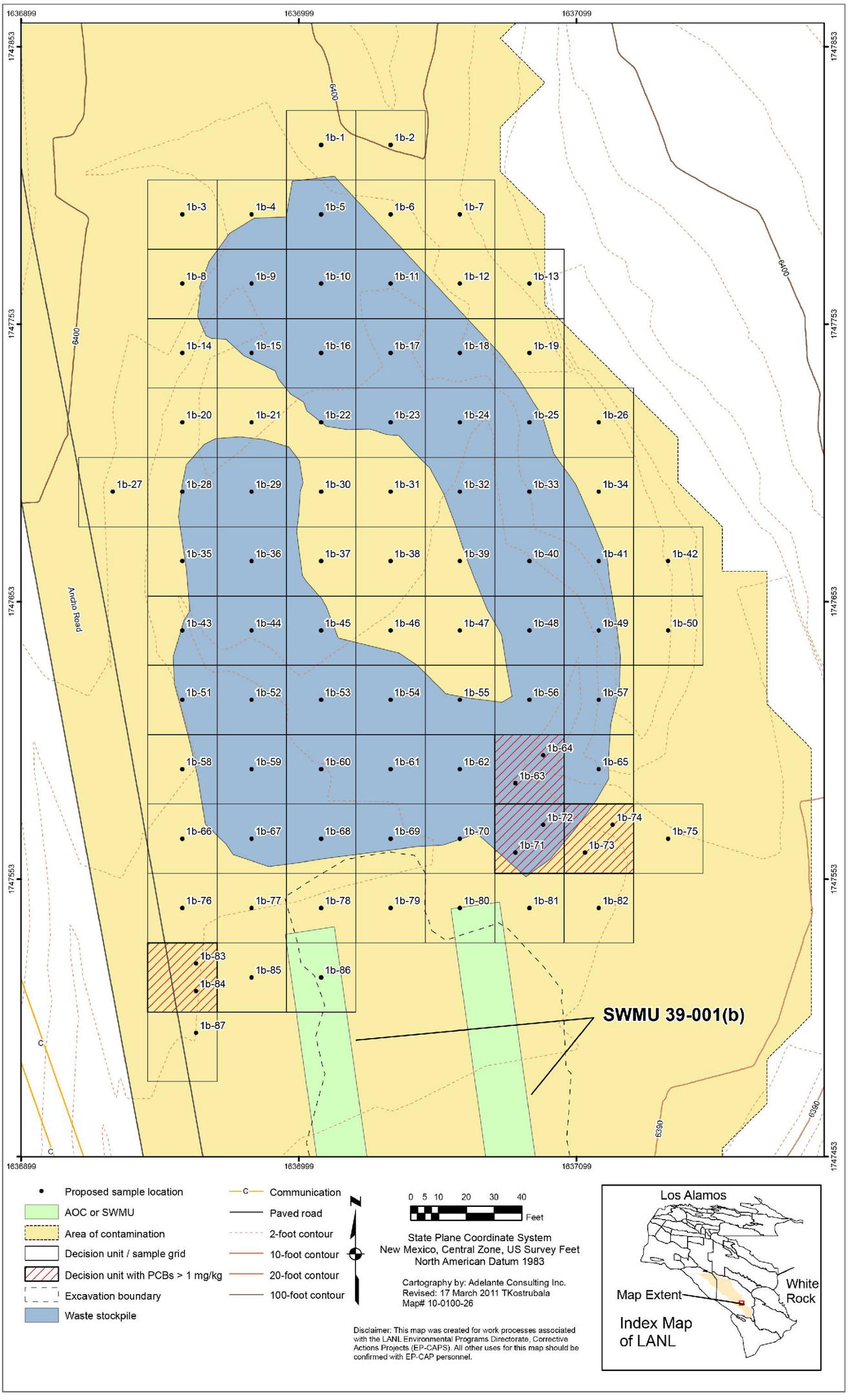

Figure 2.9-7 Proposed confirmatory sampling at the waste stockpile area at SWMU 39-001(b)

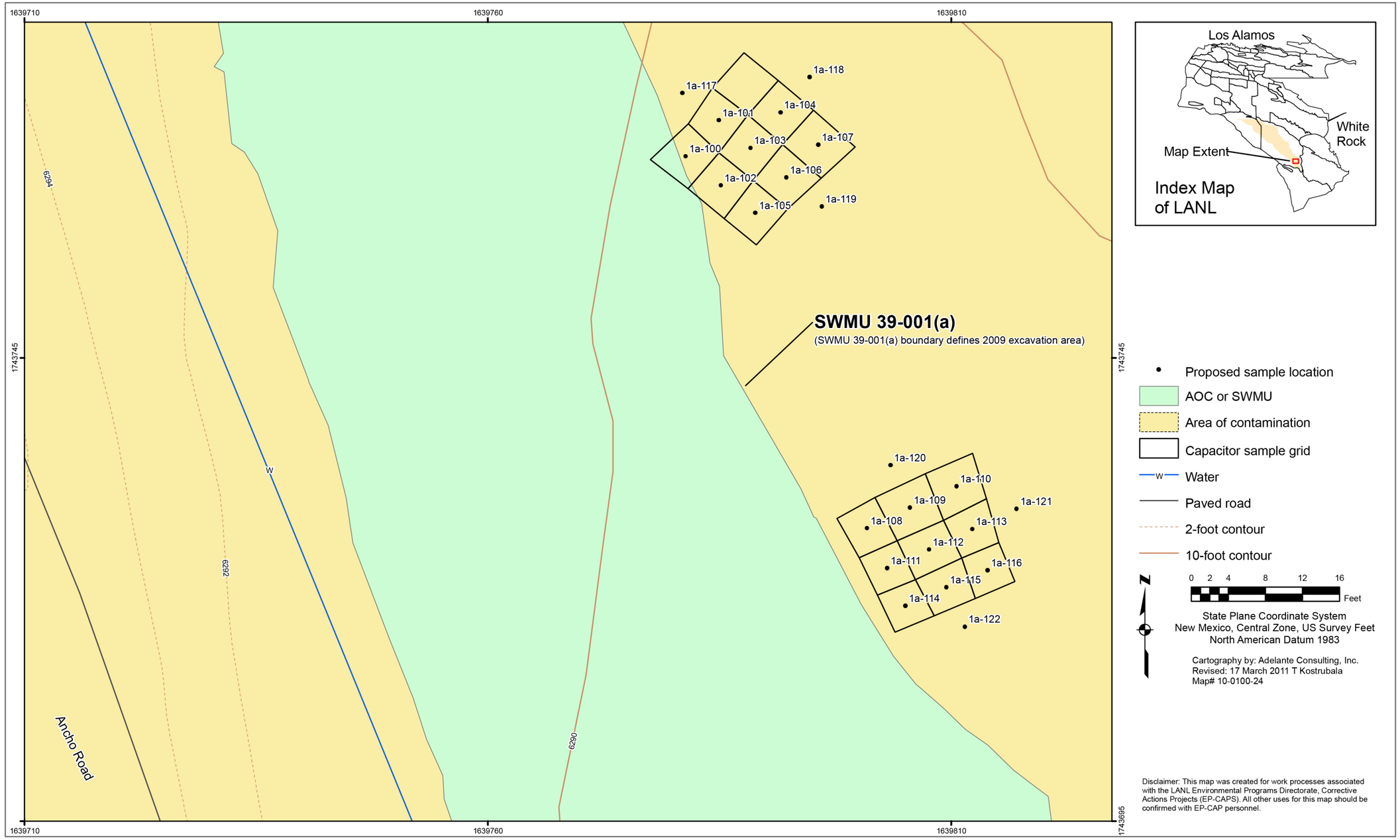

Figure 2.9-8 Proposed confirmatory sampling at the capacitor staging areas

Table 1.1-1
Sites under Phase II Investigation in the North Ancho Canyon Aggregate Area at TA-39

SWMU/AOC	Site Description	Investigation Results	Proposed Activities
SWMU 39-001(a)	Inactive landfill	Extent not defined: vertical extent of mercury, Aroclor-1242, Aroclor-1254, and uranium-238	Additional sampling for extent
SWMU 39-002(a)	Inactive Storage Area 1	Extent not defined: vertical extent for copper, mercury, lead, zinc, and Aroclor-1254. Industrial SSLs exceeded for benzo(a)pyrene and dibenz[a,h]anthracene	None; proposed for delay of further investigation until operations cease
AOC 39-002(b)	Inactive Storage Area	None: proposed investigation could not be implemented	Sampling for extent
SWMU 39-006(a)	Inactive components—former sand filter, former septic tank, former chemical seepage pit	Extent not defined: vertical extent for cadmium and perchlorate and lateral and vertical extent for cyanide, silver, Aroclor-1254, and tritium	Additional sampling for extent
SWMU 39-007(a)	Former satellite accumulation area at structure 39-63	Cleanup levels exceeded for Aroclor-1254 and Aroclor-1260	Soil removal and confirmation sampling
SWMU 39-010	Excavated soil dump from construction of SWMU 39-004(e) firing site.	Extent not defined: vertical extent for copper, lead, mercury, benzo(a)pyrene, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, HMX, and lateral and vertical extent for uranium-234, uranium-235/236, and uranium-238	Additional sampling for extent

Table 2.1-1
Summary of Samples Collected and Analyses Requested for SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Thorium	Isotopic Uranium	Metals	PCBs	Perchlorate	Pesticides/PCBs	SVOCs	VOCs	pH + Cyanide
0239-96-0403	39-01384	14.0–15.0	Fill	–[a]	–	–	1869[b]	–	1868	1869	1869	–	1867, 1869	–	–	1866	1866	1866	1867
0239-96-0406	39-01385	11.0–12.0	Fill	–	–	–	1875	–	1874	–	1875	1875	1873	–	–	1872	1872	1872	1873
0239-96-0409	39-01386	5.0–6.0	Fill	–	–	–	1875	–	1874	–	1875	–	1873, 1875	–	–	1872	1872	1872	1873
0239-96-0411	39-01386	12.0–13.0	Fill	–	–	–	1875	–	1874	–	1875	–	1873, 1875	–	–	1872	1872	1872	1873
0239-96-0414	39-01387	12.0–13.0	Fill	–	–	–	1875	–	1874	–	1875	–	1873, 1875	–	–	1872	1872	1872	1873
0239-96-0418	39-01388	11.0–12.0	Fill	–	–	–	1877	–	1876	–	1877	–	1877, 1879	–	–	1878	1878	1878	1879
0239-96-0421	39-01389	11.0–12.0	Fill	–	–	–	1877	–	1876	–	1877	–	1877, 1879	–	–	1878	1878	1878	1879
0239-96-0426	39-01390	11.0–12.0	Fill	–	–	–	1877	–	1876	–	1877	1877	1879	–	–	1878	1878	1878	1879
RE39-09-1907	39-604345	5.0–5.5	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1908	39-604345	5.5–6.0	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1909	39-604346	9.0–9.5	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1910	39-604346	9.5–10.0	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1911	39-604347	6.4–6.9	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1912	39-604347	6.9–7.4	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1913	39-604348	5.2–5.7	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1914	39-604348	5.7–6.2	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1915	39-604349	7.9–8.4	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1916	39-604349	8.4–8.9	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1917	39-604350	5.5–5.9	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992

Table 2.1-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Thorium	Isotopic Uranium	Metals	PCBs	Perchlorate	Pesticides/PCBs	SVOCs	VOCs	pH + Cyanide
RE39-09-1918	39-604350	5.9–6.5	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1919	39-604351	3.0–5.0	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1921	39-604352	5.0–5.5	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1923	39-604353	5.0–5.5	Soil	09-1993	09-1992	–	09-1993	09-1993	09-1991	09-1993	–	09-1993	09-1992	09-1991	09-1992	–	09-1991	09-1991	09-1992
RE39-09-1925	39-604354	5.4–6.4	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1929	39-604356	2.35–3.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1945	39-604356	2.35–3.5	Soil	–	–	09-2051	–	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-1930	39-604356	5.7–7.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1931	39-604357	1.0–3.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1933	39-604358	4.6–6.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1935	39-604359	7.0–7.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1936	39-604359	7.5–8.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1937	39-604360	7.0–7.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1938	39-604360	7.5–8.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1939	39-604361	5.3–7.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1941	39-604362	1.6–3.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1943	39-604363	3.4–4.8	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1938	39-604360	7.5–8.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1939	39-604361	5.3–7.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1941	39-604362	1.6–3.5	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1943	39-604363	3.4–4.8	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-1944	39-604363	6.8–9.0	Soil	09-2034	09-2033	–	09-2034	09-2034	09-2032	09-2034	–	09-2034	09-2033	09-2032	09-2033	–	09-2032	09-2032	09-2033
RE39-09-13239	39-608120	14.5–15.0	Soil	–	–	–	–	–	–	–	–	–	–	09-3287	–	–	–	–	–
RE39-09-13243	39-608120	16.0–16.5	Soil	–	–	–	–	–	–	–	–	–	–	09-3287	–	–	–	–	–
RE39-09-13241	39-608121	14.5–15.0	Soil	–	–	–	–	–	–	–	–	–	–	09-3287	–	–	–	–	–
RE39-09-13245	39-608121	16.0–16.5	Soil	–	–	–	–	–	–	–	–	–	–	09-3287	–	–	–	–	–
RE39-09-13242	39-608123	14.5–15.0	Soil	–	–	–	–	–	–	–	–	–	–	09-3287	–	–	–	–	–
RE39-09-13246	39-608123	16.0–16.5	Soil	–	–	–	–	–	–	–	–	–	–	09-3287	–	–	–	–	–
CAAN-09-11575	AN-607963	12.5–13.0	Soil	–	–	–	–	–	–	–	–	–	–	09-3007	–	–	–	–	–
CAAN-09-11576	AN-607963	14.0–14.5	Soil	–	–	–	–	–	–	–	–	–	–	09-3007	–	–	–	–	–
RE39-09-13240	AN-607963	14.5–15.0	Soil	–	–	–	–	–	–	–	–	–	–	09-3007	–	–	–	–	–
RE39-09-13244	AN-607963	16.0–16.5	Soil	–	–	–	–	–	–	–	–	–	–	09-3007	–	–	–	–	–
CAAN-09-11577	AN-607964	12.5–13.0	Soil	–	–	–	–	–	–	–	–	–	–	09-3007	–	–	–	–	–
CAAN-09-11578	AN-607964	14.0–14.5	Soil	–	–	–	–	–	–	–	–	–	–	09-3007	–	–	–	–	–

[a] – = Analysis not requested.

[b] Request numbers.

Table 2.1-2
Summary of Inorganic Chemicals Detected above BVs at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Mercury	Nitrate	Perchlorate	Silver	Uranium
Soil BVs				**0.83**	**0.4**	**0.5**	**0.1**	**na**[a]	**na**	**1**	**1.82**
Industrial SSLs				**454**	**1120**	**22,700**	**310**[b]	**1,820,000**	**795**	**5680**	**3410**
Residential SSLs				**31.3**	**77.9**	**1560**	**23**[b]	**125,000**	**54.8**	**391**	**235**
0239-96-0403	39-01384	14.0–15.0	Fill	6.1 (U)	1.7	0.53 (U)	–[c]	NA[d]	NA	–	2.25
0239-96-0406	39-01385	11.0–12.0	Fill	6.1 (U)	0.71 (U)	0.55 (U)	–	NA	NA	–	NA
0239-96-0409	39-01386	5.0–6.0	Fill	6.2 (U)	0.71 (U)	0.54 (U)	–	NA	NA	–	1.91
0239-96-0411	39-01386	12.0–13.0	Fill	6 (U)	0.7 (U)	0.54 (U)	–	NA	NA	–	–
0239-96-0414	39-01387	12.0–13.0	Fill	6.2 (U)	0.71 (U)	0.56 (U)	1.3	NA	NA	–	3.76
0239-96-0418	39-01388	11.0–12.0	Fill	9.4 (U)	0.59 (U)	0.54 (U)	–	NA	NA	1.9 (U)	–
0239-96-0421	39-01389	11.0–12.0	Fill	8.7 (U)	0.54 (U)	0.52 (U)	–	NA	NA	1.7 (U)	–
0239-96-0426	39-01390	11.0–12.0	Fill	10 (U)	0.62 (U)	0.58 (U)	–	NA	NA	2 (U)	NA
RE39-09-1907	39-604345	5.0–5.5	Soil	–	–	0.52 (UJ)	–	1.2	0.0026 (J)	–	NA
RE39-09-1908	39-604345	5.5–6.0	Soil	–	–	–	–	0.49	0.003 (J)	–	NA
RE39-09-1909	39-604346	9.0–9.5	Soil	–	–	0.52 (UJ)	–	0.76	0.0037 (J)	–	NA
RE39-09-1910	39-604346	9.5–10.0	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
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	3.0–5.0	Soil	–	–	0.55 (UJ)	–	0.18 (J)	–	–	NA

Table 2.1-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Mercury	Nitrate	Perchlorate	Silver	Uranium
Soil BVs				**0.83**	**0.4**	**0.5**	**0.1**	**na[a]**	**na**	**1**	**1.82**
Industrial SSLs				**454**	**1120**	**22700**	**310[b]**	**1820000**	**795**	**5680**	**3410**
Residential SSLs				**31.3**	**77.9**	**1560**	**23[b]**	**125000**	**54.8**	**391**	**235**
RE39-09-1921	39-604352	5.0–5.5	Soil	–	–	0.54 (UJ)	–	0.34	–	–	NA
RE39-09-1923	39-604353	5.0–5.5	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	1.0–3.0	Soil	–	–	–	–	0.7	–	–	NA
RE39-09-1933	39-604358	4.6–6.0	Soil	–	–	0.52 (U)	–	1.6	–	–	NA
RE39-09-1935	39-604359	7.0–7.5	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	7.0–7.5	Soil	–	–	0.54 (UJ)	–	0.39	–	–	NA
RE39-09-1938	39-604360	7.5–8.0	Soil	–	–	–	–	0.57	–	–	NA
RE39-09-1939	39-604361	5.3–7.0	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	6.8–9.0	Soil	–	–	0.55 (UJ)	–	0.28	–	–	NA

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] –= Less than the BV or not detected.

[d] NA = Not analyzed.

Table 2.1-3
Summary of 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	Dichlorophenyltrichloroethylene[4,4'-]	Dichlorodiphenyltrichloroethane[4,4'-]	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]
Industrial SSLs				**8.26**	**8.26**	**8.26**	**18,300**[a]	**1370**	**56.3**	**78.1**	**68,400**	**68,400**[b]	**2.34**	**na**[c]	**na**	**na**
Residential SSLs				**2.22**	**1.12**	**2.22**	**1720**[a]	**347**	**14.3**	**17.2**	**6110**	**6110**[b]	**0.621**	**na**	**na**	**na**
0239-96-0403	39-01384	14.0–15.0	Fill	–[d]	–	–	–	–	–	0.0053 (J-)	0.039 (J)	–	–	NA[e]	NA	NA
0239-96-0406	39-01385	11.0–12.0	Fill	–	–	–	–	–	–	–	0.063 (J)	–	–	NA	NA	NA
0239-96-0414	39-01387	12.0–13.0	Fill	–	0.79	–	–	–	0.312	–	–	–	–	NA	NA	NA
RE39-09-1908	39-604345	5.5–6.0	Soil	–	0.064 (J)	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1909	39-604346	9.0–9.5	Soil	–	0.0061 (J)	–	–	–	NA	NA	–	0.077 (J)	–	NA	NA	NA
RE39-09-1910	39-604346	9.5–10.0	Soil	–	0.014 (J)	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1911	39-604347	6.4–6.9	Soil	0.0089 (J)	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1912	39-604347	6.9–7.4	Soil	–	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1914	39-604348	5.7–6.2	Soil	–	0.026 (J)	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1915	39-604349	7.9–8.4	Soil	0.25 (J)	–	0.009 (J)	–	–	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
RE39-09-1917	39-604350	5.5–5.9	Soil	–	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1918	39-604350	5.9–6.5	Soil	0.014 (J)	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1919	39-604351	3.0–5.0	Soil	–	0.0092 (J)	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1921	39-604352	5.0–5.5	Soil	–	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1923	39-604353	5.0–5.5	Soil	–	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1925	39-604354	5.4–6.4	Soil	–	0.0089 (J)	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1929	39-604356	2.35–3.5	Soil	0.027 (J)	–	–	–	–	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	0.00000089 (J)	0.00000154	0.00000015 (J)
RE39-09-1930	39-604356	5.7–7.5	Soil	0.0051 (J)	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1936	39-604359	7.5–8.5	Soil	–	–	–	–	0.25 (J)	NA	NA	–	–	–	NA	NA	NA
RE39-09-1938	39-604360	7.5–8.0	Soil	–	–	–	–	–	NA	NA	–	–	–	NA	NA	NA
RE39-09-1939	39-604361	5.3–7.0	Soil	0.0048 (J)	–	–	–	–	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

Table 2.1-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1242	Aroclor 1254	Aroclor 1260	Benzo(g,h,i)perylene	Bis(2-ethylhexyl)phthalate	Dichlorophenyltrichloroethylene [4,4'-]	Dichlorodiphenyltrichloroethane [4,4'-]	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]
Industrial SSLs				**8.26**	**8.26**	**8.26**	**18,300**[a]	**1370**	**56.3**	**78.1**	**68,400**	**68,400**[b]	**2.34**	**na**[c]	**na**	**na**
Residential SSLs				**2.2**	**1.12**	**2.2**	**1720**[a]	**347**	**14.3**	**17.2**	**6110**	**6110**[b]	**0. 621**	**na**	**na**	**na**
RE39-09-1943	39-604363	3.4–4.8	Soil	–	–	–	–	0.052 (J)	NA	NA	–	–	–	NA	NA	NA
RE39-09-1944	39-604363	6.8–9.0	Soil	–	–	–	–	0.068 (J)	NA	NA	–	–	–	NA	NA	NA
RE39-09-13239	39-608120	14.5–15.0	Soil	-	0.021 (J)	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-13245	39-608121	16.0–16.5	Soil	-	0.49 (J)	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-13240	AN-607963	14.5–15.0	Soil	-	0.062 (J)	-	NA	NA	NA	NA	NA	NA	NA		NA	NA
RE39-09-13244	AN-607963	16.0–16.5	Soil	-	0.0052 (J)	-	NA	NA	NA	NA	NA	NA	NA		NA	NA
CAAN-09-11578	AN-607964	14.0–14.5	Soil	0.21	NA	0.014 (J)	NA	NA	NA	NA	NA	NA	NA		NA	NA

Table 2.1-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Heptachlorodibenzofurans (Total)	HMX	Indeno(1,2,3-cd)pyrene	Iodomethane	Methoxychlor[4,4'-]	Methylene Chloride	Nitroglycerin	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Hexahydro-1,3,5-trinitro-1,3,5-triazine
Industrial SSLs				**na**	**34,200**	**23.4**	**na**	**3100[f]**	**1090**	**68.4**	**na**	**174**
Residential SSLs				**na**	**3060**	**6.21**	**na**	**310[f]**	**199**	**6.11**	**na**	**44.2**
0239-96-0403	39-01384	14.0–15.0	Fill	NA	–	–	–	0.023 (J-)	–	NA	NA	–
0239-96-0406	39-01385	11.0–12.0	Fill	NA	–	–	–	–	–	NA	NA	–
0239-96-0414	39-01387	12.0–13.0	Fill	NA	–	–	–	–	–	NA	NA	–
RE39-09-1908	39-604345	5.5–6.0	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1909	39-604346	9.0–9.5	Soil	NA	–	–	–	NA	0.012	–	NA	–
RE39-09-1910	39-604346	9.5–10.0	Soil	NA	–	–	–	NA	0.0093	–	NA	–
RE39-09-1911	39-604347	6.4–6.9	Soil	NA	–	–	–	NA	0.013	–	NA	–
RE39-09-1912	39-604347	6.9–7.4	Soil	NA	–	–	–	NA	0.011	–	NA	–
RE39-09-1914	39-604348	5.7–6.2	Soil	NA	–	–	0.0027 (J)	NA	–	–	NA	0.032 (J+)
RE39-09-1915	39-604349	7.9–8.4	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1916	39-604349	8.4–8.9	Soil	NA	–	0.037 (J)	–	NA	0.014	–	NA	–
RE39-09-1917	39-604350	5.5–5.9	Soil	NA	–	–	–	NA	0.014	–	NA	–
RE39-09-1918	39-604350	5.9–6.5	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1919	39-604351	3.0–5.0	Soil	NA	–	–	–	NA	0.014	–	NA	–
RE39-09-1921	39-604352	5.0–5.5	Soil	NA	–	–	–	NA	0.012	–	NA	–
RE39-09-1923	39-604353	5.0–5.5	Soil	NA	–	–	–	NA	0.013	–	NA	–
RE39-09-1925	39-604354	5.4–6.4	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1929	39-604356	2.35–3.5	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1945	39-604356	2.35–3.5	Soil	0.00000015	NA	NA	NA	NA	NA	NA	0.00000636 (J)	NA
RE39-09-1930	39-604356	5.7–7.5	Soil	NA	0.044 (J)	–	–	NA	–	–	NA	–
RE39-09-1936	39-604359	7.5–8.5	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1938	39-604360	7.5–8.0	Soil	NA	–	–	–	NA	–	0.093 (J)	NA	–
RE39-09-1939	39-604361	5.3–7.0	Soil	NA	0.02 (J)	–	–	NA	–	–	NA	–
RE39-09-1941	39-604362	1.6–3.5	Soil	NA	–	–	–	NA	–	–	NA	–

Table 2.1-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Heptachlorodibenzofurans (Total)	HMX	Indeno(1,2,3-cd)pyrene	Iodomethane	Methoxychlor[4,4'-]	Methylene Chloride	Nitroglycerin	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Hexahydro-1,3,5-trinitro-1,3,5-triazine
Industrial SSLs				**na**	**34,200**	**23.4**	**na**	**3100**[f]	**1090**	**68.4**	**na**	**174**
Residential SSLs				**na**	**3060**	**6.21**	**na**	**310**[f]	**199**	**6.11**	**na**	**44.2**
RE39-09-1943	39-604363	3.4–4.8	Soil	NA	–	–	–	NA	–	–	NA	–
RE39-09-1944	39-604363	6.8–9.0	Soil	NA	–	–	–	NA	–	–	NA	–

Source: SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] SSL for pyrene used as a surrogate based on structural similarity.

[b] SSL for di-n-butylphthalate used as a surrogate based on structural similarity.

[c] na = Not available.

[d] – = Not detected.

[e] NA = Not analyzed.

[f] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table 2.1-4
Summary of Radionuclides Detected or
Detected above BVs/FVs at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Cesium-134	Uranium-238
Soil BVs/FVs				**na**[a]	**2.29**
Industrial SALs				**9.7**	**430**
Residential SALs				**2.4**	**87**
0239-96-0403	39-01384	14.0–15.0	Fill	NA[b]	NA
RE39-09-1938	39-604360	7.5–8.0	Soil	0.047	–[c]
RE39-09-1941	39-604362	1.6–3.5	Soil	–	4.67

Source: BVs/FVs from LANL (1998, 059730). SALs from LANL (2009, 107655).

Notes: Units are pCi/g. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] NA = Not analyzed.

[c] – = Less than BV/FV or not detected.

Table 2.1-5
Summary of Proposed Sampling at SWMU 39-001(a)

Site	Sampling Extent Objective	Location	Depth (ft)	Media	Mercury (EPA SW-846:7471A)	PCBs (EPA SW-846:8082)	Isotopic Uranium (HASL-300)
39-001(a)	Define vertical extent of contamination for mercury, uranium-238, Aroclor 1242, and Aroclor 1254	39-01387	14−15, 24−25	Soil, tuff	X[a] (mercury)	X	—[b]
		39-604362	5−6, 15−16	Soil, tuff	X (mercury)	—	X (uranium-238)
		39-604349	10−11, 19−20	Soil, tuff	—	X	—
		AN-607964	16−17, 26−27	Soil, tuff	—	X	—
		39-608121	17−18, 27−28	Soil, tuff	—	X	—

[a] X = Analysis proposed.

[b] — = Analysis will not be performed.

Table 2.2-1
Summary of Samples Collected and Analyses Requested for SWMU 39-002(a), Area 1

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Uranium	Metals	PCBs	Perchlorate	Pesticides/PCBs	SVOCs	Total Petroleum Hydrocarbons	VOCs	Cyanide + pH
0239-97-0013	39-01051	0.0–0.5	Soil	–[a]	–	–	–	3030R[b]	–	3032R	3031R	–	–	3029R	3029R	3029R	3032R	–
0239-97-0014	39-01053	0.0–0.5	Soil	–	–	–	–	3030R	–	3032R	3031R	–	–	3029R	3029R	3029R	3029R	–
0239-97-0001	39-01491	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0010	39-01491	1.0–1.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0002	39-01492	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0003	39-01493	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0004	39-01494	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0005	39-01495	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0006	39-01496	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0011	39-01496	1.0–1.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0007	39-01497	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0008	39-01498	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0012	39-01498	1.0–1.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
0239-97-0009	39-01499	0.0–0.5	Soil	–	–	–	–	3022R	–	3024R	3023R	3021R	–	–	3021R	3021R	3021R	–
RE39-09-5017	39-604805	0.0–1.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5018	39-604805	1.0–2.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5019	39-604805	2.0–3.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5020	39-604806	0.0–1.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5021	39-604806	1.0–2.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5022	39-604806	2.0–3.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5023	39-604807	0.0–1.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5024	39-604807	1.0–2.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5025	39-604807	2.0–3.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5026	39-604808	0.0–1.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5027	39-604808	1.0–2.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5028	39-604808	2.0–3.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5096	39-604808	2.0–3.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5029	39-604809	0.0–1.5	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5030	39-604809	1.5–2.5	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5031	39-604809	2.0–3.0	Soil	09-1479	09-1478	09-1479	09-1479	09-1477	09-1479	09-1479	08-1478	09-1477	09-1478	–	09-1477	–	09-1477	09-1478
RE39-09-5032	39-604810	0.0–1.0	Soil	09-1503	09-1502	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5033	39-604810	1.0–2.0	Soil	09-1503	09-1502	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5034	39-604810	2.0–3.0	Soil	09-1503	09-1502	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502

Table 2.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Uranium	Metals	PCBs	Perchlorate	Pesticides/PCBs	SVOCs	Total Petroleum Hydrocarbons	VOCs	Cyanide + pH
RE39-09-5035	39-604811	0.0–1.0	Soil	09-1503	09-1502	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502	RE39-09-5035
RE39-09-5036	39-604811	1.0–2.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5037	39-604811	2.0–3.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5038	39-604812	0.0–1.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5039	39-604812	1.0–2.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5040	39-604812	2.0–3.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5041	39-604813	0.0–1.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5042	39-604813	1.0–2.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5044	39-604814	0.0–1.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5045	39-604814	1.0–2.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5046	39-604814	2.0–3.0	Soil	09-1503	09-1502	–	09-1503	09-1503	09-1501	09-1503	09-1503	09-1502	09-1501	09-1502	–	09-1501	–	09-1501	09-1502
RE39-09-5047	39-604815	0.0–1.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5048	39-604815	1.0–2.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5049	39-604815	2.0–3.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5050	39-604816	0.0–1.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5051	39-604816	1.0–2.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5052	39-604816	2.0–3.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5053	39-604817	0.0–1.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5054	39-604817	1.0–2.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722
RE39-09-5055	39-604817	2.0–3.0	Soil	09-1724	09-1722	–	09-1724	09-1724	09-1721	09-1724	09-1724	09-1723	09-1720	09-1722	–	09-1720	–	09-1720	09-1722

[a] – = Analysis not requested.

[b] Request numbers.

Table 2.2-2
Summary of Inorganic Chemicals Detected above BVs at SWMU 39-002(a), Area 1

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Silver	Thallium	Zinc
Soil BVs				**0.83**	**0.4**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na**[a]	**na**	**1**	**0.73**	**48.8**
Industrial SSLs				**454**	**1120**	**45,400**	**22,700**	**800**	**310**[b]	**22,700**	**1,820,000**	**795**	**5680**	**74.9**	**341,000**
Residential SSLs				**31.3**	**77.9**	**3130**	**1560**	**400**	**23**[b]	**1560**	**125,000**	**54.8**	**391**	**5.16**	**23,500**
0239-97-0013	39-01051	0.0–0.5	Soil	–[c]	0.62 (J)	214 (J+)	NA[d]	50 (J+)	1.3 (J+)	–	NA	NA	–	0.78 (U)	59.3 (J+)
0239-97-0014	39-01053	0.0–0.5	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	0.0–0.5	Soil	5.2 (U)	0.52 (U)	16.8	NA	34.7	0.12	–	NA	NA	–	–	–
0239-97-0010	39-01491	1.0–1.5	Soil	6.1 (U)	0.61 (U)	–	NA	–	–	–	NA	NA	–	–	–
0239-97-0002	39-01492	0.0–0.5	Soil	5.2 (U)	0.52 (U)	128	NA	29.2	–	–	NA	NA	–	–	98
0239-97-0003	39-01493	0.0–0.5	Soil	4.9 (U)	0.76	78.7	NA	41	–	–	NA	NA	–	–	77.4
0239-97-0004	39-01494	0.0–0.5	Soil	5.1 (U)	0.51 (U)	28.2	NA	38.9	0.25	–	NA	NA	–	–	–
0239-97-0005	39-01495	0.0–0.5	Soil	5.2 (U)	0.52 (U)	–	NA	24.2	0.13	–	NA	NA	–	–	–
0239-97-0006	39-01496	0.0–0.5	Soil	5.1 (U)	0.84	61.3	NA	35	0.16	–	NA	NA	1.1	–	52.4
0239-97-0011	39-01496	1.0–1.5	Soil	5.8 (U)	0.58 (U)	–	NA	–	1.1	–	NA	NA	–	–	–
0239-97-0007	39-01497	0.0–0.5	Soil	5.5 (U)	0.55 (U)	–	NA	–	–	–	NA	NA	–	–	416
0239-97-0008	39-01498	0.0–0.5	Soil	5.3 (U)	0.53 (U)	28.6	NA	34.8	0.18	–	NA	NA	–	–	49
0239-97-0012	39-01498	1.0–1.5	Soil	5.9 (U)	0.59 (U)	–	NA	–	–	–	NA	NA	–	–	–
0239-97-0009	39-01499	0.0–0.5	Soil	5.2 (U)	1.7	508	NA	141	1.9	–	NA	NA	–	–	191
RE39-09-5017	39-604805	0.0–1.0	Soil	–	–	–	–	–	0.125	–	1.1	–	–	–	61.6
RE39-09-5018	39-604805	1.0–2.0	Soil	–	–	–	–	–	–	–	0.71	–	–	–	–
RE39-09-5019	39-604805	2.0–3.0	Soil	–	–	–	–	–	–	–	0.1 (J)	–	–	–	–
RE39-09-5020	39-604806	0.0–1.0	Soil	–	2.3	47.1	–	160	–	–	10.2	–	–	–	110
RE39-09-5021	39-604806	1.0–2.0	Soil	–	0.85	18	–	977	–	–	4.4	–	1.2 (U)	–	170
RE39-09-5022	39-604806	2.0–3.0	Soil	–	–	–	–	29.1	–	–	6.7	–	–	–	–
RE39-09-5024	39-604807	1.0–2.0	Soil	–	–	–	–	–	–	–	0.37	–	–	–	–
RE39-09-5025	39-604807	2.0–3.0	Soil	–	–	–	–	–	–	–	0.78	–	–	–	–
RE39-09-5026	39-604808	0.0–1.0	Soil	–	–	–	–	–	0.138	–	1.3	–	–	–	–
RE39-09-5027	39-604808	1.0–2.0	Soil	–	–	–	–	–	–	–	2.5	–	–	–	–
RE39-09-5028	39-604808	2.0–3.0	Soil	–	–	–	–	–	–	–	0.5	–	–	–	–
RE39-09-5029	39-604809	0.0–1.5	Soil	–	–	–	–	–	–	–	0.99	–	–	–	–
RE39-09-5030	39-604809	1.5–2.5	Soil	–	–	–	–	–	–	–	0.5	–	–	–	–
RE39-09-5031	39-604809	2.0–3.0	Soil	–	–	–	–	–	–	–	0.23	–	–	–	–
RE39-09-5032	39-604810	0.0–1.0	Soil	1.11 (U)	–	21.9 (J)	–	22.6 (J)	0.422	–	2.06	–	–	–	71.4
RE39-09-5033	39-604810	1.0–2.0	Soil	1.16 (U)	0.579 (U)	–	–	–	–	–	2.45	–	–	–	–
RE39-09-5034	39-604810	2.0–3.0	Soil	1.07 (U)	0.534 (U)	–	–	–	–	–	1.5	–	–	–	–

Table 2.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Silver	Thallium	Zinc
Soil BVs				**0.83**	**0.4**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na[a]**	**na**	**1**	**0.73**	**48.8**
Industrial SSLs				**454**	**1120**	**45,400**	**22,700**	**800**	**310[b]**	**22,700**	**1,820,000**	**795**	**5680**	**74.9**	**341,000**
Residential SSLs				**31.3**	**77.9**	**3130**	**1560**	**400**	**23[b]**	**1560**	**125,000**	**54.8**	**391**	**5.16**	**23,500**
RE39-09-5035	39-604811	0.0–1.0	Soil	1.14 (U)	–	16.7 (J)	–	–	0.101	–	4.38	–	–	–	141
RE39-09-5036	39-604811	1.0–2.0	Soil	1.13 (U)	0.566 (U)	–	–	–	–	–	7.28	–	–	–	–
RE39-09-5037	39-604811	2.0–3.0	Soil	1.18 (U)	0.591 (U)	–	–	–	–	–	10 (J)	–	–	–	76.1
RE39-09-5038	39-604812	0.0–1.0	Soil	2.46	1.04	122 (J)	1	233 (J)	1.85	–	1.03 (J)	–	–	1.26 (J)	113
RE39-09-5039	39-604812	1.0–2.0	Soil	1.12 (U)	–	27.5 (J)	–	–	1.22	–	1.21	–	–	–	60.6
RE39-09-5040	39-604812	2.0–3.0	Soil	1.1 (U)	–	23.7 (J)	–	24 (J)	0.602	–	1.52	–	–	–	55
RE39-09-5041	39-604813	0.0–1.0	Soil	1.11 (U)	0.604	76.1 (J)	–	43.7 (J)	0.836	–	6.58	–	–	–	297
RE39-09-5042	39-604813	1.0–2.0	Soil	1.12 (U)	0.46 (J)	37.2 (J)	–	27.6 (J)	0.846	–	4.55	–	–	–	467
RE39-09-5044	39-604814	0.0–1.0	Soil	1.07 (U)	0.429 (J)	48.1 (J)	20.8	24.1 (J)	0.109	–	–	–	–	–	94.6
RE39-09-5045	39-604814	1.0–2.0	Soil	1.16 (U)	0.582 (U)	–	20.8	–	0.188	–	–	0.000715 (J)	–	–	–
RE39-09-5046	39-604814	2.0–3.0	Soil	1.09 (U)	0.547 (U)	–	4.85	–	–	–	1.18	–	–	–	–
RE39-09-5047	39-604815	0.0–1.0	Soil	–	0.53	41.3	–	23.7	0.183	–	–	–	–	–	70.9
RE39-09-5048	39-604815	1.0–2.0	Soil	–	0.68	46.6	–	30.9	–	–	–	–	–	–	62.8
RE39-09-5049	39-604815	2.0–3.0	Soil	–	0.62	57.2	–	39.8	0.131	–	–	–	–	–	58.7
RE39-09-5053	39-604817	0.0–1.0	Soil	–	0.67	27.5	–	63.2	0.568	–	–	–	–	–	75.8
RE39-09-5054	39-604817	1.0–2.0	Soil	–	–	–	–	26.8	0.244	–	–	–	–	–	–
RE39-09-5055	39-604817	2.0–3.0	Soil	–	–	–	–	–	0.135	–	–	–	–	–	–

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] – = Less than the BV or not detected.

[d] NA = Not analyzed.

Table 2.2-3
Summary of Organic Chemicals Detected at SWMU 39-002(a), Area 1

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	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	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Ethylbenzene	Fluoranthene
Industrial SSLs				**36,700**	**18,300**[a]	**1900**[b]	**183,000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18,300**[a]	**234**	**1370**	**2340**	**68,400**	**2.34**	**1000**[b]	**14300**	**385**	**24,400**
Residential SSLs				**3440**	**1720**[a]	**150**[b]	**17,200**	**1.12**	**2.2**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**	**6110**	**0.621**	**78**[b]	**3010**	**69.7**	**2290**
0239-97-0013	39-01051	0.0–0.5	Soil	–[c]	–	–	–	0.057	–	0.88	0.99	0.86	0.45	0.96	–	1.1	–	–	–	–	–	2.2
0239-97-0014	39-01053	0.0–0.5	Soil	0.5	–	0.171	1	0.18	–	2.3	2.7	2.4	0.95	2.3	–	2.4	1.3	0.38	–	–	–	6.5
0239-97-0001	39-01491	0.0–0.5	Soil	–	–	–	–	0.21	–	1.3	1.6	1.2	1.5	1.3	–	1.6	–	–	–	–	–	3.4
0239-97-0010	39-01491	1.0–1.5	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
0239-97-0002	39-01492	0.0–0.5	Soil	–	–	–	–	0.16	–	0.73	0.84	0.6	0.72	0.73	–	0.93	–	–	–	–	–	2.1
0239-97-0003	39-01493	0.0–0.5	Soil	–	–	–	0.35	0.16	–	0.97	1	0.82	0.53	0.87	–	1.2	–	–	–	–	–	2.1
0239-97-0004	39-01494	0.0–0.5	Soil	–	–	–	–	0.26	–	1.3	1.5	1.2	0.84	1.4	–	1.5	–	–	–	–	–	3.4
0239-97-0005	39-01495	0.0–0.5	Soil	0.43	–	–	0.81	0.1	–	–	3.6	3.6	1.8	3	–	3.1	0.64	–	–	–	–	8.4
0239-97-0006	39-01496	0.0–0.5	Soil	0.34 (J)	–	–	–	0.24	–	–	1.5 (J)	1.5 (J)	0.67 (J)	1.5 (J)	–	1.6 (J)	–	–	–	–	–	3.7 (J)
0239-97-0011	39-01496	1.0–1.5	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
0239-97-0007	39-01497	0.0–0.5	Soil	1.8 (J)	–	–	3.1 (J)	0.14	–	5.5 (J)	6.4 (J)	4.9 (J)	4 (J)	5.2 (J)	–	5.6 (J)	–	–	1.1 (J)	–	–	21 (J)
0239-97-0008	39-01498	0.0–0.5	Soil	–	–	–	0.82 (J)	0.1	–	2 (J)	2.1 (J)	1.9 (J)	1 (J)	2.1 (J)	–	2.2 (J)	2.8 (J)	–	–	–	–	4.8 (J)
0239-97-0009	39-01499	0.0–0.5	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)	3.3 (J)	4.4 (J)	–	0.41 (J)	–	–	8.8 (J)
RE39-09-5017	39-604805	0.0–1.0	Soil	0.048 (J)	–	–	0.074 (J)	0.035 (J)	–	0.35 (J)	0.41	0.33 (J)	0.23 (J)	0.44	–	0.45	–	–	–	–	–	0.87
RE39-09-5018	39-604805	1.0–2.0	Soil	–	–	–	–	0.019 (J)	–	0.11 (J)	0.13 (J)	0.12 (J)	0.12 (J)	0.11 (J)	–	0.14 (J)	–	–	–	0.0007 (J)	–	0.26 (J)
RE39-09-5020	39-604806	0.0–1.0	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-)	0.26 (J-)	0.048 (J-)	–	–	–	–	0.56 (J-)
RE39-09-5021	39-604806	1.0–2.0	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)	0.23 (J)	0.062 (J)	–	–	–	–	0.46
RE39-09-5022	39-604806	2.0–3.0	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)	–	0.14 (J)	–	–	–	–	–	0.32 (J)
RE39-09-5024	39-604807	1.0–2.0	Soil	0.25 (J)	–	–	0.35 (J)	–	–	0.46	0.4	0.29 (J)	0.16 (J)	0.38 (J)	–	0.48	–	–	0.14 (J)	–	–	1.1
RE39-09-5026	39-604808	0.0–1.0	Soil	0.18 (J)	–	–	0.22 (J)	0.12 (J)	–	0.65	0.7	0.58	0.39	0.64	–	0.8	–	–	0.1 (J)	–	–	1.7
RE39-09-5027	39-604808	1.0–2.0	Soil	–	–	–	–	0.0075 (J)	–	–	–	–	–	–	–	–	–	–	–	–	–	0.067 (J)
RE39-09-5096	39-604808	2.0–3.0	Soil	NA[d]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5029	39-604809	0.0–1.5	Soil	–	–	–	–	0.0064 (J)	–	–	–	–	–	–	–	–	–	–	–	0.00043 (J)	–	0.045 (J)
RE39-09-5031	39-604809	2.0–3.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.00043 (J)	–	–
RE39-09-5032	39-604810	0.0–1.0	Soil	0.22	0.06 (J)	–	0.417	0.0318	0.0167	1.43	1.61	2.82	1.25	–	–	1.64	0.197 (J)	–	–	–	0.000718 (J)	3.72
RE39-09-5033	39-604810	1.0–2.0	Soil	–	–	–	0.0255 (J)	0.0023 (J)	0.0017 (J)	0.106	0.117	0.199	0.113	–	–	0.127	–	–	–	–	–	0.268
RE39-09-5034	39-604810	2.0–3.0	Soil	–	–	–	0.0169 (J)	0.0029 (J)	–	0.0664	0.0732	0.101	0.0498	0.0509	–	0.0793	–	–	–	–	–	0.168
RE39-09-5035	39-604811	0.0–1.0	Soil	1.61	0.201	–	2.44	–	–	6.48	6.75	8.36	4.45	3.69	–	7.3	0.29 (J)	–	0.942 (J)	–	–	15.5
RE39-09-5036	39-604811	1.0–2.0	Soil	0.123	0.0211 (J)	–	0.238	–	–	0.603	0.611	0.7	0.439	–	–	0.671	–	–	–	–	–	1.59
RE39-09-5037	39-604811	2.0–3.0	Soil	0.405	0.054 (J)	–	0.841	–	–	1.9	1.86	2.21	1.52	–	–	2.15	–	–	–	–	–	5.31
RE39-09-5038	39-604812	0.0–1.0	Soil	0.308	–	–	0.607	0.449	0.155	1.34	1.32	1.77	0.841	–	0.908 (J)	1.47	1.11 (J)	–	–	–	–	3.71
RE39-09-5039	39-604812	1.0–2.0	Soil	0.113	0.0119 (J)	–	0.229	0.0432	0.0203	0.393	0.396	0.51	0.258	–	0.0808 (J)	0.472	0.164 (J)	–	–	–	–	1.13

Table 2.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Amino-2,6-dinitrotoluene[4-]	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	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,2-]	Ethylbenzene	Fluoranthene
Industrial SSLs				**36,700**	**18,300**[a]	**1900**[b]	**183,000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18,300**[a]	**18,300**[a]	**1370**	**2340**	**68,400**	**2.34**	**1000**[b]	**14,300**	**385**	**24,400**
Residential SSLs				**3440**	**1720**[a]	**150**[b]	**17,200**	**1.12**	**2.2**	**6.21**	**0.621**	**6.21**	**1720**[a]	**1720**[a]	**347**	**621**	**6110**	**0.621**	**78**[b]	**3010**	**69.7**	**2290**
RE39-09-5040	39-604812	2.0–3.0	Soil	0.161	–	–	0.385	0.148	0.0391	0.713	0.632	0.741	0.523	–	–	0.787	0.285 (J)	–	–	–	–	2.1
RE39-09-5041	39-604813	0.0–1.0	Soil	0.339	–	–	0.643	0.147	0.0571	1.26	1.25	1.6	0.668	–	–	1.4	0.261 (J)	–	–	–	–	3.47
RE39-09-5042	39-604813	1.0–2.0	Soil	0.327	–	–	0.555	0.127	0.0486	1.23	1.27	1.57	0.799	–	–	1.43	–	–	–	–	–	3.56
RE39-09-5044	39-604814	0.0–1.0	Soil	0.0335 (J)	–	–	0.0626	0.199	0.114	0.198	0.233	0.292	0.134	–	0.19 (J)	0.263	0.0954 (J)	–	–	–	–	0.573
RE39-09-5045	39-604814	1.0–2.0	Soil	–	–	–	0.0179 (J)	0.0963	0.0497	–	0.0637	0.078	0.05	–	0.547	0.0651	0.179 (J)	–	–	–	–	0.159
RE39-09-5046	39-604814	2.0–3.0	Soil	–	–	–	–	0.0333	0.0173	–	0.0228 (J)	0.0256 (J)	0.0146 (J)	0.0165 (J)	–	0.0239 (J)	–	–	–	–	–	0.0512
RE39-09-5047	39-604815	0.0–1.0	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)	0.91	0.3 (J)	0.15 (J)	0.067 (J)	–	–	2.1
RE39-09-5048	39-604815	1.0–2.0	Soil	0.15 (J)	–	–	0.2 (J)	0.15 (J)	–	0.73	0.86 (J+)	0.78	0.47	0.76	0.14 (J)	0.92	0.51	0.16 (J)	0.051 (J)	–	–	2
RE39-09-5049	39-604815	2.0–3.0	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)	0.53	0.47	0.084 (J)	–	–	–	1.2
RE39-09-5050	39-604816	0.0–1.0	Soil	1	0.077 (J)	–	1.4	–	–	3.1	3.4 (J+)	2.6	1.6	3.2	0.068 (J)	3.7	–	0.5	0.56	–	–	8.8
RE39-09-5051	39-604816	1.0–2.0	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)	0.33 (J)	–	0.053 (J)	0.051 (J)	–	–	0.78
RE39-09-5052	39-604816	2.0–3.0	Soil	–	–	–	0.041 (J)	–	–	0.1 (J)	0.11 (J+)	0.11 (J)	0.058 (J)	0.098 (J)	–	0.12 (J)	–	–	–	–	–	0.29 (J)
RE39-09-5053	39-604817	0.0–1.0	Soil	0.84	0.078 (J)	–	1.3	0.071 (J)	–	3	3.3 (J+)	2.9	1.6	3.1	0.14 (J)	3.4	0.32 (J)	0.46	0.45	–	–	8.1
RE39-09-5054	39-604817	1.0–2.0	Soil	0.3 (J)	–	–	0.46 (J)	–	–	1.2 (J)	1.5 (J)	1.1 (J)	0.9 (J)	1.4 (J)	–	1.4 (J)	0.1 (J)	0.28 (J)	0.16 (J)	–	–	3.4 (J)
RE39-09-5055	39-604817	2.0–3.0	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)	0.46	0.05 (J)	0.091 (J)	0.042 (J)	–	–	0.99

Table 2.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluorene	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	Hexachlorodibenzodioxin[1,2,3,4,7,8-]	Hexachlorodibenzodioxin[1,2,3,6,7,8-]	Hexachlorodibenzodioxin[1,2,3,7,8,9-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]
Industrial SSLs				**24,400**	**na**[e]	**na**	**na**	**na**	**na**	**23.4**	**na**	**1090**	**4100**[b]	**252**	**na**	**na**
Residential SSLs				**2290**	**na**	**na**	**na**	**na**	**na**	**6.21**	**na**	**199**	**310**[b]	**45**	**na**	**na**
0239-97-0013	39-01051	0.0–0.5	Soil	–	NA	NA	NA	NA	NA	0.46	–	–	–	–	NA	NA
0239-97-0014	39-01053	0.0–0.5	Soil	0.57	NA	NA	NA	NA	NA	0.95	–	–	–	–	NA	NA
0239-97-0001	39-01491	0.0–0.5	Soil	–	NA	NA	NA	NA	NA	1.3	–	–	–	–	NA	NA
0239-97-0010	39-01491	1.0–1.5	Soil	–	NA	NA	NA	NA	NA	–	–	–	–	–	NA	NA
0239-97-0002	39-01492	0.0–0.5	Soil	–	NA	NA	NA	NA	NA	0.64	–	–	–	–	NA	NA
0239-97-0003	39-01493	0.0–0.5	Soil	–	NA	NA	NA	NA	NA	0.51	–	–	–	–	NA	NA
0239-97-0004	39-01494	0.0–0.5	Soil	–	NA	NA	NA	NA	NA	0.8	–	–	–	–	NA	NA
0239-97-0005	39-01495	0.0–0.5	Soil	0.36	NA	NA	NA	NA	NA	1.8	–	–	–	–	NA	NA
0239-97-0006	39-01496	0.0–0.5	Soil	–	NA	NA	NA	NA	NA	–	–	–	–	–	NA	NA
0239-97-0011	39-01496	1.0–1.5	Soil	–	NA	NA	NA	NA	NA	–	–	–	–	–	NA	NA
0239-97-0007	39-01497	0.0–0.5	Soil	2 (J)	NA	NA	NA	NA	NA	3.7 (J)	–	–	0.44 (J)	1.5 (J)	NA	NA
0239-97-0008	39-01498	0.0–0.5	Soil	0.41 (J)	NA	NA	NA	NA	NA	0.91 (J)	–	–	–	–	NA	NA
0239-97-0009	39-01499	0.0–0.5	Soil	0.76 (J)	NA	NA	NA	NA	NA	1.4 (J)	–	–	–	0.52 (J)	NA	NA
RE39-09-5017	39-604805	0.0–1.0	Soil	–	NA	NA	NA	NA	NA	0.21 (J)	–	–	–	–	NA	NA
RE39-09-5018	39-604805	1.0–2.0	Soil	–	NA	NA	NA	NA	NA	0.095 (J)	–	–	–	–	NA	NA
RE39-09-5020	39-604806	0.0–1.0	Soil	0.049 (J-)	NA	NA	NA	NA	NA	0.086 (J-)	–	–	–	0.039 (J-)	NA	NA
RE39-09-5021	39-604806	1.0–2.0	Soil	0.047 (J)	NA	NA	NA	NA	NA	0.085 (J)	–	–	–	–	NA	NA
RE39-09-5022	39-604806	2.0–3.0	Soil	0.049 (J)	NA	NA	NA	NA	NA	–	–	–	–	–	NA	NA
RE39-09-5024	39-604807	1.0–2.0	Soil	0.24 (J)	NA	NA	NA	NA	NA	0.14 (J)	–	–	0.083 (J)	0.23 (J)	NA	NA
RE39-09-5026	39-604808	0.0–1.0	Soil	0.17 (J)	NA	NA	NA	NA	NA	0.35 (J)	–	–	0.041 (J)	0.14 (J)	NA	NA
RE39-09-5027	39-604808	1.0–2.0	Soil	–	NA	NA	NA	NA	NA	–	0.00081 (J)	–	–	–	NA	NA
RE39-09-5096	39-604808	2.0–3.0	Soil	NA	0.00000807	0.00000178 (J)	0.000000129 (J)	0.00000031 (J)	0.000000191 (J)	NA	NA	NA	NA	NA	0.0000644	0.00000574
RE39-09-5029	39-604809	0.0–1.5	Soil	–	NA	NA	NA	NA	NA	–	–	–	–	–	NA	NA
RE39-09-5031	39-604809	2.0–3.0	Soil	–	NA	NA	NA	NA	NA	–	–	–	–	–	NA	NA
RE39-09-5032	39-604810	0.0–1.0	Soil	0.183	NA	NA	NA	NA	NA	1.12	–	0.00233 (J)	0.038 (J)	0.121 (J)	NA	NA
RE39-09-5033	39-604810	1.0–2.0	Soil	–	NA	NA	NA	NA	NA	0.0976	–	0.0024 (J)	–	–	NA	NA
RE39-09-5034	39-604810	2.0–3.0	Soil	–	NA	NA	NA	NA	NA	0.0498	–	–	–	–	NA	NA
RE39-09-5035	39-604811	0.0–1.0	Soil	1.63	NA	NA	NA	NA	NA	4.2	–	–	0.41	1.24	NA	NA
RE39-09-5036	39-604811	1.0–2.0	Soil	0.122	NA	NA	NA	NA	NA	0.392	–	–	0.0297 (J)	0.096	NA	NA
RE39-09-5037	39-604811	2.0–3.0	Soil	0.418	NA	NA	NA	NA	NA	1.35	–	0.00302 (J)	0.108 (J)	0.368	NA	NA

Table 2.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluorene	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	Hexachlorodibenzodioxin[1,2,3,4,7,8-]	Hexachlorodibenzodioxin[1,2,3,6,7,8-]	Hexachlorodibenzodioxin[1,2,3,7,8,9-]	Indeno(1,2,3-cd)pyrene	Iodomethane	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]
Industrial SSLs				**24,400**	**na**[e]	**na**	**na**	**na**	**na**	**23.4**	**na**	**1090**	**4100**[b]	**252**	**na**	**na**
Residential SSLs				**2290**	**na**	**na**	**na**	**na**	**na**	**6.21**	**na**	**199**	**310**[b]	**45**	**na**	**na**
RE39-09-5038	39-604812	0.0–1.0	Soil	0.309	NA	NA	NA	NA	NA	0.793	–	0.00287 (J)	0.0679 (J)	0.198	NA	NA
RE39-09-5039	39-604812	1.0–2.0	Soil	0.133	NA	NA	NA	NA	NA	0.239	–	0.00265 (J)	0.0284 (J)	0.0885	NA	NA
RE39-09-5040	39-604812	2.0–3.0	Soil	0.249	NA	NA	NA	NA	NA	0.45	–	0.00296 (J)	0.0456 (J)	0.14 (J)	NA	NA
RE39-09-5041	39-604813	0.0–1.0	Soil	0.339	NA	NA	NA	NA	NA	0.628	–	–	0.0777 (J)	0.19	NA	NA
RE39-09-5042	39-604813	1.0–2.0	Soil	0.314	NA	NA	NA	NA	NA	0.743	–	0.00345 (J)	0.0719 (J)	0.186	NA	NA
RE39-09-5044	39-604814	0.0–1.0	Soil	0.0295 (J)	NA	NA	NA	NA	NA	0.132	–	0.00269 (J)	–	0.0129 (J)	NA	NA
RE39-09-5045	39-604814	1.0–2.0	Soil	–	NA	NA	NA	NA	NA	0.0453	–	0.00294 (J)	–	–	NA	NA
RE39-09-5046	39-604814	2.0–3.0	Soil	–	NA	NA	NA	NA	NA	0.0133 (J)	–	0.00267 (J)	–	–	NA	NA
RE39-09-5047	39-604815	0.0–1.0	Soil	0.13 (J)	NA	NA	NA	NA	NA	0.42	–	–	–	0.073 (J)	NA	NA
RE39-09-5048	39-604815	1.0–2.0	Soil	0.11 (J)	NA	NA	NA	NA	NA	0.44	–	–	–	0.038 (J)	NA	NA
RE39-09-5049	39-604815	2.0–3.0	Soil	0.072 (J)	NA	NA	NA	NA	NA	0.22 (J)	–	–	–	–	NA	NA
RE39-09-5050	39-604816	0.0–1.0	Soil	0.98	NA	NA	NA	NA	NA	1.5	–	–	0.21 (J)	0.69	NA	NA
RE39-09-5051	39-604816	1.0–2.0	Soil	0.078 (J)	NA	NA	NA	NA	NA	0.17 (J)	–	–	–	0.055 (J)	NA	NA
RE39-09-5052	39-604816	2.0–3.0	Soil	–	NA	NA	NA	NA	NA	0.054 (J)	–	–	–	–	NA	NA
RE39-09-5053	39-604817	0.0–1.0	Soil	0.82	NA	NA	NA	NA	NA	1.5	–	–	0.16 (J)	0.48	NA	NA
RE39-09-5054	39-604817	1.0–2.0	Soil	0.3 (J)	NA	NA	NA	NA	NA	0.75 (J)	–	–	0.056 (J)	0.17 (J)	NA	NA
RE39-09-5055	39-604817	2.0–3.0	Soil	0.078 (J)	NA	NA	NA	NA	NA	0.27 (J)	–	–	–	0.042 (J)	NA	NA

Table 2.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Phenanthrene	Pyrene	Tetryl	Toluene	TPH-DRO	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Industrial SSLs				**20,500**	**18,300**	**2740**	**57,900**	**200**[f]	**253**	**260**[b]	**469**	**31,500**	**3610**[g]
Residential SSLs				**1830**	**1720**	**244**	**5570**	**200**[f]	**45.7**	**62**[b]	**35.9**	**9550**	**1090**[g]
0239-97-0013	39-01051	0.0–0.5	Soil	1.4	1.9	–	–	51	–	–	–	NA	NA
0239-97-0014	39-01053	0.0–0.5	Soil	3.7	3.8	0.345	–	110	–	–	1.02	NA	NA
0239-97-0001	39-01491	0.0–0.5	Soil	1.8	3	–	–	57	–	–	–	NA	NA
0239-97-0010	39-01491	1.0–1.5	Soil	–	–	–	–	9.1	–	–	–	NA	NA
0239-97-0002	39-01492	0.0–0.5	Soil	1.3	1.9	–	–	18	–	–	–	NA	NA
0239-97-0003	39-01493	0.0–0.5	Soil	2.1	2.4	–	–	56	–	–	–	NA	NA
0239-97-0004	39-01494	0.0–0.5	Soil	2.1	2.9	–	–	34	–	–	–	NA	NA
0239-97-0005	39-01495	0.0–0.5	Soil	4.2	5	–	–	70	–	–	–	NA	NA
0239-97-0006	39-01496	0.0–0.5	Soil	2.9 (J)	3.7 (J)	–	–	41	–	–	–	NA	NA
0239-97-0011	39-01496	1.0–1.5	Soil	–	–	–	–	9.8	–	–	–	NA	NA
0239-97-0007	39-01497	0.0–0.5	Soil	18 (J)	17 (J)	–	–	170	–	–	–	NA	NA
0239-97-0008	39-01498	0.0–0.5	Soil	4 (J)	4.7 (J)	–	–	110	–	–	–	NA	NA
0239-97-0009	39-01499	0.0–0.5	Soil	7.3 (J)	7.6 (J)	–	–	43	–	–	–	NA	NA
RE39-09-5017	39-604805	0.0–1.0	Soil	0.48	0.83	–	–	NA	–	–	–	NA	NA
RE39-09-5018	39-604805	1.0–2.0	Soil	0.14 (J)	0.28 (J)	–	–	NA	–	–	–	NA	NA
RE39-09-5020	39-604806	0.0–1.0	Soil	0.46 (J-)	0.49 (J-)	–	–	NA	–	–	–	NA	NA
RE39-09-5021	39-604806	1.0–2.0	Soil	0.39	0.41	–	–	NA	0.00084 (J)	–	–	NA	NA
RE39-09-5022	39-604806	2.0–3.0	Soil	0.31 (J)	0.28 (J)	–	–	NA	–	–	–	NA	NA
RE39-09-5024	39-604807	1.0–2.0	Soil	1.2	0.99	–	–	NA	–	–	–	NA	NA
RE39-09-5026	39-604808	0.0–1.0	Soil	1.4	1.5	–	–	NA	–	–	–	NA	NA
RE39-09-5027	39-604808	1.0–2.0	Soil	0.045 (J)	0.059 (J)	–	–	NA	–	–	–	NA	NA
RE39-09-5096	39-604808	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5029	39-604809	0.0–1.5	Soil	0.038 (J)	0.041 (J)	–	–	NA	–	–	–	NA	NA
RE39-09-5031	39-604809	2.0–3.0	Soil	–	–	–	–	NA	–	–	–	NA	NA
RE39-09-5032	39-604810	0.0–1.0	Soil	2.38	3.25	–	0.0233	NA	0.000747 (J)	–	–	0.000501 (J)	0.00177 (J)
RE39-09-5033	39-604810	1.0–2.0	Soil	0.151	0.234	–	–	NA	–	–	–	–	–
RE39-09-5034	39-604810	2.0–3.0	Soil	0.0961	0.148	–	–	NA	–	–	–	–	–
RE39-09-5035	39-604811	0.0–1.0	Soil	13.6	14.1	–	–	NA	–	–	–	–	–
RE39-09-5036	39-604811	1.0–2.0	Soil	1.28	1.37	–	–	NA	–	–	–	–	–
RE39-09-5037	39-604811	2.0–3.0	Soil	4.36	4.41	–	–	NA	–	–	–	–	–
RE39-09-5038	39-604812	0.0–1.0	Soil	3.11	3.27	–	–	NA	0.000501 (J)	–	–	–	–
RE39-09-5039	39-604812	1.0–2.0	Soil	1.04	0.939	–	–	NA	–	–	–	–	–
RE39-09-5040	39-604812	2.0–3.0	Soil	1.95	1.56	–	–	NA	–	–	–	–	–
RE39-09-5041	39-604813	0.0–1.0	Soil	3.03	2.94	–	0.000375 (J)	NA	–	–	–	0.000624 (J)	0.00091 (J)

Table 2.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Phenanthrene	Pyrene	Tetryl	Toluene	TPH-DRO	Trichloroethene	Trimethylbenzene[1,2,4-]	Trinitrotoluene[2,4,6-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Industrial SSLs				**20,500**	**18,300**	**2740**	**57,900**	**200**[f]	**253**	**260**[b]	**469**	**31,500**	**3610**[g]
Residential SSLs				**1830**	**1720**	**244**	**5570**	**200**[f]	**45.7**	**62**[b]	**35.9**	**9550**	**1090**[g]
RE39-09-5042	39-604813	1.0–2.0	Soil	2.96	2.96	–	–	NA	–	–	–	–	–
RE39-09-5044	39-604814	0.0–1.0	Soil	0.368	0.476	–	0.000326 (J)	NA	–	–	–	–	–
RE39-09-5045	39-604814	1.0–2.0	Soil	0.102	0.136	–	–	NA	–	–	–	–	–
RE39-09-5046	39-604814	2.0–3.0	Soil	0.0296 (J)	0.046	–	–	NA	–	–	–	–	–
RE39-09-5047	39-604815	0.0–1.0	Soil	1.3	1.7	–	–	NA	–	0.00047 (J)	–	NA	NA
RE39-09-5048	39-604815	1.0–2.0	Soil	1.3	1.9	–	–	NA	–	–	–	NA	NA
RE39-09-5049	39-604815	2.0–3.0	Soil	0.74	1	–	–	NA	–	–	–	NA	NA
RE39-09-5050	39-604816	0.0–1.0	Soil	7.1	7.6	–	–	NA	–	–	–	NA	NA
RE39-09-5051	39-604816	1.0–2.0	Soil	0.66	0.7	–	–	NA	–	–	–	NA	NA
RE39-09-5052	39-604816	2.0–3.0	Soil	0.21 (J)	0.24 (J)	–	–	NA	–	–	–	NA	NA
RE39-09-5053	39-604817	0.0–1.0	Soil	6.3	7.2	–	–	NA	–	–	–	NA	NA
RE39-09-5054	39-604817	1.0–2.0	Soil	2.6 (J)	3.2 (J)	–	–	NA	–	–	–	NA	NA
RE39-09-5055	39-604817	2.0–3.0	Soil	0.74	0.94	–	–	NA	–	–	–	NA	NA

Source: SSLs from NMED (2009, 108070) unless otherwise noted.
Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.
[a] SSL for pyrene used as a surrogate based on structural similarity.
[b] SSL from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[c] – = Not detected.
[d] NA = Not analyzed.
[e] na = Not available.
[f] Soil screening guidelines for unknown oil from NMED (2006, 094614).
[g] SSL for xylenes used as a surrogate based on structural similarity.

Table 2.2-4
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 39-002(a), Area 1

Sample ID	Location ID	Depth (ft)	Media	Cesium-137	Plutonium-239/240	Tritium	Uranium-238
Soil BVs/FVs				**1.65**[a]	**0.054**[a]	**na**[b]	**2.29**
Industrial SALs				**23**	**210**	**440,000**	**430**
Residential SALs				**5.6**	**33**	**750**	**87**
0239-97-0014	39-01053	0.0–0.5	Soil	NA[c]	NA	NA	3.88
0239-97-0009	39-01499	0.0–0.5	Soil	NA	NA	NA	6.32
RE39-09-5024	39-604807	1.0–2.0	Soil	–[d]	0.105	–	–
RE39-09-5032	39-604810	0.0–1.0	Soil	–	–	–	–
RE39-09-5038	39-604812	0.0–1.0	Soil	–	–	0.113	8.21
RE39-09-5040	39-604812	2.0–3.0	Soil	–	–	–	2.98
RE39-09-5041	39-604813	0.0–1.0	Soil	–	–	–	–
RE39-09-5044	39-604814	0.0–1.0	Soil	–	–	–	–

Source: BVs/FVs from LANL (1998, 059730). SALs from LANL (2009, 107655).
Notes: Units are pCi/g. Data qualifiers are defined in Appendix A.
[a] Applies only to samples from 0 to 1 ft bgs.
[b] na = Not available.
[c] NA = Not analyzed.
[d] – = Less than BV/FV or not detected.

Table 2.3-1
Summary of Proposed Sampling at AOC 39-002(b)

Site	Sampling Extent Objective	Location	Depth (ft)	Media	pH (EPA SW-846 9045C)	TAL Metals (EPA SW-846:6010B/6020)	Cyanide (EPA SW-846:9012A)	Nitrate (EPA 300)	Perchlorate (EPA SW-846:6850)	Explosive Compounds (EPA SW-846:8321A_MOD)	VOCs (EPA SW-846:8260B)	SVOCs (EPA SW-846:8270C)	PCBs (EPA SW-846:8082)	Dioxins, Furans (EPA SW-846:8280A)	Isotopic plutonium, isotopic uranium, americium-241 (HASL-300)	Tritium	Gamma Spectroscopy (EPA 901.1M)
39-002(b)	Define vertical and lateral extent of contamination for pH, TAL metals, cyanide, nitrate, perchlorate, explosive compounds, VOCs, SVOCs, PCBs, dioxins and furans, isotopic plutonium, isotopic uranium, americium-241, tritium, and gamma-emitting radionuclides.	4 locations, 12 samples next to and downgradient of concrete pad	0−1, 2−3, 6−7	Soil, tuff	X*	X	X	X	X	X	X	X	X	X	X	X	X

*X = Analysis performed.

Table 2.4-1
Summary of Samples Collected and Analyses Requested for SWMU 39-006(a), Inactive Components

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Gamma Spectroscopy	Tritium	Isotopic Plutonium	High Explosives	Isotopic Uranium	TCLP for Metals	Metals	PCBs	Perchlorate	Pesticides/PCBs	SVOCs	VOCs	pH + Cyanide
0239-96-0485	39-01502	8.0–9.0	Fill	–[a]	–	1919[b]	–	–		1919	1918	–	–	–	1916	1916	1916	–
RE39-09-5389	39-604868	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5390	39-604868	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5391	39-604869	4.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5392	39-604869	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5393	39-604870	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5394	39-604870	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5395	39-604871	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5396	39-604871	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5397	39-604872	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5398	39-604872	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5399	39-604873	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5400	39-604873	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5401	39-604874	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5402	39-604874	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5403	39-604875	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5404	39-604875	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5405	39-604876	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5406	39-604876	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5407	39-604877	9.5–10.0	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5408	39-604877	10.0–10.5	Soil	09-1534	09-1533	09-1534	09-1534	09-1532	09-1534	09-1534	–	09-1533	09-1532	09-1533	–	09-1532	09-1532	09-1533
RE39-09-5409	39-604878	10.0–10.5	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5410	39-604878	10.5–11.0	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5411	39-604879	10.0–10.5	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5412	39-604879	10.5–11.0	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5413	39-604880	10.0–10.5	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5414	39-604880	10.5–11.0	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5415	39-604881	10.0–10.5	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5416	39-604881	10.5–11.0	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5417	39-604882	10.0–10.5	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5418	39-604882	10.5–11.0	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5419	39-604883	10.0–10.5	Soil	09-1690	09-1706	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706

Table 2.4-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Uranium	TCLP for Metals	Metals	PCBs	Perchlorate	Pesticides/PCBs	SVOCs	VOCs	pH + Cyanide
RE39-09-5420	39-604883	10.5–11.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5421	39-604884	10.0–10.5	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5422	39-604884	10.5–11.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5423	39-604885	3.0–4.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5424	39-604885	6.0–7.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5425	39-604886	3.0–4.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5426	39-604886	6.0–7.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5427	39-604887	3.0–4.0	Soil	09-1690	09-1706	–	09-1690	09-1690	09-1705	09-1690	09-1690	–	09-1689	09-1688	09-1706	–	09-1688	09-1688	09-1706
RE39-09-5428	39-604887	6.0–7.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5429	39-604888	3.0–4.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5430	39-604888	6.0–9.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5431	39-604889	3.0–4.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5432	39-604889	6.0–7.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5433	39-604890	5.0–7.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5434	39-604890	9.0–12.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5435	39-604891	3.0–5.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5436	39-604891	8.0–10.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5437	39-604892	2.0–4.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5438	39-604892	7.0–9.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5439	39-604893	1.0–3.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5440	39-604893	4.0–5.5	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5441	39-604894	1.0–2.0	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708
RE39-09-5442	39-604894	3.0–4.5	Soil	09-1693	09-1708	–	09-1693	09-1693	09-1707	09-1693	09-1693	–	09-1692	09-1691	09-1708	–	09-1691	09-1691	09-1708

[a] – = Analysis not requested.

[b] Request numbers.

Table 2.4-2
Summary of Inorganic Chemicals Detected above BVs at SWMU 39-006(a), Inactive Components

Sample ID	Location ID	Depth (ft)	Media	Cadmium	Chromium	Cyanide (Total)	Lead	Nitrate	Perchlorate	Silver	Zinc
Soil BVs				**0.4**	**19.3**	**0.5**	**22.3**	**na**[a]	**na**	**1**	**48.8**
Industrial SSLs				**1120**	**2920**[b]	**22,700**	**800**	**1,820,000**	**795**	**5680**	**341,000**
Residential SSLs				**77.9**	**219**[b]	**1560**	**400**	**125,000**	**54.8**	**391**	**23,500**
RE39-09-5389	39-604868	9.5–10.0	Soil	0.94 (J)	–[c]	7.5 (J-)	–	3	–	9.4 (J)	–
RE39-09-5390	39-604868	10.0–10.5	Soil	2.7	–	7.4 (J-)	–	8.6	–	23.4	–
RE39-09-5391	39-604869	9.5–10.0	Soil	1.8	–	–	–	2.5	–	23.1	–
RE39-09-5392	39-604869	10.0–10.5	Soil	1.7	–	1.4 (J-)	–	3.3	–	14.9	–
RE39-09-5393	39-604870	9.5–10.0	Soil	6.7	32.3 (J)	10.9 (J-)	24	10.2	–	227 (J)	66.2
RE39-09-5394	39-604870	10.0–10.5	Soil	4.2	–	8.6 (J-)	–	10.4	–	94.7 (J)	51.5
RE39-09-5395	39-604871	9.5–10.0	Soil	1.2	–	0.83 (J-)	–	5.2	–	10.4	–
RE39-09-5396	39-604871	10.0–10.5	Soil	1.3	–	1.7 (J-)	–	4.3	–	7.4	–
RE39-09-5397	39-604872	9.5–10.0	Soil	–	–	0.57 (UJ)	–	1.4	–	4.4	–
RE39-09-5398	39-604872	10.0–10.5	Soil	1.1	–	0.61 (UJ)	–	2.4	–	6.3	–
RE39-09-5399	39-604873	9.5–10.0	Soil	–	–	–	–	8.8	–	1.1	–
RE39-09-5400	39-604873	10.0–10.5	Soil	–	–	0.62 (UJ)	–	10.6	–	–	–
RE39-09-5401	39-604874	9.5–10.0	Soil	–	–	0.65 (J-)	–	8.4	–	–	–
RE39-09-5402	39-604874	10.0–10.5	Soil	–	–	0.58 (J-)	–	8.6	–	–	55.8
RE39-09-5403	39-604875	9.5–10.0	Soil	–	–	–	–	4.5	–	–	–
RE39-09-5404	39-604875	10.0–10.5	Soil	–	–	–	–	8.9	–	–	–
RE39-09-5405	39-604876	9.5–10.0	Soil	–	–	–	–	1.9	–	–	–
RE39-09-5406	39-604876	10.0–10.5	Soil	–	–	–	–	7.4	–	–	–
RE39-09-5407	39-604877	9.5–10.0	Soil	–	–	–	–	3	–	–	–
RE39-09-5408	39-604877	10.0–10.5	Soil	–	–	1.4 (J-)	–	4.6	–	–	–
RE39-09-5409	39-604878	10.0–10.5	Soil	–	–	0.83	–	16 (J)	–	–	–
RE39-09-5410	39-604878	10.5–11.0	Soil	–	–	–	–	16.2 (J)	–	–	–
RE39-09-5413	39-604880	10.0–10.5	Soil	–	–	1.38	–	5.73 (J)	–	–	–
RE39-09-5414	39-604880	10.5–11.0	Soil	–	–	1	–	7.32 (J)	–	–	–
RE39-09-5415	39-604881	10.0–10.5	Soil	–	–	3.99	–	–	–	–	–

Table 2.4-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Cadmium	Chromium	Cyanide (Total)	Lead	Nitrate	Perchlorate	Silver	Zinc
Soil BVs				**0.4**	**19.3**	**0.5**	**22.3**	**na**[a]	**na**	**1**	**48.8**
Industrial SSLs				**1120**	**2920**[b]	**22,700**	**800**	**1,820,000**	**795**	**5680**	**341,000**
Residential SSLs				**77.9**	**219**[b]	**1560**	**400**	**125,000**	**54.8**	**391**	**23,500**
RE39-09-5420	39-604883	10.5–11.0	Soil	–	–	–	–	5.91 (J)	–	–	–
RE39-09-5423	39-604885	3.0–4.0	Soil	–	–	1.05	–	7.49 (J)	–	1.3	–
RE39-09-5424	39-604885	6.0–7.0	Soil	–	–	1.53	–	7.35 (J)	–	1.1	–
RE39-09-5425	39-604886	3.0–4.0	Soil	–	–	1.03	–	5.32 (J)	–	–	–
RE39-09-5426	39-604886	6.0–7.0	Soil	–	–	–	–	15.3 (J)	0.00124 (J)	–	–
RE39-09-5427	39-604887	3.0–4.0	Soil	–	–	–	–	–	0.000604 (J)	–	–
RE39-09-5428	39-604887	6.0–7.0	Soil	–	–	8.2 (J)	–	11.4	0.000757 (J)	10.2	–
RE39-09-5429	39-604888	3.0–4.0	Soil	–	–	1.19 (J)	–	56.4	–	–	–
RE39-09-5430	39-604888	6.0–9.0	Soil	–	–	2.82 (J)	–	10.9	–	2.1	–
RE39-09-5431	39-604889	3.0–4.0	Soil	–	–	–	–	68.2	0.00324	–	–
RE39-09-5432	39-604889	6.0–7.0	Soil	–	–	–	–	6.77	0.00106 (J)	–	–
RE39-09-5433	39-604890	5.0–7.0	Soil	–	–	–	–	8.2	0.0016 (J)	–	–
RE39-09-5435	39-604891	3.0–5.0	Soil	–	–	8.02 (J)	–	–	–	2.2	–
RE39-09-5436	39-604891	8.0–10.0	Soil	–	–	–	–	4.49	–	–	–
RE39-09-5438	39-604892	7.0–9.0	Soil	–	–	–	–	10.1	0.00095 (J)	–	–
RE39-09-5439	39-604893	1.0–3.0	Soil	–	–	0.614 (J)	–	7.97	0.000615 (J)	–	–
RE39-09-5441	39-604894	1.0–2.0	Soil	–	–	–	–	6.75	–	–	–
RE39-09-5442	39-604894	3.0–4.5	Soil	–	–	–	–	10.8	–	–	–

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] SSLs are for hexavalent chromium.

[c] – = Less than the BV or not detected.

Table 2.4-3
Summary of Organic Chemicals Detected at SWMU 39-006(a), Inactive Components

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor 1254	Benzene	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofurans (Total)	Iodomethane	Isopropyltoluene[4-]	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Phenol	Tetrachlorodibenzofurans (Total)	Toluene	Trimethylbenzene[1,2,4-]
Industrial SSLs				**851,000**	**8.26**	**85.4**	**1370**	**68,400**	**na**[a]	**na**	**na**	**na**	**na**	**na**	**14,900**[b]	**na**	**na**	**205,000**	**na**	**57,900**	**262**[b]
Residential SSLs				**67,500**	**1.12**	**15.5**	**347**	**6100**	**na**	**na**	**na**	**na**	**na**	**na**	**3210**[b]	**na**	**na**	**18,300**	**na**	**5570**	**62.1**[b]
0239-96-0485	39-01502	8.0–9.0	Fill	–[c]	–	0.0088	–	–	NA[d]	NA	NA	NA	NA	–	–	NA	NA	0.49	NA	–	–
RE39-09-5389	39-604868	9.5–10.0	Soil	–	–	–	2	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5391	39-604869	9.5–10.0	Soil	0.0099 (J)	–	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5392	39-604869	10.0–10.5	Soil	0.0092 (J)	–	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5393	39-604870	9.5–10.0	Soil	–	–	–	0.2 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5397	39-604872	9.5–10.0	Soil	–	0.028 (J)	–	–	–	NA	NA	NA	NA	NA	0.0009 (J)	–	NA	NA	–	NA	–	–
RE39-09-5399	39-604873	9.5–10.0	Soil	0.011 (J)	–	–	2	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5400	39-604873	10.0–10.5	Soil	0.013 (J)	0.0035 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5401	39-604874	9.5–10.0	Soil	–	–	–	–	–	NA	NA	NA	NA	NA	–	0.00059 (J)	NA	NA	–	NA	–	–
RE39-09-5403	39-604875	9.5–10.0	Soil	0.0088 (J)	0.014 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5407	39-604877	9.5–10.0	Soil	–	0.019 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5408	39-604877	10.0–10.5	Soil	–	0.01 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5409	39-604878	10.0–10.5	Soil	–	–	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	0.00042 (J)
RE39-09-5412	39-604879	10.5–11.0	Soil	–	–	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	0.00044 (J)
RE39-09-5413	39-604880	10.0–10.5	Soil	–	0.0039 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5414	39-604880	10.5–11.0	Soil	–	0.0035 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5415	39-604881	10.0–10.5	Soil	–	0.0096 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5419	39-604883	10.0–10.5	Soil	–	0.0028 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	0.00042 (J)
RE39-09-5423	39-604885	3.0–4.0	Soil	–	0.0042 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5424	39-604885	6.0–7.0	Soil	–	0.011 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5425	39-604886	3.0–4.0	Soil	–	0.0075 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	0.00046 (J)
RE39-09-5426	39-604886	6.0–7.0	Soil	–	0.0035 (J)	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	0.00056 (J)
RE39-09-5428	39-604887	6.0–7.0	Soil	–	0.072	–	0.12 (J)	0.039 (J)	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	0.00048 (J)	–
RE39-09-5429	39-604888	3.0–4.0	Soil	–	0.0066 (J)	–	0.19 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5430	39-604888	6.0–9.0	Soil	–	0.054	–	0.33 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5431	39-604889	3.0–4.0	Soil	–	–	–	0.54	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5432	39-604889	6.0–7.0	Soil	–	–	–	0.34 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5434	39-604890	9.0–12.0	Soil	–	–	–	0.19 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5435	39-604891	3.0–5.0	Soil	–	0.048	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-9771	39-604891	3.0–5.0	Soil	NA	NA	NA	NA	NA	0.00000146 (J)	0.00000312	0.00000075	–	0.000000401	NA	NA	0.00000763 (J)	0.000000587 (J)	NA	–	NA	NA
RE39-09-5436	39-604891	8.0–10.0	Soil	–	–	–	0.21 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–

Table 2.4-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor 1254	Benzene	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofurans (Total)	Iodomethane	Isopropyltoluene[4-]	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Phenol	Tetrachlorodibenzofurans (Total)	Toluene	Trimethylbenzene[1,2,4-]
Industrial SSLs				**851,000**	**8.26**	**85.4**	**1370**	**68,400**	**na[a]**	**na**	**na**	**na**	**na**	**na**	**14,900[d]**	**na**	**na**	**205,000**	**na**	**57,900**	**262[d]**
Residential SSLs				**67,500**	**1.12**	**15.5**	**347**	**6100**	**na**	**na**	**na**	**na**	**na**	**na**	**3210[d]**	**na**	**na**	**18,300**	**na**	**5570**	**62.1[d]**
RE39-09-5437	39-604892	2.0–4.0	Soil	–	–	–	0.34 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5438	39-604892	7.0–9.0	Soil	–	–	–	0.19 (J)	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–
RE39-09-5439	39-604893	1.0–3.0	Soil	–	–	–	–	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	0.00047 (J)	–
RE39-09-5442	39-604894	3.0–4.5	Soil	–	–	–	0.39	–	NA	NA	NA	NA	NA	–	–	NA	NA	–	NA	–	–

Source: SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[c] – = If analyzed, sample result not detected.

[d] NA = Not analyzed.

[b] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table 2.4-4
Summary of Radionuclides Detected or
Detected above BVs/FVs at SWMU 39-006(a), Inactive Components

Sample ID	Location ID	Depth (ft)	Media	Cesium-137	Tritium
Soil BVs/FVs				**1.65[a]**	**na[b]**
Industrial SALs				**23**	**440,000**
Residential SALs				**5.6**	**750**
RE39-09-5398	39-604872	10.0–10.5	Soil	–[c]	1.84
RE39-09-5401	39-604874	9.5–10.0	Soil	–	1.08
RE39-09-5402	39-604874	10.0–10.5	Soil	–	1.07
RE39-09-5407	39-604877	9.5–10.0	Soil	–	0.62
RE39-09-5419	39-604883	10.0–10.5	Soil	–	0.68
RE39-09-5439	39-604893	1.0–3.0	Soil	0.308	2.02

Source: BVs/FVs from LANL (1998, 059730). SALs from LANL (2009, 107655).

Notes: Units are pCi/g. Data qualifiers are defined in Appendix A.

[a] Applies only to samples from 0 to 1 ft bgs.

[b] na = Not available.

[c] – = Less than BV/FV or not detected.

Table 2.4-5
Summary of Proposed Sampling at SWMU 39-006(a), Inactive Components

Site	Sampling Extent Objective	Location	Depth (ft)	Media	TAL Metals (EPA SW-846:6010B/6020)	Cyanide (EPA SW 846:9012A)	Perchlorate (EPA SW-846:6850)	PCBs (EPA SW-846:8082)	Tritium
39-006(a), inactive components	Define vertical extent of contamination for cadmium, silver, cyanide, perchlorate, and Aroclor 1254.	39-604868	12–13, 20–21	Soil, tuff	X[a] (cadmium, silver)	—[b]	—	—	—
		39-604869	12–13, 20–21	Soil, tuff	—	X	—	—	—
		39-604871	12-13, 20—21	Soil, tuff	—	X	—	—	—
		39-604872	12–13, 20–21	Soil, tuff	X (cadmium, silver)	—	—	—	X
		39-604877	12–13, 20–21	Soil, tuff	—	X	—	—	—
		39-604885	8–9, 16–17	Soil, tuff	—	X	—	—	—
		39-604887	8—9, 16–17	Soil, tuff	X (silver)	X	—	X	—
		39-604888	10–11, 19–20	Soil, tuff	X (silver)	X	—	X	—
		39-604892	10–11, 19–20	Soil, tuff	—	—	X	—	—
	Define lateral extent of contamination for silver, cyanide, Aroclor 1254, and tritium	Three new locations (6a-1, 6a-2, and 6a-3) east, south and west of the septic tank excavation and around sample location 39-604874	9–10, 15–16	Soil, tuff	—	—	—	—	X
		Three new locations (6a-4, 6a-5, and 6a-6), step-out from sample locations 39-604887, 39-604888, and 39-604891 west and north of the sand filter	3–4, 9–10	Soil, tuff	X (silver)	X	—	X	—
		One new location (6a-7), stepout from 39-604885 south of sand filter	3–4, 9–10	Soil, tuff	X (silver)	X	—	—	—
		One new location (6a-8), stepout from 39-604883 southeast of sand filter	3–4, 9–10	Soil, tuff	—	—	—	—	X
		One new location (6a-9), stepout from 39-604893 northeast of the sand filter	3–4, 9–10	Soil, tuff	—	X	—	—	X

[a] X = Analysis proposed.
[b] — = Analysis will not be performed.

Table 2.5-1
Summary of Samples Collected and Analyses Requested for SWMU 39-007(a)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Uranium	Metals	PCBs	Perchlorate	SVOCs	VOCs	pH + Cyanide
RC39-01-0001	39-10018	0.0–0.5	Fill	–[a]	–	–	–	–	–	–	–	9478R[b]	9477R	–	–	–	–
RC39-01-0002	39-10019	0.0–0.5	Fill	–	–	–	–	–	–	–	–	9478R	9477R	–	–	–	–
RC39-01-0003	39-10020	0.0–0.5	Fill	–	–	–	–	–	–	–	–	9478R	9477R	–	–	–	–
RC39-01-0004	39-10021	0.0-0.5	Fill	–	–	–	–	–	–	–	–	9478R	9477R	–	–	–	–
RC39-01-0005	39-10022	0.0–0.5	Fill	–	–	–	–	–	–	–	–	9478R	9477R	–	–	–	–
RE39-09-5326	39-604852	0.0–1.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5327	39-604852	1.0–2.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5328	39-604852	2.0–3.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5386	39-604852	2.0–3.0	Soil	–	–	09-1664	–	–	–	–	–	–	–	–	–	–	–
RE39-09-5329	39-604853	0.0–1.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5330	39-604853	1.0–2.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5331	39-604853	2.0–3.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5332	39-604854	0.0–1.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5333	39-604854	1.0–2.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5334	39-604854	2.0–3.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5335	39-604855	0.0–1.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5336	39-604855	1.0–2.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5337	39-604855	2.0–3.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5338	39-604856	0.0–1.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5339	39-604856	1.0–2.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5340	39-604856	2.0–3.0	Soil	09-1439	09-1438	–	09-1439	09-1439	09-1437	09-1439	09-1439	09-1438	09-1437	09-1438	09-1437	09-1437	09-1438
RE39-09-5341	39-604857	0.0–1.0	Soil	09-1679	09-1678	–	09-1679	09-1679	09-1677	09-1679	09-1679	09-1678	09-1677	09-1677	09-1677	09-1677	09-1678
RE39-09-5342	39-604857	1.0–2.0	Soil	09-1679	09-1678	–	09-1679	09-1679	09-1677	09-1679	09-1679	09-1678	09-1677	09-1677	09-1677	09-1677	09-1678
RE39-09-5343	39-604857	2.0–3.0	Soil	09-1679	09-1678	–	09-1679	09-1679	09-1677	09-1679	09-1679	09-1678	09-1677	09-1677	09-1677	09-1677	09-1678
RE39-09-5344	39-604858	0.0–1.0	Soil	09-1679	09-1678	–	09-1679	09-1679	09-1677	09-1679	09-1679	09-1678	09-1677	09-1677	09-1677	09-1677	09-1678
RE39-09-5345	39-604858	1.0–2.0	Soil	09-1679	09-1678	–	09-1679	09-1679	09-1677	09-1679	09-1679	09-1678	09-1677	09-1677	09-1677	09-1677	09-1678
RE39-09-5346	39-604858	2.0–3.0	Soil	09-1679	09-1678	–	09-1679	09-1679	09-1677	09-1679	09-1679	09-1678	09-1677	09-1677	09-1677	09-1677	09-1678
RE39-09-5347	39-604859	0.0–1.0	Soil	09-1725	09-1726	–	09-1725	09-1725	09-1726	09-1725	09-1725	09-1725	09-1725	09-1726	09-1725	09-1725	09-1726
RE39-09-5350	39-604860	1.0–2.0	Soil	09-1725	09-1726	–	09-1725	09-1725	09-1726	09-1725	09-1725	09-1725	09-1725	09-1726	09-1725	09-1725	09-1726
RE39-09-5353	39-604861	0.0–1.0	Soil	09-1725	09-1726	–	09-1725	09-1725	09-1726	09-1725	09-1725	09-1725	09-1725	09-1726	09-1725	09-1725	09-1726

[a] – = Analysis not requested.

[b] Request numbers.

Table 2.5-2
Summary of Inorganic Chemicals Detected above BVs at SWMU 39-007(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Cadmium	Cyanide (Total)	Nitrate	Perchlorate	Zinc
Soil BVs				**0.83**	**0.4**	**0.5**	**na**[a]	**na**	**48.8**
Industrial SSLs				**454**	**1120**	**22,700**	**182,0000**	**795**	**341,000**
Residential SSLs				**31.3**	**77.9**	**1560**	**125,000**	**54.8**	**23,500**
RC39-01-0001	39-10018	0.0–0.5	Fill	–[b]	–	NA[c]	NA	NA	57.6
RC39-01-0002	39-10019	0.0–0.5	Fill	–	–	NA	NA	NA	51.6
RE39-09-5326	39-604852	0.0–1.0	Soil	–	0.591	–	–	–	56
RE39-09-5327	39-604852	1.0–2.0	Soil	1.07 (U)	0.533 (U)	–	–	–	–
RE39-09-5328	39-604852	2.0–3.0	Soil	1.04 (U)	0.522 (U)	–	–	–	–
RE39-09-5329	39-604853	0.0–1.0	Soil	1.16 (U)	0.58 (U)	–	–	–	–
RE39-09-5330	39-604853	1.0–2.0	Soil	1.14 (U)	0.57 (U)	–	–	–	–
RE39-09-5331	39-604853	2.0–3.0	Soil	1.04 (U)	0.519 (U)	–	–	–	–
RE39-09-5332	39-604854	0.0–1.0	Soil	1.13 (U)	–	–	–	–	–
RE39-09-5333	39-604854	1.0–2.0	Soil	1.09 (U)	0.546 (U)	–	–	–	–
RE39-09-5334	39-604854	2.0–3.0	Soil	1.06 (U)	0.531 (U)	–	–	–	–
RE39-09-5335	39-604855	0.0–1.0	Soil	–	0.547 (U)	–	3.57	–	–
RE39-09-5336	39-604855	1.0–2.0	Soil	1.03 (U)	0.516 (U)	–	0.879 (J)	–	–
RE39-09-5337	39-604855	2.0–3.0	Soil	1.04 (U)	0.522 (U)	–	–	–	–
RE39-09-5338	39-604856	0.0–1.0	Soil	–	0.575 (U)	–	1.38	–	–
RE39-09-5339	39-604856	1.0–2.0	Soil	1.06 (U)	0.53 (U)	–	–	–	–
RE39-09-5340	39-604856	2.0–3.0	Soil	1.06 (U)	0.53 (U)	–	–	0.000567 (J)	–
RE39-09-5341	39-604857	0.0–1.0	Soil	–	–	0.69 (UJ)	–	–	108
RE39-09-5342	39-604857	1.0–2.0	Soil	–	–	–	–	–	54.5
RE39-09-5343	39-604857	2.0–3.0	Soil	–	–	0.59 (UJ)	–	–	–
RE39-09-5346	39-604858	2.0–3.0	Soil	–	–	0.54 (UJ)	–	–	–
RE39-09-5347	39-604859	0.0–1.0	Soil	1.2 (U)	–	–	–	–	–
RE39-09-5350	39-604860	1.0–2.0	Soil	–	–	–	–	0.000585 (J)	–

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.
[a] na = Not available.
[b] – = Less than the BV or not detected.
[c] NA = Not analyzed.

Table 2.5-3
Summary of Organic Chemicals Detected at SWMU 39-007(a)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	Dichlorobenzene[1,4-]	Ethylbenzene	Fluoranthene	Isopropylbenzene	Isopropyltoluene[4-]	Phenanthrene	Pyrene	Toluene
Industrial SSLs				**851,000**	**8.26**	**8.26**	**8.26**	**8.26**	**234**	**1370**	**9100**[a]	**2340**	**180**	**385**	**24,400**	**14,900**	**14,900**[b]	**20,500**	**18,300**	**57,900**
Residential SSLs				**67,500**	**2.2**	**2.2**	**1.12**	**2.2**	**62.1**	**347**	**2600**[a]	**621**	**32.2**	**69.7**	**2290**	**3210**	**3210**[b]	**1830**	**1720**	**5570**
RC39-01-0001	39-10018	0.0–0.5	Fill	NA[c]	–[d]	–	–	0.032 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RC39-01-0002	39-10019	0.0–0.5	Fill	NA	–	–	3	–	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RC39-01-0003	39-10020	0.0–0.5	Fill	NA	–	–	–	0.086	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RC39-01-0005	39-10022	0.0–0.5	Fill	NA	–	–	–	0.036	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE39-09-5326	39-604852	0.0–1.0	Soil	–	–	–	0.0438	0.0228	–	0.189 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5327	39-604852	1.0–2.0	Soil	–	–	–	0.0094	0.0046	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-5328	39-604852	2.0–3.0	Soil	0.0103 (J)	–	–	–	–	–	0.163 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5329	39-604853	0.0–1.0	Soil	–	–	–	0.0039 (J)	0.0033 (J)	–	0.0872 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5330	39-604853	1.0–2.0	Soil	–	–	0.202	–	0.0269 (J)	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-5331	39-604853	2.0–3.0	Soil	–	–	0.00806	0.00605	0.00308 (J)	–	0.18 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5332	39-604854	0.0–1.0	Soil	–	–	–	24.6	7.82	–	0.268 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5333	39-604854	1.0–2.0	Soil	0.0346 (J)	–	–	1.26	0.404	–	0.0972 (J)	–	–	–	–	–	0.000786 (J)	0.000467 (J)	–	–	0.000633 (J)
RE39-09-5334	39-604854	2.0–3.0	Soil	–	–	–	0.268	0.089	–	0.11 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5335	39-604855	0.0–1.0	Soil	–	–	–	0.0404	0.0361	–	0.225 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5336	39-604855	1.0–2.0	Soil	–	–	–	–	0.0022 (J)	–	0.159 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5337	39-604855	2.0–3.0	Soil	–	–	–	–	–	–	0.155 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5338	39-604856	0.0–1.0	Soil	–	–	–	0.0341	0.0212	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-5339	39-604856	1.0–2.0	Soil	–	–	–	0.0024 (J)	0.0016 (J)	–	0.21 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5340	39-604856	2.0–3.0	Soil	–	–	–	0.0026 (J)	0.0015 (J)	–	0.163 (J)	–	–	–	–	–	–	–	–	–	–
RE39-09-5341	39-604857	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	0.00059 (J)	0.00043 (J)	–	–	–	–	–	0.00095 (J)
RE39-09-5344	39-604858	0.0–1.0	Soil	–	–	–	–	–	–	–	0.077 (J)	–	0.00074 (J)	0.00043 (J)	–	–	–	–	–	0.00041 (J)
RE39-09-5345	39-604858	1.0–2.0	Soil	–	–	–	–	–	–	–	–	–	–	0.00033 (J)	–	–	–	–	–	–
RE39-09-5347	39-604859	0.0–1.0	Soil	–	–	–	0.4 (J)	–	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-5350	39-604860	1.0–2.0	Soil	–	0.24 (J)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-5353	39-604861	0.0–1.0	Soil	–	–	0.35 (J)	0.26 (J)	–	0.042 (J)	–	–	0.04 (J)	–	–	0.076 (J)	–	–	0.067 (J)	0.08 (J)	–

Source: SSLs from NMED (2009, 108070) unless otherwise noted.
Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.
[a] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[b] SSL for isopropylbenzene used as a surrogate based on structural similarity.
[c] NA = Not analyzed.
[d] – = Not detected.

Table 2.5-4
Summary of Proposed Sampling at SWMU 39-007(a)

Site	Sampling Extent Objective	Location	Depth (ft)	Media	PCBs (EPA SW-846:8082)
39-007(a)	Confirmation samples following soil removal for Aroclor-1254 and Aroclor-1260	Six new sample locations (7a-1 through 7a-6) around the excavation	0–1, 2–3, 4–5	Soil	X*
		39-10019 and 39-604854 from bottom of excavation	0–1, 2–3	Soil	X

* X = Analysis performed.

Table 2.6-1
Summary of Samples Collected and Analyses Requested for SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Uranium	Metals	PCBs	Perchlorate	SVOCs	VOCs	pH + Cyanide
RE39-09-2112	39-604425	0.0–1.0	Soil	09-1220[a]	09-1219	—[b]	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	—	09-1219
RE39-09-2113	39-604425	1.0–2.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2114	39-604425	2.0–3.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2115	39-604426	0.0–1.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	—	09-1219
RE39-09-2116	39-604426	1.0–2.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2117	39-604426	2.0–3.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2118	39-604427	0.0–1.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	-	09-1219
RE39-09-2119	39-604427	1.0–2.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2120	39-604427	2.0–3.0	Qbo	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2121	39-604428	0.0–1.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	—	09-1219
RE39-09-2122	39-604428	1.0–2.0	Qbo	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	—	09-1219
RE39-09-2123	39-604428	2.0–3.0	Qbo	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2124	39-604429	0.0–1.0	Soil	09-1220	09-1219	—	09-1220	09-1220	09-1218	09-1220	09-1220	09-1219	09-1218	09-1219	09-1218	09-1218	09-1219
RE39-09-2125	39-604429	1.0–2.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227
RE39-09-2126	39-604429	2.0–3.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2127	39-604430	0.0–1.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2128	39-604430	1.0–2.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227
RE39-09-2129	39-604430	2.0–3.0	Qbo	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2130	39-604431	0.0–1.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2131	39-604431	1.0–2.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227
RE39-09-2132	39-604431	2.0–3.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2133	39-604432	0.0–1.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227

Table 2.6-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions (Nitrate)	Dioxins and Furans	Gamma Spectroscopy	Tritium	High Explosives	Isotopic Plutonium	Isotopic Uranium	Metals	PCBs	Perchlorate	SVOCs	VOCs	pH + Cyanide
RE39-09-2134	39-604432	1.0–2.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2135	39-604432	2.0–3.0	Qbo	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2136	39-604433	0.0–1.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227
RE39-09-2137	39-604433	1.0–2.0	Qbo	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2138	39-604433	2.0–3.0	Qbo	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2139	39-604434	0.0–1.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227
RE39-09-2140	39-604434	1.0–2.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2141	39-604434	2.0–3.0	Sed	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2142	39-604435	0.0–1.0	Soil	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	—	09-1227
RE39-09-2143	39-604435	1.0–2.0	Sed	09-1228	09-1227	—	09-1228	09-1228	09-1226	09-1228	09-1228	09-1227	09-1226	09-1227	09-1226	09-1226	09-1227
RE39-09-2144	39-604435	2.0–3.0	Sed	09-1231	09-1230	—	09-1231	09-1231	09-1229	09-1231	09-1231	09-1230	09-1229	09-1230	09-1229	09-1229	09-1230
RE39-09-2145	39-604436	0.0–1.0	Soil	09-1231	09-1230	—	09-1231	09-1231	09-1229	09-1231	09-1231	09-1230	09-1229	09-1230	09-1229	—	09-1230
RE39-09-2146	39-604436	1.0–2.0	Sed	09-1231	09-1230	—	09-1231	09-1231	09-1229	09-1231	09-1231	09-1230	09-1229	09-1230	09-1229	09-1229	09-1230
RE39-09-2147	39-604436	2.0–3.0	Sed	09-1231	09-1230	—	09-1231	09-1231	09-1229	09-1231	09-1231	09-1230	09-1229	09-1230	09-1229	09-1229	09-1230
RE39-09-2148	39-604437	0.0–1.0	Soil	09-1802	09-1800	09-1804	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2149	39-604437	1.0–2.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2150	39-604437	2.0–3.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2151	39-604438	0.0–1.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2152	39-604438	1.0–2.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2153	39-604438	2.0–3.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2154	39-604439	0.0–1.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2155	39-604439	1.0–2.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2156	39-604439	2.0–3.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2157	39-604440	0.0–1.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2158	39-604440	1.0–2.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2159	39-604440	2.0–3.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2160	39-604441	0.0–1.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2161	39-604441	1.0–2.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2162	39-604441	2.0–3.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2163	39-604442	0.0–1.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2164	39-604442	1.0–2.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800
RE39-09-2165	39-604442	2.0–3.0	Soil	09-1802	09-1800	—	09-1802	09-1802	09-1801	09-1802	09-1802	09-1800	09-1801	09-1800	09-1801	09-1801	09-1800

[a] Request numbers.

[b] — = Analysis not requested.

Table 2.6-2
Summary of Inorganic Chemicals Detected above BVs at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cyanide (Total)	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Vanadium	Zinc
Sediment BVs				**15,400**	**0.83**	**0.56**	**127**	**1.31**	**0.4**	**0.82**	**10.5**	**11.2**	**13,800**	**19.7**	**2370**	**543**	**0.1**	**9.38**	**na[a]**	**na**	**0.3**	**19.7**	**60.2**
Soil BVs				**29,200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**0.5**	**19.3**	**14.7**	**21,500**	**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**39.6**	**48.8**
Qbo BVs				**3560**	**0.5**	**0.56**	**25.7**	**1.44**	**0.4**	**0.5**	**2.6**	**3.96**	**3700**	**13.5**	**739**	**189**	**0.1**	**na**	**na**	**na**	**0.3**	**4.59**	**40**
Industrial SSLs				**1,130,000**	**454**	**17.7**	**224,000**	**2260**	**1120**	**22,700**	**2920[b]**	**45,400**	**795,000**	**800**	**na**	**145,000**	**310[c]**	**22,700**	**1,820,000**	**795**	**5680**	**5680**	**341,000**
Residential SSLs				**78100**	**31.3**	**3.90**	**15,600**	**156**	**77.9**	**1560**	**219[b]**	**3130**	**54,800**	**400**	**na**	**10,700**	**23[c]**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-2112	39-604425	0.0–1.0	Soil	–[d]	–	–	–	–	–	–	–	55.6	–	–	–	–	0.308 (J)	–	3.8	–	–	–	–
RE39-09-2113	39-604425	1.0–2.0	Soil	–	–	–	–	–	–	0.58 (U)	–	14.8	–	–	–	–	0.157 (U)	–	0.35	–	–	–	–
RE39-09-2114	39-604425	2.0–3.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.137 (U)	–	0.29	–	–	–	–
RE39-09-2115	39-604426	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.587 (J)	–	10.1	–	–	–	–
RE39-09-2116	39-604426	1.0–2.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	1.95	–	3.7	–	–	–	–
RE39-09-2117	39-604426	2.0–3.0	Soil	–	–	–	–	3.9	–	–	–	58.7	–	35.7	–	–	2.47	–	2.7	–	–	–	89
RE39-09-2118	39-604427	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3.7	–	–	–	–
RE39-09-2119	39-604427	1.0–2.0	Soil	–	–	–	–	–	–	0.55 (U)	–	–	–	–	–	–	–	–	1.3	–	–	–	–
RE39-09-2120	39-604427	2.0–3.0	Qbo	3600	–	1.4	65.8	–	–	–	3.6	4	7370	–	929	303	–	4.7	0.49	–	–	9	–
RE39-09-2121	39-604428	0.0–1.0	Soil	–	–	–	–	–	–	–	–	241	–	33.6	–	–	–	–	2.8	–	–	–	138
RE39-09-2122	39-604428	1.0–2.0	Qbo	–	–	–	39.1	–	–	–	4.7	15.8	3750	25.5	–	196	–	2.9	0.18 (J)	–	–	–	55.3
RE39-09-2123	39-604428	2.0–3.0	Qbo	–	–	0.65 (J)	44.1	–	–	–	38.8	4.6	4140	–	–	195	–	18.7	2.4	–	–	–	–
RE39-09-2124	39-604429	0.0–1.0	Soil	–	1.16 (U)	–	–	–	0.582 (U)	NA[e]	–	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-2125	39-604429	1.0–2.0	Soil	–	1.17 (U)	–	–	–	0.587 (U)	NA	–	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-2126	39-604429	2.0–3.0	Soil	–	1.06 (U)	–	–	–	0.531 (U)	NA	–	–	–	–	–	–	–	–	–	–	–	–	–
RE39-09-2127	39-604430	0.0–1.0	Soil	–	1.13 (U)	–	–	–	0.566 (U)	NA	–	–	–	–	–	–	–	–	3.22 (J-)	0.000738 (J)	–	–	–
RE39-09-2128	39-604430	1.0–2.0	Soil	–	1.13 (U)	–	–	–	0.566 (U)	–	–	–	–	–	–	–	–	–	7.78 (J-)	–	–	–	–
RE39-09-2129	39-604430	2.0–3.0	Qbo	–	1.14 (U)	1.1 (U)	–	–	0.569 (U)	–	–	4.74	4200	–	–	–	–	–	3.11 (J-)	0.00102 (J)	1.1 (UJ)	–	–
RE39-09-2130	39-604431	0.0–1.0	Soil	–	1.11 (U)	–	–	–	0.557 (U)	NA	–	–	–	–	–	–	0.128	–	1.91 (J-)	–	–	–	–
RE39-09-2131	39-604431	1.0–2.0	Soil	–	1.15 (U)	–	–	–	0.573 (U)	–	–	–	–	–	–	–	–	–	1.12 (J-)	–	–	–	–
RE39-09-2132	39-604431	2.0–3.0	Soil	–	1.07 (U)	–	–	–	0.537 (U)	NA	–	–	–	–	–	–	–	–	1.29 (J-)	–	–	–	–
RE39-09-2133	39-604432	0.0–1.0	Soil	–	1.08 (U)	–	–	–	0.538 (U)	NA	–	1100	–	43.8	–	–	0.294	–	1.01 (J-)	–	–	–	–
RE39-09-2134	39-604432	1.0–2.0	Soil	–	1.12 (U)	–	–	–	0.561 (U)	NA	–	1060	–	53.4	–	–	0.579	–	0.733 (J-)	–	–	–	49.5 (J)
RE39-09-2135	39-604432	2.0–3.0	Qbo	–	1.14 (U)	1.29	26.7	–	0.569 (U)	–	3.7	92.2	5840	51.2	–	259	0.338	2.14	0.717 (J-)	–	1.1 (UJ)	–	45.8 (J)
RE39-09-2136	39-604433	0.0–1.0	Soil	–	1.08 (U)	–	–	–	0.538 (U)	–	–	–	–	–	–	–	–	–	3.41 (J-)	0.000595 (J)	–	–	–
RE39-09-2137	39-604433	1.0–2.0	Qbo	3920	1.08 (U)	1.04 (J)	61.3	–	0.541 (U)	–	4.2	7.05	7280	23.6	967 (J+)	220	–	4.01	2.54 (J-)	0.000583 (J)	1.09 (UJ)	8.47	–
RE39-09-2138	39-604433	2.0–3.0	Qbo	–	–	0.822 (J)	71.8	–	0.543 (U)	–	3.54	27.4	6920	62	–	240	–	3.07	2.28 (J-)	0.000572 (J)	1.04 (UJ)	6.12	40.4 (J)
RE39-09-2139	39-604434	0.0–1.0	Soil	–	1.19	–	–	–	0.567 (U)	NA	–	43.9	–	55.4	–	–	–	–	1.17 (J-)	–	–	–	54.4 (J)
RE39-09-2140	39-604434	1.0–2.0	Soil	–	1.08 (U)	–	–	–	0.538 (U)	NA	–	–	–	–	–	–	–	–	1.03 (J-)	–	–	–	–
RE39-09-2141	39-604434	2.0–3.0	Sed	–	1.01 (U)	–	–	–	0.506 (U)	NA	–	–	–	–	–	–	–	–	0.748 (J-)	–	1.06 (UJ)	–	–

Table 2.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Cyanide (Total)	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Vanadium	Zinc
Sediment BVs				**15400**	**0.83**	**0.56**	**127**	**1.31**	**0.4**	**0.82**	**10.5**	**11.2**	**13,800**	**19.7**	**2370**	**543**	**0.1**	**9.38**	**na[a]**	**na**	**0.3**	**19.7**	**60.2**
Soil BVs				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**0.5**	**19.3**	**14.7**	**21,500**	**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**39.6**	**48.8**
Qbo BVs				**3560**	**0.5**	**0.56**	**25.7**	**1.44**	**0.4**	**0.5**	**2.6**	**3.96**	**3700**	**13.5**	**739**	**189**	**0.1**	**na**	**na**	**na**	**0.3**	**4.59**	**40**
Industrial SSLs				**1,130,000**	**454**	**17.7**	**224,000**	**2260**	**1120**	**22,700**	**2920[b]**	**45,400**	**795,000**	**800**	**na**	**145,000**	**310[c]**	**22,700**	**1,820,000**	**795**	**5680**	**5680**	**341,000**
Residential SSLs				**78,100**	**31.3**	**3.90**	**15,600**	**156**	**77.9**	**1560**	**219[b]**	**3130**	**54,800**	**400**	**na**	**10,700**	**23[c]**	**1560**	**125,000**	**54.8**	**391**	**391**	**23,500**
RE39-09-2142	39-604435	0.0–1.0	Soil	–	1.08 (U)	–	–	–	0.541 (U)	–		–	–	–	–	–	0.12	–	4.29 (J-)	–	–	–	–
RE39-09-2143	39-604435	1.0–2.0	Sed	–	1.04 (U)	–	–	–	0.522 (U)	NA		–	–	–	–	–	–	–	1.79 (J-)	–	1.02 (UJ)	–	–
RE39-09-2144	39-604435	2.0–3.0	Sed	–	1.01 (U)	–	–	–	0.505 (U)	–	–	–	–	–	–	–	–	–	1.4	–	0.998 (UJ)	–	–
RE39-09-2145	39-604436	0.0–1.0	Soil	–	1.14 (U)	–	–	–	0.569 (U)	–	–	20.2 (J+)	–	–	–	–	–	–	23.1	0.00486	–	–	–
RE39-09-2146	39-604436	1.0–2.0	Sed	–	1.04 (U)	–	–	–	0.522 (U)	–	–	–	–	–	–	–	–	–	3.97	0.00169 (J)	1.05 (UJ)	–	–
RE39-09-2147	39-604436	2.0–3.0	Sed	–	1.03 (U)	–	–	–	0.514 (U)	–	–	–	–	–	–	–	–	–	1.62	0.0016 (J)	1.01 (UJ)	–	–
RE39-09-2148	39-604437	0.0–1.0	Soil	–	–	–	–	–	–	0.53 (U)	–	29.7	–	–	–	–	0.459 (J+)	–	0.93 (J+)	–	–	–	–
RE39-09-2149	39-604437	1.0–2.0	Soil	–	–	–	–	–	0.54 (J-)	0.54 (U)	–	2530	–	–	–	–	0.272 (J+)	–	0.44 (J+)	–	–	–	–
RE39-09-2150	39-604437	2.0–3.0	Soil	–	–	–	–	2.1	–	0.52 (U)	–	38.9	–	–	–	–	–	–	0.63 (J+)	–	–	–	–
RE39-09-2151	39-604438	0.0–1.0	Soil	–	–	–	–	–	–	0.54 (U)	–	–	–	–	–	–	–	–	1.2 (J+)	–	–	–	–
RE39-09-2152	39-604438	1.0–2.0	Soil	–	–	–	–	–	–	0.54 (U)	–	–	–	–	–	–	–	–	0.36 (J+)	–	–	–	–
RE39-09-2153	39-604438	2.0–3.0	Soil	–	–	–	–	–	–	0.54 (U)	–	–	–	–	–	–	–	–	5 (J+)	–	–	–	–
RE39-09-2154	39-604439	0.0–1.0	Soil	–	–	–	–	–	–	0.55 (U)	–	15.6	–	–	–	–	–	–	–	–	–	–	–
RE39-09-2155	39-604439	1.0–2.0	Soil	–	–	–	–	–	–	0.55 (U)	–	27.9	–	–	–	–	0.178 (J+)	–	–	–	–	–	–
RE39-09-2156	39-604439	2.0–3.0	Soil	–	–	–	–	–	–	0.55 (U)	–	66.7	–	–	–	–	0.111 (J+)	–	0.65 (J+)	–	–	–	–
RE39-09-2157	39-604440	0.0–1.0	Soil	–	–	–	–	–	–	0.54 (U)	–	–	–	–	–	–	0.17 (J+)	–	1.2 (J+)	–	–	–	–
RE39-09-2158	39-604440	1.0–2.0	Soil	–	–	–	–	–	–	0.55 (U)	–	–	–	–	–	–	0.521 (J+)	–	4.7 (J+)	–	–	–	–
RE39-09-2159	39-604440	2.0–3.0	Soil	–	–	–	–	–	–	0.55 (U)	–	–	–	–	–	–	–	–	1.1 (J+)	–	–	–	–
RE39-09-2160	39-604441	0.0–1.0	Soil	–	–	–	–	–	–	0.54 (U)	–	–	–	–	–	–	0.363 (J+)	–	–	–	–	–	–
RE39-09-2161	39-604441	1.0–2.0	Soil	–	–	–	–	–	–	0.56 (U)	–	31.9	–	–	–	–	0.202 (J+)	–	1 (J+)	–	–	–	–
RE39-09-2162	39-604441	2.0–3.0	Soil	–	–	–	–	–	–	0.54 (U)	–	15.2	–	–	–	–	0.201 (J+)	–	1.5 (J+)	–	–	–	–
RE39-09-2163	39-604442	0.0–1.0	Soil	–	–	–	–	3.6	–	0.54 (U)	–	58.2	–	–	–	–	1.06 (J+)	–	1.2 (J+)	–	–	–	–
RE39-09-2164	39-604442	1.0–2.0	Soil	–	–	–	–	2.3	–	0.54 (U)	–	101	–	–	–	–	0.902 (J+)	–	2.9 (J+)	–	–	–	–
RE39-09-2165	39-604442	2.0–3.0	Soil	–	–	–	–	2.3	–	0.52 (U)	–	56	–	–	–	–	0.662 (J+)	–	3 (J+)	–	–	–	–

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] SSLs are for hexavalent chromium.

[c] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] – = Less than the BV or not detected.

[e] NA = Not analyzed.

Table 2.6-3
Summary of Organic Chemicals Detected at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Amino-2,6-dinitrotoluene[4-]	Amino-4,6-dinitrotoluene[2-]	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	Chloromethane	Chrysene	Di-n-butylphthalate	Fluoranthene	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	Heptachlorodibenzofuran[1,2,3,4,7,8,9-]
Industrial SSLs				**1900**[a]	**2000**[a]	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18,300**[b]	**234**	**1370**	**9100**[a]	**198**	**2340**	**68,400**	**24,400**	**na**[c]	**na**	**na**
Residential SSLs				**150**[a]	**150**[a]	**1.12**	**2.2**	**6.21**	**0.621**	**6.21**	**1720**[b]	**62.1**	**347**	**2600**[a]	**35.6**	**621**	**6110**	**2290**	**na**	**na**	**na**
RE39-09-2113	39-604425	1.0–2.0	Soil	–[d]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	NA[e]	NA	NA
RE39-09-2116	39-604426	1.0–2.0	Soil	–	–	–	–	–	–	–	–	–	0.11 (J)	–	–	–	–	–	NA	NA	NA
RE39-09-2117	39-604426	2.0–3.0	Soil	NA	NA	–	–	–	–	–	–	–	0.84	–	–	–	–	–	NA	NA	NA
RE39-09-2121	39-604428	0.0–1.0	Soil	NA	NA	–	–	–	–	–	–	–	–	–	NA	–	1.3	–	NA	NA	NA
RE39-09-2122	39-604428	1.0–2.0	Qbo	–	–	–	–	–	–	–	–	–	–	0.24 (J)	–	–	0.14 (J)	–	NA	NA	NA
RE39-09-2123	39-604428	2.0–3.0	Qbo	–	–	–	–	–	–	–	–	–	–	–	–	–	0.073 (J)	–	NA	NA	NA
RE39-09-2133	39-604432	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	–	–	NA	–	2.76	–	NA	NA	NA
RE39-09-2134	39-604432	1.0–2.0	Soil	–	–	0.0032 (J)	–	–	–	–	–	–	–	–	–	–	–	–	NA	NA	NA
RE39-09-2135	39-604432	2.0–3.0	Qbo	–	–	0.0147	0.0041	–	–	–	–	–	–	–	–	–	–	–	NA	NA	NA
RE39-09-2137	39-604433	1.0–2.0	Qbo	–	–	–	–	–	–	–	–	–	–	–	–	–	0.0501 (J)	–	NA	NA	NA
RE39-09-2138	39-604433	2.0–3.0	Qbo	–	–	–	–	–	–	–	–	–	–	–	–	–	0.0421 (J)		NA	NA	NA
RE39-09-2139	39-604434	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	–	–	NA	–	0.0446 (J)	–	NA	NA	NA
RE39-09-2142	39-604435	0.0–1.0	Soil	–	–	0.0015 (J)	–	–	–	–	–	–	–	–	NA	–	–	–	NA	NA	NA
RE39-09-2148	39-604437	0.0–1.0	Soil	–	–	–	0.0049 (J)	–	–	–	–	–	–	–	–	–	–	–	0.0000947	0.00000972	0.00000083 (J)
RE39-09-2149	39-604437	1.0–2.0	Soil	–	–	–	0.0051 (J)	–	–	–	–	–	–	–	–	–	0.085 (J)	–	NA	NA	NA
RE39-09-2150	39-604437	2.0–3.0	Soil	–	–	–	–	–	–	–	–	–	0.049 (J)	–	–	–	3.8	–	NA	NA	NA
RE39-09-2153	39-604438	2.0–3.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.19 (J)	–	NA	NA	NA
RE39-09-2154	39-604439	0.0–1.0	Soil	0.0064 (J)	0.0099 (J)	–	–	–	–	–	–	–	–	–	–	–	–	–	NA	NA	NA
RE39-09-2156	39-604439	2.0–3.0	Soil	0.016 (J)	–	–	–	–	–	–	–	–	0.059 (J)	–	–	–	0.89	–	NA	NA	NA
RE39-09-2157	39-604440	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.053 (J)	–	NA	NA	NA
RE39-09-2160	39-604441	0.0–1.0	Soil	–	–	–	–	0.094 (J)	0.12 (J)	0.097 (J)	0.072 (J)	0.1 (J)	–	–	–	0.12 (J)	–	0.19 (J)	NA	NA	NA
RE39-09-2161	39-604441	1.0–2.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.041 (J)	–	NA	NA	NA
RE39-09-2162	39-604441	2.0–3.0	Soil	–	–	–	–	0.059 (J)	0.066 (J)	0.06 (J)	–	0.056 (J)	–	–	–	0.067 (J)	–	0.12 (J)	NA	NA	NA
RE39-09-2163	39-604442	0.0–1.0	Soil	–	–	–	–	–	–	–	–	–	–	–	0.00053 (J)	–	–	–	NA	NA	NA
RE39-09-2164	39-604442	1.0–2.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.036 (J)	–	NA	NA	NA
RE39-09-2165	39-604442	2.0–3.0	Soil	–	–	–	–	–	–	–	–	–	–	–	–	–	0.09 (J)	–	NA	NA	NA

Table 2.6-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxin[1,2,3,4,7,8-]	Hexachlorodibenzodioxin[1,2,3,6,7,8-]	Hexachlorodibenzodioxin[1,2,3,7,8,9-]	Hexachlorodibenzofuran[1,2,3,4,7,8-]	Hexachlorodibenzofuran[1,2,3,6,7,8-]	Hexachlorodibenzofuran[1,2,3,7,8,9-]	Hexachlorodibenzofuran[2,3,4,6,7,8-]	Hexanone[2-]	HMX	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]
Industrial SSLs				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1400**[a]	**34200**	**23.4**	**na**	**na**
Residential SSLs				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**210**[a]	**3060**	**6.21**	**na**	**na**
RE39-09-2113	39-604425	1.0–2.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2116	39-604426	1.0–2.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	0.087 (J)	–	NA	NA
RE39-09-2117	39-604426	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	2.6 (J)	–	NA	NA
RE39-09-2121	39-604428	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	NA	–	–	NA	NA
RE39-09-2122	39-604428	1.0–2.0	Qbo	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2123	39-604428	2.0–3.0	Qbo	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2133	39-604432	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	NA	–	–	NA	NA
RE39-09-2134	39-604432	1.0–2.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	1.47	–	NA	NA
RE39-09-2135	39-604432	2.0–3.0	Qbo	NA	NA	NA	NA	NA	NA	NA	–	0.75	–	NA	NA
RE39-09-2137	39-604433	1.0–2.0	Qbo	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2138	39-604433	2.0–3.0	Qbo	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2139	39-604434	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	NA	–	–	NA	NA
RE39-09-2142	39-604435	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	NA	–	–	NA	NA
RE39-09-2148	39-604437	0.0–1.0	Soil	0.000000682 (J)	0.00000219 (J)	0.0000013 (J)	0.00000112 (J)	0.000000566 (J)	0.000000558 (J)	0.000000869 (J)	–	–	–	0.000989	0.000021
RE39-09-2149	39-604437	1.0–2.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	0.034 (J-)	–	NA	NA
RE39-09-2150	39-604437	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2153	39-604438	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2154	39-604439	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2156	39-604439	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	0.0038 (J)	0.01 (J-)	–	NA	NA
RE39-09-2157	39-604440	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2160	39-604441	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	0.01 (J-)	0.065 (J)	NA	NA
RE39-09-2161	39-604441	1.0–2.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2162	39-604441	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	–	–	NA	NA
RE39-09-2163	39-604442	0.0–1.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	0.036 (J-)	–	NA	NA
RE39-09-2164	39-604442	1.0–2.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	0.66 (J-)	–	NA	NA
RE39-09-2165	39-604442	2.0–3.0	Soil	NA	NA	NA	NA	NA	NA	NA	–	0.14 (J-)	–	NA	NA

Table 2.6-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofuran[1,2,3,7,8-]	Pentachlorodibenzofuran[2,3,4,7,8-]	Phenanthrene	Pyrene	Hexahydro-1,3,5-trinitro-1,3,5-triazine	Trimethylbenzene[1,3,5-]	Trinitrotoluene[2,4,6-]
Industrial SSLs				**na**	**na**	**20500**	**18300**	**174**	**10000**[a]	**469**
Residential SSLs				**na**	**na**	**1830**	**1720**	**44.2**	**780**[a]	**35.9**
RE39-09-2113	39-604425	1.0–2.0	Soil	NA	NA	–	–	0.028 (J)	–	–
RE39-09-2116	39-604426	1.0–2.0	Soil	NA	NA	–	–	3.7	–	–
RE39-09-2117	39-604426	2.0–3.0	Soil	NA	NA	–	–	–	–	–
RE39-09-2121	39-604428	0.0–1.0	Soil	NA	NA	–	–	–	NA	–
RE39-09-2122	39-604428	1.0–2.0	Qbo	NA	NA	–	–	–	–	–
RE39-09-2123	39-604428	2.0–3.0	Qbo	NA	NA	–	–	–	–	–
RE39-09-2133	39-604432	0.0–1.0	Soil	NA	NA	–	–	–	NA	–
RE39-09-2134	39-604432	1.0–2.0	Soil	NA	NA	–	–	25.3	–	–
RE39-09-2135	39-604432	2.0–3.0	Qbo	NA	NA	–	–	8.49	–	0.293 (J)
RE39-09-2137	39-604433	1.0–2.0	Qbo	NA	NA	–	–	–	–	–
RE39-09-2138	39-604433	2.0–3.0	Qbo	NA	NA	–	–	–	–	–
RE39-09-2139	39-604434	0.0–1.0	Soil	NA	NA	–	–	–	NA	–
RE39-09-2142	39-604435	0.0–1.0	Soil	NA	NA	–	–	–	NA	–
RE39-09-2148	39-604437	0.0–1.0	Soil	0.000000257 (J)	0.000000693 (J)	–	–	–	–	–
RE39-09-2149	39-604437	1.0–2.0	Soil	NA	NA	–	–	0.16	–	–
RE39-09-2150	39-604437	2.0–3.0	Soil	NA	NA	–	–	–	–	–
RE39-09-2153	39-604438	2.0–3.0	Soil	NA	NA	–	–	–	0.0005 (J)	–
RE39-09-2154	39-604439	0.0–1.0	Soil	NA	NA	–	–	–	–	0.033 (J)
RE39-09-2156	39-604439	2.0–3.0	Soil	NA	NA	–	–	–	–	0.0066 (J)
RE39-09-2157	39-604440	0.0–1.0	Soil	NA	NA	–	–	–	–	–
RE39-09-2160	39-604441	0.0–1.0	Soil	NA	NA	0.064 (J)	0.18 (J)	–	–	–
RE39-09-2161	39-604441	1.0–2.0	Soil	NA	NA	–	–	–	–	–

Table 2.6-3 (continued)

RE39-09-2162	39-604441	2.0–3.0	Soil	NA	NA	0.05 (J)	0.1 (J)	–	–	–
RE39-09-2163	39-604442	0.0–1.0	Soil	NA	NA	–	–	–	–	–
RE39-09-2164	39-604442	1.0–2.0	Soil	NA	NA	–	–	–	–	–
RE39-09-2165	39-604442	2.0–3.0	Soil	NA	NA	–	–	–	0.00046 (J)	–

Source: SSLs from NMED (2009, 108070) unless otherwise noted.

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs are from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] SSL for pyrene used as a surrogate based on structural similarity.

[c] na = Not available.

[d] – = Not detected.

[e] NA = Not analyzed.

Table 2.6-4
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 39-010

Sample ID	Location ID	Depth (ft)	Media	Cesium-137	Tritium	Uranium-234	Uranium-235/236	Uranium-238
Soil BVs/FVs				**1.65**[a]	**na**[b]	**2.59**	**0.2**	**2.29**
Qbo BVs				**na**	**na**	**4**	**0.18**	**3.9**
Industrial SALs				**23**	**440,000**	**1500**	**87**	**430**
Residential SALs				**5.6**	**750**	**170**	**17**	**87**
RE39-09-2112	39-604425	0.0–1.0	Soil	–[c]	–	2.68	0.223	9.42
RE39-09-2113	39-604425	1.0–2.0	Soil	–	–	12.7	1.93 (J)	90
RE39-09-2114	39-604425	2.0–3.0	Soil	–	–	–	0.266	–
RE39-09-2115	39-604426	0.0–1.0	Soil	–	–	3.86	0.45	19.4
RE39-09-2116	39-604426	1.0–2.0	Soil	0.205	–	6.83	0.74	42.9
RE39-09-2117	39-604426	2.0–3.0	Soil	–	–	55	10.5	344
RE39-09-2119	39-604427	1.0–2.0	Soil	–	–	–	0.78 (J)	–
RE39-09-2121	39-604428	0.0–1.0	Soil	–	–	–	–	4.98
RE39-09-2123	39-604428	2.0–3.0	Qbo		3.91	–	–	–
RE39-09-2127	39-604430	0.0–1.0	Soil	–	–	3.75	0.207	5.64
RE39-09-2128	39-604430	1.0–2.0	Soil	0.201	–	4.37	0.302	9.37
RE39-09-2129	39-604430	2.0–3.0	Qbo	–	–	4.03	0.224	7.27
RE39-09-2130	39-604431	0.0–1.0	Soil	–	–	–	–	3.64
RE39-09-2131	39-604431	1.0–2.0	Soil	0.127	–	–	–	2.97
RE39-09-2133	39-604432	0.0–1.0	Soil	–	–	5.01	0.428	17.7
RE39-09-2134	39-604432	1.0–2.0	Soil	–	–	5.23	0.475	21.2
RE39-09-2135	39-604432	2.0–3.0	Qbo	–	–	6.46	0.592	32.6
RE39-09-2136	39-604433	0.0–1.0	Soil	–	–	–	–	3.22
RE39-09-2137	39-604433	1.0–2.0	Qbo	–	–	–	–	4.47
RE39-09-2138	39-604433	2.0–3.0	Qbo	–	–	5.24	0.282	11.1
RE39-09-2139	39-604434	0.0–1.0	Soil	–	–	5.54	0.487	16.3
RE39-09-2140	39-604434	1.0–2.0	Soil	–	–	2.6	–	5.86
RE39-09-2142	39-604435	0.0–1.0	Soil	–	–	–	–	4.35 (J-)
RE39-09-2145	39-604436	0.0–1.0	Soil	–	0.037	–	–	2.63
RE39-09-2148	39-604437	0.0–1.0	Soil	–	–	7.3 (J)	0.9	56.2 (J)
RE39-09-2149	39-604437	1.0–2.0	Soil	–	–	–	–	11 (J)
RE39-09-2150	39-604437	2.0–3.0	Soil	–	–	3.43 (J)	0.296	12.5 (J)

Table 2.6-4 (continued)

Sample ID	Location ID	Depth (ft)	Media	Cesium-137	Tritium	Uranium-234	Uranium-235/236	Uranium-238
Soil BVs/FVs				**1.65**[a]	**na**[b]	**2.59**	**0.2**	**2.29**
Qbo BVs				**na**	**na**	**4**	**0.18**	**3.9**
Industrial SALs				**23**	**440000**	**1500**	**87**	**430**
Residential SALs				**5.6**	**750**	**170**	**17**	**87**
RE39-09-2151	39-604438	0.0–1.0	Soil	–	–	–	–	4.44 (J)
RE39-09-2152	39-604438	1.0–2.0	Soil	–	–	–	–	2.33 (J)
RE39-09-2154	39-604439	0.0–1.0	Soil	–	–	–	–	3.48 (J)
RE39-09-2155	39-604439	1.0–2.0	Soil	–	2.35	–	–	4.62 (J)
RE39-09-2156	39-604439	2.0–3.0	Soil	–	–	3.76 (J)	0.275	9.06 (J)
RE39-09-2157	39-604440	0.0–1.0	Soil	–	–	2.81 (J)	0.283	11.4 (J)
RE39-09-2158	39-604440	1.0–2.0	Soil	–	–	–	–	3.09 (J)
RE39-09-2159	39-604440	2.0–3.0	Soil	–	–	–	–	3.4 (J)
RE39-09-2160	39-604441	0.0–1.0	Soil	–	–	–	–	6.6 (J)
RE39-09-2161	39-604441	1.0–2.0	Soil	–	–	3.28 (J)	0.264	9.24 (J)
RE39-09-2162	39-604441	2.0–3.0	Soil	–	–	3.09 (J)	–	9.14 (J)
RE39-09-2163	39-604442	0.0–1.0	Soil	–	–	4.86 (J)	0.627	26.7 (J)
RE39-09-2164	39-604442	1.0–2.0	Soil	–	–	10.2 (J)	1.12	58.6 (J)
RE39-09-2165	39-604442	2.0–3.0	Soil	–	–	7.08 (J)	1.08	48 (J)

Source: BVs/FVs from LANL (1998, 059730). SALs from LANL (2009, 107655).

Notes: Units are pCi/g. Data qualifiers are defined in Appendix A.

[a] Applies only to samples from 0 to 1 ft bgs.

[b] na = Not available.

[c] – = Less than BV/FV or not detected.

Table 2.6-5
Summary of Proposed Sampling at SWMU 39-010

Site	Sampling Extent Objective	Location	Depth (ft)	Media	TAL Metals (EPA SW-846:6010B/6020)	SVOCs (EPA SW-846:8270C)	Explosive Compounds (EPA SW-846:8321A_MOD)	Isotopic Uranium, (HASL-300)	Tritium
39-010	Define vertical extent of contamination for copper, lead, mercury, benzo(a)pyrene, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, HMX, uranium-234, uranium-235/236, uranium-238, and tritium	39-604426	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	X[a] (copper, lead, mercury)	X [bis(2-ethylhexyl)phthalate]	X (HMX)	X	—
		39-604428	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	—[b]	—	—	X	X
		39-604430	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	—	—	—	X	—
		39-604432	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	X (lead, mercury)	—	—	X	—
		39-604433	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	X (copper, lead)	—	—	X	—
		39-604437	2–3, 9—10 beneath interface of fill and alluvium	Soil, tuff	—	X [bis(2-ethylhexyl)phthalate and di-n-butylphthalate)]	—	X	—
		39-604439	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	X (copper)	X [bis(2-ethylhexyl)phthalate]	—	X	—
		39-604441	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	—	X [benzo(a)pyrene]	—	X	—
		39-604442	2–3, 9–10 beneath interface of fill and alluvium	Soil, tuff	—	—	—	X	—
	Define lateral extent of contamination	Six new locations downgradient (10-1 through 10-6) (10-1) west of site between Ancho Road and soil piles, (10-2) on east side of site (10-3, 10-4, and 10-5) south of site across the alluvial terrace, and (10-6) downgradient of the site in the main drainage channel.	0-1, 2–3, 6–7	Soil, tuff	—	—	—	X	—

[a] X = Analysis proposed.
[b] — = Analysis will not be performed.

Table 2.7-1
Summary of Shallow Wells and Angled Boreholes to be Abandoned at TA-39

Site	Well/ Borehole	Borehole Sample Loc ID	Casing Diameter (inch)	Casing Type	Orientation	Year Drilled	Drilling Method	Water Present	Top of Column (ft)	Total Depth (ft)	Status	Construction
39-001(a)	DMB-1	39-01122	4[a]	PVC[a]	Vertical[a]	1994[a]	HSA[a]	—[b]	—	119[a]	Existing	Well completion documentation not found
	DM-2	39-01121	4[c]	PVC[c]	Vertical[c]	1994[c]	HSA[c]	—	—	40[c]	Existing	Well completion documentation not found
	DM-4	39-01133	4[d]	PVC[d]	Vertical[d]	1994[d]	HSA[d]	No	—	24.94	Existing	Well completion documentation not found
	ASC-0	39-01132	2[e]	PVC[e]	45 degrees[e]	1994[e]	HSA[e]	Yes	82.77	83.25	Existing	Well completion documentation not found
	ASC-1	39-01153	2[f]	PVC[f]	45 degrees[f]	1994[f]	HSA[f]	—	—	—	Abandoned when casing broke during installation	Well completion documentation not found
	ASC-2	39-01152	2[g]	PVC[g]	45 degrees[g]	1994[g]	HSA[g]	Yes	74.47	82.97	Existing	Well completion documentation not found
	ASC-3	39-01151	2[h]	PVC[h]	45 degrees[h]	1994[h]	HSA[h]	—	—	—	PVC casing cut by heavy equipment during 2009 excavation[i]	Well completion documentation not found
	ASC-4	39-01150	2[j]	PVC[j]	45 degrees[j]	1994[j]	HSA[j]	Yes	81.77	83.26	Existing	Well completion documentation not found
39-001(b)	DM-6	39-01135	4	PVC	Vertical	1994	HSA	No	—	61.80	Existing	HSA 8 ¾ inch borehole dia.: 0-27 ft bgs – no backfill material 25-27.5 ft bgs – seal – bentonite 27.5-57.5 ft bgs – 10-20 silica sand – 10 ft screen length
	UM-3	39-01120	4	Stainless Steel	Vertical	1994	HSA	—	—	56.5	Existing	HSA 8 ¾ inch borehole dia.: 0-27 ft bgs –- 3% bentonite-cement backfill 27-29.5 ft bgs– seal – bentonite 29.5-56.5 ft bgs – 10-20 silica sand – 15 ft screen length
	ASC-11	39-01111	2	PVC	45 degrees	1994	HSA	No	—	82.58	Existing	Well completion documentation not found
	ASC-12	39-01112	2	PVC	45 degrees	1994	HSA	Yes	82.09	82.55	Existing	Well completion documentation not found
	ASC-13	39-01113	2	PVC	45 degrees	1994	HSA	Yes	79.19	83.27	Existing	Well completion documentation not found
	ASC-14	39-01114	2	PVC	45 degrees	1994	HSA	Yes	83.36	83.51	Existing	Well completion documentation not found
	ASC-15	39-01115	2	PVC	45 degrees	1994	HSA	Yes	52.75	83.90	Existing	Well completion documentation not found
	ASC-16	39-01116	2	PVC	45 degrees	1994	HSA	Yes	81.11	82.95	Existing	Well completion documentation not found
	ASC-17	39-01117	2	PVC	45 degrees	1994	HSA	Yes	83.54	83.83	Existing	Well completion documentation not found
	ASC-18	39-01118	2	PVC	45 degrees	1994	HSA	Yes	81.33	83.85	Existing	Well completion documentation not found
	ASC-19	39-01119	2	PVC	45 degrees	1994	HSA	Yes	81.30	81.43	Existing	Well completion documentation not found

Source: Information provided in LANL 2010, 108592 unless otherwise noted. Manual water level measurements performed in May 2009.

[a] HSA = Hollow-stem auger; LANL 1994, 050689.

[b] — = Not measured.

[c] LANL 1994, 050698

[d] LANL 1994, 110780

[e] LANL 1994, 110823

[f] LANL 1994, 050716

[g] LANL 1994, 050725

[h] LANL 1994, 098581

[i] LANL 2010, 111099

[j] LANL 1994, 050734

Table 2.9-1
Waste Characterization Samples Collected and Analyses Requested for SWMU 39-001(a)

Sample ID	Media	Americium-241	Cyanide (Total)	Explosive Compounds	Gamma-Emitting Radionuclides	Herbicides	Herbicides (TCLP)	Isotopic Plutonium	Isotopic Uranium	Metals	Metals (TCLP)	Nitrate
RE39-09-3292	Soil	09-1907*	09-1906	09-1905	09-1907	09-1905	09-1905	09-1907	09-1907	09-1906	09-1906	09-1906
RE39-09-3293	Soil	09-1907	09-1906	09-1905	09-1907	09-1905	09-1905	09-1907	09-1907	09-1906	09-1906	09-1906
RE39-09-3294	Soil	09-1907	09-1906	09-1905	09-1907	09-1905	09-1905	09-1907	09-1907	09-1906	09-1906	09-1906
RE39-09-3295	Soil	09-1907	09-1906	09-1905	09-1907	09-1905	09-1905	09-1907	09-1907	09-1906	09-1906	09-1906
RE39-09-3296	Soil	09-1907	09-1906	09-1905	09-1907	09-1905	09-1905	09-1907	09-1907	09-1906	09-1906	09-1906
RE39-09-3297	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3298	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3299	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3300	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3301	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3302	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3303	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3304	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3305	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3306	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3307	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3308	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3309	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3310	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3311	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3312	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3313	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3314	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3315	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3316	Soil	09-1925	09-1924	09-1923	09-1925	09-1923	09-1923	09-1925	09-1925	09-1924	09-1924	09-1924
RE39-09-3318	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3319	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3320	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3321	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3322	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3323	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3324	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3325	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948
RE39-09-3326	Soil	09-1949	09-1948	09-1947	09-1949	09-1947	09-1947	09-1949	09-1949	09-1948	09-1948	09-1948

Table 2.9-1 (continued)

Sample ID	Media	PCBs	Perchlorate	Pesticides	Pesticides (TCLP)	Strontium-90	SVOCs	SVOCs (TCLP)	TPH-GRO	Tritium	VOCs	VOCs (TCLP)
RE39-09-3292	Soil	09-1905	09-1906	09-1905	09-1905	09-1907	09-1905	09-1905	09-1905	09-1907	09-1905	09-1905
RE39-09-3293	Soil	09-1905	09-1906	09-1905	09-1905	09-1907	09-1905	09-1905	09-1905	09-1907	09-1905	09-1905
RE39-09-3294	Soil	09-1905	09-1906	09-1905	09-1905	09-1907	09-1905	09-1905	09-1905	09-1907	09-1905	09-1905
RE39-09-3295	Soil	09-1905	09-1906	09-1905	09-1905	09-1907	09-1905	09-1905	09-1905	09-1907	09-1905	09-1905
RE39-09-3296	Soil	09-1905	09-1906	09-1905	09-1905	09-1907	09-1905	09-1905	09-1905	09-1907	09-1905	09-1905
RE39-09-3297	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3298	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3299	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3300	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3301	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3302	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3303	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3304	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3305	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3306	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3307	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3308	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3309	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3310	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3311	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3312	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3313	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3314	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3315	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3316	Soil	09-1923	09-1924	09-1923	09-1923	09-1925	09-1923	09-1923	09-1923	09-1925	09-1923	09-1923
RE39-09-3318	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3319	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3320	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3321	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3322	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3323	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3324	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3325	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947
RE39-09-3326	Soil	09-1947	09-1948	09-1947	09-1947	09-1949	09-1947	09-1947	09-1947	09-1949	09-1947	09-1947

* Analytical request number.

Table 2.9-2
Waste Characterization Samples Collected and Analyses Requested for SWMU 39-001(b)

Sample ID	Media	Americium-241	Cyanide (Total)	Explosive Compounds	Gamma-Emitting Radionuclides	Herbicides	Herbicides (TCLP)	Isotopic Plutonium	Isotopic Uranium	Metals	Metals (TCLP)	Nitrate	PCBs
RE39-09-3093	Soil	09-858[a]	09-857	09-856	09-858	09-856	09-856	09-858	09-858	09-857	09-857	09-857	09-856
RE39-09-3094	Soil	09-858	09-857	09-856	09-858	09-856	09-856	09-858	09-858	09-857	09-857	09-857	09-856
RE39-09-3095	Soil	09-858	09-857	09-856	09-858	09-856	09-856	09-858	09-858	09-857	09-857	09-857	09-856
RE39-09-3096	Soil	09-858	09-857	09-856	09-858	09-856	09-856	09-858	09-858	09-857	09-857	09-857	09-856
RE39-09-3097	Soil	09-858	09-857	09-856	09-858	09-856	09-856	09-858	09-858	09-857	09-857	09-857	09-856
RE39-09-3098	Soil	09-858	09-857	09-856	09-858	09-856	09-856	09-858	09-858	09-857	09-857	09-857	09-856
RE39-09-3099	Soil	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897
RE39-09-3100	Soil	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897	09-897
RE39-09-3101	Soil	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898
RE39-09-3102	Soil	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898	09-898
RE39-09-3103	Soil	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896
RE39-09-3104	Soil	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896	09-896
RE39-09-3105	Soil	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895
RE39-09-3106	Soil	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895	09-895
RE39-09-3107	Soil	09-928	09-927	09-926	09-928	09-926	09-926	09-928	09-928	09-927	09-927	09-927	09-926
RE39-09-3108	Soil	09-928	09-927	09-926	09-928	09-926	09-926	09-928	09-928	09-927	09-927	09-927	09-926
RE39-09-3109	Soil	09-928	09-927	09-926	09-928	09-926	09-926	09-928	09-928	09-927	09-927	09-927	09-926
RE39-09-3110	Soil	09-928	09-927	09-926	09-928	09-926	09-926	09-928	09-928	09-927	09-927	09-927	09-926
RE39-09-3111	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3112	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3113	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3114	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3115	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3116	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3117	Soil	09-987	09-985	09-986	09-987	09-986	09-986	09-987	09-987	09-985	09-985	09-985	09-986
RE39-09-3118	Soil	09-1008	09-1007	09-1006	09-1008	09-1006	09-1006	09-1008	09-1008	09-1007	09-1007	09-1007	09-1006
RE39-09-3119	Soil	09-1008	09-1007	09-1006	09-1008	09-1006	09-1006	09-1008	09-1008	09-1007	09-1007	09-1007	09-1006
RE39-09-3120	Soil	09-1008	09-1007	09-1006	09-1008	09-1006	09-1006	09-1008	09-1008	09-1007	09-1007	09-1007	09-1006
RE39-09-3121	Soil	09-1008	09-1007	09-1006	09-1008	09-1006	09-1006	09-1008	09-1008	09-1007	09-1007	09-1007	09-1006
RE39-09-3122	Soil	09-1537	09-1536	09-1535	09-1537	09-1535	09-1535	09-1537	09-1537	09-1536	09-1536	09-1536	09-1535
RE39-09-3123	Soil	09-1537	09-1536	09-1535	09-1537	09-1535	09-1535	09-1537	09-1537	09-1536	09-1536	09-1536	09-1535
RE39-09-3124	Soil	09-1537	09-1536	09-1535	09-1537	09-1535	09-1535	09-1537	09-1537	09-1536	09-1536	09-1536	09-1535
RE39-09-3125	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550

Table 2.9-2 (continued)

Sample ID	Media	Americium-241	Cyanide (Total)	Explosive Compounds	Gamma-Emitting Radionuclides	Herbicides	Herbicides (TCLP)	Isotopic Plutonium	Isotopic Uranium	Metals	Metals (TCLP)	Nitrate	PCBs
RE39-09-3126	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3127	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3128	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3129	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3130	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3131	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3132	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3133	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3134	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3135	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3136	Soil	09-1552	09-1551	09-1550	09-1552	09-1550	09-1550	09-1552	09-1552	09-1551	09-1551	09-1551	09-1550
RE39-09-3137	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3138	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3139	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3140	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3141	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3142	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3143	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3144	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3145	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3146	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3147	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3148	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3149	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3150	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3151	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3152	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3153	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3154	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3155	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3156	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3157	Soil	09-1564	09-1563	09-1562	09-1564	09-1562	09-1562	09-1564	09-1564	09-1563	09-1563	09-1563	09-1562
RE39-09-3158	Soil	09-1591	09-1590	09-1589	09-1591	09-1589	09-1589	09-1591	09-1591	09-1590	09-1590	09-1590	09-1589
RE39-09-3159	Soil	09-1591	09-1590	09-1589	09-1591	09-1589	09-1589	09-1591	09-1591	09-1590	09-1590	09-1590	09-1589
RE39-09-3160	Soil	09-1591	09-1590	09-1589	09-1591	09-1589	09-1589	09-1591	09-1591	09-1590	09-1590	09-1590	09-1589

Table 2.9-2 (continued)

Sample ID	Media	Americium-241	Cyanide (Total)	Explosive Compounds	Gamma-Emitting Radionuclides	Herbicides	Herbicides (TCLP)	Isotopic Plutonium	Isotopic Uranium	Metals	Metals (TCLP)	Nitrate	PCBs
RE39-09-3161	Soil	09-1591	09-1590	09-1589	09-1591	09-1589	09-1589	09-1591	09-1591	09-1590	09-1590	09-1590	09-1589
RE39-09-3162	Soil	09-1591	09-1590	09-1589	09-1591	09-1589	09-1589	09-1591	09-1591	09-1590	09-1590	09-1590	09-1589
RE39-09-3163	Soil	09-1591	09-1590	—[b]	09-1591	09-1589	—	09-1591	09-1591	09-1590	09-1590	09-1590	—
RE39-09-3164	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3165	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3166	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3167	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3168	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3169	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3170	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3171	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3172	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3173	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3174	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3175	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3176	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3177	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3178	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3179	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3180	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3181	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3182	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3183	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611
RE39-09-3184	Soil	09-1613	09-1612	09-1611	09-1613	09-1611	09-1611	09-1613	09-1613	09-1612	09-1612	09-1612	09-1611

Table 2.9-2 (continued)

Sample ID	Media	Perchlorate	Pesticides	Pesticides (TCLP)	Strontium-90	SVOCs	SVOCs (TCLP)	TPH-DRO	TPH-GRO	Tritium	VOCs	VOCs (TCLP)
RE39-09-3093	Soil	09-857	09-856	09-856	09-858	09-856	09-856	09-856	09-856	09-858	09-856	09-856
RE39-09-3094	Soil	09-857	09-856	09-856	09-858	09-856	09-856	09-856	09-856	09-858	09-856	09-856
RE39-09-3095	Soil	09-857	09-856	09-856	09-858	09-856	09-856	09-856	09-856	09-858	09-856	09-856
RE39-09-3096	Soil	09-857	09-856	09-856	09-858	09-856	09-856	09-856	09-856	09-858	09-856	09-856
RE39-09-3097	Soil	09-857	09-856	09-856	09-858	09-856	09-856	09-856	09-856	09-858	09-856	09-856
RE39-09-3098	Soil	09-857	09-856	09-856	09-858	09-856	09-856	09-856	09-856	09-858	09-856	09-856
RE39-09-3099	Soil	09-897	09-897	09-897	09-897	09-897	09-897	—	09-897	09-897	09-897	09-897
RE39-09-3100	Soil	09-897	09-897	09-897	09-897	09-897	09-897	—	09-897	09-897	09-897	09-897
RE39-09-3101	Soil	09-898	09-898	09-898	09-898	09-898	09-898	—	09-898	09-898	09-898	09-898
RE39-09-3102	Soil	09-898	09-898	09-898	09-898	09-898	09-898	—	09-898	09-898	09-898	09-898
RE39-09-3103	Soil	09-896	09-896	09-896	09-896	09-896	09-896	—	09-896	09-896	09-896	09-896
RE39-09-3104	Soil	09-896	09-896	09-896	09-896	09-896	09-896	—	09-896	09-896	09-896	09-896
RE39-09-3105	Soil	09-895	09-895	09-895	09-895	09-895	09-895	—	09-895	09-895	09-895	09-895
RE39-09-3106	Soil	09-895	09-895	09-895	09-895	09-895	09-895	—	09-895	09-895	09-895	09-895
RE39-09-3107	Soil	09-927	09-926	09-926	09-928	09-926	09-926	09-926	09-926	09-928	09-926	09-926
RE39-09-3108	Soil	09-927	09-926	09-926	09-928	09-926	09-926	09-926	09-926	09-928	09-926	09-926
RE39-09-3109	Soil	09-927	09-926	09-926	09-928	09-926	09-926	09-926	09-926	09-928	09-926	09-926
RE39-09-3110	Soil	09-927	09-926	09-926	09-928	09-926	09-926	09-926	09-926	09-928	09-926	09-926
RE39-09-3111	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3112	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3113	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3114	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3115	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3116	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3117	Soil	09-985	09-986	09-986	09-987	09-986	09-986	—	—	09-987	09-986	09-986
RE39-09-3118	Soil	09-1007	09-1006	09-1006	09-1008	09-1006	09-1006	—	—	09-1008	09-1006	09-1006
RE39-09-3119	Soil	09-1007	09-1006	09-1006	09-1008	09-1006	09-1006	—	—	09-1008	09-1006	09-1006
RE39-09-3120	Soil	09-1007	09-1006	09-1006	09-1008	09-1006	09-1006	—	—	09-1008	09-1006	09-1006
RE39-09-3121	Soil	09-1007	09-1006	09-1006	09-1008	09-1006	09-1006	—	—	09-1008	09-1006	09-1006
RE39-09-3122	Soil	09-1536	09-1535	09-1535	09-1537	09-1535	09-1535	—	09-1535	09-1537	09-1535	09-1535
RE39-09-3123	Soil	09-1536	09-1535	09-1535	09-1537	09-1535	09-1535	—	09-1535	09-1537	09-1535	09-1535
RE39-09-3124	Soil	09-1536	09-1535	09-1535	09-1537	09-1535	09-1535	—	09-1535	09-1537	09-1535	09-1535
RE39-09-3125	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3126	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550

Table 2.9-2 (continued)

Sample ID	Media	Perchlorate	Pesticides	Pesticides (TCLP)	Strontium-90	SVOCs	SVOCs (TCLP)	TPH-DRO	TPH-GRO	Tritium	VOCs	VOCs (TCLP)
RE39-09-3127	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3128	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3129	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3130	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3131	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3132	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3133	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3134	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3135	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3136	Soil	09-1551	09-1550	09-1550	09-1552	09-1550	09-1550	—	09-1550	09-1552	09-1550	09-1550
RE39-09-3137	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3138	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3139	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3140	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3141	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3142	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3143	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3144	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3145	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3146	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3147	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3148	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3149	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3150	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3151	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3152	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3153	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3154	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3155	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3156	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3157	Soil	09-1563	09-1562	09-1562	09-1564	09-1562	09-1562	—	09-1562	09-1564	09-1562	09-1562
RE39-09-3158	Soil	09-1590	09-1589	09-1589	09-1591	09-1589	09-1589	—	—	09-1591	09-1589	09-1589
RE39-09-3159	Soil	09-1590	09-1589	09-1589	09-1591	09-1589	09-1589	—	—	09-1591	09-1589	09-1589
RE39-09-3160	Soil	09-1590	09-1589	09-1589	09-1591	09-1589	09-1589	—	—	09-1591	09-1589	09-1589
RE39-09-3161	Soil	09-1590	09-1589	09-1589	09-1591	09-1589	09-1589	—	09-1589	09-1591	09-1589	09-1589

Table 2.9-2 (continued)

Sample ID	Media	Perchlorate	Pesticides	Pesticides (TCLP)	Strontium-90	SVOCs	SVOCs (TCLP)	TPH-DRO	TPH-GRO	Tritium	VOCs	VOCs (TCLP)
RE39-09-3162	Soil	09-1590	09-1589	09-1589	09-1591	09-1589	09-1589	—	—	09-1591	—	09-1589
RE39-09-3163	Soil	09-1590	—	—	09-1591	—	—	—	—	09-1591	09-1589	—
RE39-09-3164	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3165	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3166	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3167	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3168	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3169	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3170	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3171	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3172	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3173	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3174	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3175	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3176	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3177	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3178	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3179	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3180	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3181	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3182	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3183	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611
RE39-09-3184	Soil	09-1612	09-1611	09-1611	09-1613	09-1611	09-1611	—	09-1611	09-1613	09-1611	09-1611

[a] Request number.

[b] — = Analysis not requested.

Table 2.9-3
PCBs Detected in Waste Characterization Samples at SWMU 39-001(a)

Sample ID	Media	Aroclor 1242	Aroclor 1254
Residential SSL[a]		**2.22**	**1.12**
RE39-09-3293	Soil	—[b]	0.0098 (J)
RE39-09-3295	Soil	—	73 (J)
RE39-09-3296	Soil	—	120 (J)
RE39-09-3297	Soil	—	230 (J)
RE39-09-3298	Soil	0.57 (J)	0.15 (J)
RE39-09-3299	Soil	—	59 (J)
RE39-09-3300	Soil	—	440 (J)
RE39-09-3301	Soil	—	0.22 (J)
RE39-09-3302	Soil	—	3.1 (J)
RE39-09-3303	Soil	1.9 (J)	0.74 (J)
RE39-09-3304	Soil	—	1.3 (J)
RE39-09-3305	Soil	17 (J)	7.2 (J)
RE39-09-3306	Soil	—	0.75 (J)
RE39-09-3307	Soil	—	0.84 (J)
RE39-09-3308	Soil	—	0.35 (J)
RE39-09-3309	Soil	—	0.34 (J)
RE39-09-3310	Soil	—	2.2 (J)
RE39-09-3311	Soil	—	0.23 (J)
RE39-09-3312	Soil	—	0.28 (J)
RE39-09-3313	Soil	—	0.14 (J)
RE39-09-3314	Soil	—	0.27 (J)
RE39-09-3316	Soil	—	0.11 (J)
RE39-09-3318	Soil	—	0.57 (J)
RE39-09-3319	Soil	—	0.031 (J)
RE39-09-3320	Soil	—	0.059 (J)
RE39-09-3321	Soil	0.15 (J)	0.11 (J)
RE39-09-3322	Soil	—	0.11 (J)
RE39-09-3323	Soil	—	0.011 (J)
RE39-09-3324	Soil	—	0.11 (J)
RE39-09-3325	Soil	—	0.15 (J)
RE39-09-3326	Soil	—	0.0062 (J)

Note: Units are mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs from NMED (2009, 108070).

[b] — = Not detected.

Table 2.9-4
Lead Detected above BV in Waste Characterization Samples at SWMU 39-001(a)

Sample ID	Media	Lead
Soil BV[a]		**22.3**
Residential SSL[b]		**400**
RE39-09-3298	Soil	1210
RE39-09-3305	Soil	44.1
RE39-09-3297	Soil	26.1

Note: Units are mg/kg. Data qualifiers are defined in Appendix A.

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

[b] SSL from NMED (2009, 108070).

Table 2.9-5
Uranium-238 Detected above BV in
Waste Characterization Samples at SWMU 39-001(a)

Sample ID	Media	Uranium-238
Soil BV[a]		**2.29**
Residential SAL[b]		**87**
RE39-09-3294	Soil	4.04
RE39-09-3295	Soil	3.77
RE39-09-3296	Soil	4.14
RE39-09-3297	Soil	2.58
RE39-09-3298	Soil	2.82
RE39-09-3300	Soil	2.36
RE39-09-3301	Soil	4.41
RE39-09-3302	Soil	5.84
RE39-09-3303	Soil	4.18
RE39-09-3304	Soil	2.87
RE39-09-3305	Soil	94.5
RE39-09-3306	Soil	12.4

Note: Units are pCi/g. Data qualifiers are defined in Appendix A.

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

[b] SAL from LANL (2009, 107655).

Table 2.9-6
PCBs Detected in Waste Characterization Samples at SWMU 39-001(b)

Sample ID	Media	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
Residential SSL[a]		**3.93**	**2.22**	**2.22**	**1.12**	**2.22**
RE39-09-3097	Soil	—[b]	—	—	0.0013 (J)	—
RE39-09-3099	Soil	—	—	—	0.0407	—
RE39-09-3100	Soil	—	—	—	0.0933	—
RE39-09-3101	Soil	—	—	0.0034 (J)	0.0068	0.0037
RE39-09-3102	Soil	—	—	0.017 (J)	0.0251	0.0181
RE39-09-3103	Soil	—	—	—	0.0034 (J)	0.0027 (J)
RE39-09-3104	Soil	—	—	—	0.302	—
RE39-09-3105	Soil	—	—	—	0.0483	0.0169
RE39-09-3106	Soil	—	—	—	0.0352	0.0205
RE39-09-3107	Soil	—	—	—	0.073 (J)	—
RE39-09-3108	Soil	—	—	—	0.13 (J)	—
RE39-09-3109	Soil	—	—	—	0.032 (J)	—
RE39-09-3110	Soil	—	—	—	0.3 (J)	—
RE39-09-3111	Soil	—	—	—	0.0092	0.0036 (J)
RE39-09-3112	Soil	—	0.0063	—	0.0064	0.0027 (J)
RE39-09-3113	Soil	—	0.012	—	0.0101	0.0088
RE39-09-3114	Soil	—	0.0148	—	0.0099	0.0032 (J)
RE39-09-3115	Soil	—	0.0244	—	0.0332	0.0082
RE39-09-3116	Soil	—	0.0163	—	0.0145	0.0071
RE39-09-3118	Soil	—	—	—	38.4	11.8
RE39-09-3119	Soil	—	0.256	—	0.572	0.133
RE39-09-3120	Soil	—	—	—	0.245	0.063
RE39-09-3122	Soil	—	—	—	0.061 (J)	—
RE39-09-3123	Soil	—	—	—	0.01 (J)	—
RE39-09-3124	Soil	—	0.17 (J)	—		—
RE39-09-3125	Soil	—	—	—	0.087 (J)	—
RE39-09-3126	Soil	—	—	0.16 (J)	—	0.044
RE39-09-3127	Soil	—	—	—	3.4 (J)	—
RE39-09-3128	Soil	—	—	—	7.9 (J)	—
RE39-09-3129	Soil	—	—	—	0.54 (J)	—
RE39-09-3130	Soil	—	—	—	0.38 (J)	—
RE39-09-3131	Soil	—	—	—	0.32 (J)	—

Table 2.9-6 (continued)

Sample ID	Media	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
Residential SSL[a]		**3.93**	**2.22**	**2.22**	**1.12**	**2.22**
RE39-09-3133	Soil	—	—	—	0.13 (J)	—
RE39-09-3134	Soil	—	0.12 (J)	—	—	—
RE39-09-3135	Soil	—	—	—	1.9 (J)	—
RE39-09-3136	Soil	—	—	—	0.3 (J)	—
RE39-09-3137	Soil	—	—	—	0.045 (J)	—
RE39-09-3138	Soil	—	—	—	0.011 (J)	0.0078 (J)
RE39-09-3139	Soil	—	—	—	0.031 (J)	—
RE39-09-3140	Soil	—	—	—	0.063 (J)	—
RE39-09-3141	Soil	—	0.84 (J)	—	1.4 (J)	—
RE39-09-3142	Soil	—	—	—	0.48 (J)	—
RE39-09-3143	Soil	—	—	—	1.3 (J)	—
RE39-09-3144	Soil	—	—	—	0.84 (J)	—
RE39-09-3145	Soil	—	—	—	1.3 (J)	—
RE39-09-3146	Soil	—	—	0.054 (J)	—	—
RE39-09-3147	Soil	—	—	—	0.014 (J)	—
RE39-09-3148	Soil	—	—	—	0.026 (J)	—
RE39-09-3149	Soil	—	0.26 (J)	—	—	—
RE39-09-3150	Soil	—	0.04 (J)	—	—	—
RE39-09-3151	Soil	—	—	—	0.33 (J)	—
RE39-09-3152	Soil	1.1	—	—	1.2 (J)	—
RE39-09-3153	Soil	2.5	—	—	3.8 (J)	—
RE39-09-3154	Soil	—	—	—	2.0 (J)	—
RE39-09-3155	Soil	—	—	—	0.18 (J)	—
RE39-09-3156	Soil	—	—	—	0.0096 (J)	—
RE39-09-3157	Soil	—	—	—	0.021 (J)	—
RE39-09-3164	Soil	—	—	0.17 (J)	0.11 (J)	—
RE39-09-3166	Soil	—	—	—	0.011 (J)	—
RE39-09-3167	Soil	—	—	—	0.027 (J)	—
RE39-09-3168	Soil	—	0.054 (J)	—	—	—
RE39-09-3169	Soil	—	0.18 (J)	—	—	—
RE39-09-3170	Soil	—	—	0.18 (J)	—	0.029 (J)
RE39-09-3171	Soil	—	0.12 (J)	—	—	—
RE39-09-3172	Soil	—	—	—	0.026 (J)	—
RE39-09-3173	Soil	—	0.17 (J)	—	0.049 (J)	—
RE39-09-3174	Soil	—	0.2 (J)	—	—	—
RE39-09-3177	Soil	—	—	—	0.031 (J)	—
RE39-09-3179	Soil	—	—	—	0.0081 (J)	—
RE39-09-3180	Soil	—	—	—	0.046 (J)	—

Table 2.9-6 (continued)

Sample ID	Media	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
Residential SSL[a]		**3.93**	**2.22**	**2.22**	**1.12**	**2.22**
RE39-09-3181	Soil	—	—	—	0.1 (J)	—
RE39-09-3182	Soil	—	—	—	0.059 (J)	—
RE39-09-3183	Soil	—	—	—	0.023 (J)	—
RE39-09-3184	Soil	—	—	—	0.038 (J)	—

Note: Units are mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs from NMED (2009, 108070).

[b] — = Not detected.

Table 2.9-7
SVOCs Detected in Waste Characterization Samples at SWMU 39-001(b)

Sample ID	Media	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Indeno(1,2,3-cd)pyrene
Residential SSL[a]		**6.21**	**0.621**	**6.21**	**6.21**
RE39-09-3093	Soil	—[b]	0.0188 (J)	0.0286 (J)	—
RE39-09-3100	Soil	—	0.0131 (J)	—	—
RE39-09-3101	Soil	0.0135 (J)	—	—	—
RE39-09-3111	Soil	0.646 (J)	0.603 (J)	0.951 (J)	0.348 (J)
RE39-09-3112	Soil	0.0414 (J)	0.0365 (J)	0.0411 (J)	0.0405 (J)
RE39-09-3113	Soil	3.56 (J)	3.68 (J)	5.45 (J)	2.46 (J)
RE39-09-3114	Soil	0.0319 (J)	0.0293 (J)	0.0464 (J)	0.0329 (J)
RE39-09-3115	Soil	0.02 (J)	0.0193 (J)	0.0373 (J)	0.0287 (J)
RE39-09-3116	Soil	0.0668 (J)	0.0687 (J)	0.0849 (J)	0.0597 (J)
RE39-09-3117	Soil	10.4 (J)	10.1 (J)	10.6 (J)	6.74 (J)
RE39-09-3119	Soil	0.0418	0.0348 (J)	0.0403	0.0173 (J)
RE39-09-3120	Soil	0.0342 (J)	—	0.0459	—
RE39-09-3121	Soil	—	—	0.0366 (J)	—
RE39-09-3122	Soil	0.11 (J)	0.11 (J)	0.082 (J)	0.075 (J)
RE39-09-3123	Soil	0.15 (J)	0.15 (J)	0.12 (J)	0.1 (J)
RE39-09-3124	Soil	0.25 (J)	0.23 (J)	0.21 (J)	0.15 (J)
RE39-09-3127	Soil	0.098 (J)	0.088 (J)	0.074 (J)	—
RE39-09-3128	Soil	9.2	8.9	7.5	2.5
RE39-09-3129	Soil	2.2	2.0	1.7	0.76
RE39-09-3130	Soil	2.7	2.4	1.6	1.2
RE39-09-3131	Soil	1.1	1.0	0.83	0.42
RE39-09-3132	Soil	1.2	1.1	0.9	0.43
RE39-09-3133	Soil	0.19 (J)	0.19 (J)	0.16 (J)	0.079 (J)
RE39-09-3134	Soil	0.14 (J)	0.13 (J)	0.1 (J)	0.074 (J)
RE39-09-3136	Soil	0.045 (J)	0.042 (J)	—	—

Table 2.9-7 (continued)

Sample ID	Media	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Indeno(1,2,3-cd)pyrene
Residential SSL		**6.21**	**0.621**	**6.21**	**6.21**
RE39-09-3139	Soil	0.9	0.89	0.79	0.34 (J)
RE39-09-3140	Soil	2.1	2.0	1.8	0.79
RE39-09-3141	Soil	0.14 (J)	0.14 (J)	0.12 (J)	0.056 (J)
RE39-09-3142	Soil	0.84	0.83	0.69	0.34 (J)
RE39-09-3143	Soil	0.35 (J)	0.35 (J)	0.31 (J)	0.16 (J)
RE39-09-3144	Soil	1.5	1.4	1.0	0.79
RE39-09-3145	Soil	0.25 (J)	0.26 (J)	0.24 (J)	0.13 (J)
RE39-09-3146	Soil	0.54	0.53	0.52	0.24 (J)
RE39-09-3147	Soil	0.39	0.38	0.33 (J)	0.15 (J)
RE39-09-3148	Soil	1.0	1.0	0.84	0.46
RE39-09-3149	Soil	0.2 (J)	0.21 (J)	0.18 (J)	0.086 (J)
RE39-09-3150	Soil	0.26 (J)	0.24 (J)	0.21 (J)	0.11 (J)
RE39-09-3151	Soil	0.22 (J)	0.22 (J)	0.19 (J)	0.099 (J)
RE39-09-3154	Soil	2.7	2.5	2.3	1.1
RE39-09-3157	Soil	0.24 (J)	0.22 (J)	0.19 (J)	0.093 (J)
RE39-09-3164	Soil	0.92	0.95	0.72	0.38
RE39-09-3165	Soil	0.25 (J)	0.25 (J)	0.23 (J)	0.12 (J)
RE39-09-3166	Soil	0.31 (J)	0.33 (J)	0.3 (J)	0.15 (J)
RE39-09-3167	Soil	0.87	0.91	0.76	0.37
RE39-09-3168	Soil	0.13 (J)	0.12 (J)	0.099 (J)	0.089 (J)
RE39-09-3169	Soil	2.0	2.1	1.8	0.76
RE39-09-3170	Soil	0.85	0.86	0.72	0.34 (J)
RE39-09-3171	Soil	0.53	0.51	0.37	0.29 (J)
RE39-09-3172	Soil	0.41	0.43	0.42	0.21 (J)
RE39-09-3173	Soil	2.2	2.0	1.6	0.78
RE39-09-3174	Soil	1.2	1.3	0.96	0.7

Table 2.9-7 (continued)

Sample ID	Media	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Indeno(1,2,3-cd)pyrene
Residential SSL		**6.21**	**0.621**	**6.21**	**6.21**
RE39-09-3175	Soil	3.4	3.6	3.1	1.4
RE39-09-3176	Soil	5.2	4.8	4.5	1.7
RE39-09-3177	Soil	2.5	2.5	2.2	0.93
RE39-09-3180	Soil	3.6	3.7	2.7	1.3
RE39-09-3181	Soil	2	2.2	2	1.1
RE39-09-3182	Soil	2.1	2.1	1.9	1.0
RE39-09-3183	Soil	0.41	0.4	0.31 (J)	0.26 (J)
RE39-09-3184	Soil	0.45	0.48	0.38	0.18 (J)

Note: Units are mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs from NMED (2009, 108070).

[b] — = Not detected.

Table 2.9-8
Samples Collected and Analyses Requested for Capacitor Staging Areas at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Sample Type	PCBs
Northern Capacitor Staging Area					
RE39-09-10266	AN-608008	0.0–0.17	Soil	MI	09-2748*
CAAN-09-12435	AN-608008	2.0–2.17	Soil	MI	09-3139
CAAN-09-12436	AN-608009	2.0–2.17	Soil	MI	09-3139
RE39-10-3954	AN-608009	4.0–4.17	Soil	MI	10-393
RE39-09-10267	AN-608010	0.0–0.17	Soil	MI	09-2748
CAAN-09-12437	AN-608010	2.0–2.17	Soil	MI	09-3139
CAAN-09-12438	AN-608011	2.0–2.17	Soil	MI	09-3139
CAAN-09-12439	AN-608012	2.0–2.17	Soil	MI	09-3138
RE39-09-10265	AN-608013	0.0–0.17	Soil	MI	09-2748
CAAN-09-12440	AN-608013	2.0–2.17	Soil	MI	09-3138
RE39-09-10264	AN-608014	0.0–0.17	Soil	MI	09-2748
CAAN-09-12441	AN-608014	2.0–2.17	Soil	MI	09-3138
CAAN-09-12442	AN-608015	2.0–2.17	Soil	Sidewall MI	09-3138
CAAN-09-12443	AN-608016	2.0–2.17	Soil	Sidewall MI	09-3138
Southern Capacitor Staging Area					
RE39-09-10276	AN-607996	0.0–0.17	Soil	MI	09-2748
CAAN-09-12423	AN-607996	2.0–2.17	Soil	MI	09-3139
RE39-10-3952	AN-607996	4.0–4.17	Soil	MI	10-393
RE39-09-10275	AN-607997	0.0–0.17	Soil	MI	09-2748
CAAN-09-12424	AN-607997	2.0–2.17	Soil	MI	09-3139
RE39-10-3953	AN-607997	4.0–4.17	Soil	MI	10-393
RE39-09-10274	AN-607998	0.0–0.17	Soil	MI	09-2748
CAAN-09-12425	AN-607998	2.0–2.17	Soil	MI	09-3139
RE39-09-10273	AN-607999	0.0–0.17	Soil	MI	09-2748
CAAN-09-12426	AN-607999	2.0–2.17	Soil	MI	09-3139
RE39-09-10272	AN-608000	0.0–0.17	Soil	MI	09-2748
CAAN-09-12427	AN-608000	2.0–2.17	Soil	MI	09-3139
RE39-09-10271	AN-608001	0.0–0.17	Soil	MI	09-2748
CAAN-09-12428	AN-608001	2.0–2.17	Soil	MI	09-3139
RE39-09-10270	AN-608002	0.0–0.17	Soil	MI	09-2748
CAAN-09-12429	AN-608002	2.0–2.17	Soil	MI	09-3139
RE39-09-10269	AN-608003	0.0–0.17	Soil	MI	09-2748
CAAN-09-12430	AN-608003	2.0–2.17	Soil	MI	09-3139
RE39-09-10268	AN-608004	0.0–0.17	Soil	MI	09-2748

Table 2.9-8 (continued)

Sample ID	Location ID	Depth (ft)	Media	Sample Type	PCBs
CAAN-09-12431	AN-608004	2.0–2.17	Soil	MI	09-3139
CAAN-09-12432	AN-608005	2.0–2.17	Soil	Sidewall MI	09-3139
CAAN-09-12433	AN-608006	2.0–2.17	Soil	Sidewall MI	09-3139
CAAN-09-12434	AN-608007	2.0–2.17	Soil	Sidewall MI	09-3139

*Analytical request number.

Table 2.9-9
PCBs Detected at the Capacitor Staging Areas at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1260
Residential SSL[a]				**3.93**	**2.22**	**2.22**	**2.22**
Northern Capacitor Staging Area							
RE39-09-10266	AN-608008	0.0-0.17	Soil	0.15	—[b]	0.19	0.025 (J)
CAAN-09-12435	AN-608008	2.0-2.17	Soil	—	0.0069 (J)	—	—
CAAN-09-12436	AN-608009	2.0-2.17	Soil	—	3.6 (J)	—	0.12
RE39-09-10267	AN-608010	0.0-0.17	Soil	220	—	—	—
CAAN-09-12437	AN-608010	2.0-2.17	Soil	—	0.67 (J)	—	0.024 (J)
CAAN-09-12438	AN-608011	2.0-2.17	Soil	—	0.17 (J)	—	0.0066 (J)
CAAN-09-12439	AN-608012	2.0-2.17	Soil	—	0.57 (J)	—	0.028 (J)
RE39-09-10265	AN-608013	0.0-0.17	Soil	0.42	—	—	—
CAAN-09-12440	AN-608013	2.0-2.17	Soil	—	0.087 (J)	—	—
RE39-09-10264	AN-608014	0.0-0.17	Soil	0.075	—	—	—
CAAN-09-12441	AN-608014	2.0-2.17	Soil	—	0.021 (J)	—	—
CAAN-09-12442	AN-608015	2.0-2.17	Soil	—	0.0067 (J)	—	—
CAAN-09-12443	AN-608016	2.0-2.17	Soil	—	0.0057 (J)	—	—
Southern Capacitor Staging Area							
RE39-09-10276	AN-607996	0.0-0.17	Soil	65	—	—	—
CAAN-09-12423	AN-607996	2.0-2.17	Soil	—	7.9 (J)	—	0.35
RE39-10-3952	AN-607996	4.0-4.17	Soil	—	0.36 (J)	—	0.013 (J)
RE39-09-10275	AN-607997	0.0-0.17	Soil	0.59	—	—	—
CAAN-09-12424	AN-607997	2.0-2.17	Soil	—	3.1 (J)	—	0.096
RE39-10-3953	AN-607997	4.0-4.17	Soil	—	0.53 (J)	—	0.021 (J)
RE39-09-10274	AN-607998	0.0-0.17	Soil	0.46	—	—	—

Table 2.2-9 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1260
Residential SSL[a]				**3.93**	**2.22**	**2.22**	**2.22**
CAAN-09-12425	AN-607998	2.0-2.17	Soil	—	0.23 (J)	—	0.011 (J)
RE39-09-10273	AN-607999	0.0-0.17	Soil	6.9	—	—	—
CAAN-09-12426	AN-607999	2.0-2.17	Soil	—	0.025 (J)	—	—
RE39-09-10272	AN-608000	0.0-0.17	Soil	110	—	—	—
CAAN-09-12427	AN-608000	2.0-2.17	Soil	—	0.69 (J)	—	0.05
RE39-09-10271	AN-608001	0.0-0.17	Soil	2.0	—	—	—
CAAN-09-12428	AN-608001	2.0-2.17	Soil	—	0.19 (J)	—	0.0069 (J)
RE39-09-10270	AN-608002	0.0-0.17	Soil	6.1		—	—
CAAN-09-12429	AN-608002	2.0-2.17	Soil	—	0.031 (J)	—	—
RE39-09-10269	AN-608003	0.0-0.17	Soil	160	—	—	—
CAAN-09-12430	AN-608003	2.0-2.17	Soil	—	0.42 (J)	—	0.019 (J)
RE39-09-10268	AN-608004	0.0-0.17	Soil	9.4	—	—	—
CAAN-09-12431	AN-608004	2.0-2.17	Soil	—	0.22 (J)	—	0.037
CAAN-09-12432	AN-608005	2.0-2.17	Soil	—	0.24 (J)	—	0.0093 (J)
CAAN-09-12433	AN-608006	2.0-2.17	Soil	—	0.0083 (J)	—	—
CAAN-09-12434	AN-608007	2.0-2.17	Soil	—	0.018 (J)	—	0.0078

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A. Shading indicates sample locations excavated during cleanup activities.

[a] SSLs from NMED (2009, 108070).

[b] — = Not detected.

Table 2.9-10
Samples Collected and Analysis Requested
for the Waste Stockpile Area at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	PCBs
RE39-10-16435	39-612070	0–0.17	Soil	10-3258*
RE39-10-16436	39-612071	0–0.17	Soil	10-3258
RE39-10-16437	39-612072	0–0.17	Soil	10-3258
RE39-10-16438	39-612073	0–0.17	Soil	10-3258
RE39-10-16439	39-612074	0–0.17	Soil	10-3258
RE39-10-16440	39-612075	0–0.17	Soil	10-3258
RE39-10-16441	39-612076	0–0.17	Soil	10-3258
RE39-10-16442	39-612077	0–0.17	Soil	10-3258
RE39-10-16443	39-612078	0–0.17	Soil	10-3258
RE39-10-16444	39-612079	0–0.17	Soil	10-3258
RE39-10-16445	39-612080	0–0.17	Soil	10-3258
RE39-10-16446	39-612081	0–0.17	Soil	10-3258
RE39-10-16447	39-612082	0–0.17	Soil	10-3258
RE39-10-16448	39-612083	0–0.17	Soil	10-3258
RE39-10-16449	39-612084	0–0.17	Soil	10-3258
RE39-10-16450	39-612085	0–0.17	Soil	10-3258
RE39-10-16451	39-612086	0–0.17	Soil	10-3258
RE39-10-16452	39-612087	0–0.17	Soil	10-3258
RE39-10-16453	39-612088	0–0.17	Soil	10-3258
RE39-10-16454	39-612089	0–0.17	Soil	10-3258
RE39-10-16455	39-612090	0–0.17	Soil	10-3257
RE39-10-16456	39-612091	0–0.17	Soil	10-3257
RE39-10-16457	39-612092	0–0.17	Soil	10-3257
RE39-10-16458	39-612093	0–0.17	Soil	10-3257
RE39-10-16459	39-612094	0–0.17	Soil	10-3257
RE39-10-16460	39-612095	0–0.17	Soil	10-3257
RE39-10-16461	39-612096	0–0.17	Soil	10-3257
RE39-10-16462	39-612097	0–0.17	Soil	10-3257
RE39-10-16463	39-612098	0–0.17	Soil	10-3257
RE39-10-16464	39-612099	0–0.17	Soil	10-3257
RE39-10-16465	39-612100	0–0.17	Soil	10-3257
RE39-10-16466	39-612101	0–0.17	Soil	10-3257
RE39-10-16467	39-612102	0–0.17	Soil	10-3257
RE39-10-16468	39-612103	0–0.17	Soil	10-3257
RE39-10-16469	39-612104	0–0.17	Soil	10-3276

Table 2.9.10 (continued)

Sample ID	Location ID	Depth (ft)	Media	PCBs
RE39-10-16470	39-612105	0–0.17	Soil	10-3276
RE39-10-16471	39-612106	0–0.17	Soil	10-3257
RE39-10-16472	39-612107	0–0.17	Soil	10-3266
RE39-10-16473	39-612108	0-0.17	Soil	10-3266
RE39-10-16474	39-612109	0–0.17	Soil	10-3266
RE39-10-16476	39-612111	0–0.17	Soil	10-3266
RE39-10-16477	39-612112	0–0.17	Soil	10-3266
RE39-10-16483	39-612118	0–0.17	Soil	10-3266
RE39-10-16484	39-612119	0–0.17	Soil	10-3266
RE39-10-16489	39-612124	0–0.17	Soil	10-3266
RE39-10-16490	39-612125	0–0.17	Soil	10-3266

* Analytical request number.

Table 2.9-11
Samples Collected and Analysis Requested for the Waste Stockpile Area at SWMU 39-001(b)

Sample ID	Location ID	Depth (ft)	Media	PCBs
RE39-10-16300	39-611970	0–0.17	Soil	10-3267*
RE39-10-16301	39-611971	0–0.17	Soil	10-3267
RE39-10-16302	39-611972	0–0.17	Soil	10-3267
RE39-10-16303	39-611973	0–0.17	Soil	10-3267
RE39-10-16304	39-611974	0–0.17	Soil	10-3267
RE39-10-16305	39-611975	0–0.17	Soil	10-3267
RE39-10-16306	39-611976	0–0.17	Soil	10-3267
RE39-10-16307	39-611977	0–0.17	Soil	10-3267
RE39-10-16308	39-611978	0–0.17	Soil	10-3267
RE39-10-16309	39-611979	0–0.17	Soil	10-3267
RE39-10-16310	39-611980	0–0.17	Soil	10-3267
RE39-10-16311	39-611981	0–0.17	Soil	10-3267
RE39-10-16312	39-611982	0–0.17	Soil	10-3267
RE39-10-16313	39-611983	0–0.17	Soil	10-3267
RE39-10-16314	39-611984	0–0.17	Soil	10-3267
RE39-10-16315	39-611985	0–0.17	Soil	10-3267
RE39-10-16316	39-611986	0–0.17	Soil	10-3277
RE39-10-16317	39-611987	0–0.17	Soil	10-3277
RE39-10-16318	39-611988	0–0.17	Soil	10-3277
RE39-10-16319	39-611989	0–0.17	Soil	10-3277
RE39-10-16320	39-611990	0–0.17	Soil	10-3277
RE39-10-16321	39-611991	0–0.17	Soil	10-3277
RE39-10-16322	39-611992	0–0.17	Soil	10-3277
RE39-10-16323	39-611993	0–0.17	Soil	10-3277
RE39-10-16324	39-611994	0–0.17	Soil	10-3277
RE39-10-16325	39-611995	0–0.17	Soil	10-3277
RE39-10-16326	39-611996	0–0.17	Soil	10-3294
RE39-10-16327	39-611997	0–0.17	Soil	10-3294
RE39-10-16328	39-611998	0–0.17	Soil	10-3294
RE39-10-16329	39-611999	0–0.17	Soil	10-3294
RE39-10-16330	39-612000	0–0.17	Soil	10-3294
RE39-10-16331	39-612001	0–0.17	Soil	10-3294
RE39-10-16332	39-612002	0–0.17	Soil	10-3294
RE39-10-16333	39-612003	0–0.17	Soil	10-3294
RE39-10-16334	39-612004	0–0.17	Soil	10-3294

Table 2.9-11 (continued)

Sample ID	Location ID	Depth (ft)	Media	PCBs
RE39-10-16335	39-612005	0–0.17	Soil	10-3294
RE39-10-16336	39-612006	0–0.17	Soil	10-3294
RE39-10-16337	39-612007	0–0.17	Soil	10-3294
RE39-10-16338	39-612008	0–0.17	Soil	10-3294
RE39-10-16339	39-612009	0–0.17	Soil	10-3294
RE39-10-16340	39-612010	0–0.17	Soil	10-3294
RE39-10-16341	39-612011	0–0.17	Soil	10-3294
RE39-10-16342	39-612012	0–0.17	Soil	10-3298
RE39-10-16343	39-612013	0–0.17	Soil	10-3298
RE39-10-16344	39-612014	0–0.17	Soil	10-3298
RE39-10-16345	39-612015	0–0.17	Soil	10-3298
RE39-10-16346	39-612016	0–0.17	Soil	10-3298
RE39-10-16347	39-612017	0–0.17	Soil	10-3298
RE39-10-16348	39-612018	0–0.17	Soil	10-3298
RE39-10-16349	39-612019	0–0.17	Soil	10-3298
RE39-10-16350	39-612020	0–0.17	Soil	10-3298
RE39-10-16351	39-612021	0–0.17	Soil	10-3298
RE39-10-16352	39-612022	0–0.17	Soil	10-3298
RE39-10-16353	39-612023	0–0.17	Soil	10-3298
RE39-10-16354	39-612024	0–0.17	Soil	10-3298
RE39-10-16355	39-612025	0–0.17	Soil	10-3298
RE39-10-16356	39-612026	0–0.17	Soil	10-3298
RE39-10-16357	39-612027	0–0.17	Soil	10-3298
RE39-10-16358	39-612028	0–0.17	Soil	10-3298
RE39-10-16359	39-612029	0–0.17	Soil	10-3298
RE39-10-16360	39-612030	0–0.17	Soil	10-3298
RE39-10-16361	39-612031	0–0.17	Soil	10-3298
RE39-10-16362	39-612032	0–0.17	Soil	10-3313
RE39-10-16363	39-612033	0–0.17	Soil	10-3313
RE39-10-16364	39-612034	0–0.17	Soil	10-3313
RE39-10-16365	39-612035	0–0.17	Soil	10-3313
RE39-10-16366	39-612036	0–0.17	Soil	10-3313
RE39-10-16367	39-612037	0–0.17	Soil	10-3313
RE39-10-16368	39-612038	0–0.17	Soil	10-3313
RE39-10-16369	39-612039	0–0.17	Soil	10-3313
RE39-10-16370	39-612040	0–0.17	Soil	10-3313
RE39-10-16371	39-612041	0–0.17	Soil	10-3313
RE39-10-16372	39-612042	0–0.17	Soil	10-3313
RE39-10-16373	39-612043	0–0.17	Soil	10-3313
RE39-10-16374	39-612044	0–0.17	Soil	10-3313

Table 2.9-11 (continued)

Sample ID	Location ID	Depth (ft)	Media	PCBs
RE39-10-16375	39-612045	0–0.17	Soil	10-3313
RE39-10-16376	39-612046	0–0.17	Soil	10-3313
RE39-10-16377	39-612047	0–0.17	Soil	10-3313
RE39-10-16378	39-612048	0–0.17	Soil	10-3313
RE39-10-16379	39-612049	0–0.17	Soil	10-3313

* Analytical request number.

Table 2.9-12
PCBs Detected at the Waste Stockpile Area at SWMU 39-001(a)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1016	Aroclor 1254
Residential SSL[a]				**3.93**	**1.12**
RE39-10-16435	39-612070	0–0.17	Soil	—[b]	**1.9 (J)**
RE39-10-16436	39-612071	0–0.17	Soil	—	**18 (J)**
RE39-10-16437	39-612072	0–0.17	Soil	—	0.87 (J)
RE39-10-16438	39-612073	0–0.17	Soil	—	**3.7 (J)**
RE39-10-16439	39-612074	0–0.17	Soil	—	**14 (J)**
RE39-10-16440	39-612075	0–0.17	Soil	—	**8.4 (J)**
RE39-10-16441	39-612076	0–0.17	Soil	—	**2.5 (J)**
RE39-10-16442	39-612077	0–0.17	Soil	—	**1.8 (J)**
RE39-10-16443	39-612078	0–0.17	Soil	—	**4.5 (J)**
RE39-10-16444	39-612079	0–0.17	Soil	—	**14 (J)**
RE39-10-16445	39-612080	0–0.17	Soil	—	**14 (J)**
RE39-10-16446	39-612081	0–0.17	Soil	—	**7.4 (J)**
RE39-10-16447	39-612082	0–0.17	Soil	—	**1.6 (J)**
RE39-10-16448	39-612083	0–0.17	Soil	0.27	0.49 (J)
RE39-10-16449	39-612084	0–0.17	Soil	—	**4.3 (J)**
RE39-10-16450	39-612085	0–0.17	Soil	—	**3.1 (J)**
RE39-10-16451	39-612086	0–0.17	Soil	—	**9.4 (J)**
RE39-10-16452	39-612087	0–0.17	Soil	—	**360 (J)**
RE39-10-16453	39-612088	0–0.17	Soil	—	**850 (J)**
RE39-10-16454	39-612089	0–0.17	Soil	6.7	**15 (J)**
RE39-10-16455	39-612090	0–0.17	Soil	—	0.42 (J)
RE39-10-16457	39-612092	0–0.17	Soil	—	**5.4 (J)**
RE39-10-16458	39-612093	0–0.17	Soil	—	**26 (J)**
RE39-10-16459	39-612094	0–0.17	Soil	—	**23 (J)**
RE39-10-16460	39-612095	0–0.17	Soil	6.7	**10 (J)**
RE39-10-16461	39-612096	0–0.17	Soil	—	**4.8 (J)**
RE39-10-16462	39-612097	0–0.17	Soil	—	0.63 (J)

Table 2.9-12 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1016	Aroclor 1254
Residential SSL[a]				**3.93**	**1.12**
RE39-10-16463	39-612098	0–0.17	Soil	—	1.0 (J)
RE39-10-16464	39-612099	0–0.17	Soil	—	**19 (J)**
RE39-10-16465	39-612100	0–0.17	Soil	—	**8.3 (J)**
RE39-10-16466	39-612101	0–0.17	Soil	—	**3.1 (J)**
RE39-10-16467	39-612102	0–0.17	Soil	—	**6.1 (J)**
RE39-10-16468	39-612103	0–0.17	Soil	—	**3.4 (J)**
RE39-10-16469	39-612104	0–0.17	Soil	—	**7.3 (J)**
RE39-10-16470	39-612105	0–0.17	Soil	—	**15 (J)**
RE39-10-16471	39-612106	0–0.17	Soil	—	**7.1 (J)**
RE39-10-16472	39-612107	0–0.17	Soil	—	**2.4 (J)**
RE39-10-16473	39-612108	0–0.17	Soil	—	**13 (J)**
RE39-10-16474	39-612109	0–0.17	Soil	—	0.065 (J)
RE39-10-16476	39-612111	0–0.17	Soil	—	**6.1 (J)**
RE39-10-16477	39-612112	0–0.17	Soil	—	**11 (J)**
RE39-10-16483	39-612118	0–0.17	Soil	—	**5.3 (J)**
RE39-10-16484	39-612119	0–0.17	Soil	—	**3.5 (J)**
RE39-10-16489	39-612124	0–0.17	Soil	—	0.47 (J)
RE39-10-16490	39-612125	0–0.17	Soil	—	**5.2 (J)**

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs from NMED (2009, 108070).

[b] — = Not detected.

Table 2.9-13
PCBs Detected at the Waste Stockpile Area at SWMU 39-001(b)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1254
Residential SSL*				**1.12**
RE39-10-16302	39-611972	0–0.17	Soil	0.0064 (J)
RE39-10-16303	39-611973	0–0.17	Soil	0.011 (J)
RE39-10-16307	39-611977	0–0.17	Soil	0.018 (J)
RE39-10-16308	39-611978	0–0.17	Soil	0.017 (J)
RE39-10-16309	39-611979	0–0.17	Soil	0.011 (J)
RE39-10-16311	39-611981	0–0.17	Soil	0.012 (J)
RE39-10-16313	39-611983	0–0.17	Soil	0.011 (J)
RE39-10-16314	39-611984	0–0.17	Soil	0.0081 (J)
RE39-10-16315	39-611985	0–0.17	Soil	0.012 (J)
RE39-10-16316	39-611986	0–0.17	Soil	0.017 (J)
RE39-10-16317	39-611987	0–0.17	Soil	0.015 (J)
RE39-10-16318	39-611988	0–0.17	Soil	0.0082 (J)
RE39-10-16319	39-611989	0–0.17	Soil	0.14 (J)
RE39-10-16320	39-611990	0–0.17	Soil	0.03 (J)
RE39-10-16321	39-611991	0–0.17	Soil	0.0096 (J)
RE39-10-16322	39-611992	0–0.17	Soil	0.025 (J)
RE39-10-16323	39-611993	0–0.17	Soil	0.019 (J)
RE39-10-16324	39-611994	0–0.17	Soil	0.027 (J)
RE39-10-16325	39-611995	0–0.17	Soil	0.019 (J)
RE39-10-16326	39-611996	0–0.17	Soil	0.021 (J)
RE39-10-16327	39-611997	0–0.17	Soil	0.07
RE39-10-16328	39-611998	0–0.17	Soil	0.02 (J)
RE39-10-16330	39-612000	0–0.17	Soil	0.011 (J)
RE39-10-16331	39-612001	0–0.17	Soil	0.022 (J)
RE39-10-16332	39-612002	0–0.17	Soil	0.013 (J)
RE39-10-16333	39-612003	0–0.17	Soil	0.065
RE39-10-16334	39-612004	0–0.17	Soil	0.097
RE39-10-16335	39-612005	0–0.17	Soil	0.11
RE39-10-16336	39-612006	0–0.17	Soil	0.079
RE39-10-16337	39-612007	0–0.17	Soil	0.0086 (J)
RE39-10-16338	39-612008	0–0.17	Soil	0.038
RE39-10-16339	39-612009	0–0.17	Soil	0.05
RE39-10-16340	39-612010	0–0.17	Soil	0.033
RE39-10-16342	39-612012	0–0.17	Soil	0.082
RE39-10-16343	39-612013	0–0.17	Soil	0.15 (J)

Table 2.9-13 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aroclor 1254
Residential SSL*				**1.12**
RE39-10-16344	39-612014	0–0.17	Soil	0.17 (J)
RE39-10-16345	39-612015	0–0.17	Soil	0.24 (J)
RE39-10-16346	39-612016	0–0.17	Soil	0.051
RE39-10-16347	39-612017	0–0.17	Soil	0.051 (J)
RE39-10-16348	39-612018	0–0.17	Soil	0.025 (J)
RE39-10-16349	39-612019	0–0.17	Soil	0.02 (J)
RE39-10-16350	39-612020	0–0.17	Soil	0.24 (J)
RE39-10-16351	39-612021	0–0.17	Soil	0.25 (J)
RE39-10-16352	39-612022	0–0.17	Soil	0.36
RE39-10-16353	39-612023	0–0.17	Soil	0.81 (J)
RE39-10-16354	39-612024	0–0.17	Soil	0.18 (J)
RE39-10-16355	39-612025	0–0.17	Soil	0.077 (J)
RE39-10-16356	39-612026	0–0.17	Soil	0.024 (J)
RE39-10-16357	39-612027	0–0.17	Soil	0.052 (J)
RE39-10-16358	39-612028	0–0.17	Soil	0.12
RE39-10-16359	39-612029	0–0.17	Soil	0.21 (J)
RE39-10-16360	39-612030	0–0.17	Soil	0.31 (J)
RE39-10-16361	39-612031	0–0.17	Soil	0.2 (J)
RE39-10-16362	39-612032	0–0.17	Soil	**4.7**
RE39-10-16363	39-612033	0–0.17	Soil	0.92
RE39-10-16364	39-612034	0–0.17	Soil	0.18
RE39-10-16365	39-612035	0–0.17	Soil	0.18
RE39-10-16366	39-612036	0–0.17	Soil	0.14
RE39-10-16367	39-612037	0–0.17	Soil	0.16
RE39-10-16368	39-612038	0–0.17	Soil	0.39
RE39-10-16369	39-612039	0–0.17	Soil	**1.6**
RE39-10-16370	39-612040	0–0.17	Soil	**1.3**
RE39-10-16371	39-612041	0–0.17	Soil	0.66
RE39-10-16372	39-612042	0–0.17	Soil	0.47
RE39-10-16373	39-612043	0–0.17	Soil	0.11
RE39-10-16374	39-612044	0–0.17	Soil	0.22
RE39-10-16375	39-612045	0–0.17	Soil	0.26
RE39-10-16376	39-612046	0–0.17	Soil	0.35
RE39-10-16377	39-612047	0–0.17	Soil	**1.6**
RE39-10-16378	39-612048	0–0.17	Soil	0.086
RE39-10-16379	39-612049	0–0.17	Soil	0.19

Notes: Units are in mg/kg. Data qualifiers are defined in Appendix A.

* SSLs from NMED (2009, 108070).

Table 2.9-14
Summary of Proposed Sampling at Waste Stockpile and Capacitor Staging Areas

Site	Sampling Objective	Location	Depth (ft)	Media	TAL Metals (EPA SW-846:6010B/6020)	PCBs (EPA SW-846:8082)	SVOCs (EPA SW-846- 8270C)	Isotopic Uranium (HASL-300)
39-001(a) waste stockpile area	Confirm removal of contaminated soil. Collect one discrete sample from decision units/grid cells where PCB results were < 1 mg/kg; collect two discrete samples from decision units/grid cells where PCB results were > 1 mg/kg.	1a-1–1a-99 NOTE: locations1a-4–1a-7, 1a-11–1a-20, 1a-22–1a-31, 1a-33–1a-44, 1a-47–1a-56, 1a-59–1a-68, 1a-71–1a-80, 1a-83–1a-86, 1a-90–1a-93, 1a-96, and 1a-97 are in decision units/grid cells where PCB results were > 1 mg/kg.	0.0–1.0 below excavation	Soil	X[a] (lead)	X	—[b]	X
39-001(a) capacitor staging areas	Confirm cleanup of PCB spill	1a-100, 1a-101, 1a-103–1a-107, 1a-110–1a-116	2.0–3.0 bgs	Soil	—	X	—	—
		1a-102, 1a-108, 1a-109	4.0–5.0 bgs	Soil	—	X	—	—
		1a-117–1a-122	0.0–1.0, 2.0–3.0, 4.0–5.0 bgs	Soil	—	X	—	—
39-001(b) waste stockpile area	Confirm removal of contaminated soil. Collect one discrete sample from decision units/grid cells where PCB results were < 1 mg/kg; collect two discrete samples from decision units/grid cells where PCB results were > 1 mg/kg.	1b-1–1b-87 Note: locations 1b-63, 1b-64, 1b-71–1b-74, 1b-83, and 1b-84 are in decision units/grid cells where PCB results were > 1 mg/kg.	0.0–1.0 below excavation	Soil	—	X	X	—

[a] X = Analysis proposed.

[b] — = Analysis will not be performed.

Table 3.0-1
Summary of Investigation Methods

Method	Summary
Spade-and-Scoop Collection of Soil Samples	This method is typically used to collect shallow (e.g., approximately 0–12 in.) soil or sediment samples. The spade-and-scoop method involves digging a hole to the desired depth, as prescribed in the sampling and analysis plan, and collecting a discrete grab sample. The sample is typically placed in a clean stainless-steel bowl for transfer into various sample containers.
Hand-Auger Sampling	This method is typically used for sampling soil or sediment at depths of less than 10–15 ft but may in some cases be used for collecting samples of weathered or nonwelded tuff. The method involves hand-turning a stainless-steel bucket auger (typically 3–4 in. inside diameter), creating a vertical hole that can be advanced to the desired sampling depth. When the desired depth is reached, the auger is decontaminated before the hole is advanced to the sampling depth. The sample material is transferred from the auger bucket to a stainless-steel sampling bowl before the various required sample containers are filled. Carbon-steel auger buckets may be used, particularly in cases where chromium and nickel are the primary constituents of interest and cross-contamination from stainless-steel equipment is a concern.
Handling, Packaging, and Shipping of Samples	Field team members seal and label samples before packing and ensure that the sample containers and the containers used for transport are free of external contamination. Field team members package all samples so as to minimize the possibility of breakage during transportation. After all environmental samples are collected, packaged, and preserved; a field team member transports the samples either to the SMO or to an SMO-approved radiation screening laboratory under chain of custody. The SMO arranges to ship samples to the analytical laboratories. The field team member must inform the SMO and/or the radiation screening laboratory coordinator when levels of radioactivity are in the action-level or limited-quantity ranges.
Sample Control and Field Documentation	The collection, screening, and transport of samples are documented on standard forms generated by the SMO. These forms include sample collection logs, chain-of-custody forms, and sample container labels. Collection logs are completed at the time of sample collection and are signed by the sampler and a reviewer who verifies the logs for completeness and accuracy. Corresponding labels are initialed and applied to each sample container, and custody seals are placed around container lids or openings. Chain-of-custody forms are completed and assigned to verify that the samples are not left unattended. Site attributes (e.g., former and proposed soil sampling locations, sediment sampling locations) are located by using a GPS. Horizontal locations will be measured to the nearest 0.5 ft. The survey results for this field event will be presented as part of the investigation report. Sample coordinates will be uploaded into the Sample Management Database.
Field Quality-Control Samples	Field quality-control samples are collected as follows. *Field duplicate*: At a frequency of 10%; collected at the same time as a regular sample and submitted for the same analyses. *Equipment rinsate blank*: At a frequency of 10%; collected by rinsing sampling equipment with deionized water, which is collected in a sample container and submitted for laboratory analysis. *Trip blanks*: Required for all field events that include the collection of samples for VOC analysis. Trip blanks are containers of certified clean sand that are opened and kept with the other sample containers during the sampling process.
Field Decontamination of Drilling and Sampling Equipment	Dry decontamination is the preferred method to minimize generating liquid waste. Dry decontamination may include using a wire brush or other tool to remove soil or other material adhering to the sampling equipment, followed by using a commercial cleaning agent (nonacid, waxless cleaners) and paper wipes. Dry decontamination may be followed by wet decontamination if necessary. Wet decontamination may include washing with a nonphosphate detergent and water, followed by a water rinse and a second rinse with deionized water. Alternatively, steam-cleaning may be used.

Table 3.0-1 (continued)

Method	Summary
Containers and Preservation of Samples	Specific requirements/processes for sample containers, preservation techniques, and holding times are based on EPA guidance for environmental sampling, preservation, and QA. Specific requirements for each sample are printed on the sample collection logs provided by the SMO (size and type of container [glass, amber glass, polyethylene, preservative, etc.]). All samples are preserved by placing them in insulated containers with ice to maintain a temperature of 4˚C. Other requirements such as nitric acid or other preservatives may apply to different media or analytical requests.
Management, Characterization, and Storage of IDW	IDW is managed, characterized, and stored in accordance with an approved waste characterization strategy form that documents site history, field activities, and the characterization approach for each waste stream managed. Waste characterization complies with on-site or off-site waste acceptance criteria. All stored IDW will be marked with appropriate signage and labels, as appropriate. Drummed IDW will be stored on pallets to prevent the containers from deterioration. Generators are required to reduce the volume of waste generated as much as technically and economically feasible. Means to store, control, and transport each potential waste type and classification shall be determined before field operations that generate waste begin. A waste storage area will be established before waste is generated. Waste storage areas located in controlled areas of the Laboratory will be controlled as needed to prevent inadvertent addition or management of wastes by unauthorized personnel. Each container of waste generated will be individually labeled as to waste classification, item identification number, and radioactivity (if applicable), immediately following containerization. All waste shall be segregated by classification and compatibility to prevent cross-contamination. See Appendix B for additional information.
Geodetic Surveys	This method describes the methodology for coordinating and evaluating geodetic surveys and establishing QA and QC for geodetic survey data. The procedure covers evaluating geodetic survey requirements, preparing to perform a geodetic survey, performing geodetic survey field activities, preparing geodetic survey data for QA review, performing QA review of geodetic survey data, and submitting geodetic survey data.
Hollow-Stem Auger Drilling Methods	In this method, hollow-stem augers (sections of seamless pipe with auger flights welded to the pipe) act as a screw conveyor to bring cuttings of sediment, soil, and/or rock to the surface. Auger sections are typically 5 ft in length and have outside diameters of 4.25 to 14 in. Drill rods, split-spoon core barrels, Shelby tubes, and other samplers can pass through the center of the hollow-stem auger sections for collection of discrete samples from desired depths. Hollow-stem augers are used as temporary casings when setting wells to prevent cave-ins of the borehole walls.
Direct-Push Sampling Methods	In this method, a tool string is pushed into the ground using the weight of a truck in combination with a hydraulic ram or hammer. Various tool strings can be used for obtaining discrete samples, continuous samples, both discrete and continuous samples, and groundwater samples. The direct-push core samples collected in this investigation are continuous. The inside of the continuous sampler is exposed to the subsurface environment while it is advanced to the sampling interval. This is a dual-tube sampler, so named because it uses two sets of rods to collect soil cores. The outer rods receive the driving force from the hydraulic pushing method and provide a sealed hole from which soil samples may be recovered without the threat of cross-contamination or cave-in. The inner set of rods is placed within the outer rods and holds a sampler in place as the outer rods are driven to the sample interval. The inner rods are then retracted to retrieve the soil core.

Table 3.7-1
Summary of Analytical Methods

Analyte	Analytical Method
TAL metals	SW-846:6010B; SW-846:6020; SW-846:7471A (mercury)
Perchlorate	SW-846:6850
PCBs	SW-846:8082
SVOCs	SW-846:8270C
VOCs	SW-846:8260B
Americium-241	HASL-300:AM-241
Gamma-emitting radionuclides	EPA:901.1
Isotopic plutonium	HASL-300:ISOPU
Isotopic uranium	HASL-300:ISOU
Tritium	Liquid Scintillation
pH	SW-846:9045C
Explosive Compounds	SW-846:8321A Modified
Dioxins/Furans	SW-846:8290A

Appendix A

Acronyms and Abbreviations,
Metric Conversion Table, and Data Qualifier Definitions

A-1.0 ACRONYMS AND ABBREVIATIONS

AK	acceptable knowledge
AOC	area of concern
bgs	below ground surface
BV	background value
Consent Order	Compliance Order on Consent
D&D	decontamination and decommissioning
DOE	Department of Energy (U.S.)
DRO	diesel range organics
EPA	Environmental Protection Agency (U.S)
FV	fallout value
GPS	global positioning system
GRO	gasoline range organics
HMX	1,3,5,7-tetranitro-1,3,5,7-tetrazocine
HAS	hollow-stem auger
IDW	investigation-derived waste
IP	individual permit
LANL	Los Alamos National Laboratory
LLW	low-level waste
MI	multi-increment
MLLW	mixed low-level waste
NM	New Mexico
NMED	New Mexico Environment Department
PCB	polychlorinated biphenyl
PID	photoionization detector
PPE	personal protective equipment
QA	quality assurance
QC	quality control
RFI	Resource Conservation and Recovery Act Facility Investigation
RPF	Records Processing Facility
SAA	satellite accumulation area
SAL	screening action level
SMA	site-monitoring area

SMO	Sample Management Office
SOP	standard operating procedure
SSL	soil screening level
SVOC	semivolatile organic compound
SWMU	solid waste management unit
TA	technical area
TAL	target analyte list
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbon
VOC	volatile organic compound
WAC	waste acceptance criteria
WCSF	waste characterization strategy form

A-2.0 METRIC CONVERSION TABLE

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

A-3.0 DATA QUALIFIER DEFINITIONS

Data Qualifier	Definition
U	The analyte was analyzed for but not detected.
J	The analyte was positively identified, and the associated numerical value is estimated to be more uncertain than would normally be expected for that analysis.
J+	The analyte was positively identified, and the result is likely to be biased high.
J-	The analyte was positively identified, and the result is likely to be biased low.
UJ	The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit.
R	The data are rejected as a result of major problems with quality assurance / quality control (QA/QC) parameters.

Appendix B

Management Plan for Investigation-Derived Waste

B-1.0 INTRODUCTION

This appendix describes how investigation-derived waste (IDW) generated during the North Ancho Canyon Aggregate Area Phase II investigation will be managed by Los Alamos National Laboratory (the Laboratory). IDW may include, but is not limited to, drill cuttings, excavated media, excavated man-made debris, contact waste, decontamination fluids, and all other waste that has potentially come into contact with contamination.

B-2.0 INVESTIGATION-DERIVED WASTE

All IDW generated during investigation activities will be managed in accordance with the current version of Standard Operating Procedure (SOP) 5238, Characterization and Management of Environmental Program Waste. This SOP incorporates the requirements of applicable U.S. Environmental Protection Agency and New Mexico Environment Department (NMED) regulations, U.S. Department of Energy orders, and Laboratory requirements.

The most recent version of the Laboratory's Hazardous Waste Minimization Report will be implemented during the investigation to minimize waste generation. The Hazardous Waste Minimization Report is updated annually as a requirement of Module VIII of the Laboratory's Hazardous Waste Facility Permit.

A waste characterization strategy form (WCSF) will be prepared and approved per requirements of SOP-5238. The WCSF will provide detailed information on IDW characterization methods, management, containerization, and potential volumes. IDW characterization is completed through review of investigation data and/or documentation or by direct sampling. Waste characterization may include a review of historical information and process knowledge to identify whether listed hazardous waste may be present (i.e., due diligence reviews). If low levels of listed hazardous waste are identified, a "contained in" determination may be submitted for approval to NMED. Moderate amounts of material may potentially be excavated during the remediation of portions of Solid Waste Management Units (SWMUs) 39-002(a), Area 1 and 39-007(a) and at areas where remediation wastes were stockpiled and handled at SWMUs 39-001(a) and 39-001(b). To facilitate the staging and segregation of these materials, the Laboratory may use previously approved areas of contamination at SWMUs 39-001(a) and 39-001(b); however, the ground surface will be covered and the waste will be loaded directly into appropriate containers.

Wastes will be containerized and placed in clearly marked and appropriately constructed waste accumulation areas. If IDW is generated within the boundary of an area of contamination, it will be managed as nonhazardous within those boundaries in designated, properly constructed waste management areas. If hazardous, the IDW will be managed in accordance with hazardous waste requirements once it is removed from the area of contamination. If IDW is generated outside the area of contamination boundaries, the initial management of the waste will rely on the data from previous investigations and/or process knowledge. If new analytical data change the expected waste category, the waste will be managed in accumulation areas appropriate to the final waste determination. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based on the type of IDW and its classification. Container and storage requirements will be detailed in the WCSF and approved before the waste is generated. Table B-2.0-1 summarizes how waste is expected to be managed. The waste streams anticipated to be generated during work plan implementation are described below.

B-2.1 Drill Cuttings

This waste stream consists of soil and rock generated by the drilling of boreholes with the intent to sample. Drill cuttings include excess core samples not submitted for analysis and any returned samples sent for analysis. Drill cuttings will be containerized in 20 yd^3 rolloff containers, 55-gal. drums, B-12 containers, or other appropriate containers at the point of generation.

Cuttings will be land applied if they are nonhazardous and meet residential soil screening levels and the criteria in the NMED-approved Notice of Intent Decision Tree for Land Application of Investigation Derived Waste Solids from Construction of Wells and Boreholes. This waste stream will be characterized based either on direct sampling of the waste or on the results from core samples collected during drilling. If directly sampled, the following analyses will be performed: volatile organic compounds (VOCs); semivolatile organic compounds (SVOCs); cyanide, nitrate, explosive compounds and perchlorate (if screening and/or process knowledge indicates the presence of explosives); radionuclides as identified for each site in the work plan; total metals; and, if needed, toxicity characteristic leaching procedure (TCLP) metals. If process knowledge, odors, or staining indicates the cuttings may be contaminated with petroleum products, the materials will also be analyzed for total petroleum hydrocarbons (TPH) and polychlorinated biphenyls (PCBs). Other constituents may be analyzed as necessary to meet the waste acceptance criteria (WAC) for a receiving facility. The Laboratory expects most cuttings will be land applied or disposed of as a PCB-contaminated low-level waste (LLW). However, the waste may also be classified as hazardous, LLW, or mixed low-level waste (MLLW). All drill cuttings will be treated/disposed of at an authorized on-site or off-site facility appropriate for the waste classification.

B-2.2 Excavated Environmental Media

Excavated environmental media will consist of contaminated soil and rock to be removed from SWMU 39-007(a) and soil to be removed from the locations of the former soil stockpiles and associated waste-handling areas at SWMUs 39-001(a) and 39-001(b). This material will be field screened for radioactivity and/or organic vapors during the excavation process and will be stored either in rolloff bins or other suitable containers in designated waste accumulation areas; excavated environmental media will not be staged on bare ground. A minimum of two samples will be collected from the total volume of excavated material at each site. If the total volume is less than 200 yd^3, one sample will be collected for each 50 yd^3 of excavated material. If the total volume is greater than 200 yd^3, a minimum of one sample will be collected for every 100 yd^3 of excavated material. The samples will be analyzed for VOCs, target analyte list metals, TCLP metals, nitrate, cyanide, explosive compounds, PCBs, TPH, perchlorate, and radionuclides, as identified for each site in the work plan. Other constituents may be analyzed as necessary to meet the WAC for a receiving facility. Based on existing data, the Laboratory expects the excavated soil and rock will be designated as industrial waste or PCB waste. However, the waste may also be classified as hazardous, LLW, PCB-contaminated LLW, or MLLW. All excavated environmental media waste will be treated/disposed of at an authorized off-site facility appropriate for the waste classification.

B-2.2.1 Excavated Soil and Rock from SWMU 39-007(a)

This waste stream will consist of the upper 2 ft of contaminated soil and rock excavated from a 4-ft radius around sample locations 39-10019 and 39-604854 where Aroclor 1254 and Aroclor 1260 were elevated above 1.0 mg/kg. The excavated materials will be placed in containers (e.g., 55-gal. drums or rolloff bins) and managed in accordance with applicable Laboratory waste management requirements based on waste characterization results. Any soil generated will be managed as described in section B-2.2. The Laboratory expects this waste to be designated as industrial or PCB waste; however, the waste may also

be classified as PCB-contaminated LLW. All excavated waste will be treated/disposed of at an authorized off-site facility appropriate for the waste classification.

B-2.2.2 Soil Removed from Former Waste Stockpile Areas at SWMUs 39-001(a) and 39-001(b)

This waste stream will consist of the top 1 ft of soil excavated from decision units within the former waste stockpile areas at SWMUs 39-001(a) and 39-001(b) where PCBs are present at concentrations exceeding 1.0 mg/kg. The excavated soil will be containerized (e.g., rolloff bins) and managed in accordance with applicable Laboratory waste management requirements based on waste characterization results. Any soil generated will be managed as described in section B-2.2. The Laboratory expects most of this waste to be designated as industrial or PCB waste. However, the waste may also be classified as PCB-contaminated LLW. All excavated waste will be treated/disposed of at an authorized off-site facility appropriate for the waste classification.

B-2.2.3 Debris from Former Waste Stockpile Areas at SWMUs 39-001(a) and 39-001(b)

This waste stream will consist of residual debris remaining in the areas where soil and remediation waste were formerly stockpiled and handled at SWMUs 39-001(a) and 39-001(b). The debris consists of approximately 2 yd^3 including pieces of wiring and plastic. This debris will be containerized (e.g., 55-gal. drums) and managed in accordance with applicable Laboratory waste management requirements based on waste characterization results. The Laboratory expects most of this waste to be designated as industrial or LLW. However, the waste may also be classified as PCB-contaminated LLW. All excavated waste will be treated/disposed of at an authorized off-site facility appropriate for the waste classification.

B-2.3 Contact Waste

The contact waste stream consists of potentially contaminated materials that "contacted" waste during sampling and excavation. This waste stream consists primarily of, but is not limited, to personal protective equipment such as gloves; decontamination wastes such as paper wipes; and disposable sampling supplies. Characterization of this waste stream will use acceptable knowledge (AK) of the waste materials, the methods of generation, the extent of contamination, and analysis of the material contacted (e.g., drill cuttings and soil). The waste will be containerized (e.g., in 55-gal. drums) and managed in accordance with applicable Laboratory waste management requirements based on the waste characterization results. The Laboratory expects most of the contact waste to be designated industrial waste or PCB waste. However, the waste may also be classified as hazardous, MLLW, PCB-contaminated LLW, or LLW. All contact waste will be treated/disposed of at an authorized off-site facility appropriate for the waste classification.

B-2.4 Purge Water from Wells and Boreholes at SWMUs 39-001(a) and 39-001(b)

This waste stream will consist of water from wells and boreholes at SWMUs 39-001(a) and 39-001(b) that are to be abandoned. Before abandonment, the wells and boreholes will be tested to determine whether water is present within the casing. If water is present, the well/borehole will be purged and the purge water will be containerized, characterized, and managed in accordance with applicable Laboratory waste management requirements based on the waste characterization results. Any generated purge water will be analyzed for VOCs, SVOCs, isotopic uranium, total metals, and, if needed, TCLP metals and other analytes required by the receiving facility (e.g., total suspended solids, Microtox, chemical oxygen demand, oil and grease, pH, nitrates). If adequate sample volume is available, samples will also be analyzed for PCBs and explosive compounds. The Laboratory expects any generated purge water to be

nonhazardous liquid waste or PCB liquid waste that will be sent to one of the Laboratory's wastewater treatment facilities or to an authorized off-site facility where the WAC allows the waste to be received.

B-2.5 Waste/Debris from Well and Borehole Abandonment

This waste stream will consist of polyvinyl chloride casing, bentonite, concrete, soil, and rock from wells and boreholes at SWMUs 39-001(a) and 39-001(b) that are to be abandoned during the Phase II investigation. The waste will be generated when casing is removed or overdrilled during abandonment activities at wells and boreholes. The waste will be containerized (e.g., in 55-gal. drums) and managed in accordance with applicable Laboratory waste management requirements based on the waste characterization results. The Laboratory expects most of this waste to be designated industrial waste. However, the waste may also be classified as hazardous, LLW, MLLW, or PCB-contaminated LLW. Waste generated from well and borehole abandonment activities will be treated/disposed of at an authorized off-site facility appropriate for the waste classification.

B-2.6 Decontamination Fluids

This waste stream will consist of liquid wastes from decontamination activities if dry decontamination cannot be performed. Consistent with waste minimization practices, the Laboratory uses dry equipment decontamination methods to the extent possible. If dry decontamination cannot be performed, liquid decontamination wastes will be collected in containers at the point of generation. The fluids from decontaminating drilling or sampling equipment will be characterized through AK of the waste materials, the levels of contamination measured in the environmental media (e.g., the results of the associated drill cuttings), and, if necessary, direct sampling of the containerized waste. If directly sampled, the following analyses will be performed: VOCs, SVOCs, radionuclides (as identified for each site in the work plan), total metals, and, if needed, TCLP metals and other analytes required by the receiving facility (e.g., total suspended solids, Microtox, chemical oxygen demand, oil and grease, pH, nitrates). The Laboratory expects any decontamination liquid waste to be nonhazardous liquid waste or PCB liquid waste that will be sent to one of the Laboratory's wastewater treatment facilities or to an authorized off-site facility where the WAC allows the waste to be received.

Table B-2.0-1
Summary of Estimated IDW Generation and Management

Waste Stream	Expected Waste Type	Expected Disposition
Drill Cuttings	Industrial Hazardous PCB-LLW LLW MLLW	Land application or treatment/disposal at an authorized on-site or off-site facility
Excavated Environmental Media	Industrial Hazardous PCB PCB-LLW LLW MLLW	Disposal at an authorized off-site facility
Debris	Industrial Hazardous PCB LLW	Disposal at an authorized off-site facility
Contact Waste	Industrial Hazardous PCB PCB-LLW LLW MLLW	Disposal at an approved off-site facility
Waste/Debris from Well and Borehole Abandonment	Industrial Hazardous PCB-LLW LLW MLLW	Disposal at an approved off-site facility
Water from Wells and Boreholes	Industrial Hazardous PCB LLW MLLW	Treatment at an on-site wastewater treatment facility or treatment/disposal at an authorized off-site facility
Decontamination Fluids	Industrial PCB	Treatment at an on-site wastewater treatment facility or treatment/disposal at an authorized off-site facility

Appendix C

Photographs Documenting
Current Use of Solid Waste Management Unit 39-002(a), Area 1



Photo C-1 **View looking west of transportainers and base-course pad currently located at Solid Waste Management Unit (SWMU) 39-002(a), Area 1**



Photo C-2 **View of north end of SWMU 39-002(a), Area 1, with transportainer and base-course pad now located at the site**



Photo C-3 **View of transportainers and base-course pad currently located at SWMU 39-002(a), Area 1**

Appendix D

Analytical Data Not Previously Reported
(on CD included with this document)

Appendix E

Waste Management Information
(on CD included with this document)

1639849 1639869 1639889 1639909 1639929

1742452 1742437 1742422 1742407 1742392

SWMU 39-002(a), Area 1

H59

G

G

G

G

39-62

39-169

39-2

Concrete

Asphalt

39-604808 0-3 ft
RE39-09-5026 (0-1 ft)
Acenaphthene 0.18 (J)
Anthracene 0.22 (J)
Aroclor-1254 0.12 (J)
Benzo(a)anthracene 0.65
Benzo(a)pyrene 0.7
Benzo(b)fluoranthene 0.58
Benzo(g,h,i)perylene 0.39
Benzo(k)fluoranthene 0.64
Chrysene 0.8
Dibenzofuran 0.1 (J)
Fluoranthene 1.7
Fluorene 0.17 (J)
Indeno(1,2,3-cd)pyrene 0.35 (J)
Methylnaphthalene[2-] 0.041 (J)
Naphthalene 0.14 (J)
Phenanthrene 1.4
Pyrene 1.5
RE39-09-5027 (1-2 ft)
Aroclor-1254 0.0075 (J)
Fluoranthene 0.067 (J)
Isobornethane 0.00081 (J)
Phenanthrene 0.045 (J)
Pyrene 0.059 (J)
RE39-09-5096 (2-3 ft)
1,2,3,4,6,7,8-HpCDD 0.00000807
1,2,3,4,6,7,8-HpCDF 0.00000178 (J)
1,2,3,4,7,8-HxCDD 0.000000129 (J)
1,2,3,6,7,8-HxCDD 0.000000031 (J)
1,2,3,7,8,9-HxCDD 0.000000191 (J)
OCDD 0.0000644
OCDF 0.00000574

39-604805 0-3 ft
RE39-09-5017 (0-1 ft)
Acenaphthene 0.048 (J)
Anthracene 0.074 (J)
Aroclor-1254 0.035 (J)
Benzo(a)anthracene 0.35 (J)
Benzo(a)pyrene 0.41 (J)
Benzo(b)fluoranthene 0.33 (J)
Benzo(g,h,i)perylene 0.23 (J)
Benzo(k)fluoranthene 0.44
Chrysene 0.45
Fluoranthene 0.87
Indeno(1,2,3-cd)pyrene 0.21 (J)
Phenanthrene 0.48
Pyrene 0.83
RE39-09-5018 (1-2 ft)
Aroclor-1254 0.019 (J)
Benzo(a)anthracene 0.11 (J)
Benzo(a)pyrene 0.13 (J)
Benzo(b)fluoranthene 0.12 (J)
Benzo(g,h,i)perylene 0.12 (J)
Benzo(k)fluoranthene 0.11 (J)
Chrysene 0.14 (J)
Dichlorobenzene[1,2-] 0.0007 (J)
Fluoranthene 0.26 (J)
Indeno(1,2,3-cd)pyrene 0.095 (J)
Phenanthrene 0.14 (J)
Pyrene 0.28 (J)

39-01491 0-1.5 ft
0239-97-0001 (0-0.5 ft)
Aroclor-1254 0.21
Benzo(a)anthracene 1.3
Benzo(a)pyrene 1.6
Benzo(b)fluoranthene 1.2
Benzo(g,h,i)perylene 1.5
Benzo(k)fluoranthene 1.3
Chrysene 1.6
Fluoranthene 3.4
Indeno(1,2,3-cd)pyrene 1.3
Phenanthrene 1.8
Pyrene 3
TPH-DRO 57
0239-97-0010 (1-1.5 ft)
TPH-DRO 9.1

39-01495 0-0.5 ft
0239-97-0005 (0-0.5 ft)
Acenaphthene 0.43
Anthracene 0.81
Aroclor-1254 0.1
Benzo(a)pyrene 3.6
Benzo(b)fluoranthene 3.6
Benzo(g,h,i)perylene 1.8
Benzo(k)fluoranthene 3
Chrysene 3.1
Di-n-butylphthalate 0.64
Fluoranthene 8.4
Fluorene 0.36
Indeno(1,2,3-cd)pyrene 1.8
Phenanthrene 4.2
Pyrene 5
TPH-DRO 70

39-01493 0-0.5 ft
0239-97-0003 (0-0.5 ft)
Anthracene 0.35
Aroclor-1254 0.16
Benzo(a)anthracene 0.97
Benzo(a)pyrene 1
Benzo(b)fluoranthene 0.82
Benzo(g,h,i)perylene 0.53
Benzo(k)fluoranthene 0.87
Chrysene 1.2
Fluoranthene 2.1
Indeno(1,2,3-cd)pyrene 0.51
Phenanthrene 2.1
Pyrene 2.4
TPH-DRO 56

39-01492 0-0.5 ft
0239-97-0002 (0-0.5 ft)
Aroclor-1254 0.16
Benzo(a)anthracene 0.73
Benzo(a)pyrene 0.84
Benzo(b)fluoranthene 0.6
Benzo(g,h,i)perylene 0.72
Benzo(k)fluoranthene 0.73
Chrysene 0.93
Fluoranthene 2.1
Indeno(1,2,3-cd)pyrene 0.64
Phenanthrene 1.3
Pyrene 1.9
TPH-DRO 18

39-604806 0-3 ft
RE39-09-5020 (0-1 ft)
Acenaphthene 0.059 (J-)
Anthracene 0.086 (J-)
Aroclor-1254 0.39 (J)
Benzo(a)anthracene 0.22 (J-)
Benzo(a)pyrene 0.22 (J-)
Benzo(b)fluoranthene 0.18 (J-)
Benzo(g,h,i)perylene 0.12 (J-)
Benzo(k)fluoranthene 0.25 (J-)
Bis(2-ethylhexyl)phthalate 0.065 (J-)
Chrysene 0.26 (J-)
Di-n-butylphthalate 0.048 (J-)
Fluoranthene 0.56 (J-)
Fluorene 0.049 (J-)
Indeno(1,2,3-cd)pyrene 0.086 (J-)
Naphthalene 0.039 (J-)
Phenanthrene 0.46 (J-)
Pyrene 0.49 (J-)
RE39-09-5021 (1-2 ft)
Acenaphthene 0.046 (J)
Anthracene 0.091 (J)
Aroclor-1254 0.066 (J)
Benzo(a)anthracene 0.19 (J)
Benzo(a)pyrene 0.21 (J)
Benzo(b)fluoranthene 0.14 (J)
Benzo(g,h,i)perylene 0.11 (J)
Benzo(k)fluoranthene 0.22 (J)
Bis(2-ethylhexyl)phthalate 0.082 (J)
Chrysene 0.23 (J)
Di-n-butylphthalate 0.062 (J)
Fluoranthene 0.46
Fluorene 0.047 (J)
Indeno(1,2,3-cd)pyrene 0.085 (J)
Phenanthrene 0.39
Pyrene 0.5
Trichloroethene 0.00054 (J)
RE39-09-5022 (2-3 ft)
Acenaphthene 0.04 (J)
Anthracene 0.068 (J)
Aroclor-1254 0.024 (J)
Benzo(a)anthracene 0.13 (J)
Benzo(a)pyrene 0.12 (J)
Benzo(b)fluoranthene 0.095 (J)
Benzo(g,h,i)perylene 0.057 (J)
Benzo(k)fluoranthene 0.12 (J)
Chrysene 0.14 (J)
Fluoranthene 0.32 (J)
Phenanthrene 0.31 (J)
Pyrene 0.25 (J)

39-604807 0-3 ft
RE39-09-5024 (1-2 ft)
Acenaphthene 0.25 (J)
Anthracene 0.35 (J)
Benzo(a)anthracene 0.46
Benzo(a)pyrene 0.4
Benzo(b)fluoranthene 0.29 (J)
Benzo(g,h,i)perylene 0.16 (J)
Benzo(k)fluoranthene 0.38 (J)
Chrysene 0.48
Dibenzofuran 0.14 (J)
Fluoranthene 1.1
Fluorene 0.24 (J)
Indeno(1,2,3-cd)pyrene 0.14 (J)
Methylnaphthalene[2-] 0.083 (J)
Naphthalene 0.23 (J)
Phenanthrene 1.2
Pyrene 0.99

39-01496 0-1.5 ft
0239-97-0006 (0-0.5 ft)
Acenaphthene 0.34 (J)
Aroclor-1254 0.24
Benzo(a)pyrene 1.5 (J)
Benzo(b)fluoranthene 1.5 (J)
Benzo(g,h,i)perylene 0.67 (J)
Benzo(k)fluoranthene 1.5 (J)
Chrysene 1.6 (J)
Fluoranthene 3.7 (J)
Phenanthrene 2.9 (J)
Pyrene 3.7 (J)
TPH-DRO 47
0239-97-0011 (1-1.5 ft)
TPH-DRO 9.8

39-604814 0-3 ft
RE39-09-5044 (0-1 ft)
Acenaphthene 0.0335 (J)
Anthracene 0.0626
Aroclor-1254 0.199
Aroclor-1260 0.114
Benzo(a)anthracene 0.198
Benzo(a)pyrene 0.233
Benzo(b)fluoranthene 0.292
Benzo(g,h,i)perylene 0.134
Bis(2-ethylhexyl)phthalate 0.19 (J)
Chrysene 0.263
Di-n-butylphthalate 0.0954 (J)
Fluoranthene 0.573
Fluorene 0.0295 (J)
Indeno(1,2,3-cd)pyrene 0.132
Methylene Chloride 0.00389 (J)
Naphthalene 0.0129 (J)
Phenanthrene 0.368
Pyrene 0.476
Toluene 0.000326 (J)
RE39-09-5045 (1-2 ft)
Anthracene 0.0179 (J)
Aroclor-1254 0.0963
Aroclor-1260 0.0497
Benzo(a)pyrene 0.0637
Benzo(b)fluoranthene 0.078
Benzo(g,h,i)perylene 0.05
Bis(2-ethylhexyl)phthalate 0.547
Chrysene 0.0651
Di-n-butylphthalate 0.179 (J)
Fluoranthene 0.159
Indeno(1,2,3-cd)pyrene 0.0453
Methylene Chloride 0.00294 (J)
Phenanthrene 0.102
Pyrene 0.136
RE39-09-5046 (2-3 ft)
Aroclor-1254 0.0333
Aroclor-1260 0.0173
Benzo(a)pyrene 0.0228 (J)
Benzo(b)fluoranthene 0.0256 (J)
Benzo(g,h,i)perylene 0.0146 (J)
Benzo(k)fluoranthene 0.0165 (J)
Chrysene 0.0239 (J)
Fluoranthene 0.0512
Indeno(1,2,3-cd)pyrene 0.0133 (J)
Methylene Chloride 0.00307 (J)
Phenanthrene 0.0296 (J)
Pyrene 0.046

39-604809 0-3 ft
RE39-09-5029 (0-1.5 ft)
Aroclor-1254 0.0064 (J)
Dichlorobenzene[1,2-] 0.00043 (J)
Fluoranthene 0.045 (J)
Phenanthrene 0.038 (J)
Pyrene 0.041 (J)
RE39-09-5031 (2-3 ft)
Dichlorobenzene[1,2-] 0.00043 (J)

39-604810 0-3 ft
RE39-09-5032 (0-1 ft)
Acenaphthene 0.22
Acenaphthylene 0.06 (J)
Anthracene 0.417
Aroclor-1254 0.0318
Aroclor-1260 0.0167
Benzo(a)anthracene 1.43
Benzo(a)pyrene 1.61
Benzo(b)fluoranthene 2.82
Benzo(g,h,i)perylene 1.25
Chrysene 1.64
Di-n-butylphthalate 0.197 (J)
Ethylbenzene 0.000718 (J)
Fluoranthene 3.72
Fluorene 0.153
Indeno(1,2,3-cd)pyrene 1.12
Methylene Chloride 0.00233 (J)
Methylnaphthalene[2-] 0.038 (J)
Naphthalene 0.121 (J)
Phenanthrene 2.38
Pyrene 3.25
Toluene 0.0233
Trichloroethene 0.000747 (J)
Xylene[1,2-] 0.000501 (J)
Xylene[1,3-]+Xylene[1,4-] 0.00177 (J)
RE39-09-5033 (1-2 ft)
Anthracene 0.0255 (J)
Aroclor-1254 0.0023 (J)
Aroclor-1260 0.0017 (J)
Benzo(a)anthracene 0.106
Benzo(a)pyrene 0.117
Benzo(b)fluoranthene 0.199
Benzo(g,h,i)perylene 0.113
Chrysene 0.127
Fluoranthene 0.268
Indeno(1,2,3-cd)pyrene 0.0976
Methylene Chloride 0.0024 (J)
Phenanthrene 0.151
Pyrene 0.234
RE39-09-5034 (2-3 ft)
Anthracene 0.0169 (J)
Aroclor-1254 0.0028 (J)
Benzo(a)anthracene 0.0664
Benzo(a)pyrene 0.0732
Benzo(b)fluoranthene 0.0961
Benzo(g,h,i)perylene 0.0509
Chrysene 0.0793
Fluoranthene 0.168
Indeno(1,2,3-cd)pyrene 0.0498
Phenanthrene 0.0961
Pyrene 0.148

39-604811 0-3 ft
RE39-09-5035 (0-1 ft)
Acenaphthene 1.61
Acenaphthylene 0.201
Anthracene 2.44
Benzo(a)anthracene 6.48
Benzo(a)pyrene 6.75
Benzo(b)fluoranthene 8.36
Benzo(g,h,i)perylene 4.45
Benzo(k)fluoranthene 3.1
Chrysene 6.48
Dibenz(a,h)anthracene 0.653 (J)
Dibenzofuran 0.951 (J)
Fluoranthene 10
Fluorene 1.63
Indeno(1,2,3-cd)pyrene 4.2
Methylnaphthalene[2-] 0.41
Naphthalene 1.24
Phenanthrene 13.6
Pyrene 14.1
RE39-09-5036 (1-2 ft)
Acenaphthene 0.123
Acenaphthylene 0.0211 (J)
Anthracene 0.238
Benzo(a)anthracene 0.603
Benzo(a)pyrene 0.611
Benzo(b)fluoranthene 0.7
Benzo(g,h,i)perylene 0.439
Chrysene 0.671
Fluoranthene 1.59
Fluorene 0.122
Indeno(1,2,3-cd)pyrene 0.392
Methylnaphthalene[2-] 0.0297 (J)
Naphthalene 0.096
Phenanthrene 1.28
Pyrene 1.37
RE39-09-5037 (2-3 ft)
Acenaphthene 0.405
Acenaphthylene 0.054 (J)
Anthracene 0.841
Benzo(a)anthracene 1.9
Benzo(a)pyrene 1.86
Benzo(b)fluoranthene 2.21
Benzo(g,h,i)perylene 1.52
Chrysene 2.15
Fluoranthene 5.31
Fluorene 0.418
Indeno(1,2,3-cd)pyrene 1.35
Methylene Chloride 0.00302 (J)
Methylnaphthalene[2-] 0.108 (J)
Naphthalene 0.368
Phenanthrene 4.36
Pyrene 4.41

39-604812 0-3 ft
RE39-09-5038 (0-1 ft)
Acenaphthene 0.308
Anthracene 0.607
Aroclor-1254 0.449
Aroclor-1260 0.155
Benzo(a)anthracene 1.34
Benzo(a)pyrene 1.32
Benzo(b)fluoranthene 1.77
Benzo(g,h,i)perylene 0.841
Bis(2-ethylhexyl)phthalate 0.908 (J)
Chrysene 1.47
Di-n-butylphthalate 1.11 (J)
Fluoranthene 3.71
Fluorene 0.309
Indeno(1,2,3-cd)pyrene 0.793
Methylene Chloride 0.00287 (J)
Methylnaphthalene[2-] 0.0679 (J)
Naphthalene 0.198
Phenanthrene 3.11
Pyrene 3.27
Trichloroethene 0.000501 (J)
RE39-09-5039 (1-2 ft)
Acenaphthene 0.113
Acenaphthylene 0.0119 (J)
Anthracene 0.229
Aroclor-1254 0.0432
Aroclor-1260 0.0203
Benzo(a)anthracene 0.393
Benzo(a)pyrene 0.396
Benzo(b)fluoranthene 0.51
Benzo(g,h,i)perylene 0.258
Bis(2-ethylhexyl)phthalate 0.0808 (J)
Chrysene 0.472
Di-n-butylphthalate 0.164 (J)
Fluoranthene 1.13
Fluorene 0.133
Indeno(1,2,3-cd)pyrene 0.239
Methylene Chloride 0.00265 (J)
Methylnaphthalene[2-] 0.0284 (J)
Naphthalene 0.0805
Phenanthrene 1.04
Pyrene 0.939
RE39-09-5040 (2-3 ft)
Acenaphthene 0.161
Anthracene 0.385
Aroclor-1254 0.148
Aroclor-1260 0.0391
Benzo(a)anthracene 0.713
Benzo(a)pyrene 0.632
Benzo(b)fluoranthene 0.741
Benzo(g,h,i)perylene 0.523
Chrysene 0.787
Di-n-butylphthalate 0.285 (J)
Fluoranthene 2.1
Fluorene 0.249
Indeno(1,2,3-cd)pyrene 0.45
Methylene Chloride 0.00296 (J)
Methylnaphthalene[2-] 0.0456 (J)
Naphthalene 0.14 (J)
Phenanthrene 1.95
Pyrene 1.56

39-604813 0-2 ft
RE39-09-5041 (0-1 ft)
Acenaphthene 0.339
Anthracene 0.643
Aroclor-1254 0.147
Aroclor-1260 0.0571
Benzo(a)anthracene 1.26
Benzo(a)pyrene 1.25
Benzo(b)fluoranthene 1.6
Benzo(g,h,i)perylene 0.668
Chrysene 1.4
Di-n-butylphthalate 0.261 (J)
Fluoranthene 3.47
Fluorene 0.339
Indeno(1,2,3-cd)pyrene 0.638
Methylnaphthalene[2-] 0.0777 (J)
Naphthalene 0.19
Phenanthrene 3.03
Pyrene 2.94
Toluene 0.000375 (J)
Xylene[1,2-] 0.000624 (J)
Xylene[1,3-]+Xylene[1,4-] 0.00091 (J)
RE39-09-5042 (1-2 ft)
Acenaphthene 0.327
Anthracene 0.555
Aroclor-1254 0.127
Aroclor-1260 0.0486
Benzo(a)anthracene 1.23
Benzo(a)pyrene 1.27
Benzo(b)fluoranthene 1.57
Benzo(g,h,i)perylene 0.799
Chrysene 1.43
Fluoranthene 3.56
Fluorene 0.314
Indeno(1,2,3-cd)pyrene 0.743
Methylene Chloride 0.00345 (J)
Methylnaphthalene[2-] 0.0719 (J)
Naphthalene 0.184
Phenanthrene 2.96
Pyrene 2.96

39-604815 0-3 ft
RE39-09-5047 (0-1 ft)
Acenaphthene 0.15 (J)
Anthracene 0.23 (J)
Aroclor-1254 0.15 (J)
Aroclor-1260 0.071
Benzo(a)anthracene 0.74
Benzo(a)pyrene 0.88 (J+)
Benzo(b)fluoranthene 0.77
Benzo(g,h,i)perylene 0.46
Benzo(k)fluoranthene 0.92
Bis(2-ethylhexyl)phthalate 0.25 (J)
Chrysene 0.91
Di-n-butylphthalate 0.3 (J)
Dibenz(a,h)anthracene 0.15 (J)
Dibenzofuran 0.067 (J)
Fluoranthene 2.1
Fluorene 0.13 (J)
Indeno(1,2,3-cd)pyrene 0.42
Naphthalene 0.073 (J)
Phenanthrene 1.3
Pyrene 1.7
Trimethylbenzene[1,2,4-] 0.00047 (J)
RE39-09-5048 (1-2 ft)
Acenaphthene 0.15 (J)
Anthracene 0.2 (J)
Aroclor-1254 0.15 (J)
Benzo(a)anthracene 0.73
Benzo(a)pyrene 0.86 (J+)
Benzo(b)fluoranthene 0.78
Benzo(g,h,i)perylene 0.47
Benzo(k)fluoranthene 0.76
Bis(2-ethylhexyl)phthalate 0.14 (J)
Chrysene 0.92
Di-n-butylphthalate 0.51
Dibenz(a,h)anthracene 0.16 (J)
Dibenzofuran 0.051 (J)
Fluoranthene 2
Fluorene 0.11 (J)
Indeno(1,2,3-cd)pyrene 0.44
Naphthalene 0.038 (J)
Phenanthrene 1.3
Pyrene 1.9
RE39-09-5049 (2-3 ft)
Acenaphthene 0.085 (J)
Anthracene 0.12 (J)
Aroclor-1254 0.19 (J)
Benzo(a)anthracene 0.43
Benzo(a)pyrene 0.5 (J+)
Benzo(b)fluoranthene 0.46
Benzo(g,h,i)perylene 0.25 (J)
Benzo(k)fluoranthene 0.51
Bis(2-ethylhexyl)phthalate 0.17 (J)
Chrysene 0.53
Di-n-butylphthalate 0.47
Dibenz(a,h)anthracene 0.084 (J)
Fluoranthene 1.2
Fluorene 0.072 (J)
Indeno(1,2,3-cd)pyrene 0.22 (J)
Phenanthrene 0.74
Pyrene 1

39-604816 0-3 ft
RE39-09-5050 (0-1 ft)
Acenaphthene 1
Acenaphthylene 0.077 (J)
Anthracene 1.4
Benzo(a)anthracene 3.1
Benzo(a)pyrene 3.4 (J+)
Benzo(b)fluoranthene 2.6
Benzo(g,h,i)perylene 1.6
Benzo(k)fluoranthene 3.2
Bis(2-ethylhexyl)phthalate 0.068 (J)
Chrysene 3.7
Dibenz(a,h)anthracene 0.5
Dibenzofuran 0.56
Fluoranthene 8.8
Fluorene 0.99
Indeno(1,2,3-cd)pyrene 1.5
Methylnaphthalene[2-] 0.31 (J)
Naphthalene 0.69
Phenanthrene 7.1
Pyrene 7.6
RE39-09-5051 (1-2 ft)
Acenaphthene 0.084 (J)
Anthracene 0.11 (J)
Benzo(a)anthracene 0.27 (J)
Benzo(a)pyrene 0.28 (J+)
Benzo(b)fluoranthene 0.23 (J)
Benzo(g,h,i)perylene 0.17 (J)
Benzo(k)fluoranthene 0.23 (J)
Bis(2-ethylhexyl)phthalate 0.16 (J)
Chrysene 0.33 (J)
Dibenz(a,h)anthracene 0.053 (J)
Dibenzofuran 0.051 (J)
Fluoranthene 0.78
Fluorene 0.078 (J)
Indeno(1,2,3-cd)pyrene 0.17 (J)
Naphthalene 0.055 (J)
Phenanthrene 0.66
Pyrene 0.7
RE39-09-5052 (2-3 ft)
Anthracene 0.041 (J)
Benzo(a)anthracene 0.1 (J)
Benzo(a)pyrene 0.11 (J+)
Benzo(b)fluoranthene 0.11 (J)
Benzo(g,h,i)perylene 0.058 (J)
Benzo(k)fluoranthene 0.098 (J)
Chrysene 0.12 (J)
Fluoranthene 0.29 (J)
Indeno(1,2,3-cd)pyrene 0.054 (J)
Phenanthrene 0.21 (J)
Pyrene 0.24 (J)

39-604817 0-3 ft
RE39-09-5053 (0-1 ft)
Acenaphthene 0.84
Acenaphthylene 0.078 (J)
Anthracene 1.3
Aroclor-1254 0.071 (J)
Benzo(a)anthracene 3
Benzo(a)pyrene 3.3 (J+)
Benzo(b)fluoranthene 2.9
Benzo(g,h,i)perylene 1.8
Benzo(k)fluoranthene 3.1
Bis(2-ethylhexyl)phthalate 0.14 (J)
Chrysene 3.4
Di-n-butylphthalate 0.132 (J)
Dibenz(a,h)anthracene 0.46
Dibenzofuran 0.45
Fluoranthene 6.2
Fluorene 0.82
Indeno(1,2,3-cd)pyrene 1.5
Methylnaphthalene[2-] 0.16 (J)
Naphthalene 0.48
Phenanthrene 6.3
Pyrene 7.2
RE39-09-5054 (1-2 ft)
Acenaphthene 0.3 (J)
Anthracene 0.46 (J)
Benzo(a)anthracene 1.2 (J)
Benzo(a)pyrene 1.3 (J)
Benzo(b)fluoranthene 1.1 (J)
Benzo(g,h,i)perylene 0.9 (J)
Benzo(k)fluoranthene 1.4 (J)
Chrysene 1.4 (J)
Di-n-butylphthalate 0.1 (J)
Dibenz(a,h)anthracene 0.28 (J)
Dibenzofuran 0.16 (J)
Fluoranthene 3.4 (J)
Fluorene 0.3 (J)
Indeno(1,2,3-cd)pyrene 0.75 (J)
Methylnaphthalene[2-] 0.056 (J)
Naphthalene 0.17 (J)
Phenanthrene 2.6 (J)
Pyrene 3.2 (J)
RE39-09-5055 (2-3 ft)
Acenaphthene 0.085 (J)
Anthracene 0.13 (J)
Aroclor-1254 0.021 (J)
Benzo(a)anthracene 0.37 (J)
Benzo(a)pyrene 0.4 (J+)
Benzo(b)fluoranthene 0.31 (J)
Benzo(g,h,i)perylene 0.31 (J)
Benzo(k)fluoranthene 0.35 (J)
Bis(2-ethylhexyl)phthalate 0.057 (J)
Chrysene 0.46 (J)
Di-n-butylphthalate 0.05 (J)
Dibenz(a,h)anthracene 0.091 (J)
Dibenzofuran 0.042 (J)
Fluoranthene 0.99
Fluorene 0.078 (J)
Indeno(1,2,3-cd)pyrene 0.27 (J)
Naphthalene 0.042 (J)
Phenanthrene 0.74
Pyrene 0.94

39-604814 0-3 ft
RE39-09-5044 (0-1 ft)
Acenaphthene 0.0335 (J)
Anthracene 0.0626
Aroclor-1254 0.199
Aroclor-1260 0.114
Benzo(a)anthracene 0.198
Benzo(a)pyrene 0.233
Benzo(b)fluoranthene 0.292
Benzo(g,h,i)perylene 0.134
Bis(2-ethylhexyl)phthalate 0.19 (J)
Chrysene 0.263
Di-n-butylphthalate 0.0954 (J)
Fluoranthene 0.573
Fluorene 0.0295 (J)
Indeno(1,2,3-cd)pyrene 0.132
Methylene Chloride 0.00389 (J)
Naphthalene 0.0129 (J)
Phenanthrene 0.368
Pyrene 0.476
Toluene 0.000326 (J)
RE39-09-5045 (1-2 ft)
Anthracene 0.0179 (J)
Aroclor-1254 0.0963
Aroclor-1260 0.0497
Benzo(a)pyrene 0.0637
Benzo(b)fluoranthene 0.078
Benzo(g,h,i)perylene 0.05
Bis(2-ethylhexyl)phthalate 0.547
Chrysene 0.0651
Di-n-butylphthalate 0.179 (J)
Fluoranthene 0.159
Indeno(1,2,3-cd)pyrene 0.0453
Methylene Chloride 0.00294 (J)
Phenanthrene 0.102
Pyrene 0.136
RE39-09-5046 (2-3 ft)
Aroclor-1254 0.0333
Aroclor-1260 0.0173
Benzo(a)pyrene 0.0228 (J)
Benzo(b)fluoranthene 0.0256 (J)
Benzo(g,h,i)perylene 0.0146 (J)
Benzo(k)fluoranthene 0.0165 (J)
Chrysene 0.0239 (J)
Fluoranthene 0.0512
Indeno(1,2,3-cd)pyrene 0.0133 (J)
Methylene Chloride 0.00307 (J)
Phenanthrene 0.0296 (J)
Pyrene 0.046

39-604815 0-3 ft
RE39-09-5047 (0-1 ft)
Acenaphthene 0.15 (J)
Anthracene 0.23 (J)
Aroclor-1254 0.15 (J)
Aroclor-1260 0.071
Benzo(a)anthracene 0.74
Benzo(a)pyrene 0.88 (J+)
Benzo(b)fluoranthene 0.77
Benzo(g,h,i)perylene 0.46
Benzo(k)fluoranthene 0.92
Bis(2-ethylhexyl)phthalate 0.25 (J)
Chrysene 0.91
Di-n-butylphthalate 0.3 (J)
Dibenz(a,h)anthracene 0.15 (J)
Dibenzofuran 0.067 (J)
Fluoranthene 2.1
Fluorene 0.13 (J)
Indeno(1,2,3-cd)pyrene 0.42
Naphthalene 0.073 (J)
Phenanthrene 1.3
Pyrene 1.7
Trimethylbenzene[1,2,4-] 0.00047 (J)
RE39-09-5048 (1-2 ft)
Acenaphthene 0.15 (J)
Anthracene 0.2 (J)
Aroclor-1254 0.15 (J)
Benzo(a)anthracene 0.73
Benzo(a)pyrene 0.86 (J+)
Benzo(b)fluoranthene 0.78
Benzo(g,h,i)perylene 0.47
Benzo(k)fluoranthene 0.76
Bis(2-ethylhexyl)phthalate 0.14 (J)
Chrysene 0.92
Di-n-butylphthalate 0.51
Dibenz(a,h)anthracene 0.16 (J)
Dibenzofuran 0.051 (J)
Fluoranthene 2
Fluorene 0.11 (J)
Indeno(1,2,3-cd)pyrene 0.44
Naphthalene 0.038 (J)
Phenanthrene 1.3
Pyrene 1.9
RE39-09-5049 (2-3 ft)
Acenaphthene 0.085 (J)
Anthracene 0.12 (J)
Aroclor-1254 0.19 (J)
Benzo(a)anthracene 0.43
Benzo(a)pyrene 0.5 (J+)
Benzo(b)fluoranthene 0.46
Benzo(g,h,i)perylene 0.25 (J)
Benzo(k)fluoranthene 0.51
Bis(2-ethylhexyl)phthalate 0.17 (J)
Chrysene 0.53
Di-n-butylphthalate 0.47
Dibenz(a,h)anthracene 0.084 (J)
Fluoranthene 1.2
Fluorene 0.072 (J)
Indeno(1,2,3-cd)pyrene 0.22 (J)
Phenanthrene 0.74
Pyrene 1

39-604817 0-3 ft
RE39-09-5053 (0-1 ft)
Acenaphthene 0.84
Acenaphthylene 0.078 (J)
Anthracene 1.3
Aroclor-1254 0.071 (J)
Benzo(a)anthracene 3
Benzo(a)pyrene 3.3 (J+)
Benzo(b)fluoranthene 2.9
Benzo(g,h,i)perylene 1.8
Benzo(k)fluoranthene 3.1
Bis(2-ethylhexyl)phthalate 0.14 (J)
Chrysene 3.4
Di-n-butylphthalate 0.132 (J)
Dibenz(a,h)anthracene 0.46
Dibenzofuran 0.45
Fluoranthene 6.2
Fluorene 0.82
Indeno(1,2,3-cd)pyrene 1.5
Methylnaphthalene[2-] 0.16 (J)
Naphthalene 0.48
Phenanthrene 6.3
Pyrene 7.2
RE39-09-5054 (1-2 ft)
Acenaphthene 0.3 (J)
Anthracene 0.46 (J)
Benzo(a)anthracene 1.2 (J)
Benzo(a)pyrene 1.3 (J)
Benzo(b)fluoranthene 1.1 (J)
Benzo(g,h,i)perylene 0.9 (J)
Benzo(k)fluoranthene 1.4 (J)
Chrysene 1.4 (J)
Di-n-butylphthalate 0.1 (J)
Dibenz(a,h)anthracene 0.28 (J)
Dibenzofuran 0.16 (J)
Fluoranthene 3.4 (J)
Fluorene 0.3 (J)
Indeno(1,2,3-cd)pyrene 0.75 (J)
Methylnaphthalene[2-] 0.056 (J)
Naphthalene 0.17 (J)
Phenanthrene 2.6 (J)
Pyrene 3.2 (J)
RE39-09-5055 (2-3 ft)
Acenaphthene 0.085 (J)
Anthracene 0.13 (J)
Aroclor-1254 0.021 (J)
Benzo(a)anthracene 0.37 (J)
Benzo(a)pyrene 0.4 (J+)
Benzo(b)fluoranthene 0.31 (J)
Benzo(g,h,i)perylene 0.31 (J)
Benzo(k)fluoranthene 0.35 (J)
Bis(2-ethylhexyl)phthalate 0.057 (J)
Chrysene 0.46 (J)
Di-n-butylphthalate 0.05 (J)
Dibenz(a,h)anthracene 0.091 (J)
Dibenzofuran 0.042 (J)
Fluoranthene 0.99
Fluorene 0.078 (J)
Indeno(1,2,3-cd)pyrene 0.27 (J)
Naphthalene 0.042 (J)
Phenanthrene 0.74
Pyrene 0.94

39-604816 0-3 ft
RE39-09-5050 (0-1 ft)
Acenaphthene 1
Acenaphthylene 0.077 (J)
Anthracene 1.4
Benzo(a)anthracene 3.1
Benzo(a)pyrene 3.4 (J+)
Benzo(b)fluoranthene 2.6
Benzo(g,h,i)perylene 1.6
Benzo(k)fluoranthene 3.2
Bis(2-ethylhexyl)phthalate 0.068 (J)
Chrysene 3.7
Dibenz(a,h)anthracene 0.5
Dibenzofuran 0.56
Fluoranthene 8.8
Fluorene 0.99
Indeno(1,2,3-cd)pyrene 1.5
Methylnaphthalene[2-] 0.31 (J)
Naphthalene 0.69
Phenanthrene 7.1
Pyrene 7.6
RE39-09-5051 (1-2 ft)
Acenaphthene 0.084 (J)
Anthracene 0.11 (J)
Benzo(a)anthracene 0.27 (J)
Benzo(a)pyrene 0.28 (J+)
Benzo(b)fluoranthene 0.23 (J)
Benzo(g,h,i)perylene 0.17 (J)
Benzo(k)fluoranthene 0.23 (J)
Bis(2-ethylhexyl)phthalate 0.16 (J)
Chrysene 0.33 (J)
Dibenz(a,h)anthracene 0.053 (J)
Dibenzofuran 0.051 (J)
Fluoranthene 0.78
Fluorene 0.078 (J)
Indeno(1,2,3-cd)pyrene 0.17 (J)
Naphthalene 0.055 (J)
Phenanthrene 0.66
Pyrene 0.7
RE39-09-5052 (2-3 ft)
Anthracene 0.041 (J)
Benzo(a)anthracene 0.1 (J)
Benzo(a)pyrene 0.11 (J+)
Benzo(b)fluoranthene 0.11 (J)
Benzo(g,h,i)perylene 0.058 (J)
Benzo(k)fluoranthene 0.098 (J)
Chrysene 0.12 (J)
Fluoranthene 0.29 (J)
Indeno(1,2,3-cd)pyrene 0.054 (J)
Phenanthrene 0.21 (J)
Pyrene 0.24 (J)

39-604817 0-3 ft
RE39-09-5053 (0-1 ft)
Acenaphthene 0.84
Acenaphthylene 0.078 (J)
Anthracene 1.3
Aroclor-1254 0.071 (J)
Benzo(a)anthracene 3
Benzo(a)pyrene 3.3 (J+)
Benzo(b)fluoranthene 2.9
Benzo(g,h,i)perylene 1.8
Benzo(k)fluoranthene 3.1
Bis(2-ethylhexyl)phthalate 0.14 (J)
Chrysene 3.4
Di-n-butylphthalate 0.132 (J)
Dibenz(a,h)anthracene 0.46
Dibenzofuran 0.45
Fluoranthene 6.2
Fluorene 0.82
Indeno(1,2,3-cd)pyrene 1.5
Methylnaphthalene[2-] 0.16 (J)
Naphthalene 0.48
Phenanthrene 6.3
Pyrene 7.2
RE39-09-5054 (1-2 ft)
Acenaphthene 0.3 (J)
Anthracene 0.46 (J)
Benzo(a)anthracene 1.2 (J)
Benzo(a)pyrene 1.3 (J)
Benzo(b)fluoranthene 1.1 (J)
Benzo(g,h,i)perylene 0.9 (J)
Benzo(k)fluoranthene 1.4 (J)
Chrysene 1.4 (J)
Di-n-butylphthalate 0.1 (J)
Dibenz(a,h)anthracene 0.28 (J)
Dibenzofuran 0.16 (J)
Fluoranthene 3.4 (J)
Fluorene 0.3 (J)
Indeno(1,2,3-cd)pyrene 0.75 (J)
Methylnaphthalene[2-] 0.056 (J)
Naphthalene 0.17 (J)
Phenanthrene 2.6 (J)
Pyrene 3.2 (J)
RE39-09-5055 (2-3 ft)
Acenaphthene 0.085 (J)
Anthracene 0.13 (J)
Aroclor-1254 0.021 (J)
Benzo(a)anthracene 0.37 (J)
Benzo(a)pyrene 0.4 (J+)
Benzo(b)fluoranthene 0.31 (J)
Benzo(g,h,i)perylene 0.31 (J)
Benzo(k)fluoranthene 0.35 (J)
Bis(2-ethylhexyl)phthalate 0.057 (J)
Chrysene 0.46 (J)
Di-n-butylphthalate 0.05 (J)
Dibenz(a,h)anthracene 0.091 (J)
Dibenzofuran 0.042 (J)
Fluoranthene 0.99
Fluorene 0.078 (J)
Indeno(1,2,3-cd)pyrene 0.27 (J)
Naphthalene 0.042 (J)
Phenanthrene 0.74
Pyrene 0.94

39-604818 0-3 ft
RE39-09-5056 (0-1 ft)
Acenaphthene 0.0326 (J)
Anthracene 0.0609
Aroclor-1254 0.0971
Aroclor-1260 0.0556
Benzo(a)anthracene 0.0963
Benzo(a)pyrene 0.113
Benzo(b)fluoranthene 0.142
Benzo(g,h,i)perylene 0.0651
Bis(2-ethylhexyl)phthalate 0.0926 (J)
Chrysene 0.128
Di-n-butylphthalate 0.0464 (J)
Fluoranthene 0.278
Fluorene 0.0287 (J)
Indeno(1,2,3-cd)pyrene 0.0644
Methylene Chloride 0.00189 (J)
Naphthalene 0.00627 (J)
Phenanthrene 0.179
Pyrene 0.231
Toluene 0.000158 (J)